### CHIGNIK MANAGEMENT AREA ANNUAL FINFISH MANAGEMENT REPORT, 2000



By

George E. Pappas Michael J. Daigneault and Matthew LaCroix

Regional Information Report<sup>1</sup> No. 4K03-62

Alaska Department of Fish and Game Division of Commercial Fisheries 211 Mission Road Kodiak, Alaska 99615

December 2003

<sup>&</sup>lt;sup>1</sup> The Regional Information Report Series was established in 1987 to provide an information access system for all unpublished division reports. These reports frequently serve diverse ad hoc informational purposes or archive basic uninterpreted data. To accommodate timely reporting of recently collected information, reports in this series undergo only limited internal review and may contain preliminary data; this information may be subsequently finalized and published in the formal literature. Consequently, these reports should not be cited without prior approval of the author or the Division of Commercial Fisheries.

### ACKNOWLEDGMENTS

Special funding beyond the Alaska Department of Fish and Game (ADF&G) general fund budget was made available through the Exxon Valdez Oil Spill Trustee Council (EVOS) Civil Settlement funds administered by the Alaska Department of Community and Regional Affairs. This funding allowed the weir to remain operational in late August and September.

The 2000 salmon season was one of the more difficult seasons in the history of the weir because of numerous disasters. A large number of dedicated department employees and contracted specialists worked at the Chignik weir facility during the 2000 season. The authors apologize in advance if any individuals were not identified and thanked for contributing to the 2000 season at the Chignik weir.

The authors George Pappas, Michael Daigneault, and Matthew LaCroix express their appreciation to the following seasonal employees who worked many long days and irregular hours to keep the Chignik weir operational: James Andel, Alvin Boskofsky, Matt Ford, Boris Lesniak, Eli Rodgers, Jessica Chervistad, and pilots Ken Bethy and Don Hauenstien. Pete Probasco, Denby Lloyd, and Rod Campbell's assistance and supervision during the season were also appreciated. The late Dave Owen's assistance through correspondence was greatly appreciated. Thanks to Ivan Vining and Jim Blackburn for biometric support and review. Mr. Hal Geiger's expertise with the installation of modern sonar equipment when the weir washed out was invaluable. Thanks to Kenneth Bouwens for constructing the run forecast. Thanks to Mark Witteveen and Arnie Shaul for their input on the Alaska Peninsula Management Area. A special thanks goes to Bob Murphy for allowing his staff to provide additional help on short notice. Phillip Tschersich's assistance as a SCUBA diver at the weir in times of need was also invaluable. We also appreciate the assistance from Jim McCullough and Lisa Scarbrough on subsistence issues. We thank Tom Emerson for his talented operation of the pile driver and for his abilities as a welder. We also thank Lucinda Neel and Joanne Shaker for their technical support.

Residents from the villages of Chignik Lagoon and Chignik Lake deserve thanks for assisting in the recovery efforts involved in salvaging the 2000 season camp supplies. The supplies were set adrift when the landing craft chartered to transports the weir's supplies from Chignik Bay to the weir sank in the Chignik Lagoon.

The department would like to express their gratitude to the United States Coast Guard who rescued the area manager George Pappas and department pilot Don Hauenstien from the remote site where the ADF&G Piper Supercub FG-125 was forced to crash land due to high winds at 3:45 PM August 29 while returning from an aerial survey.

## TABLE OF CONTENTS

## Page

LIST OF TABLES	i
LIST OF FIGURES	v
LIST OF APPENDICES	vi
ABSTRACT	1
CHIGNIK SALMON FISHERIES	2
Introduction	2
Overview of the 2000 Salmon Season	2
2000 Catch Overview	2
2000 Escapement Overview	
2000 Exvessel Value	
	0
Chinook Salmon	5
Background	5
2000 Forecast	
Historical Escapement, Harvests, and 2000 Management	
Sockeye Salmon	7
Background	7
2000 Forecast	
Historical Escapement, Harvests, and 2000 Management	8
Inriver Management	
Chronology for June and Early July Inseason Management of the	
Chignik Sockeye Salmon Fishery	9
Chronology for the Late Season Fishery	9
Cape Igvak Sockeye Salmon Fishery	
Southeastern District Mainland Sockeye Salmon Fishery	
Scale Pattern Analysis of Chignik Sockeye Salmon	
Season Summary	
Pink and Chum Salmon	12
Background	12
2000 Forecast	13
2000 Management and Harvests	_

## TABLE OF CONTENTS (Cont.)

## Page

Coho Salmon	14
Background	15
Subsistence Salmon Fisheries	15
Personal Use of the Commercial Catch	16
CHIGNIK HERRING FISHERIES	16
Background	16
2000 Management and Harvests	17
OTHER SPECIES (NON-COMMERCIAL)	17
LITERATURE CITED	18
TABLES	20
FIGURES1	128
APPENDIX1	143

## LIST OF TABLES

<u>Table</u>		Page 1
1.	List of permit holders who fished in the Chignik Management Area, 2000	20
2.	Residency status of permit holders in the Chignik Management Area, 1966-2000	23
3.	Commercial salmon catches in the Chignik Management Area by species and year, 1960-2000	24
4.	Commercial salmon catches in the Chignik Management Area by district, statistical area, and species, 2000	25
5.	Commercial salmon fishing effort and catch by day in the Chignik Management Area, 2000	26
6.	Commercial salmon catch and effort by statistical area and day in the Chignik Management Area, 2000.	28
7.	Processors in the Chignik Management Area, 2000	36
8.	Chinook salmon daily and cumulative escapement estimates through the Chignik weir, 2000	37
9.	Estimated salmon escapement by district and statistical area in the Chignik Management Area, 2000	38
10.	Sockeye salmon daily and cumulative escapement estimates through the Chignik weir, 2000	39
11.	Pink, chum, and coho salmon daily and cumulative escapement estimates through the Chignik weir, 2000	41
12.	Black Lake and Black River tributaries peak aerial sockeye salmon survey escapement estimates, 1960-2000	43
13.	Salmon escapement aerial survey counts in the Chignik Management Area, 2000	44
14.	Total pink salmon catch, escapement, and run numbers (in thousands of fish) in the Chignik Management Area, 1962-2000	74
15.	Pink and chum salmon escapement estimates (in thousands of fish) for select Chignik Management Area streams, 1953-2000	75

# LIST OF TABLES (Cont.)

<u>Table</u>		Page
16.	Total chum salmon catch, escapement, and run numbers (in thousands of fish) in the Chignik Management Area, 1962-2000	83
17.	Economic value of salmon and average income per commercial salmon permit holder, in dollars, in the Chignik Management Area, 1970-2000	84
18.	Chignik River chinook salmon escapement, Chignik Management Area catch, and total run, 1960-2000	86
19.	Age composition of Black Lake sockeye salmon sampled at the Black Lake outlet, 2000	87
20.	Estimated sockeye salmon escapement through the Chignik River weir bound for Chignik Lake and Black Lake using daily percentages attributable to Chignik Lake, derived from the inseason scale pattern analysis and time of entry curve, 2000	88
21.	Daily estimated Chignik River sockeye salmon escapement, catch destined to the Chignik Lakes system, and total run, by day and area (adjusted to Chignik Lagoon date), 2000	90
22.	Harvest of Chignik bound sockeye salmon in the Chignik, Cape Igvak, and Southeastern District Mainland Areas from 1964-2000	93
23.	Total Chignik Management Area and 80 percent of the sockeye salmon harvest in the Cape Igvak and Southeastern District Mainland Areas through July 25, 1973-2000	96
24.	Sockeye salmon age compositions of Chignik Lagoon commercial and test fishery samples, 2000	97
25.	Estimated stock composition of age 1.3 Chignik sockeye salmon from commercial catch and test fishery samples, based on postseason scale pattern analysis, 2000	98
26.	Estimated stock composition of age 2.3 Chignik sockeye salmon from commercial catch and test fishery samples, based on postseason scale pattern analysis, 2000	99

## LIST OF TABLES (Cont.)

<u>Table</u>		Page
27.	Daily and cumulative sockeye salmon escapement and catch estimates as determined by postseason scale pattern analysis for the Chignik Lake stock (adjusted to Chignik Lagoon date), 2000	100
28.	Daily and cumulative sockeye salmon escapement and catch estimates as determined by postseason scale pattern analysis for the Black Lake stock (adjusted to Chignik Lagoon date), 2000	103
29.	Black Lake weekly sockeye salmon escapement, by age class, estimated by postseason scale pattern analysis, 2000	105
30.	Chignik Lake weekly sockeye salmon escapement, by age class, estimated by postseason scale pattern analysis, 2000	106
31.	Weekly sockeye salmon catch bound for Black Lake, by age class, estimated by postseason scale pattern analysis, 2000	108
32.	Black Lake and Chignik Lake sockeye salmon escapement, catch, and total run estimates, by age class, based on postseason scale pattern analysis, 2000	109
33.	Weekly sockeye salmon catch bound for Chignik Lake, by age class, estimated by postseason scale pattern analysis, 2000	110
34.	Sockeye salmon escapement, catch, and total run for Black Lake, Chignik Lake, and combined runs, based on postseason scale pattern analysis, 1954-2000.	112
35.	Comparison of average weights of salmon, based on weights from fish tickets, caught in the Chignik Bay District and all other districts combined, 1983-2000	114
36.	Pink salmon catch, estimated escapement, and estimated run numbers (in thousands of fish) in the Chignik Bay District, 1962-2000	116
37.	Pink salmon catch, estimated escapement, and estimated run numbers (in thousands of fish) in the Central District, 1962-2000	117
38.	Pink salmon catch, estimated escapement, and estimated run numbers (in thousands of fish) in the Eastern District, 1962-2000	118

## LIST OF TABLES (Cont.)

<u>Table</u>		Page
39.	Pink salmon catch, estimated escapement, and estimated run numbers (in thousands of fish) in the Western District, 1962-2000	119
40.	Pink salmon catch, estimated escapement, and estimated run numbers (in thousands of fish) in the Perryville District, 1962-2000	120
41.	Chum salmon catch, estimated escapement, and estimated run numbers (in thousands of fish) in the Chignik Bay District, 1962-2000	121
42.	Chum salmon catch, estimated escapement, and estimated run numbers (in thousands of fish) in the Central District, 1962-2000	122
43.	Chum salmon catch, estimated escapement, and estimated run numbers (in thousands of fish) in the Eastern District, 1962-2000	123
44.	Chum salmon catch, estimated escapement, and estimated run numbers (in thousands of fish) in the Western District, 1962-2000	124
45.	Chum salmon catch, estimated escapement, and estimated run numbers (in thousands of fish) in the Perryville District, 1962-2000	125
46.	Estimated subsistence harvests of salmon in the Chignik Management Area, 1976-2000	126
47.	Number of permits, landings, and salmon species harvested for personal use in the commercial salmon fishery in the Chignik Management Area, 2000	127

## LIST OF FIGURES

Figur	<u>e</u>	Page 1
1.	Map of the Alaska Peninsula illustrating the relative locations of the Chignik, Kodiak, and Alaska Peninsula Management Areas	128
2.	Map of the Chignik River watershed	129
3.	Map illustrating district boundaries and village locations within the Chignik Management Area	130
4.	Map of Chignik Management Area illustrating district boundaries and statistical areas	131
5.	Total salmon harvest by species in the Chignik Management Area, 1960-2000	132
6.	Black and Chignik Lakes sockeye salmon run (catch and escapement) timing estimated using scale pattern analysis, 2000.	133
7.	Exvessel value of salmon harvested in the Chignik Management Area by species, 1970-2000	134
8.	Average economic value of salmon per Chignik Management Area permit holder, 1970-2000.	135
9.	Chinook salmon catch and escapement in the Chignik Management Area, 1960-2000	136
10.	Age composition of sockeye salmon sampled in the Chignik Lagoon fishery, 2000	137
11.	Estimated total sockeye salmon runs to Black and Chignik Lakes, 1954-2000	138
12.	Black Lake (upper panel) and Chignik Lake (lower panel) sockeye salmon catch and escapement estimates, 1954-2000	139
13.	Pink salmon catch and estimated escapement in the Chignik Management Area, 1962-2000	140
14.	Chum salmon catch and estimated escapement in the Chignik Management Area, 1962-2000	141
15.	Average catch of coho salmon by day in the Western District as compared to the Chignik Bay District, 1991-2000	142

## LIST OF APPENDICES

Appendix	Page
A. Chignik Management Area salmon forecasts, 2000	144
B. Commercial salmon fishing time, by district and section in the Chignik Management Area, 2000	145
C. Chignik Management Area salmon regulations, 2000	146
D. Emergency orders for the Chignik Management Area, 2000	150
<ul><li>E. Chignik River system sockeye salmon escapement objectives for the early-run (Black Lake) and the late-run (Chignik Lake) by time period</li></ul>	153
F. Comparison of Black Lake (early-run) and Chignik Lake (late-run) forecasts versus postseason estimated runs in millions of sockeye salmon, 1987-2000	154
G. Chignik Management Area herring regulations, 2000	155

#### ABSTRACT

The 2000 Chignik commercial salmon fishery began on June 11 with the last reported landing occurring on August 30. A total of 99 seine permits were fished in 2000. The total number of salmon harvested for the Chignik Management Area (CMA) included 2,592 chinook *Oncorhynchus tschawytscha*, 1,775,225 sockeye *O. nerka*, 123,222 coho *O. kisutch*, 428,064 pink *O. gorbuscha*, and 120,957 chum salmon *O. keta*. The 2000 chinook, sockeye, coho, pink, and chum salmon harvests were below forecasts. The exvessel value for all species of salmon harvested in the Chignik Management Area was \$12 million. Sockeye and chinook salmon escapement goals were met for the Chignik Lakes system. The pink and chum salmon escapement goals were met or exceeded in all districts of the CMA in 2000 but there was not much harvestable surplus available. Coho salmon escapement to all districts of the CMA was considered fair for 2000. The subsistence fishery harvest in the CMA totaled 163 chinook, 9,516 sockeye, 1,783 coho, 1,154 pink, and 517 chum salmon. There were 130 subsistence permits issued in 2000 of which 112 were completed and returned.

### **CHIGNIK SALMON FISHERIES**

#### Introduction

The Chignik Management Area (CMA) includes all coastal waters and inland drainages of the northwest Gulf of Alaska between Kilokak Rocks and Kupreanof Point on the south side of the Alaska Peninsula (Figure 1). The CMA is bordered by the Alaska Peninsula Management Area to the west and the Kodiak Management Area to the east. The CMA includes approximately 110 salmon producing streams. The Chignik River system is the largest sockeye salmon producer within the CMA (Figure 2). The Chignik River weir facility is located three miles from Chignik Lagoon and is the home base for all commercial salmon and herring management operations in the CMA. The weir was first installed in 1922, and is currently fabricated with pile driven supports and spans the 350' width of the Chignik River.

Within the CMA, commercial and subsistence salmon are the economic mainstay for five villages: Chignik Lake, Chignik Lagoon, Chignik Bay, Perryville, and Ivanof (Figure 3). The CMA is divided into five districts from, east to west: the Eastern, Central, Chignik Bay, Western, and Perryville Districts (Figure 3). These districts are further broken down into sections and statistical reporting areas (Figure 4). A number of permit holders and crewmembers reside in all villages, while shoreside processing is located only in Chignik Bay.

Purse seines are the only legal commercial salmon gear allowed within the CMA. In 2000, 99 of 103 available limited entry salmon permits were actively fished in the CMA (Table 1) with 85.9% of the permit holders claiming Alaska residency (Table 2).

Five species of Pacific salmon are commercially harvested in the CMA: chinook *Oncorhynchus tschawytscha*, sockeye *O. nerka*, coho *O. kisutch*, pink *O. gorbuscha*, and chum salmon *O. keta*. The Alaska Department of Fish and Game (ADF&G), Division of Commercial Fisheries, manages the CMA commercial salmon fisheries to achieve escapement goals for each species, and allow for orderly fisheries to harvest any salmon surplus to escapement requirements.

This annual report adds to a report series dating back to 1922. Information has been updated from historic electronic databases after 1970. Disparities between previously reported catch and escapement statistics and those presented here can be attributed to the editorial objective of providing the most accurate information available.

#### Overview of the 2000 Salmon Season

#### 2000 Catch Overview

The 2000 CMA commercial salmon fishing season was characterized by an above average harvest of sockeye salmon. There were 1,775,225 sockeye salmon harvested in the CMA during 2000 (Table 3).

The 2000 sockeye salmon harvest was slightly above the previous 10-year average (1990-1999) of 1,720,584 fish (Table 3). The 2000 CMA sockeye salmon harvest was about 1,695,000 fish below the preseason harvest forecast of 3,470,000 fish (Appendix A). The first 2000 CMA commercial salmon harvest occurred on June 11 when the Chignik Bay, Central, and Eastern Districts initially opened for 24 hours (Appendix B). The last 2000 CMA commercial salmon harvest was on August 30 when local processors stopped purchasing salmon. The 2000 season provided 52 days of fishing opportunity with closures lasting up to two weeks in length.

During the first half of the 2000 commercial salmon fishing season, open waters within the Chignik Lagoon were designated to Humes Point, which is located across Chignik Lagoon from Chignik Island (Figure 2; Appendix C and D). This management action allowed the department to manage conservatively while the weir was not fish-tight and escapement estimates were made utilizing split beam sonar.

Throughout the majority of the season, the Central and Chignik Bay Districts were opened concurrently (Appendix B). Through June 18, the Eastern District was also opened concurrently with the Chignik Bay District. The Eastern District was closed through July 15 during the transition between the early run to Black Lake and the late run to Chignik Lake. During this transition between the early and late runs, the department evaluated the strength of the sockeye salmon late run to Chignik Lake. The entire CMA was closed to fishing during the transition period because the late run initially appeared to be weak in strength. CMA fishery openings in the districts furthest from the Chignik Lake system (Eastern and Western Districts) were curtailed until the strength of the late run to Chignik Lake was determined. No fishing occurred after August 14 in the Eastern District due to the below average area wide pink salmon escapements and because markets were not available for water-marked pink salmon (Appendix B).

The first commercial fishery in the Western and Perryville Districts opened on July 15 as a commercial test fishery. This commercial test fishery opening served as a means to evaluate pink and chum salmon run strength through commercial harvests. A total of four commercial test fisheries were conducted in the Western and Perryville Districts of the CMA during 2000. The last commercial test fishery in the Western and Perryville Districts occurred on August 14 (Appendix B). The commercial test fisheries in the Western and Perryville Districts were not extended because low catch rates and aerial surveys results indicated that the chum and pink salmon runs were below average in strength. As the season progressed, commercial openings were not warranted as pink and chum salmon interim escapement goals were not being met. The regulation which closes the Western and Perryville Districts on or about August 20 to enhance coho salmon escapement to the Kametolook River, as well as other streams in these two districts, was not superceded in 2000 by an August 14 closure to protect weak pink and chum salmon runs.

The total 2000 commercial salmon harvest (all species) in the CMA of 2.5 million salmon (Tables 4-6), was processed by two processors (Table 7). This was approximately 0.8 million less fish than the 1990-1999 average catch of 3.2 million fish (Table 3; Figure 5). A comparison of the 2000 commercial salmon catch by species to the 10-year average (1990-1999) catch from in the CMA results in the following: the 2000 chinook salmon catch of 2,592 fish was 61% lower, the sockeye salmon catch of

1,775,225 fish was 3% greater, the coho salmon catch of 123,222 fish was 34% lower, the pink salmon catch of 428,064 fish was 60% lower, and the chum salmon catch of 120,957 fish was 40% lower (Table 3).

#### **2000 Escapement Overview**

Fish were counted through the Chignik River weir from May 28 until June 7, and again from June 14 through September 4 after which the weir was removed for the season. Due to high water events, on June 8, a 90 foot wide section of the weir washed out. Visual estimates were made for the total number of salmon migrating through the washed out weir until June 14. From June 14, until the weir was reinstalled and fish tight on July 11, split beam sonar was utilized to enumerate salmon passing through the 90' hole in the weir. Since 1996, salmon have been enumerated later in the season than in any other period since the late 1950s. Funding for operation of the weir in late August and early September was made available through the Exxon Valdez Oil Spill Trustee Council (EVOS), which administered the Civil Settlement funds through the Department of Community and Regional Affairs. Funding for late escapement counts (August 4 to September 4) will continue through the 2003 season.

For the majority of the 2000 season, salmon escapement through the Chignik River weir was estimated with the use of an underwater camera, video monitor, and recording devices. The video monitoring equipment was operated continuously, with recording media exchanged once daily. When the weir was washed out and the split beam sonar equipment was installed, hourly escapement estimates were based on all sonar signatures that represented sockeye salmon sized targets for 24 hours per day.

Chinook salmon escapement into the Chignik River was estimated to be 4,285 fish which was 1,585 fish above the escapement goal of 1,450-2,700 (Table 8; Nelson and Lloyd 2001). During the period from June 20 through July 12, chinook salmon escapement counts were not available because the sonar system was calibrated to enumerate sockeye salmon sized targets. An estimate of the chinook salmon passing through the weir during this time period was derived using the data available before and after the wash out and a recent 10-year average time of entry curve was applied to the chinook salmon escapement. Total sockeye salmon escapement for the CMA was estimated at 814,425 with 805,225 sockeye estimated in the Chignik Bay District and 9,180 sockeye estimated in the Eastern District (Table 9). Sockeye salmon escapement to the Chignik River system through August 31 was estimated at 799,647 fish, 149,647 over the June 1 through August 31 escapement goal of 650,000 sockeye salmon (Table 10; Nelson and Lloyd 2001). Pink salmon (4,284 fish), chum salmon (48 fish), and coho salmon (7,062 fish) escapements were estimated through September 4 as they passed the Chignik River weir (Table 11). Aerial surveys of the Black Lake and Black River tributaries are conducted annually to document the distribution of the salmon migrating through the weir and reaching their respective spawning grounds (Table 12 and 13). In 2000, the late season aerial survey of the Black Lake and Black River tributaries indicated that an additional 200,000 sockeye salmon above the weir estimate had escaped to the spawning grounds. The discrepancy between the weir counts and the spawning ground aerial surveys could be a result of the accuracy of the split beam sonar system installed while the weir was washed out and the conservative daily visual estimates made before the sonar system was functioning.

Inseason and postseason sockeye salmon scale pattern estimates indicated that the first run was above average in size (peak late June) and the midpoint of the transition from Black Lake to Chignik Lake stock occurred on July 14 (50/50 stock composition; Figure 6). After July 14, management emphasis shifted from primarily attaining the Black Lake sockeye salmon escapement to attaining the Chignik Lake escapement. The Clark River portion of the late-run was not completely surveyed due to the lack of survey aircraft at the end of the season. (Figure 2; Table 12 and 13).

Salmon escapement for all other streams in the CMA was estimated by aerial survey (Table 13). Aerial surveys of approximately 110 salmon streams, adjacent bays, and stream mouths are flown regularly inseason to provide current escapement indices (Tables 13). Postseason escapement indices are estimated for each stream using the inseason aerial observations using area-under-the-curve methodology (Table 15, Johnson and Barrett 1988). The estimates assume a 15-day average stream life for pink and chum salmon and a final escapement stream entry date of September 15.

District wide pink and chum salmon escapements met or exceeded district wide escapement goals. Escapement goals for coho salmon are not established because weather, stream turbidity, and budget constraints preclude adequate late fall surveys. Late season aerial surveys for coho abruptly ended when the department Piper Super Cub was forced to crash land while returning from a survey on August 29. Initial reports indicated that the coho salmon runs in the CMA appeared to lag two weeks behind normal run timing or were weak in strength.

The pink salmon runs in the CMA appeared to be below average. Aerial survey data indicated that the Chignik area wide peak pink salmon count was 1,212,956 fish, well above the escapement goal of 780,000 fish (Tables 13 - 15; Nelson and Lloyd, 2001). Aerial survey data indicated that the Chignik area wide peak chum salmon count was 303,414 fish, well above the escapement goal of 207,000 fish (Tables 13, 15, 16; Nelson and Lloyd, 2001).

#### 2000 Exvessel Value

The exvessel value of the 2000 commercial salmon harvest was \$12.3 million, about \$1.5 million below the 1990-1999 average exvessel value of \$13.8 million (Table 17; Figures 7-8). The approximate value per permit for the 2000 season was \$124,356 which is \$16,231 thousand less than the 1990-1999 average (Table 17).

### Chinook Salmon

### Background

The CMA chinook salmon catch normally occurs primarily in the Chignik Bay District, and the escapement is primarily to the Chignik River system (Tables 4, 8, and 9). The Chignik River is the largest chinook salmon producing system on the south side of the Alaska Peninsula. There is no directed chinook salmon fishery within the CMA. Most incidental harvests of chinook salmon peak in July as

fishers target sockeye salmon. During 2000, more chinook salmon were harvested in the Western District than all other districts combined.

A brood table, based on only a few years of age class data from small sample sizes, has been used to establish an initial Chignik River system escapement goal of 1,450-2,700 fish (Nelson and Lloyd 2001). To ensure the lower end of the escapement goal is met, the department's inriver goal of 1,950 chinook salmon allows for a projected sport and subsistence harvest of 500 fish (Pappas 2000a). If escapement in early July is weak and escapement goals are not likely to be met, closed waters in the Chignik Lagoon to the Hume's Point markers may be used to enhance escapement. Normally 50% of the chinook escapement passes through the weir by July 11.

### 2000 Forecast

The preseason chinook salmon harvest projection was estimated at 3,800 salmon (Pappas 2000a). The chinook salmon harvests are dependent upon the amount of fishing time allowed for sockeye salmon harvest in July. Historically, chinook salmon are usually retained as bycatch from the sockeye salmon harvest efforts. This projection approximated the 6-year (1994-1999) average harvest of 3,835 salmon (Appendix A). A 6-year average was used because anomalously large chinook salmon catches occurred in the CMA during 1992 and 1993 (Table 18).

### Historical Escapement, Harvests, and 2000 Management

Since 1963, the combined chinook salmon catch and escapement in the CMA have ranged from a low of 927 fish in 1974 to a high of 21,461 fish in 1993 (Table 18; Figure 9). Commercial catches have increased from an average of 1,089 fish (1970-1979) to 6,641 fish (1990-1999; Table 3 and 18). A corresponding increase in escapement into the Chignik River has also occurred from an average of 1,212 fish (1970-1979) to 3,601 fish (1990-1999; Table 18).

The 2000 CMA chinook salmon commercial harvest of 2,592 fish was below the 1990-1999 average of 6,641 fish (Table 18; Figure 9). The commercial chinook salmon harvest occurred from June 11 to August 30, with a peak harvest of 791 fish on July 26 (Table 5). The total exvessel value of the 2000 chinook salmon harvest was estimated at \$16,336 averaging \$165 per permit holder (Table 17; Figure 7).

The 2000 chinook salmon Chignik Lakes system escapement estimate of 4,285 fish was 684 more than the 1990-1999 average escapement of 3,601 (Table 18). The escapement counts were not adjusted for chinook salmon which were removed by the sport fishery, utilized for personal or subsistence use, or those that spawned below the weir. During 2000, 50% of the chinook escapement passed the weir by July 11 (Table 8).

### Sockeye Salmon

### Background

Sockeye salmon are the most important commercial salmon species in the CMA. The commercial salmon fishery targets two runs of sockeye salmon that return to the Chignik River system. The majority of the early run ascends mostly during June an July, via Black River to spawn in the upper watershed of Black Lake. The majority of the late run ascends to Chignik Lake mostly during July and August (Witteveen 2002). Sockeye salmon destined for the Chignik and Black Lakes system are also harvested outside the CMA in two historic Alaska Board of Fisheries (BOF) approved fisheries: from the east in the Cape Igvak Section of the Kodiak Management Area; and from the west in the Southeastern District Mainland of the Alaska Peninsula Management Area.

Most CMA sockeye salmon production originates from the Chignik Lakes system. The Aniakchak River tributaries (Albert Johnson Creek) and Surprise Lake, however, also support small sockeye salmon runs (Table 13). Tagging studies conducted over several years in Aniakchak Bay and Cape Kumlik areas indicate that sockeye salmon harvested in these waters are almost exclusively bound for the Chignik River system (Lechner 1969). Consequently, the Eastern District management strategy is based on the sockeye salmon run strength of the Chignik River system which opens during June concurrently with the commercial openings in the Chignik Bay and Central Districts. This management strategy was approved by the BOF and enacted into regulation as the Eastern District Management Plan. In 1998, the Eastern District Management Plan was repealed from regulation because part of the plan required the department to adjust management practices when non-local salmon stocks were present. Because the department does not have the ability to determine the origin of a salmon stock in a timely and cost effective fashion, the Eastern District Management Plan was repealed.

The upper range of escapement goals for sockeye salmon are 400,000 fish for Black Lake and 255,000 fish for Chignik Lake (Appendix E; Nelson and Lloyd). The September 1-15 late run supplemental escapement objective of 25,000 sockeye salmon was adopted in 1995 to address late season subsistence concerns (Pappas 2000a; Appendix E). Commercial fishing time for sockeye salmon is regulated on achieving interim escapement goals by specific dates for each run (Pappas 2000a; Appendix E). Achieving these goals is complicated due to the run timing overlap of the two runs. Fisheries managers refer to this period of run timing overlap as the transition period.

The transition period from early-run (Black Lake) to late-run (Chignik Lake) fish generally occurs between June 26 and mid July (Pappas 2000a). Department biologists assess age and stock composition of the catch to estimate which stock is dominant at various times during this period. Catch sampling efforts are increased from once a week to every third day to assess the changing age and stock composition. Based on sampling results, fishing time may be increased to harvest early-run fish or may be decreased to allow time for evaluating the late run strength.

Two methods have been developed to estimate the daily proportion of each run during the transition period. The first is based on tagging studies conducted from 1962-1966 (Dahlberg 1968). These

studies allow fisheries biologists to develop an in season average time of entry (ATOE) curve to apportion the two Chignik sockeye salmon runs into the early and late-run components. The second method is based on differential growth between juvenile salmon rearing in Black and Chignik Lakes (Burgner and Marshall 1974, Conrad 1983). Sockeye salmon fry rearing in Black Lake (early run) emerge earlier and grow at a faster rate than fry rearing in Chignik Lake (late run; Narver 1966). The disparity in growth rates between Black and Chignik Lakes juvenile salmon is reflected in their scale patterns, which provides a means to separate adults returning to Black Lake from those bound for Chignik Lake. All scale age data are recorded in European notation (i.e., 1.2) where the first number indicates the number of years the juvenile salmon reared in fresh water and the second number indicates the number of years the salmon lived in a saltwater environment (Koo 1962; Table 19). The total age of the fish includes an additional year representing the time between egg deposition and fry emergence.

#### 2000 Forecast

The forecasts for Black and Chignik Lakes 2000 runs were based on simple linear regressions between sibling relationships or median values of returns from brood years since 1977, and were evaluated against smolt emigration data since 1994. Significant sibling regression relationships (P<.10) were used to estimate Black Lake ages-1.3 and 2.3 and Chignik Lake age-1.3 runs. The remaining age classes were estimated by the median value of each age class. Prediction intervals (80%) were either calculated from the regression analyses or from the variance associated with the age classes when no significant sibling relationships existed. (Appendices A; Scott and Geiger, 2000).

The 2000 sockeye salmon run to the Chignik River system was expected to be 4.99 million fish, which was 500,000 more fish than the record run of 1999. The Black Lake (early) run was expected to be large (3.90 million) when compared with the Chignik Lake (late) run (1.09 million). The 2000 Chignik River system total sockeye salmon run forecast was greatly over estimated (Appendix F).

A large portion of the early run (2.88 million) was expected to be age-1.3 fish. Two lines of evidence point to a large age-1.3 return in 2000. First, the age-1.2 (brood year 1995) component in the 1999 run was large, which was an indicator of the 2000 age-1.3 run. Brood year 1979 possessed similar age-1.2 return characteristics as brood year 1995 was showing, and resulted in an age-1.3 run of over 3 million fish.

### Historical Escapement, Harvests, and 2000 Management

*Inriver Management.* The Chignik River weir is located three miles upstream from the river mouth which empties into Chignik Lagoon (Figure 2). During 2000, the weir was operational from May 28 through September 4. Underwater video cameras recorded all fish that passed through two fish counting gates installed in the weir. Live video feeds from the underwater cameras were displayed on video monitors inside the main weir office and were archived on high resolution VHS video tapes. From 7:00 AM until 10:00 PM, weir personnel identified and enumerated all fish that passed by the video cameras during the first ten minutes of each hour from real time video feed. To obtain fish counts from 10:00 PM until 7:00 AM, weir personnel reviewed the first ten minutes of each recorded hour of video tape the

following morning. The ten minute counts were extrapolated by multiplying by six to provide an estimate of all fish (by species) passing through the weir during each hour. To ensure that the weir remained fish tight, staff performed maintenance dives using SCUBA gear on the weir to clean video cameras, repair damage, or to check for erosion beneath the aluminum panels.

*Chronology for June and Early July Inseason Management of the Chignik Sockeye Salmon Fishery.* In accordance with the annual management plan, commercial sockeye salmon fishing is allowed if the cumulative sockeye salmon escapement exceeds the interim escapement objective of 40,000 fish prior to June 12 (Appendix C and E), and is accompanied by a strong buildup of sockeye salmon within Chignik Lagoon (Pappas 2000a).

The cumulative escapement on June 9, exceeded the minimum interim escapement objective but was not accompanied by a substantial buildup of sockeye salmon in the Chignik Lagoon. The department conducted test fisheries on June 8 and June 10. Test fishery results from June 10 indicated the presence of a strong buildup, thus the Chignik Bay, Central, and Eastern Districts opened concurrently to commercial fishing on June 11 for 48 hours (Appendix B and D). The sockeye salmon escapement on June 14 exceeded the June 16 escapement objective of 100,000 fish. The escapement rate decreased which necessitated an extended area wide fishery closure from June 18 to June 29. The Eastern District was closed on June 18 and did not open until after the department had evaluated the Chignik Lake sockeye salmon run during the transition period (Table 10, Appendices B and E). From June 14 until July 11, salmon were enumerated through the weir with the use of split beam sonar because a large section of the weir had washed out. While the split beam sonar was in use, the department's fisheries management decisions were conservative.

On June 29, the Chignik Bay and Central Districts were opened concurrently. There were approximately 447,583 sockeye salmon harvested during the June 29 to July 7 commercial fishery. On July 15, all districts of the CMA were opened concurrently. The Western and Perryville Districts were opened on a commercial test fishery basis to assess the pink and chum salmon run strength (Appendix B).

*Chronology for the Late Season Fishery*. After July 13, through the end of the season, the management priority shifted towards achieving the escapement goal for the Chignik Lake late run. On July 15, the Chignik Bay and Central Districts opened to commercial fishing until July 17 (Appendix D) after the Chignik Lake late run July 19 interim escapement objective of 100,000 sockeye salmon was exceeded (Appendix E). There were 215,302 sockeye salmon harvested during the July 15 to July 17 fishing period (Table 5).

All districts were opened to commercial fishing on July 23. The fisheries in the Chignik Bay and Central Districts were extended several times before closing on July 30 (Appendix D). The fishery opening and the extensions were warranted because the estimated escapement of Chignik Lake sockeye salmon through the weir on July 31 was 218,589 fish which surpassed the July 31 upper interim escapement objective of 200,000 fish (Table 20; Appendix E). The Western and Perryville Districts were opened on July 23 for 52 hours on a test fishery basis and were extended for 24 hours before closing on July 26

(Appendix B and D). The opening and extensions were warranted based on the Chignik Lake sockeye salmon escapement and on the catch and escapement of pink and chum salmon. The total CMA commercial harvest for the July 23 to July 31 fishery was as follows: 126,516 sockeye salmon, 150,710 pink salmon, and 37,408 chum salmon (Table 5).

All districts opened to commercial fishing on August 4, for a 52-hour fishing period (Appendix B and D). The opening was justified by the Chignik Lake sockeye salmon escapement of approximately 239,442 as of MIDNIGHT August 4 (Table 20). This cumulative escapement exceeded the August 31 lower interim objective of 200,000 fish (Appendix E). The fisheries in the Chignik Bay and Central Districts were extended several times before closing on August 15 (Appendix B and D). The Eastern, Western, and Perryville Districts also opened on August 4, for a 52-hour fishing period on a test fishery basis to assess the strength of the pink and chum salmon runs (Appendix B and D). The pink and chum salmon escapements, assessed in-season by aerial surveys, appeared to be achieving escapement goals. Though area wide pink and chum salmon escapement achieved the district wide goals, a below average amount of harvestable surplus was available for the fleet in 2000. The total commercial harvest for the August 4 to August 15 fishery was as follows: 104,000 sockeye salmon, 140,902 pink salmon, and 28,750 chum salmon (Table 5).

The Chignik Bay and Outer Chignik Bay Section of the Central District opened to commercial fishing on August 18 for a 75-hour fishing period (Appendix B and D). The remainder of the Central District opened to commercial fishing on August 20. Fishing time in both districts was extended until August 23 after the Chignik Lake sockeye salmon escapement had surpassed the August 31 upper interim objective of 250,000 (Appendix E). The total commercial harvest for the August 18 to August 23 fishery is as follows: 46,218 sockeye salmon, 26,137 pink salmon, and 3,480 chum salmon (Table 5).

The Chignik Bay District and the Outer Chignik Bay Section of the Central District opened to commercial salmon fishing on August 25 for a 120-hour fishing period before closing on August 30 (Appendix B and D). The opening was justified by a Chignik Lake sockeye salmon escapement of approximately 277,403 fish as of midnight August 24 (Table 20). The escapement had surpassed the August 31 upper interim objective of 250,000 (Appendix E). The total commercial harvest for the August 25 to August 30 fishery is as follows: 29,084 sockeye salmon, and 6,196 pink salmon, 1,718 chum salmon (Table 5). The CMA had its last commercial salmon delivery on August 30. Although this was the last day of commercial fishing in the CMA, the regulatory season extends through September 31. This allows for the possibility of a commercial fishery if sockeye salmon escapement is sufficient enough to support a fishery, processor, and the late season subsistence "redfish" needs are met.

The escapement was not on track with the September 1 to 15 upper interim objective of 25,000 sockeye salmon through the weir to meet the late-run subsistence needs of the local subsistence users (Appendix E). Because of the concern for low escapement in September, no further commercial fisheries took place during the remainder of the 2000 season within the CMA.

*Cape Igvak Sockeye Salmon Fishery.* The Cape Igvak salmon fishery, located in the Kodiak Management Area, is allocated 15 percent of the available Chignik harvest when specific biological and

harvest criteria are met in Chignik (5 AAC 18.360. Cape Igvak Salmon Management Plan; ADF&G 1999). In order to comply with the biological (achieving escapement goals for the Chignik River system) and allocative requirements (minimum harvest levels in Chignik assured), fishing was limited to a total of 14 days in 2000. The Cape Igvak fishery harvested an estimated 272,808 Chignik bound sockeye salmon through July 25 (Tables 21-23), which represented 14.46% of the total Chignik sockeye salmon harvest through July 25.

*Southeastern District Mainland Sockeye Salmon Fishery.* The Southeastern District Mainland fishery harvested an estimated 103,419 Chignik bound sockeye salmon through July 25 (Table 21-23). This represents 5.48% of the total Chignik sockeye salmon harvest through July 25. The 2000 Southeastern District Mainland sockeye salmon harvest was 0.5% less than the 6.0% allocation (5 AAC. 09.360 Southeastern District Salmon Management Plan; ADF&G 1999).

*Scale Pattern Analysis of Chignik Sockeye Salmon.* During 2000, the midpoint of the run transition occurred on approximately July 14 (50% Black Lake / 50% Chignik Lake), as determined by inseason scale pattern analysis (SPA), time of entry curve, and age composition data (Figure 10; Table 20).

Postseason SPA age 1.3 and 2.3 models were used to assign sockeye salmon to Black Lake or Chignik Lake. Linear discriminate models for the age 1.3 and 2.3 sockeye salmon were utilized for postseason reconstructing the 2000 sockeye salmon run. Stock estimates, using these models, assigned salmon to Black Lake or Chignik Lake from each commercial sample (Tables 24-26). Linear interpolation of the percent composition between sample dates was calculated for catch and escapement values and adjusted to Chignik Lagoon dates (Table 21) resulting in daily escapement and catch estimates for each stock (Tables 27 and 28).

The Black Lake sockeye salmon postseason SPA escapement estimate of 536,141 fish (Table 29) was 23,492 less fish than the inseason estimate (Table 20) and 136,141 fish more than the Black Lake upper escapement goal of 400,000. Chignik Lake escapement estimates only include salmon counts estimated through the weir. Post weir estimates that are based on statistical analysis of the ratio of the Chignik Lagoon sockeye salmon catch to escapement prior to weir removal were not generated because of the absence of fishing activity during the month of September. The Chignik Lake sockeye salmon postseason SPA escapement estimate of 269,084 fish through August 31 (Table 30), was above the 250,000 Chignik Lake upper interim escapement goal.

The major age classes, as determined by SPA, which contributed to the escapement and catch of the Black Lake run are listed in Tables 31 and 32. Major age classes, as determined by SPA, which contributed to the escapement and catch of the Chignik Lake run are listed in Tables 32 and 33.

*Season Summary.* The 2000 total sockeye harvest and escapement was 2.96 million fish (Tables 32 and 34; Figure 11). This was 60% below the forecasted estimate of 4.99 million total fish return (Appendix A and F). Total catch bound to both lakes was 2,151,452 sockeye salmon (includes Cape Igvak and Southeastern District Mainland catch) with 1,575,855 fish apportioned to Black Lake and 575,597 fish apportioned to Chignik Lake (Table 32; Figure 12). Total sockeye salmon harvest within

the CMA was 1,775,225 fish with an exvessel value of \$12,311,264 million (Tables 3, 17; Figure 7). The average total earnings per permit holder was \$124,356 (Table 17; Figure 8). The percentage of sockeye salmon harvest by district, within the CMA, were as follows: 75% in Chignik Bay District, 20% in the Central District, 4% in the Eastern District, 1% in the Western District, and 0.1% in the Perryville District (Table 4). The harvest of Chignik bound sockeye salmon through July 25 in the CMA was 1,509,652 fish (80% of the total), the Cape Igvak Section was 272,808 fish (14.46% of the total) and the Southeastern District Mainland Area was 103,419 fish (5.48% of the total, Table 22).

The sockeye salmon harvested in the CMA were large during the 2000 season. The area wide sockeye salmon average weight of 7.7 pounds is the second largest since 1983 (Table 35). The average weight per sockeye salmon in the Chignik Bay District for the 2000 season was 7.8 pounds. as compared to the 1990-1999 average of 6.6 pounds. The average weight of the sockeye salmon harvested in all other districts of the CMA were also larger than the 1990-1999 average. The combined 1990-1999 average sockeye salmon weight of all other districts of the CMA was 6.5 pounds, while the 2000 average was 7.4 pounds. (Table 35).

The sockeye salmon total run (catch and escapement) for Black Lake was 2,111,996 fish and for Chignik Lake was 844,681 fish based on postseason scale pattern analysis (Tables 32 and 34; Figure 12). A total of 536,141 sockeye salmon were apportioned to the Black Lake escapement and 269,084 sockeye salmon were apportioned to Chignik Lake escapement (Tables 32 and 34; Figure 12). Late season aerial surveys documented approximately 200,000 additional sockeye salmon in the tributaries of Black Lake above the weir and SPA estimates.

### Pink and Chum Salmon

#### Background

Pink and chum salmon production in the CMA has historically been characterized by variable escapements and returns for both species (Tables 15, 16, 36-45). The variability of the returns may be attributed to the physical morphology of the stream systems, which are characterized by loose substrates and steep gradients. These systems are impacted by fall, winter, and spring floods that may cause streambed scouring, and can result in high egg and fry mortality (Arnie Shaul and Patrick Holmes, Alaska Department of Fish and Game, Kodiak, personal communication).

In the past, commercial fishing periods in the Eastern, Western, and Perryville Districts from early July through August depended primarily on the abundance of pink and chum salmon. However, fishing periods where pink and chum salmon were caught incidentally in the Central and Chignik Bay Districts were based primarily on a fishery targeting the Chignik River system sockeye salmon. Management of the CMA pink and chum salmon fisheries is based on inseason aerial assessments of escapement (conducted annually since 1953; Table 13), historical catch and escapement data, and catch per unit effort (CPUE) data generated from commercial test fisheries.

During 2000, all salmon are processed locally in Chignik Bay. A majority of the sockeye salmon are processed for the fresh frozen market but new canning facilities were used this year. With the re-introduction of canning facilities in the CMA, pink and chum salmon have become more important to the fleet as the industry now has a means of processing these species. To provide the quality required for both fresh frozen processing and canning, the fisheries are managed to harvest migrating fish prior to, or just as they reach terminal waters.

### 2000 Forecast

The 2000 preseason harvest forecast estimated a catch of 1,000,000 pink salmon (Appendix A). The 2000 CMA pink salmon harvest of 428,064 fish was 57% below the forecast. The 2000 preseason harvest forecast estimated a catch of 200,000 chum salmon (Appendix A). The 2000 CMA chum salmon harvest of 120,957 fish was 40% below the forecast.

The pink and chum salmon forecasts were based on the average harvest over the most recent 10-year period. Historically the majority of the pink and chum salmon harvests come from the Western and Perryville Districts. However, unstable stream conditions that create high freshwater mortality and reduce suitable spawning habitat in these districts may have resulted in poor returns from excellent parent year escapements.

### 2000 Management and Harvests

During June and July in the Chignik Bay and Central Districts, pink and chum salmon were caught incidentally in commercial openings directed towards the harvest of sockeye salmon.

In conjunction with the July 15 Chignik Bay and Central Districts opening, there were also openings in the Eastern, Western, and Perryville Districts. The Western and Perryville Districts were opened on a commercial test fishery basis to assess the strength of pink and chum salmon runs. Based on aerial surveys, the pink and chum salmon escapements appeared to be about normal. There were a total of four commercial test fishery openings in the Western and Perryville Districts during 2000 (Appendix B and D). The poor catch results of these test fisheries indicated that the Western and Perryville District pink and chum salmon runs could not provide a significant harvestable surplus above escapement needs. Of the 2000 total pink salmon harvest, 106,647 fish (25%) were harvested in the Western District, while 271,417 fish (63%) were harvested in the Central District (Table 4). Of the total 2000 chum salmon harvest, 34,823 fish (29%) were harvested in the Western District, while 66,904 fish (55%) were harvested in the Central District (Table 4).

The 2000 CMA pink salmon estimated total escapement (ETE) of 1,212,956 fish was based on the area-under-the-curve method (Table 9; Figure 13). The distribution and the comparative magnitude of the 2000 escapement to the 1990-1999 escapement average by CMA District is as follows; the Chignik Bay District escapement of 27,434 fish was approximately 45% less than the 1990-1999 average of 49,700 pink salmon (Tables 9 and 36); the Central District escapement of 163,700 fish was approximately 56% less than the 1990-1999 average of 302,900 pink salmon (Tables 9 and 37); the

Eastern District escapement of 793,100 fish was approximately 15% less than the 1990-1999 average of 927,700 pink salmon (Tables 9 and 38); the Western District escapement of 142,600 fish was approximately 16% less than the 1990-1999 average of 170,700 pink salmon (Tables 9 and 39); and the Perryville District escapement of 86,200 fish was approximately 69% less than the 1990-1999 average escapement of 282,600 pink salmon (Tables 9 and 40).

The 2000 CMA chum salmon catch was 120,957 fish (Table 4; Figure 14). The CMA chum salmon harvest was approximately 79,043 fish below the forecasted harvest of 200,000 fish, and 79,938 fish below the 1990-1999 average harvest of 200,895 chum salmon (Table 3; Appendix A). During 2000, most chum salmon were harvested in the Central District (66,904 fish). The chum salmon harvest in the remaining districts were as follows: Chignik Bay (8,389 fish), Eastern (8,045 fish), Western (34,823 fish), and Perryville (2,796 fish) Districts (Table 4).

Like pink salmon, the chum salmon total escapement estimate was based on the area-under-the-curve method. A total of 303,413 chum salmon escaped to all districts during 2000. This chum salmon escapement was approximately 23% lower than the 1990-1999 average of 395,400 salmon (Tables 9 and 16; Figure 14). The chum salmon escapements by district are as follows: Chignik Bay (98 fish), Central (22,730 fish), Eastern (216,000 fish), Western (12,735 fish), and Perryville (51,850 fish) Districts (Table 9, 41-45).

The exvessel value of pink and chum salmon harvested within the CMA was estimated at \$106,470 and \$93,030, respectively (Table 17; Figure 7). The average value per permit holder was \$1,075 for pink salmon and \$940 for chum salmon (Table 17; Figure 7).

### Coho Salmon

### Background

The Chignik Lakes coho salmon run is the largest within the CMA and one of the largest within the Westward Region. Although a directed CMA coho salmon fishery usually begins in late August primarily in the Chignik Bay District, coho salmon are also harvested incidentally in the directed sockeye, pink, and chum salmon commercial fisheries. The Western District usually accounts for the second highest coho salmon catches in the CMA (Figure 15). Commercial coho salmon catches begin as early as June and normally continue until the CMA closes. From 1960-2000, total catches have ranged from 1,292 to 370,420 fish with an overall trend of increasing catches since 1960 (Table 3).

Peak timing for coho salmon catches differ when comparing offshore cape and inshore bay fisheries. Peak offshore catches occur during the targeted pink and chum salmon cape fisheries in late July, while peak inshore catches occur in the Chignik Bay District in late August to early September (Figure 15). The early coho salmon catches, occurring primarily in the Western and Perryville Districts, have similar average weights as those caught early in Chignik Lagoon. Ivanof Bay of the Perryville District and several streams in the Eastern District also have good coho salmon production. Overall, coho salmon escapement monitoring in the CMA is sporadic due to the late timing of the run, poor weather conditions, and the logistics involved in monitoring the numerous streams in this remote area.

#### **2000 Forecast**

Coho salmon harvest projections for Chignik Bay and the outside districts were based on a 10-year average. The 2000 coho salmon harvest forecast was 200,000 fish (Appendix A). Coho salmon harvests were affected by the duration of fishing periods directed to harvest sockeye, pink, or chum salmon. For example, a weak sockeye salmon second run (Chignik Lake) or a weak pink and chum salmon run could severely curtail the fisheries and, consequently, the incidental harvest of coho salmon would also be reduced.

#### 2000 Management and Harvests

The Chignik River coho salmon escapement of 7,062 fish was estimated from weir counts through September 4 (Table 11). Because of low numbers of coho salmon escaping through the weir coupled with the lack of commercial fishing activity after August 31, post-weir estimates using catch and escapement ratios prior to weir removal could not be accurately estimated. It appears that the 2000 Chignik Lakes system coho salmon run was behind average run timing. Coho salmon aerial surveys during the late season were incomplete during 2000 because the department aircraft was forced to crash land while returning from surveying on August 29. No further aerial surveys were conducted in 2000.

In the CMA, 123,222 coho salmon were caught during the 2000 season (Table 4). This catch was 76,778 fish less than the harvest projection of 200,000 coho salmon (Appendix A). The largest coho salmon catches came from the Western District with a total harvest of 69,559 salmon (Table 4). The Mitrofania Section in the Western District (ADF&G statistical areas 273-70, 273-72, and 273-74; Figure 4) produced the largest harvest of coho salmon in the CMA during 2000 (42,497 fish, Table 6). The largest daily catch of 24,120 coho salmon occurred on July 24 (Table 5). The exvessel value of the CMA coho salmon harvest was \$283,061 (Table 17; Figure 7). The average value per permit holder was \$2,859 (Table 17).

### Subsistence Salmon Fisheries

The CMA villages of Chignik, Chignik Lake, Chignik Lagoon, Perryville, and Ivanof Bay rely heavily on local salmon resources for subsistence. Salmon subsistence permits are issued to people in these villages through the Kodiak and Chignik ADF&G offices, Village Public Safety Officers, processors, and by ADF&G Subsistence Division personnel. In 2000, a total of 112 of the 130 subsistence permits issued were returned with harvest data (Table 46). The ADF&G Subsistence Division estimates harvests by a stratified expansion model for each community (Hutchinson-Scarbrough and Fall 1999). In 2000, the

CMA subsistence harvest was estimated at 163 chinook, 9,516 sockeye, 1,783 coho, 1,154 pink, and 517 chum salmon (Table 46).

This was the fourth year the village of Perryville instituted self-imposed harvest restrictions on approximately half (upper reaches) of the Kametolook River during the coho salmon run. A coho salmon restoration project was started in 1997. Eggs were taken during the fall of 1998 through 2000 and annually placed in incubation boxes for coho salmon run restoration purposes (Scarbrough and McCullough, 2000). Jim McCullough, ADF&G biologist and co-principal investigator of the Kametolook Coho Salmon Restoration Project, was unable to estimate a total indexed count of coho salmon in the Kametolook River due to high and turbid water conditions during 2000.

### Personal Use of the Commercial Catch

Starting in 1995 the Chignik permit holders have been required to record commercially harvested salmon kept for personal use (although no data were available in 1997). There were a total of 20 chinook salmon harvested for personal use in the 2000 CMA commercial salmon fishery (Table 47).

### **CHIGNIK HERRING FISHERIES**

### Background

The earliest recorded Pacific herring *Clupea pallasi* fishery in the Alaska Peninsula region was in 1906. During the early herring fisheries, the Chignik area catch was combined with catches from North and South Peninsula areas and labeled as southwestern Alaska catches. During this period, annual herring catches did not exceed 500 tons for all three areas combined. These herring were harvested with beach seines and marketed as a salted product. This early herring fishery ceased in the late 1930s and did not commence again until 1980, when a herring sac roe fishery developed (Pappas 2000b).

Since 1980, the CMA herring sac roe fishery has been a low effort, low yield fishery. Prior to 1984, harvests were concentrated in the Big River Section of the Eastern District. This area was closed to commercial herring fishing in 1985 due to low herring abundance and has remained closed since. This closure shifted fishing pressure to other areas of the CMA but harvests have remained low. The most recent harvest of herring in the CMA took place in 1996 (Pappas 2000b). The 2000 regulations pertaining to the herring fishery in the CMA are located in Appendix F.

Spawning schools of herring located in small geographic areas (generally a bay or lagoon), are managed as discrete stocks. The projected annual exploitation rate of each of these stocks is dependent on the previous year's biomass estimates (Pappas 2000b). Preseason harvest projections may differ from actual harvest levels if inseason information (aerial surveys, catch per unit effort) suggests that the spawning biomass of a discrete stock differs significantly from anticipated levels. Current CMA commercial fishing regulations can be found in Appendix G.

#### 2000 Management and Harvests

In 2000, a sac roe herring fishery did not occur. No fishing effort or harvest of herring were recorded for 2000 due to lack of fishing interest. No herring biomass estimates were determined by the department due to budget constraints.

#### **OTHER SPECIES (NON-COMMERCIAL)**

Dolly Varden *Salvelinus malma* have been enumerated through the Chignik weir since state management began in 1960 (Table 48). Dolly Varden were not enumerated during 2000 because of the use of split beam sonar used during the time frame when the weir was washed out. The sonar system's tracking parameters were set to enumerate sockeye salmon sized targets. A run time of entry curve for Dolly Varden was not generated or utilized to estimate fish passage through the weir during 2000.

#### LITERATURE CITED

- ADF&G (Alaska Department of Fish and Game). 2000. Chignik, Kodiak, and Cook Inlet, Areas Commercial Fishing Regulations, 1999-2001 edition, Commercial Fisheries Division, Juneau.
- Burgner, R. and S. Marshall. 1974. Optimum escapement studies of Chignik sockeye salmon. University of Washington, Fisheries Research Institute, Project Report AFC-34, Segment 3, Seattle.
- Conrad, R.H. 1983. Management applications of scale pattern analysis methods for the sockeye salmon runs to Chignik, Alaska. M.S. Thesis, Univ. Washington, Seattle.
- Dahlberg, M.L. 1968. Analysis of the dynamics of sockeye salmon returns to Chignik Lakes, Alaska. Ph.D. dissertation. Univ. Washington, Seattle.
- Johnson, B.A. and B. Barrett. 1988. Estimation of salmon escapement based on stream survey data: a geometric approach. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K88-35, Kodiak.
- Hutchinson-Scarbrough, Lisa B. and J.A. Fall. 1999. Interim Progress Report: Supplemental Information on Subsistence Uses of Salmon in the Chignik Management Area by the Residents of Perryville, Southwest Alaska. Report to the Alaska Board of Fisheries, Fairbanks, October 1999. Alaska Department of Fish and Game, Division of Subsistence, Anchorage.
- Koo, T.S.Y. 1962. Age designation in salmon. In: Studies of Alaska red salmon. Univ. Wash. Publ. Fish. New Ser. 1. Seattle, WA.
- Lechner, J. 1969. Identification of red salmon stocks taken in the Cape Kumlik-Aniakchak Bay fishery, Chignik Area, 1967. Alaska Department of Fish and Game, Division of Commercial Fisheries. Informational Leaflet 133, Juneau.
- Narver, D.W. 1966. Pelagial ecology and carrying capacity of sockeye salmon in the Chignik Lakes, Alaska. Ph.D. dissertation, Univ. Washington, Seattle.
- Nelson, P.A. and D.S. Lloyd. 2001. Escapement goals for Pacific salmon in Kodiak, Chignik, and Alaska Peninsula/Aleutian Islands Areas of Alaska. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K01-66, Kodiak.
- Pappas, G.E. 2000a. Chignik Management Area Commercial Salmon Fishery Management Plan, 2000. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K00-36, Kodiak.

#### LITERATURE CITED

- Pappas, G.E. 2000b. Chignik Management Area Commercial Sac Roe Herring Fishery Management Plan, 2000. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K00-37, Kodiak.
- Scarbrough, H.L. and J.N. McCullough. 2000 Kametolook River Coho Salmon Subsistence Project, Restoration Projects Annual Report, 00247 and 01247, 2000 and 2001 Annual Report, Exxon Valdez Oil Spill Restoration Project Annual Report.
- Scott, R. and H.J. Geiger. 2000. Run forecasts and harvest projections for 2000 Alaska salmon fisheries and review of the 1999 season. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 5J00-04, Juneau.
- Witteveen, M.J. 2002. Chignik Lakes scale pattern analysis, run apportionment, and sockeye salmon catch sampling results, 2001. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K02-2, Kodiak.

	Nai	me	Permit No.	Alaska Residency	Vessel Name	ADF&G N
1	ALEXANDER	JASON	S01L59000W	NR	CAPT'N JAY	217
2	ALLEN	BENJAMIN	S01L57376O	R	ILLUSION	105
3	ANDERSON	AARON	S01L56203U	R	VENTURE	3384
4	ANDERSON	IAN	S01L56415U	R	GYPSY LADY	615
5	ANDERSON	RODNEY	S01L56936B	R	ENDURANCE	6412
6	ANDERSON	GEORGE	S01L57133E	R	ALICE A	333
7	ANDERSON	AL	S01L57160U	R	ALYSA JUNE	616
8	ANDERSON	GARY	S01L57501K	R	JANET LYNNE	533
9	ANDERSON	DEAN	S01L60114M	R	SIERRA GALE	609
10	ANDERSON	EUGENE	S01L60601G	R	RAY MAR	314
11	ANDERSON	JULIUS	S01L55433H	R	CHRISTINA J	412
12	ANDERSON	LARS	S01L50123N	R	ERICA RAE	339
13	ASTOR	CRAIG	S01L59794I	R	DREAMER	413
14	BRANDAL	HENRY	S01L50032K	R	KERRI LYNN	363
15	BRANDAL	ALEC	S01L55170U	R	ALEXANDRIA	325
16	BRANDAL	CLIFFORD	S01L50332L	R	TASHA	324
17	BROOKMAN	GLENN	S01L58578P	NR	ALEUTIAN STORM	232
18	BROWN	MALCOLM	S01L55938M	R	HYPATIA	626
19	BUMPUS	DONALD	S01L61910L	R	KIMBERLY DAWN	596
20	BURKHART	GLEN	S01L56935J	R	RESURRECTION	454
21	CAMERON	ROBERT	S01L58603C	NR	LAUNI C	377
22	CAMPBELL	ANGUS	S01L55731X	NR	TORI-ANNA	581
23	CARLSON	RODRICK	S01L57704F	R	KAISHA LENAE	574
24	CARLSON	EUGENE	S01L55520P	NR	LADY ANN	580
25	CARLSON	GARY	S01L56192Z	R	AARON C	218
26	CARLSON	ERNEST	S01L57125P	R	DESPERADO	437
27	CARLSON	DALE	S01L57473V	R	LADY DIANE	433
28	CARLSON	BERNARD	S01L50060S	R	TARISSA JEAN C	338
29	CONSTANTINE		S01L57808I	R	EDDIE LEE	70
30	COWGILL	JOHN	S01L57469C	NR	VICTORIA	510
31	ERICKSON	CLARENCE	S01L56512B	R	SHARON LEE	577
32	ERICKSON	RAYMOND	S01L62210Z	R	MIDNIGHT SUN	527
33	GREGORIO	TONY	S01L58848X	R	ANTOINETTE REN	375
34	GRUNERT	CLEMENS	S01L64188M	R	ADVENTURESS	423
35	GRUNERT	FRANK	S01L59851X	R	KURT ELDON	614
36	GRUNERT	MICHEAL	S01L55935K	R	CAPT'N SAM	594
37	HANSEN	RANDALL	S01L55954N	NR	MICKEY H	617
38	HATCH	ARNE	S01L60183F	R	MISS MELODY	616
39	HINDERER	WALLACE	S01L57085S	R	RAECHEL LOUISE	415
40	HORN	DAVID	S01L55399O	R	ALYSA ANNE	318
41	JOHNSON	PAUL	S01L56395S	NR	SUSAN RAE	359
42	JONES	JOHN	S01L56589I	R	SONDRA	555
43	JONES	MORRIS	S01L56405W	NR	ISLANDER	392
44	KALMAKOFF	HARVEY	S01L50090M	R	OCEAN SPRAY	236
45	KALMAKOFF	ARCHIE	S01L55361H	R	DESERT STORM	381
46	KALMAKOFF	JOSEPH	S01L60614G	R	MISS PEGGY	219
-10		3000111	-Continued		1001	219

 Table 1.
 List of permit holders who fished in the Chignik Management Area, 2000.

Table 1. (page 2 of 3)

	Na	me	Permit No.	Residency	Vessel Name	ADF&G N
47	KASHEVAROF	WILLIAM	S01L57487N	R	CHRISTINE K	542
48	KOPUN	ALOYS	S01L57863I	R	KAREY GALE	459
49	KOPUN	AXEL	S01L57612J	R	MISS MARIT	358
50	KOSBRUK	IVAN	S01L50116R	R	JELLY ROLL	457
51	KOSBRUK	HARRY	S01L56726L	R	SAINT HERMAN	385
52	KOSBRUK	BORIS	S01L58206U	R	LADY EVELYN	432
53	KULIN	STEPHEN	S01L60113U	R	KRITARKA	631
54	LIND	JOHNNY	S01L50223W	R	ALEUT SISTERS	384
55	LIND	ELLIOT	S01L56872O	R	LISA MARIE	35
56	LIND	MITCHELL	S01L57384C	R	JESSICA MARIE	
57	LOUNSBURY	BRETT	S01L58322F	R	KARMA	31
58	MARTIN	MICHAEL	S01L64187U	R	CAPTAIN KIDD	67
59	MCKILLY	GABRIEL	S01L59493O	R	DOROTHY M	32
60	MERSHON	JOSHUA	S01L58818F	R	WITNESS	574
61	MERSHON	DANIEL	S01L61370V	R	MAGNUM	42
62	NELSON	ROBERT	S01L58425P	R	SEA PRINCE	60
63	ODOMIN	ANDREW	S01L57696L	R	ELLA MAE	
64	OGLE	LEONARD	S01L55311R	R	CHALLENGE	61
65	OLSEN	KNUD	S01L56418W	NR	HEIDE LINEA	55
66	OLSEN	GARRETT	S01L58496R	NR	ABSOLUT	21
67	OLSEN	JEFFREY	S01L60115F	NR	DENAKA	
68	ORLOFF	GEORGE	S01L59308M	R	MICHELLE LEE	35
69	PEDERSEN	ALVIN	S01L55953V	R	MILLIE JO	37
70	PEDERSEN	HANS	S01L57171K	R	LAYLA MARIE	47
71	PEDERSEN	AUGUST	S01L58126H	R	SHARON ANN	59
72	PEDERSEN	ALEC	S01L57695S	R	DIANA	51
73	PEDERSEN	STANLEY	S01L60121I	R	KAYLEE	5
74	PLETNIKOFF	ROBERT	S01L58077F	R	RITA MARIE	35
75	ROSS	MALCOLM	S01L60106Z	R	SHADOWFAX	61
76	ROWLAND	ROGER	S01L63976A	R	DESIDERATA	41
77	SHANGIN	CLEMENT	S01L56733H	R	MISS CLEMENTINI	38
78	SHANGIN	EDGAR	S01L57003B	R	MISS ANGELINA	49
79	SHANGIN	ANDY	S01L58145K	R	SHARON DAWN	39
80	SHANGIN	DENNIS	S01L58178G	R	MIRANDA LEIGH	21
81	SHANGIN	RUSSELL	S01L52949G	R	AMBER NICOLE	56
82	SHANGIN	STEPHEN	S01L57296B	R	BAY VIEW	21
83	SIEMION	THEODORE	S01L56322H	R	OUTSIDER	20
84	SIEMION	MATTHEW	S01L56992S	NR	SEA BREEZE	32
85	SKONBERG	RALPH	S01L50205L	R	SUSAN RAE	35
86	SKONBERG	ARNOLD	S01L55477R	R	LEANNA JEAN	45
87	SKONBERG	DARRELL	S01L55546P	R	ALASKA ROSE	33
88	SKONBERG	CALVIN	S01L56228C	R	ROSALIE	34
89	SKONBERG	ROY	S01L58470R	R	AMY RAE	42
90	STEPANOFF	WALTER	S01L57091W	R	MIRACLE GIRL	36
91	STEPANOFF	DONALD	S01L58308N	R	MISS OLIVIA	41
		ANDREW	S01L60144G	R	LAURA JUNE	283

Table 1. (page 3 of 3)

	Ν	ame	Permit No.	Residency	Vessel Name	ADF&G NO.
 93	SUYDAM	LOWELL	S01L56680K	R	STELLOR	39962
94	SUYDAM	GLENN	S01L59615J	R	ALEUT SON	53205
95	TAKAK	RICHARD	S01L57035F	R	SEA WALKER	21707
96	THOMAS	MARK	S01L55925M	NR	COLUMBIA	56222
97	VEERHUSEN	DANIEL	S01L57662X	R	SHADY LADY	67536
98	YAGIE	JERRY	S01L56797N	R	NORTHWIND	36296
 99	YAGIE	MARVIN	S01L57278P	R	MAXINE	54909

	Resi	dent	Non-R	esident	Total Permits
Year	Number	Percent	Number	Percent	Fished
1966	65	89.0	8	11.0	73
1967	73	88.0	10	12.0	83
1968	59	88.1	8	11.9	67
1969	57	83.8	11	16.2	68
1970	57	82.6	12	17.4	69
1971	64	83.1	13	16.9	77
1972	62	78.5	17	21.5	79
1973	63	81.8	14	18.2	77
1974	79	84.0	15	16.0	94
1975	72	83.7	14	16.3	86
1976	66	85.7	11	14.3	77
1977	74	84.1	14	15.9	88
1978	82	86.3	13	13.7	95
1979	87	86.1	14	13.9	101
1980	87	86.1	14	13.9	101
1981	87	84.5	16	15.5	103
1982	89	84.8	16	15.2	105
1983	84	84.0	16	16.0	100
1984	84	83.2	17	16.8	101
1985	85	84.2	16	15.8	101
1986	87	87.0	13	13.0	100
1987	89	87.3	13	12.7	102
1988	88	86.3	14	13.7	102
1989	86	84.3	16	15.7	102
1990	85	84.2	16	15.8	101
1991	85	83.0	18	17.0	103
1992	84	84.0	17	17.0	101
1993	85	83.3	17	16.7	102
1994	82	82.8	17	17.2	99
1995	80	80.0	20	20.0	100
1996	80	80.0	20	20.0	100
1997	81	82.7	17	17.3	98
1998	70	82.4	15	17.6	85
1999	77	85.6	13	14.4	90
2000	85	85.9	14	14.1	99
Averages					
1970-1979	71	83.6	14	16.4	84
1980-1989	87	85.2	15	14.8	102
1990-1999	81	82.8	17	17.3	98

Table 2. Residency status of permit holders in the Chignik Management Area, 1966-2000.

	Number of Salmon <sup>a</sup>										
Year	Chinook	Sockeye	Coho	Pink	Chum	Total					
1960	643	715,969	8,933	557,327	486,699	1,769,57					
1961	409	322,890	3,088	443,510	178,760	948,65					
1962	435	364,753	1,292	1,519,305	364,335	2,250,120					
1963	1,744	408,606	9,933	1,662,363	112,697	2,195,34					
1964	1,099	556,890	2,735	1,682,365	333,336	2,576,42					
1965	1,592	599,553	9,602	1,118,158	120,589	1,849,49					
1966	636	219,794	16,050	683,215	238,883	1,158,57					
1967	882	462,000	13,150	108,981	75,543	660,55					
1968	674	977,382	2,200	1,290,660	223,861	2,494,77					
1969	3,448	394,135	18,103	1,779,736	67,721	2,263,14					
1970	1,226	1,325,734	15,348	1,157,172	437,252	2,936,73					
1971	2,010	1,016,136	14,557	612,290	353,952	1,998,94					
1972	464	378,218	19,615	72,161	78,298	548,75					
1973	525	870,354	22,322	25,472	8,717	927,39					
1974	255	662,905	12,245	69,515	34,312	779,23					
1975	549	399,593	53,283	66,165	25,161	544,75					
1976	2,290	1,163,728	35,167	395,287	81,403	1,677,87					
1977	710	1,972,207	17,430	604,806	110,452	2,705,60					
1978	1,603	1,576,283	20,212	985,114	120,889	2,704,10					
1979	1,253	1,049,497	99,129	1,905,198	188,907	3,243,98					
1980	2,344	859,966	119,573	1,093,184	252,521	2,327,58					
1981	2,694	1,839,469	78,805	1,162,613	580,332	3,663,91					
1982	5,236	1,521,686	300,273	873,384	390,096	3,090,67					
1983	5,488	1,824,175	61,927	321,178	159,412	2,372,18					
1984	4,318	2,660,619	110,128	444,804	63,303	3,283,17					
1985	1,888	922,151	191,188	160,128	22,806	1,298,16					
1986	3,037	1,645,834	116,633	647,125	176,640	2,589,26					
1987	2,651	1,898,838	150,414	246,775	127,261	2,305,20					
1988	7,296	795,841	370,420	2,997,159	267,775	4,438,49					
1989	3,542	1,159,287	68,233	27,712	1,624	1,260,39					
1990	9,901	2,093,650	130,131	550,008	270,004	3,053,69					
1991	3,157	1,895,665	165,625	1,169,248	261,096	3,494,79					
1992	10,832	1,277,449	310,943	1,554,073	222,134	3,375,43					
1993	19,515	1,697,351	229,459	1,648,377	122,360	3,717,06					
1993	3,919	1,618,973	229,439	431,063	227,276	2,518,43					
1994	5,261	1,724,045	280,605	2,057,998	380,949	4,448,85					
1995	3,105	1,958,353	193,226	183,806	99,791	2,438,28					
1990	3,032	769,683	90,908	844,431	155,905	1,863,95					
		1,054,172	90,908 129,512	776,988	128,841						
1998 1999	4,395					2,093,90 5,048,45					
2000	3,296 2,592	3,116,501 1,775,225	89,410 123,222	1,698,651 428,064	140,594 120,957	2,450,06					
2000	2,372	1,113,223	123,222	720,004	120,937	2,430,00					
Avg. (1960-69)	1,156	502,197	8,509	1,084,562	220,242	1,816,66					
Avg. (1970-79)	1,089	1,041,466	30,931	589,318	143,934	1,806,73					
Avg. (1980-89)	3,849	1,512,787	156,759	797,406	204,177	2,674,97					
Avg. (1990-99)	6,641	1,720,584	185,702	1,091,464	200,895	3,205,28					

Table 3.Commercial salmon catches in the Chignik Management Area by species<br/>and year, 1960-2000.

<sup>a</sup> Does not include salmon caught for personal use. Does not include salmon caught with subsistence permit. Does not include salmon caught at Cape Igvak or Southeastern District Mainland considered by regulation as destined for Chignik. Includes catches from the department's test fishery and the Chignik Seiner's community harvests which took place while the fleet was conducting price negotiations with the processors.

			Catch by Species in Number of Salmon <sup>a</sup>							
	Statistical									
District	Area	Chinook	Sockeye	Coho	Pink	Chum	Total			
Chignik Bay	27110	581	1,327,249	11,620	28,067	8,389	1,375,906			
Chighik Day	Total	581	1,327,249	11,620	28,067	8,389	1,375,906			
Central	27220	109	10,392	14,143	63,944	14,376	102,964			
	27230	151	103,710	12,021	66,754	22,742	205,378			
	27240	40	11,678	5,644	29,820	5,652	52,834			
	27250	63	118,281	1,202	22,654	10,733	152,933			
	27262	164	114,924	4,933	88,245	13,401	221,667			
	Total	527	358,985	37,943	271,417	66,904	735,776			
Eastern	27260	32	2,186	1,170	4,980	662	9,030			
	27290	0	7,369	0	251	282	7,902			
	27292	21	60,693	987	4,651	6,492	72,844			
	27296	0	1,324	398	618	609	2,949			
	Total	53	71,572	2,555	10,500	8,045	92,725			
Western	27372	0	0	0	53	35	88			
	27374	1,179	7,975	42,497	65,567	21,744	138,962			
	27380	0	302	20	18	69	409			
	27390	222	6,056	25,565	35,889	11,850	79,582			
	27394	20	701	1,517	4,620	1,125	7,983			
	Total	1,421	15,034	69,599	106,147	34,823	227,024			
Perryville	27540	10	2,054	1,365	10,348	2,405	16,182			
	27550	0	331	140	1,585	391	2,447			
	Total	10	2,385	1,505	11,933	2,796	18,629			
All Districts Total		2,592	1,775,225	123,222	428,064	120,957	2,450,060			

Table 4.	Commercial salmon catches in the Chignik Management Area by district,
	statistical area, and species, 2000.

<sup>a</sup> Does not include salmon caught for personal use or subsistence. Does not include salmon caught at Cape Igvak or Southeastern District Mainland destined for Chignik. Includes catches from the department's test fishery and the Chignik Seiners's community harvests conducted while the fleet was conducting price negotiations.

Catch	tch Fishing Effort		shing Effort Chinook		Chinook Sockeye		Coho		Pinks		Chum		Total <sup>a</sup>	
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
8-Jun <sup>b</sup>	1	1	-	-	1,293	9,860	-	-	-	-	-	-	1,293	9,860
10-Jun <sup>b</sup>	1	1	-	-	5,480	40,343	-	-	-	-	-	-	5,480	40,343
11-Jun	70	72	1	8	135,244	1,034,221	-	-	-	-	35	344	135,280	1,034,573
12-Jun	78	88	4	46	119,809	913,556	-	-	30	83	294	2,010	120,137	915,695
13-Jun	77	81	19	353	111,220	825,402	-	-	542	1,521	1,988	16,848	113,769	844,124
14-Jun	74	82	18	400	95,598	710,828	-	-	303	489	1,423	10,857	97,342	722,574
15-Jun	81	90	14	328	128,021	937,358	-	-	676	2,045	2,105	16,117	130,816	955,848
16-Jun	86	95	10	244	109,838	825,470	-	-	3,862	6,807	1,392	11,151	115,102	843,672
17-Jun	92	102	12	295	94,225	710,234	17	141	3,806	8,483	1,598	12,051	99,658	731,204
20-Jun <sup>b</sup>	1	1	-	-	1,182	9,140	-	-	-	-	-	-	1,182	9,140
23-Jun <sup>b</sup>	1	1	-	-	530	4,158	-	-	-	-	-	-	530	4,158
26-Jun <sup>b</sup>	1	1	-	-	585	4,575	-	-	-	-	-	-	585	4,575
29-Jun	72	75	21	443	58,467	459,057	-	-	582	1,474	95	856	59,165	461,830
30-Jun	85	92	57	1,213	55,243	428,394	3	23	5,449	12,188	1,454	12,151	62,206	453,969
1-Jul	89	96	56	1,057	63,119	493,890	9	60	13,123	24,326	2,019	17,091	78,326	536,424
2-Jul	84	86	92	1,848	58,395	452,431	7	42	15,112	27,164	3,841	33,410	77,447	514,895
3-Jul	86	88	76	1,649	49,612	388,739	27	180	14,029	27,338	3,798	34,158	67,542	452,064
4-Jul	88	92	48	1,175	60,356	472,789	43	296	12,496	31,412	5,757	42,563	78,700	548,235
5-Jul	76	81	62	1,381	55,015	443,090	56	294	5,468	11,079	2,729	22,590	63,330	478,434
6-Jul	88	92	82	1,696	47,376	377,496	268	1,868	11,612	23,405	7,568	69,613	66,906	474,078
9-Jul <sup>b</sup>	1	1	-	-	654	5,751	-	-	-	-	-	-	654	5,751
12-Jul <sup>b</sup>	1	1	-	-	1,190	9,760	-	-	-	-	-	-	1,190	9,760
15-Jul	83	90	24	558	122,356	1,004,140	312	1,988	547	1,339	910	7,720	124,149	1,015,745
16-Jul	83	87	91	1,210	51,895	412,738	5,706	39,667	8,483	18,968	6,274	52,291	72,449	524,874
17-Jul	91	96	95	1,704	41,051	325,103	8,379	60,046	7,999	17,663	6,321	54,580	63,845	459,096
20-Jul <sup>b</sup>	1	1	-	-	690	5,203	-	-	-	-	-	-	690	5,203
24-Jul	94	116	443	4,662	36,704	286,519	24,120	176,130	32,752	88,909	11,199	97,812	105,218	654,032
25-Jul	67	69	195	2,520	16,108	123,743	12,197	94,664	33,070	75,812	6,745	59,418	68,315	356,157
26-Jul	78	81	791	5,423	20,049	153,526	18,816	138,823	37,035	99,982	10,906	92,591	87,597	490,345
27-Jul	64	65	19	275	12,621	97,955	530	4,064	8,353	19,979	914	7,488	22,437	129,761
28-Jul	60	61	40	629	9,358	73,205	2,018	16,078	15,400	37,689	1,643	14,159	28,459	141,760
29-Jul	70	72	33	468	10,651	82,514	2,238	16,363	8,785	27,819	2,239	19,278	23,946	146,442
30-Jul	55	56	21	281	9,778	76,197	1,148	8,587	6,705	19,951	2,054	17,284	19,706	122,300
31-Jul	53	56	31	497	11,247	87,865	959	7,543	8,610	27,566	1,708	15,055	22,555	138,526
4-Aug	79	80	42	756	15,799	121,913	6,204	46,636	24,105	72,268	9,661	82,043	55,811	323,616
5-Aug	78	81	20	311	11,928	92,635	3,143	23,407	20,793	64,865	5,192	46,662	41,076	227,880
6-Aug	62	64	14	255	9,294	72,044	1,266	9,594	16,818	55,834	2,554	24,103	29,946	161,830
7-Aug	51	51	4	255	6,027	46,502	711	5,460	7,711	25,432	1,439	12,247	15,892	89,896

Table 5. Commercial salmon fishing effort and catch by day in the Chignik Management Area, 2000.

-Continued-

Table 5. (page 2 of 2)

Catch	Fishing	<u>Effort</u>	Chin	ook	Soc	keve	Co	ho	Pi	nks	Chu	m	Tot	al <sup>a</sup>
Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
8-Aug	45	46	8	255	7,851	60,211	1,663	12,703	15,479	51,217	2,026	18,114	27,027	142,500
9-Aug	50	50	7	255	8,020	62,368	1,192	9,068	10,893	36,238	1,683	15,010	21,795	122,939
10-Aug	30	30	5	255	4,945	38,526	1,130	9,044	6,283	21,170	927	8,948	13,290	77,943
11-Aug	40	41	3	255	7,572	59,209	1,755	14,333	8,625	29,575	1,127	9,633	19,082	113,005
12-Aug	55	56	9	255	10,728	83,089	2,112	16,200	11,587	38,097	1,650	13,628	26,086	151,269
13-Aug	50	52	9	255	7,399	57,337	1,055	7,526	6,846	22,800	1,073	8,809	16,382	96,727
14-Aug	40	41	2	255	7,328	56,498	619	4,748	4,832	16,448	583	4,864	13,364	82,813
15-Aug	45	46	7	255	8,072	62,279	1,321	10,375	6,930	24,045	835	7,305	17,165	104,259
18-Aug	50	51	12	255	8,350	63,512	1,892	14,409	7,638	26,440	870	7,637	18,762	112,253
19-Aug	51	51	5	255	9,314	71,723	1,092	8,096	4,560	15,624	494	4,196	15,465	99,894
20-Aug	47	48	6	255	11,168	86,034	1,548	12,269	5,852	19,772	786	6,235	19,360	124,565
21-Aug	46	46	2	255	5,913	44,906	1,830	16,125	3,460	12,771	656	5,331	11,861	79,388
22-Aug	42	42	26	255	8,982	67,687	1,874	16,043	3,491	11,610	519	4,284	14,892	99,879
23-Aug	22	22	3	255	2,491	18,986	949	8,033	1,136	4,353	155	1,347	4,734	32,974
25-Aug	31	31	7	255	5,362	39,646	1,577	13,470	1,076	3,516	247	1,960	8,269	58,847
26-Aug	51	51	22	255	8,075	60,041	3,833	32,681	2,551	8,709	647	5,582	15,128	107,268
27-Aug	38	38	1	255	6,018	44,872	2,587	22,881	1,010	3,224	268	2,096	9,884	73,328
28-Aug	34	35	8	255	4,668	34,178	4,137	37,482	1,002	3,518	310	2,470	10,125	77,903
29-Aug	26	26	13	255	2,702	20,025	1,747	15,777	211	793	115	730	4,788	37,580
30-Aug	20	20	2	255	2,259	16,753	1,132	10,319	346	1,194	131	945	3,870	29,466
Total	99	3,268	2,592	34,757	1,775,225	13,666,224	123,222	943,536	428,064	1,183,004	120,957	1,033,665	2,450,060	16,861,186
Average w	eight			13.4		7.7		7.7		2.8		8.5		

<sup>a</sup> Does not include salmon that were caught for personal or subsistence use. Does not include salmon caught at Cape Igvak or Southeastern District Mainland considered by regulation as destined to Chignik.
 <sup>b</sup> Catch from the department's test fishery within Chignik Lagoon.

Stat	Catch	Fishing	Effort <sup>a</sup>	Chino	ok	Sock	eye	Coho	)	Pink	s	Chur	n	Total Sa	lmon <sup>b,c</sup>
Area	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
27110	8-Jun <sup>d</sup>	1	1	0	0	1,293	9,860	0	0	0	0	0	0	1,293	9,860
	10-Jun <sup>d</sup>	1	1	0	0	5,480	40,343	0	0	0	0	0	0	5,480	40,343
	11-Jun	66	68	0	0	133,198	1,018,637	0	0	0	0	0	0	133,198	1,018,637
	12-Jun	71	80	0	0	104,939	802,844	0	0	0	0	1	8	104,940	802,852
	13-Jun	62	65	3	27	69,750	535,279	0	0	0	0	0	0	69,753	535,306
	14-Jun	60	68	1	7	68,641	525,504	0	0	0	0	1	8	68,643	525,519
	15-Jun	59	67	0	0	62,129	474,844	0	0	0	0	0	0	62,129	474,844
	16-Jun	63	71	2	45	69,031	524,299	0	0	0	0	0	0	69,033	524,344
	17-Jun	63	71	0	0	65,157	495,226	0	0	0	0	0	0	65,157	495,226
	20-Jun <sup>d</sup>	1	1	0	0	1,182	9,140	0	0	0	0	0	0	1,182	9,140
	23-Jun <sup>d</sup>	1	1	0	0	530	4,158	0	0	0	0	0	0	530	4,15
	26-Jun <sup>d</sup>	1	1	0	0	585	4,575	0	0	0	0	0	0	585	4,575
	29-Jun	69	72	20	423	56,698	445,670	0	0	4	10	23	166	56,745	446,269
	30-Jun	65	71	39	886	41,234	322,729	1	7	22	60	94	722	41,390	324,404
	1-Jul	62	69	37	704	51,471	405,888	4	28	531	1,037	102	877	52,145	408,534
	2-Jul	60	62	64	1,319	46,072	360,433	2	15	36	81	18	145	46,192	361,993
	3-Jul	63	65	46	1,098	33,897	270,893	2	11	32	64	40	321	34,017	272,387
	4-Jul	62	65	31	785	40,049	318,433	0	0	150	338	45	338	40,275	319,894
	5-Jul	61	64	56	1,242	44,035	359,805	10	52	1,168	2,086	373	3,089	45,642	366,274
	6-Jul	59	60	40	800	27,100	222,391	0	0	28	61	60	500	27,228	223,752
	9-Jul <sup>d</sup>	1	1	0	0	654	5,751	0	0	0	0	0	0	654	5,75
	12-Jul <sup>d</sup>	1	1	0	0	1,190	9,760	0	0	0	0	0	0	1,190	9,76
	15-Jul	75	82	15	440	116,219	956,418	1	8	58	148	94	758	116,387	957,772
	16-Jul	60	64	26	612	30,340	247,377	6	41	81	203	140	1,103	30,593	249,336
	17-Jul	60	63	31	762	25,890	208,074	47	318	104	275	113	942	26,185	210,371
	20-Jul d	1	1	0	0	690	5,203	0	0	0	0	0	0	690	5,203
	24-Jul	57	73	22	594	28,144	218,991	45	303	301	966	674	5,582	29,186	226,430
	25-Jul	39	39	29	649	10,732	82,352	58	409	238	771	261	2,123	11,318	86,304
	26-Jul	45	46	16	321	12,788	99,632	63	440	281	951	271	2,110	13,419	103,454
	27-Jul	52	52	15	217	11,027	85,932	174	1,241	442	1,427	334	2,733	11,992	91,55
	28-Jul	43	43	8	186	7,585	59,703	55	385	276	930	220	1,661	8,144	62,86
	29-Jul	49	50	16	318	8,452	65,570	133	977	514	1,935	397	3,136	9,512	71,93
	30-Jul	42	43	3	66	7,657	59,915	33	256	370	1,403	205	1,608	8,268	63,24
	31-Jul	36	38	4	89	8,668	68,321	2	14	695	2,511	254	1,906	9,623	72,84
	4-Aug	50	50	13	295	12,135	94,243	156	1,218	3,196	11,340	1,680	13,674	17,180	120,77
	5-Aug	46	46	9	177	8,534	66,840	248	1,641	2,952	9,685	507	4,125	12,250	82,46
	6-Aug	39	40	5	111	6,142	47,675	24	182	1,183	4,183	220	1,603	7,574	53,754

Table 6. Commercial salmon catch and effort by statistical area and day in the Chignik Management Area, 2000.

Table 6. (page 2 of 8)

Stat	Catch	Fishing		Chino		Soci	keye	Coh	0	Pink	s	Chur	n	Total S	Salmon
Area	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
	7-Aug	32	32	0	0	3,837	29,817	80	611	921	3,712	161	1,215	4,999	35,355
	8-Aug	25	25	1	5	4,942	38,113	35	258	933	3,371	235	1,884	6,146	43,631
	9-Aug	31	31	2	48	5,403	42,871	71	529	1,375	5,110	190	1,518	7,041	50,076
	10-Aug	21	21	2	38	3,036	23,796	74	567	487	1,781	91	739	3,690	26,921
	11-Aug	22	23	1	47	5,903	46,315	76	595	1,110	4,329	137	1,034	7,227	52,320
	12-Aug	35	36	4	71	8,430	65,414	167	1,103	1,561	5,642	202	1,594	10,364	73,824
	13-Aug	29	30	2	22	5,465	42,655	78	601	892	3,315	118	922	6,555	47,515
	14-Aug	30	30	2	19	6,326	49,044	287	2,179	1,068	4,010	125	960	7,808	56,212
	15-Aug	30	30	5	112	7,231	56,107	152	1,189	1,027	3,863	127	1,005	8,542	62,276
	18-Aug	38	38	1	34	7,463	56,943	205	1,637	1,160	4,378	145	1,153	8,974	64,145
	19-Aug	41	41	2	37	8,174	63,184	430	3,546	1,344	4,996	110	861	10,060	72,624
	20-Aug	35	35	1	31	9,138	70,970	576	4,878	1,033	3,749	136	1,097	10,884	80,725
	21-Aug	34	34	0	0	4,648	35,512	416	3,436	667	2,286	78	622	5,809	41,856
	22-Aug	31	31	2	15	7,569	57,312	621	5,282	705	2,544	110	879	9,007	66,032
	23-Aug	18	18	0	0	2,202	16,806	139	1,176	182	620	26	209	2,549	18,811
	25-Aug	22	22	1	25	3,807	28,299	726	6,296	220	753	49	373	4,803	35,746
	26-Aug	37	37	1	20	4,744	35,796	892	7,865	310	1,044	102	756	6,049	45,481
	27-Aug	30	30	1	39	3,868	29,367	1,177	10,653	170	569	46	325	5,262	40,953
	28-Aug	26	27	2	26	2,810	20,694	2,492	22,649	131	403	36	260	5,471	44,032
	29-Aug	19	19	0	0	1,725	12,880	1,192	10,749	56	174	18	127	2,991	23,930
	30-Aug	14	14	0	0	1,210	9,040	670	6,214	53	142	20	146	1,953	15,542
_	Total	91	2,359	581	12,762	1,327,249	10,363,643	11,620	99,559	28,067	97,256	8,389	66,917	1,375,906	10,640,137
_	Avg. Wt.				22.0		7.8		8.6		3.5		8.0		
27220	30-Jun	а	а	а	а	а	а	а	а	а	а	а	а	а	a
27220	1-Jul	a	a	a	a	a	a	a	a	a	a	a	a	a	a
	2-Jul	а	a	a	a	a	a	a	a	a	a	a	a	a	a
	3-Jul	a	a	a	a	a	a	a	a	a	a	a	a	a	a
	4-Jul	а	a	a	a	a	a	a	a	a	a	a	a	а	a
	6-Jul	5	5	26	535	2,202	17,294	186	1,313	5,601	12,322	2,682	27,711	10,697	59,175
	17-Jul	a	a	a	a	a	a	a	a	a	a	a	a	a	8
	28-Jul	a	a	a	a	a	a	a	a	a	a	a	a	a	2
	29-Jul	6	7	6	36	444	3,372	890	7,371	2,713	8,138	712	6,724	4,765	25,641
	30-Jul	a	a	a	a	a	a	a	a	_,e	a	a	a	a	20,013
	31-Jul	a	a	a	a	a	a	a	a	a	a	a	a	a	a
	4-Aug	4	4	0	0	381	2,972	1,436	11,481	6,137	21,474	1,669	16,824	9,623	52,751
	5-Aug	6	6	2	21	489	3,816	1,264	10,119	6,972	24,403	1,683	17,173	10,410	55,532
	6-Aug	4	4	2	41	174	1,350	510	4,078	5,513	19,296	887	9,540	7,086	34,305
	7-Aug	a	a	a	a	a	1,550 a	a	1,078 a	3,313 a	17,270 a	a	2,510 a	7,000 a	a 1,505
	8-Aug	a	a	a	a	a	a	a	a	a	a	a	a	a	a
	~ · · · · · · · · · · · · · · · · · · ·	u	u	u	u	u	u	u	u	u	u		u	u	

Table 6. (page 3 of 8)

Stat	Catch	Fishing	Effort	Chino	ok	Socke	ye	Coh	0	Pink	S	Chu	m	Total Sa	lmon
Area	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
	10-Aug	а	а	a	а	а	a	а	а	a	а	а	а	а	а
	11-Aug	а	а	а	а	а	а	а	a	а	a	a	а	а	а
	12-Aug	а	а	а	а	а	а	а	а	а	а	а	а	а	а
	13-Aug	а	а	a	а	а	а	а	а	а	а	а	а	а	8
	15-Aug	4	5	2	20	122	924	947	7,573	2,991	10,470	294	2,946	4,356	21,933
	18-Aug	а	а	a	a	а	a	а	a	a	a	а	a	а	8
	20-Aug	а	а	a	a	а	a	а	a	a	a	а	a	а	8
	21-Aug	а	а	а	а	а	а	а	а	а	а	а	а	а	1
	22-Aug	а	а	а	а	а	а	а	а	а	а	а	а	а	2
	23-Aug	а	а	a	а	а	а	а	а	а	а	а	а	а	8
	26-Aug	а	а	a	а	а	а	а	а	а	а	а	а	a	8
	28-Aug	а	а	a	a	а	a	а	a	a	a	a	a	a	8
	Total	30	73	109	1,844	10,392	79,584	14,143	113,786	63,944	199,245	14,376	142,312	102,964	536,771
	Avg. Wt.				16.9		7.7		8.0		3.1		9.9		
								0							
27230	11-Jun	4	4	1	8	2,046	15,584	0	0	0	0	35	344	2,082	15,936
	12-Jun	4	4	2	25	3,880	27,430	0	0	3	10	71	503	3,956	27,968
	13-Jun	a	a	a	a	a 2 2 2 5	a	a	a	a	a	a	a	a	1 < 0.0
	14-Jun	4	4	3	47	2,327	16,726	0	0	0	0	13	132	2,343	16,905
	15-Jun	а	а	а	а	а	а	а	а	а	а	а	а	а	:
	16-Jun	a	а	а	а	а	а	а	а	а	а	а	а	а	:
	17-Jun	a	а	а	а	а	а	а	а	а	а	а	а	а	8
	29-Jun	a	a	а	a	a	a	a	a	a	a	a	a	a	
	30-Jun	8	8	16	263	5,453	41,490	0	0	1,283	2,250	738	6,389	7,490	50,392
	1-Jul	8	8	7	92	3,836	29,048	0	0	1,154	2,056	713	5,649	5,710	36,845
	2-Jul	6	6	8	142	4,165	31,012	0	0	877	1,408	660	5,962	5,710	38,524
	3-Jul	5	5	3	50	2,449	18,451	0	0	622	1,038	232	1,959	3,306	21,498
	4-Jul	10	11	11	259	7,784	60,596	6	43	4,901	12,119	2,955	20,298	15,657	93,315
	5-Jul	6	6	2	24	2,864	22,306	3	23	699	1,658	578	5,091	4,146	29,102
	6-Jul	11	11	4	44	3,761	28,805	7	39	879	1,110	1,261	10,950	5,912	40,948
	15-Jul	4	4	1	38	2,859	22,049	19	112	244	517	265	2,172	3,388	24,888
	16-Jul	10	10	36	157	6,695	51,728	1,144	8,823	1,978	3,845	1,295	10,312	11,148	74,865
	17-Jul	13	13	8	166	7,677	59,753	281	1,925	786	1,884	1,501	14,152	10,253	77,880
	24-Jul	12	13	4	83	2,896	22,706	189	1,394	1,709	4,117	809	6,401	5,607	34,701
	25-Jul	6	7	2	40	1,070	8,243	24	154	273	914	232	1,944	1,601	11,295
	26-Jul	6	6	1	15	810	6,062	15	109	243	637	138	1,057	1,207	7,880
	27-Jul	6	6	0	0	874	6,658	25	170	406	1,216	272	2,204	1,577	10,248
	28-Jul	5	5	2	45	361	2,597	56	393	728	2,221	126	999	1,273	6,255
	29-Jul	10	10	0	0	940	7,597	142	1,014	2,118	7,366	345	2,793	3,545	18,770
	30-Jul	7	7	1	12	1,392	10,526	566	4,225	2,851	8,090	1,191	9,505	6,001	32,358
	31-Jul	7	7	0	0	1,214	9,230	104	839	1,752	4,971	418	3,576	3,488	18,616

-Continued-

Table 6. (Page 4 of 8)

Stat	Catch	Fishing		Chino		Socke		Coho		Pink		Chu		Total S	almon
Area	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pound
	4-Aug	9	9	0	0	1,952	14,704	95	648	1,688	4,598	748	6,226	4,483	26,170
	5-Aug	10	11	0	0	1,544	11,699	76	501	952	3,243	437	3,574	3,009	19,017
	6-Aug	12	12	1	11	1,953	15,170	70	558	2,568	7,341	573	4,728	5,165	27,808
	7-Aug	13	13	1	14	1,768	13,466	104	846	3,372	10,226	741	6,036	5,986	30,588
	8-Aug	13	13	1	24	2,034	15,360	200	1,567	2,934	9,334	873	7,262	6,042	33,54
	9-Aug	15	15	2	44	1,876	13,942	256	1,932	3,860	12,059	860	7,208	6,854	35,185
	10-Aug	а	а	а	а	а	а	а	а	а	а	а	а	а	
	11-Aug	6	6	1	27	433	3,236	68	546	1,138	3,868	148	946	1,788	8,623
	12-Aug	11	11	2	47	1,147	8,897	269	1,772	3,345	10,512	528	3,962	5,291	25,190
	13-Aug	16	16	0	0	856	6,412	240	1,660	2,160	7,473	429	3,403	3,685	18,948
	14-Aug	8	9	0	0	513	3,795	146	1,079	2,313	8,083	352	2,949	3,324	15,906
	15-Aug	9	9	0	0	625	4,551	176	1,269	2,575	8,572	359	2,893	3,735	17,285
	18-Aug	9	9	2	66	571	4,206	228	1,768	1,704	5,490	233	1,888	2,738	13,418
	19-Aug	10	10	3	75	1,140	8,539	662	4,550	3,216	10,628	384	3,335	5,405	27,127
	20-Aug	9	10	3	55	1,477	10,930	465	3,684	3,398	10,581	398	3,010	5,741	28,260
	21-Aug	9	9	1	23	870	6,428	217	2,002	1,332	4,461	252	2,012	2,672	14,926
	22-Aug	9	9	1	26	1,065	7,910	247	2,287	1,699	4,711	216	1,761	3,228	16,695
	23-Aug	а	а	а	а	a	a	a	á	a	a	а	a	a	, í
	25-Aug	7	7	0	0	1,250	9,069	660	5,554	856	2,763	157	1,229	2,923	18,615
	26-Aug	10	10	0	0	2,934	21,345	1,602	13,444	1,379	4,216	350	3,040	6,265	42,045
	27-Aug	8	8	0	0	2,150	15,505	1,410	12,228	840	2,655	222	1,771	4,622	32,159
	28-Aug	7	7	4	93	1,802	13,194	1,178	10,798	687	2,562	220	1,676	3,891	28,323
	29-Aug	7	7	13	244	977	7,145	555	5,028	155	619	97	603	1,797	13,639
	30-Aug	6	6	2	51	1.049	7,713	462	4,105	293	1.052	111	799	1,917	13,720
	Total	33	386	151	2,338	103,710	784,082	12,021	97,547	66,754	194,647	22,742	184,632	205,378	1,263,246
	Avg. Wt.				15.5	,	7.6	,	8.1	,	2.9	,	8.1	,	
27240	16-Jun	а	а	а	а	а	a	а	a	а	а	а	а	a	
	17-Jun	а	а	а	а	а	а	a	a	а	а	а	а	а	
	30-Jun	а	а	а	а	а	а	a	a	а	а	а	а	а	
	2-Jul	а	а	а	а	а	а	a	а	а	а	а	а	а	:
	26-Jul	а	а	а	а	а	а	a	a	а	а	а	а	а	
	27-Jul	а	а	а	а	а	а	a	а	а	а	а	а	а	
	28-Jul	6	6	5	55	309	2,567	820	6,645	1,946	4,923	528	4,523	3,608	18,713
	29-Jul	a	a	a	a	a	a	a	a	a	a	a	a	a	- , -
	30-Jul	а	а	а	а	а	а	a	а	а	а	а	а	а	
	31-Jul	a	a	a	a	a	a	a	a	a	a	a	a	a	
	6-Aug	4	4	0	0	145	1,071	389	2,580	2,951	10,151	371	3,352	3,856	17,154
	7-Aug	a	a	a	a	a	a	a	a	_,, e = a	a	a	a	a	
	8-Aug	a	a	a	a	a	a	a	a	a	a	a	a	a	
	Total	14	33	40	589	11,678	88,616	5,644	43,326	29,820	79,638	5,652	48,793	52,834	260,962
	Avg. Wt.				14.7	,	7.6	- ,	7.7	. ,	2.7	.,	8.6		

Table 6. (page 5 of 8)

Stat	Catch	Fishing	Effort	Chino	ok	Socke	eye	Coho	<u>)</u>	Pink	<u>s</u>	Chu	n	Total S	almon
Area	Date	Permits	Landings	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds
27250	12-Jun	a	a	а	а	a	a	a	а	а	a	а	а	а	a
	13-Jun	5	6	6	167	14,796	106,912	0	0	114	342	178	1,530	15,094	108,951
	14-Jun	6	6	3	74	12,895	84,133	0	0	283	442	204	1,587	13,385	86,236
	15-Jun	7	7	10	241	21,328	153,649	0	0	290	870	405	3,274	22,033	158,034
	16-Jun	4	4	0	0	7,389	52,510	0	0	574	1,070	86	756	8,049	54,336
	17-Jun	15	16	4	84	17,357	129,184	17	141	943	2,604	515	4,022	18,836	136,035
	29-Jun	a	a	а	а	a	a	a	а	а	a	а	а	а	a
	30-Jun	a	a	а	а	a	a	a	а	а	a	а	а	а	a
	1-Jul	а	а	а	а	а	a	а	а	а	а	а	а	a	a
	2-Jul	4	4	3	27	2,362	17,628	2	14	2,527	5,343	557	4,415	5,451	27,427
	3-Jul	4	4	0	0	1,193	8,954	4	22	630	1,896	337	2,530	2,164	13,402
	4-Jul	8	8	3	54	8,254	61,424	6	35	3,945	10,215	1,871	14,285	14,079	86,013
	5-Jul	5	5	1	12	4,159	31,317	37	177	2,389	4,908	1,314	10,213	7,900	46,627
	6-Jul	6	6	6	143	7,792	58,496	47	303	2,637	4,859	2,108	17,534	12,590	81,335
	16-Jul	a	a	а	а	a	a	a	а	a	a	а	a	а	a
	17-Jul	5	5	6	122	3,178	25,123	183	1,492	627	1,392	777	7,136	4,771	35,265
	24-Jul	a	а	а	а	а	а	а	а	а	а	а	а	а	a
	25-Jul	a	а	а	а	а	а	а	а	а	а	а	а	а	a
	26-Jul	a	а	а	а	a	а	a	а	а	а	а	а	а	a
	27-Jul	a	а	а	а	a	а	a	а	а	а	а	а	а	a
	4-Aug	a	а	а	а	a	a	a	а	а	a	а	а	а	a
	5-Aug	a	а	а	а	a	а	a	а	а	а	а	а	а	a
	6-Aug	a	а	а	а	a	а	a	а	а	а	а	а	а	a
	9-Aug	a	а	а	а	a	a	a	а	а	a	а	а	а	a
	15-Aug	a	а	а	а	a	a	a	а	а	a	а	а	а	a
	26-Aug	a	а	а	а	a	a	a	а	а	a	а	а	а	a
	Total	24	97	63	1,355	118,281	863,976	1,202	9,186	22,654	57,099	10,733	86,919	152,933	1,018,535
	Avg. Wt.				21.5	,	7.3		7.6	,	2.5	· ·	8.1	,	
27260	17-Jun	а	а	а	а	а	а	а	а	а	а	а	а	а	a
	24-Jul	a	a	а	а	a	a	a	а	а	а	а	а	а	a
	25-Jul	a	a	а	а	a	a	a	а	а	a	а	а	а	a
	4-Aug	а	а	а	а	a	а	a	а	а	а	а	а	а	a
	15-Aug	a	a	a	a	a	a	a	а	a	a	a	a	a	a
	20-Aug	а	а	а	а	a	а	a	а	а	а	а	а	а	a
	21-Aug	a	a	a	a	a	a	a	a	a	a	a	a	a	a
	22-Aug	a	a	a	a	a	a	a	a	a	a	a	a	a	a
	23-Aug	a	a	a	a	a	a	a	a	a	a	a	a	a	a
	25-Aug	a	a	a	a	a	a	a	a	a	a	a	a	a	a
	Total	5	14	32	517	2,186	16,336	1,170	9,579	4,980	18,124	662	5,725	9,030	50,281
	Avg. Wt.	U			16.2	_,	7.5	-,0	8.2	.,	3.6	~~=	8.6	,	2 0,201

Table 6. (page 6 of 8)

Stat		Fishing E		Chino		Socke		Coho		Pinl		Chu		Total Sa	
Area	Date	Permits	Lndgs	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pound
27262	12-Jun	а	а	а	а	а	а	а	а	а	а	а	а	а	
	13-Jun	а	а	а	а	а	а	а	а	а	a	а	а	а	
	14-Jun	а	а	а	а	а	а	а	а	а	а	а	а	а	
	15-Jun	4	5	3	72	10,582	75,094	0	0	135	311	105	825	10,825	76,30
	16-Jun	15	16	4	122	25,237	189,214	0	0	1,607	2,142	632	4,998	27,480	196,47
	17-Jun	5	5	0	0	1,686	12,135	0	0	177	322	43	379	1,906	12,83
	30-Jun	9	9	1	30	6,365	48,288	2	16	2,542	4,921	297	2,532	9,207	55,78
	1-Jul	15	15	9	206	6,095	46,177	1	6	7,603	12,125	879	7,701	14,587	66,21
	2-Jul	11	11	8	207	4,014	30,303	3	13	5,057	9,426	847	7,277	9,929	47,22
	3-Jul	11	11	15	332	10,051	74,877	3	23	7,902	14,047	1,552	13,490	19,523	102,76
	4-Jul	6	6	3	77	3,570	26,711	5	43	1,378	3,433	458	3,729	5,414	33,99
	5-Jul	5	6	3	103	3,957	29,662	6	42	1,212	2,427	464	4,197	5,642	36,43
	6-Jul	8	10	6	174	6,521	50,510	28	213	2,467	5,053	1,457	12,918	10,479	68,86
	15-Jul	а	а	а	а	а	a	а	а	а	а	а	а	а	
	16-Jul	5	5	6	108	5,115	40,072	366	2,769	870	2,051	853	7,715	7,210	52,71
	17-Jul	а	а	а	a	а	a	a	а	а	a	а	а	а	
	24-Jul	6	6	4	100	868	6,483	477	3,448	3,951	8,920	642	5,879	5,942	24,83
	25-Jul	а	а	а	а	а	а	а	а	а	а	а	а	а	
	26-Jul	а	а	а	а	а	a	а	а	а	а	а	а	а	
	27-Jul	а	а	а	а	а	а	а	а	а	а	а	а	а	
	28-Jul	а	а	а	а	а	а	а	а	а	а	a	а	а	
	29-Jul	а	а	а	а	а	а	а	а	а	а	а	а	а	
	30-Jul	a	a	а	a	a	a	a	a	a	a	а	a	a	
	31-Jul	4	5	24	378	871	6,467	220	1,628	3,542	12,219	334	2,688	4,991	23,38
	5-Aug	а	а	а	а	а	а	а	а	а	а	а	а	а	
	6-Aug	а	а	а	а	а	а	а	а	а	а	а	а	а	
	7-Aug	а	а	а	а	а	а	а	а	а	а	а	а	а	
	8-Aug	а	а	а	а	а	а	а	а	а	а	а	а	а	
	9-Aug	a	a	a	a	a 1 71 c	a 12 200	a 122	a	a	a	a	a 5 1 2 0	a	25.71
	10-Aug	4	4	3	66	1,716	13,289	422	3,388	4,173	13,872	522	5,138	6,836	35,75
	11-Aug	а	а	а	а	а	а	а	а	а	а	а	а	а	
	12-Aug	а	а	а	а	а	а	а	а	а	а	а	а	а	
	13-Aug	а	а	а	а	а	а	а	а	а	а	а	а	а	
	14-Aug	a	a	a	a	a	a	a	a	a	a	a	a	a	1 220 2
	Total	27	162	164	3,097	114,924	862,338	4,933	37,662	88,245	209,738	13,401	116,433	221,667	1,229,26
	Avg. Wt.				18.9		7.5		7.6		2.4		8.7		
27290	15-Jun	а	а	а	а	а	а	а	а	а	а	а	а	а	
	Total	а	а	а	а	а	а	а	а	а	а	а	а	а	
	Avg. Wt.				0.0		5.0		0.0		3.4		6.2		

Table 6. (page 7 of 8)

Stat		Fishing E	ffort	Chino	ok	Socke	ve	Coh	2	Pinl	<u> </u>	Chu	m	Total Sa	almon
Area	Date	Permits	Lndgs	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pound
		_	_	_											
27292	13-Jun	5	5	7	131	21,396	144,503	0	0	406	1,113	1,770	14,977	23,579	160,72
	14-Jun	a	a	a 1	a	a 25.162	a	a	a	a	a	a 1.276	a	a	106.00
	15-Jun	6	6	1	15	25,163	186,093	0	0	0	0	1,276	9,915	26,440	196,02
	16-Jun	a	a	a	a	a 2 7 1 2	a	a	a	a	a	a	a 2 702	a	
	17-Jun	4	5	1	10	2,712	18,446	0	0	184	551	339	2,703	3,236	21,71
	16-Jul	а	a	а	a	a	a	a	a	a	a	a	а	а	
	24-Jul	a	a 21	a 21	a	a	a	<u>a</u> 987	a	a	a 10.000	a	a	a	400.20
	Total	10	21	21	374	60,693	427,469	987	6,887	4,651	10,990	6,492	52,636	72,844	498,35
_	Avg. Wt.				17.8		7.0		7.0		2.4		8.1		
27296	17-Jul	а	а	а	а	а	а	а	а	а	а	а	а	а	
	Total	а	а	а	а	а	а	а	а	а	а	а	а	а	
_	Avg. Wt.				0		8		7		3		10		
27372	28-Jul	а	а	а	а	а	а	а	а	а	а	а	а	а	
21512	Total	a	a	a	a	a	a	a	a	a	a	a	a	a	
	Avg. Wt.	u	u	u	0.0	u	0.0	u	0.0	u	3.0	u	8.6	u	
	1116. 111.				0.0		0.0		0.0		5.0		0.0		
27374	16-Jul	а	a	a	a	a	a	a	а	a	a	a	а	a	
	17-Jul	6	6	41	511	339	2,496	5,273	37,602	4,058	8,310	2,275	18,103	11,986	67,02
	24-Jul	9	11	372	3,357	2,183	17,491	14,609	101,524	16,695	47,206	5,524	46,144	39,383	215,72
	25-Jul	7	7	91	926	1,691	13,234	6,524	47,632	18,819	37,641	3,333	27,345	30,458	126,77
	26-Jul	12	13	630	3,480	2,178	16,057	8,743	60,917	17,720	50,242	5,664	46,268	34,935	176,96
	27-Jul	а	а	а	a	а	а	а	а	а	а	а	а	а	
	4-Aug	6	6	21	319	165	1,261	3,023	22,487	3,671	8,288	2,538	20,319	9,418	52,67
	5-Aug	4	4	4	25	111	802	904	6,344	1,588	4,378	714	6,002	3,321	17,55
	Total	19	51	1,179	8,856	7,975	60,930	42,497	299,268	65,567	163,353	21,744	178,278	138,962	710,68
_	Avg. Wt.				7.5		7.6		7.0		2.5		8.2		
27380	15-Jul	а	а	а	а	а	а	а	а	а	а	а	а	а	
	Total	а	а	а	а	а	а	а	а	а	а	а	а	а	
_	Avg. Wt.				0		8		7		2		8		
27200	1671														
27390	16-Jul	а	а	а	а	а	а	а	а	а	а	а	а	а	
	17-Jul	a	a	a	a 120	a	a	a	a	a	a	a	a	a	
	24-Jul	6	6	34	429	1,182	9,218	7,884	62,687	6,513	19,203	2,600	26,038	18,213	117,57
	25-Jul	9	9	52	556	1,298	9,968	5,026	42,001	7,698	20,848	2,203	21,426	16,277	94,79
	26-Jul	9	9	132	1,473	2,150	15,977	8,442	64,459	10,325	28,557	3,847	34,654	24,896	145,12
	4-Aug	а	а	а	а	а	а	а	а	а	а	а	а	а	
	5-Aug	а	а	а	а	а	a -Continu	а	а	а	а	а	а	а	

### Table 6. (page 8 of 8)

Stat		Fishing Et	ffort.	Chino	ok	Soc	keve	Coh	0	Pir	ık	Chu	ım	Total S	almon
Area	Date	Permits	Lndgs	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pounds	Number	Pound
	11-Aug	8	8	0	0	328	2,552	1,124	9,118	4,003	13,574	408	3,965	5,863	29,209
_	12-Aug	а	а	а	а	а	a	а	а	а	а	а	а	a	а
	Total	22	44	222	2,534	6,056	45,855	25,565	201,118	35,889	103,275	11,850	108,507	79,582	461,289
_	Avg. Wt.				11.4		7.6		7.9		2.9		9.2		
27394	25-Jul	а	а	а	а	а	a	a	а	a	а	а	а	а	а
	26-Jul	а	а	а	а	а	a	а	а	а	а	а	а	a	а
	4-Aug	а	а	a	а	а	а	а	а	а	а	а	а	a	8
	12-Aug	а	а	a	а	а	а	а	а	а	а	а	а	a	8
	Total	7	7	20	314	701	5,368	1,517	11,884	4,620	15,210	1,125	10,321	7,983	43,097
_	Avg. Wt.				15.7		7.7		7.8		3.3		9.2		
27540	24-Jul	а	а	а	а	а	а	а	a	а	а	а	а	а	а
	4-Aug	a	a	a	a	a	a	a	a	a	a	a	a	a	a
	5-Aug	4	5	2	28	364	2,713	244	1,723	2,849	5,808	665	5,314	4,124	15,586
	11-Aug	а	а	a	а	a	a	a	a	a	a	а	a	a	a
	13-Aug	а	а	a	а	а	а	a	a	а	а	а	а	а	a
-	Total	8	12	10	177	2,054	15,737	1,365	9,740	10,348	26,392	2,405	19,426	16,182	71,472
_	Avg. Wt.				17.7	,	7.7		7.1	,	2.6	*	8.1		,
27550	4-Aug	а	а	а	а	а	a	a	a	а	а	а	a	а	a
	5-Aug	а	а	а	а	а	а	а	а	а	а	а	а	а	а
_	Total	a	a	a	a	a	а	a	a	a	a	a	а	а	2
_	Avg. Wt.				0.0		7.9		7.7		3.2		10.1		
C	Grand Total	100	3,268	2,592	34,757	1,775,225	13,670,000	123,222	943,536	428,064	1,183,004	120,957	1,033,665	2,450,060	16,861,18
	Avg. Wt.				13.4		7.7		7.7		2.8		8.5		

<sup>a</sup> Fishing effort omitted where there are confidentiality concerns (3 or less vessels).
<sup>b</sup> Does not include any catch from Southeastern District Mainland or Cape Igvak.
<sup>c</sup> Does not include any salmon that were caught for personal use or subsistence.
<sup>d</sup> The department's test fisheries in Chignik Lagoon.

Processo	r		
Code	Name	Туре	Address
F3495	Norquest Seafoods Inc.	Chignik-Shoreside Proccessor	4225 23rd Avenue West Seattle, Wa. 98199
F0365	Sea Catch Inc.	Chignik-Shoreside Processor	4241 21st Avenue West #300, Seattle, Wa. 98199

Table 7. Processors in the Chignik Management Area, 2000.

	Escapeme	nt <sup>a,b</sup>		Escape	ment <sup>a,b</sup>
Date	Daily Cu		Date		Cumulative
19-Jun	0	0	28-Jul	42	3,848
20-Jun	39	39	29-Jul	37	
21-Jun	8	47	30-Jul	38	3,923
22-Jun	13	60	31-Jul	30	3,953
23-Jun	13	73	1-Aug	20	3,973
24-Jun	21	94	2-Aug	90	
25-Jun	30	124	3-Aug	48	4,111
26-Jun	39	163	4-Aug	24	4,135
27-Jun	56	219	5-Aug	12	4,147
28-Jun	81	300	6-Aug	42	4,189
29-Jun	99	399	7-Aug	0	4,189
30-Jun	68	467	8-Aug	0	4,189
1-Jul	90	557	9-Aug	24	4,213
2-Jul	86	643	10-Aug	6	4,219
3-Jul	120	763	11-Aug	30	4,249
4-Jul	124	887	12-Aug	0	4,249
5-Jul	146	1,033	13-Aug	6	4,255
6-Jul	201	1,234	14-Aug	12	4,267
7-Jul	150	1,384	15-Aug	0	4,267
8-Jul	197	1,581	16-Aug	18	4,285
9-Jul	172	1,753	17-Aug	0	4,285
10-Jul	201	1,954	18-Aug	0	4,285
11-Jul	149	2,103	19-Aug	0	4,285
12-Jul	240	2,343	20-Aug	0	4,285
13-Jul	169	2,512	21-Aug	0	4,285
14-Jul	96	2,608	22-Aug	0	4,285
15-Jul	120	2,728	23-Aug	0	4,285
16-Jul	108	2,836	24-Aug	0	4,285
17-Jul	102	2,938	25-Aug	0	4,285
18-Jul	78	3,016	26-Aug	0	4,285
19-Jul	143	3,159	27-Aug	0	4,285
20-Jul	85	3,244	28-Aug	0	4,285
21-Jul	108	3,352	29-Aug	0	4,285
22-Jul	90	3,442	30-Aug	0	4,285
23-Jul	208	3,650	31-Aug	0	4,285
24-Jul	116	3,766	1-Sep	0	4,285
25-Jul	20	3,786	2-Sep	0	4,285
26-Jul	2	3,788	3-Sep	0	4,285
27-Jul	18	3,806	4-Sep	Weir R	emoved

Table 8. Chinook salmon daily and cumulative escapement estimates through the Chignik weir, 2000.

<sup>a</sup> No adjustments are made for chinook salmon that escape below the weir or those that are removed by the sport fishery.
<sup>b</sup> The chinook salmon sustainable escapement goal is 1,450 - 2,700 fish.

	Statistical				cies		
District	Area	Chinook	Sockeye <sup>a</sup>	Coho <sup>b</sup>	Pink c	Chum	Total
			d				
Chignik Bay	27110	4,285	805,225 <sup>d</sup>	7,062	27,434	98	844,104
	Total	4,285	805,225	7,062	27,434	98	844,104
Central	27220				8,400	30	
Central	27220				35,000	8,000	
	27250				102,675	14,700	
	Total	0	0	0	146,075	22,730	0
	- • • • • •	· · · ·			,	,	
Eastern	27260	6	3,380		285,600	46,800	
	27270		200	115	60,512	29,000	
	27272				25,300	11,000	
	27280			15	123,000	57,200	
	27290			1,000	148,800	59,000	
	27292				60,000	5,000	
	27296		5600	100	107500	8000	
	Total	6	9,180	1,230	810,712	216,000	0
** /	25250			1 000	25.000	2 500	
Western	27370			1,800	35,000	2,500	
	27372			700	74,000	2,560	
	27380				5,000	150	
	27382			1,200	4,330	505	
	27384				11,400	7,020	
	27390				350		
	Total	0	0	3,700	130,080	12,735	0
Perryville	27540		20	2,400	73,405	49,450	
I city ville	27550		20	300	24,500	2,400	
	27550 <sup>e</sup>			500	24,500 750	2,400	
	Total	0	20	2,700	98,655	51,850	0
				,	7	- , *	
All Dis	trict Total	4,291	814,425	14,692	1,212,956	303,413	844,104

Table 9.	Estimated salmon escapement by district and statistical area in the Chignik
	Management Area, 2000.

<sup>a</sup> Includes sockeye salmon from Chignik weir counts, aerial surveys, and post weir estimates.

<sup>b</sup> Coho escapement estimates were from Chignik River weir counts, aerial surveys, and post weir estimates. Coho aerial surveys were incomplete because of budget constraints.

<sup>c</sup> Escapement estimates for pink and chum were based on Chignik River weir counts, aerial surveys, and area under the curve methods developed by Johnson and Barrett (1988).

<sup>d</sup> Approximately 200,000 additional sockeye salmon were observed during aerial surveys of Black Lake tributaries.

<sup>e</sup> A October 23 foot survey in Kametolook River showed 74 actual coho expanded to 148 coho salmon. These data were included in the above table.

Date         Daily         Cumulative           28-May         30         30         8-Jul         10,227         407,592           29-May         60         90         9-Jul         14,901         422,493           30-May         57         147         10-Jul         21,306         443,799           31-May         439         586         11-Jul         25,275         469,074           1-Jun         653         1,239         12-Jul         31,165         500,239           2-Jun         900         2,139         13-Jul         23,579         523,818           3-Jun         466         2,605         14-Jul         25,835         549,653           4-Jun         1,015         3,620         15-Jul         28,671         578,324           5-Jun         4,268         7,888         16-Jul         15,644         593,968           6-Jun         15,000         36,962         29-Jul         23,401         63,942           10-Jun         15,000         86,962         23-Jul         28,448         870,622           12-Jun         8,000         89,962         23-Jul         28,448         870,613           13-Jun		Escapemei	nt <sup>a</sup>		Escapeme	nt <sup>a</sup>
29-May         60         90         9-Jul         14,901         422,493           30-May         57         147         10-Jul         21,306         443,799           31-May         439         586         11-Jul         23,575         469,074           1-Jun         653         1,239         13-Jul         23,579         523,818           3-Jun         406         2,605         14-Jul         228,535         549,653           4-Jun         1,015         3,620         15-Jul         28,671         578,324           5-Jun         4,268         7,888         16-Jul         15,644         593,968           6-Jun         1,133         12,021         17-Jul         4,057         598,025           7-Jun         9,941         21,962         18-Jul         4,644         602,669           8-Jun         15,000         31,962         22-Jul         23,401         639,642           10-Jun         15,000         81,962         22-Jul         28,848         68,7062           12-Jun         8,000         89,962         23-Jul         20,629         707,691           13-Jun         6,049         915,543         26-Jul         1,45	Date	Daily	Cumulative	Date	Daily	Cumulative
29-May         60         90         9-Jul         14,901         422,493           30-May         57         147         10-Jul         21,306         443,799           31-May         439         586         11-Jul         23,575         469,074           1-Jun         653         1,239         13-Jul         23,579         523,818           3-Jun         406         2,605         14-Jul         228,535         549,653           4-Jun         1,015         3,620         15-Jul         28,671         578,324           5-Jun         4,268         7,888         16-Jul         15,644         593,968           6-Jun         1,133         12,021         17-Jul         4,057         598,025           7-Jun         9,941         21,962         18-Jul         4,644         602,669           8-Jun         15,000         31,962         22-Jul         23,401         639,642           10-Jun         15,000         81,962         22-Jul         28,848         68,7062           12-Jun         8,000         89,962         23-Jul         20,629         707,691           13-Jun         6,049         915,543         26-Jul         1,45	28-May	30	30	8-Jul	10 227	407 592
30-May         57         147         10-Jul         21,306         443,799           31-May         439         586         11-Jul         25,275         469,074           1-Jun         653         1,239         12-Jul         31,165         500,239           2-Jun         900         2,139         13-Jul         23,579         523,818           3-Jun         466         2,605         14-Jul         25,835         549,653           4-Jun         1,015         3,620         15-Jul         28,671         578,324           5-Jun         4,268         7,888         16-Jul         15,644         593,968           6-Jun         4,133         12,021         17-Jul         4,057         598,025           7.Jun         9,941         21,962         19-Jul         13,572         616,241           9-Jun         15,000         51,962         20-Jul         23,401         639,642           10-Jun         15,000         81,962         23-Jul         18,572         658,214           11-Jun         10,832         108,794         25-Jul         14,753         725,194           14-Jun         10,822         108,794         25-Jul         <	•					
31-May       439       586       11-Jul       25,275       469,074         1-Jun       653       1,239       12-Jul       31,165       500,239         2-Jun       900       2,139       13-Jul       23,579       523,818         3-Jun       466       2,605       14-Jul       12,853       549,653         4-Jun       1,015       3,620       15-Jul       28,671       578,324         5-Jun       4,268       7,888       16-Jul       15,644       593,068         6-Jun       4,133       12,021       17-Jul       4,057       598,025         7-Jun       9,941       21,962       18-Jul       13,572       616,241         9-Jun       15,000       36,962       21-Jul       18,572       658,214         10-Jun       15,000       81,962       22-Jul       28,848       687,062         12-Jun       8,000       89,962       23-Jul       20,629       707,691         13-Jun       8,000       89,962       23-Jul       14,777       719,168         14-Jun       10,832       108,794       25-Jul       1,473       723,741         15-Jun       6,749       115,543       26-Jul </td <td>•</td> <td></td> <td></td> <td></td> <td></td> <td></td>	•					
1-Jun       653       1,239       12-Jul       31,165       500,239         2-Jun       900       2,139       13-Jul       23,579       523,818         3-Jun       466       2,605       14-Jul       23,579       523,818         4-Jun       1,015       3,620       15-Jul       28,671       578,324         5-Jun       4,268       7,888       16-Jul       15,644       593,968         6-Jun       4,133       12,021       17-Jul       4,644       602,669         8-Jun       15,000       36,962       19-Jul       13,572       616,241         9-Jun       15,000       66,962       21-Jul       18,572       658,214         11-Jun       15,000       81,962       22-Jul       20,629       707,691         13-Jun       8,000       97,962       24-Jul       11,477       719,168         14-Jun       10,832       108,794       25-Jul       4,573       723,741         15-Jun       6,749       115,543       26-Jul       1,453       725,194         16-Jun       5,187       125,947       28-Jul       1,478       727,941         18-Jun       4,692       130,639       29	•					,
2-Jun         900         2,139         13-Jul         23,579         523,818           3-Jun         466         2,605         14-Jul         25,835         549,653           4-Jun         1,015         3,620         15-Jul         28,671         578,324           5-Jun         4,268         7,888         16-Jul         15,644         593,968           6-Jun         4,133         12,021         17-Jul         4,057         598,025           7-Jun         9,941         21,962         18-Jul         14,644         602,669           8-Jun         15,000         51,962         20-Jul         23,401         639,642           10-Jun         15,000         81,962         22-Jul         28,848         687,062           12-Jun         8,000         89,962         23-Jul         20,629         707,691           13-Jun         8,000         97,962         24-Jul         11,473         723,741           15-Jun         6,749         115,543         26-Jul         1,453         725,194           16-Jun         5,217         120,760         27-Jul         1,269         72,643           17-Jun         5,187         125,947         28-Jul <td>•</td> <td></td> <td></td> <td></td> <td></td> <td></td>	•					
3-Jun         466         2,605         14-Jul         25,835         549,653           4-Jun         1,015         3,620         15-Jul         28,671         578,324           5-Jun         4,268         7,888         16-Jul         15,644         593,968           6-Jun         4,133         12,021         17-Jul         4,057         598,025           7-Jun         9,941         21,962         18-Jul         4,644         602,669           8-Jun         15,000         36,962         20-Jul         23,401         639,642           10-Jun         15,000         81,962         22-Jul         28,848         687,062           12-Jun         8,000         89,962         23-Jul         20,629         707,691           13-Jun         8,000         89,962         23-Jul         4,573         723,741           15-Jun         6,749         115,543         26-Jul         1,453         725,194           16-Jun         5,217         120,760         27-Jul         1,269         726,463           17-Jun         5,187         125,947         28-Jul         1,314         729,255           19-Jun         8,097         138,736         30-Jul<						
4-Jun1,0153,62015-Jul28,671578,3245-Jun4,2687,88816-Jul15,644593,9686-Jun4,13312,02117-Jul4,057598,0257-Jun9,94121,96218-Jul4,644602,6698-Jun15,00051,96220-Jul23,401639,64210-Jun15,00066,96221-Jul18,572616,2419-Jun15,00089,96223-Jul20,629707,69113-Jun8,00089,96223-Jul20,629707,69113-Jun8,00097,96224-Jul11,477719,16814-Jun10,832108,79425-Jul4,573723,74115-Jun6,749115,54326-Jul1,453725,19416-Jun5,217120,76027-Jul1,269726,46317-Jun5,187125,94728-Jul1,478727,94118-Jun4,692130,63929-Jul1,314729,25519-Jun8,097138,73630-Jul858730,11320-Jun14,684167,9521-Aug613731,85122-Jun25,905193,8572-Aug4,312736,16323-Jun30,777224,6343-Aug11,51774,60024-Jun21,815246,4494-Aug4,411752,09125-Jun13,020358,4728-Aug917756,15829-Jun20,066378,5389-Aug1						
5-Jun         4,268         7,888         16-Jul         15,644         593,968           6-Jun         4,133         12,021         17-Jul         4,057         598,025           7-Jun         9,941         21,962         18-Jul         4,644         602,669           8-Jun         15,000         36,962         19-Jul         13,572         616,241           9-Jun         15,000         66,962         21-Jul         18,572         658,214           11-Jun         15,000         89,962         23-Jul         20,629         707,691           13-Jun         8,000         97,962         24-Jul         11,477         719,168           14-Jun         10,832         108,794         25-Jul         4,573         723,741           15-Jun         6,749         115,543         26-Jul         1,453         725,194           16-Jun         5,217         120,760         27-Jul         1,269         72,941           18-Jun         4,692         130,639         29-Jul         1,314         729,255           19-Jun         8,097         138,736         30-Jul         858         730,113           20-Jun         14,532         153,268         3						
6-Jun4,13312,02117-Jul4,057598,0257-Jun9,94121,96218-Jul4,644602,6698-Jun15,00036,96219-Jul13,572616,2419-Jun15,00066,96221-Jul18,572658,21411-Jun15,00081,96222-Jul28,848687,06212-Jun8,00089,96223-Jul20,629707,69113-Jun8,00089,96223-Jul20,629707,69113-Jun8,00097,96224-Jul11,477719,16814-Jun10,832108,79425-Jul4,573723,74115-Jun6,749115,54326-Jul1,453725,19416-Jun5,217120,76027-Jul1,269726,46317-Jun5,187125,94728-Jul1,478727,94118-Jun4,692130,63929-Jul1,314729,25519-Jun8,097138,73630-Jul858730,11320-Jun14,532153,26831-Jul1,125731,23821-Jun14,684167,9521-Aug613731,85122-Jun25,905193,8572-Aug4,312736,16323-Jun30,777224,6343-Aug1,517747,68024-Jun21,815246,4494-Aug4,411752,09125-Jun15,795262,2445-Aug9,207754,30727-Jun27,631328,1827-Aug <td></td> <td></td> <td></td> <td></td> <td>,</td> <td></td>					,	
7-Jun9,94121,96218-Jul4,644602,6698-Jun15,00036,96219-Jul13,572616,2419-Jun15,00051,96220-Jul23,401639,64210-Jun15,00066,96221-Jul18,572658,21411-Jun15,00081,96222-Jul28,848687,06212-Jun8,00089,96223-Jul20,629707,69113-Jun8,00097,96224-Jul11,477719,16814-Jun10,832108,79425-Jul4,573723,74115-Jun6,749115,54326-Jul1,453725,19416-Jun5,217120,76027-Jul1,269726,46317-Jun5,187125,94728-Jul1,478727,94118-Jun4,682130,63929-Jul1,314729,25519-Jun8,097138,73630-Jul858730,11320-Jun14,532153,26831-Jul1,125731,23821-Jun14,684167,9521-Aug613731,85122-Jun25,905193,8572-Aug4,312736,16323-Jun30,777224,6343-Aug1,517747,68024-Jun11,815246,4494-Aug4,411752,09125-Jun15,795262,2445-Aug1,007754,30727-Jun27,631328,1827-Aug934755,24128-Jun30,290358,4728-Aug <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
8-Jun15,000 $36,962$ $19$ -Jul $13,572$ $616,241$ $9$ -Jun15,000 $51,962$ $20$ -Jul $23,401$ $639,642$ $10$ -Jun15,000 $66,962$ $21$ -Jul $18,572$ $658,214$ $11$ -Jun15,000 $81,962$ $22$ -Jul $28,848$ $687,062$ $12$ -Jun $8,000$ $89,962$ $23$ -Jul $20,629$ $707,691$ $13$ -Jun $8,000$ $97,962$ $24$ -Jul $11,477$ $719,168$ $14$ -Jun $10,832$ $108,794$ $25$ -Jul $4,573$ $723,741$ $15$ -Jun $6,749$ $115,543$ $26$ -Jul $1,453$ $725,194$ $16$ -Jun $5,217$ $120,760$ $27$ -Jul $1,269$ $726,463$ $17$ -Jun $5,187$ $125,947$ $28$ -Jul $1,478$ $727,941$ $18$ -Jun $4,692$ $130,639$ $29$ -Jul $1,314$ $729,255$ $19$ -Jun $8,097$ $138,736$ $30$ -Jul $858$ $730,113$ $20$ -Jun $14,532$ $153,268$ $31$ -Jul $1,125$ $731,238$ $21$ -Jun $14,684$ $167,952$ $1$ -Aug $613$ $731,851$ $22$ -Jun $25,905$ $193,857$ $2$ -Aug $4,312$ $736,163$ $23$ -Jun $30,777$ $224,634$ $3$ -Aug $11,517$ $747,680$ $24$ -Jun $21,815$ $246,449$ $4$ -Aug $4,411$ $752,091$ $25$ -Jun $15,795$ $262,244$ $5$ -Aug $1,007$ $754,307$ $27$ -Jun $27,631$ $328$						
9-Jun15,000 $51,962$ $20$ -Jul $23,401$ $639,642$ 10-Jun15,000 $66,962$ $21$ -Jul $18,572$ $658,214$ 11-Jun15,000 $81,962$ $22$ -Jul $28,848$ $687,062$ 12-Jun $8,000$ $89,962$ $23$ -Jul $20,629$ $707,691$ 13-Jun $8,000$ $97,962$ $24$ -Jul $11,477$ $719,168$ 14-Jun $10,832$ $108,794$ $25$ -Jul $4,573$ $723,741$ 15-Jun $6,749$ $115,543$ $26$ -Jul $1,453$ $725,194$ 16-Jun $5,217$ $120,760$ $27$ -Jul $1,269$ $72,6463$ 17-Jun $5,187$ $125,947$ $28$ -Jul $1,478$ $72,941$ 18-Jun $4,692$ $130,639$ $29$ -Jul $1,314$ $729,255$ 19-Jun $8,097$ $138,736$ $30$ -Jul $858$ $730,113$ 20-Jun $14,532$ $153,268$ $31$ -Jul $1,125$ $731,238$ 21-Jun $14,684$ $167,952$ $1-Aug$ $613$ $731,851$ 22-Jun $25,905$ $193,857$ $2-Aug$ $4,312$ $736,163$ 23-Jun $30,777$ $224,634$ $3-Aug$ $11,517$ $747,680$ 24-Jun $21,815$ $246,449$ $4-Aug$ $4,411$ $752,091$ 25-Jun $15,795$ $262,244$ $5-Aug$ $1,007$ $754,307$ 27-Jun $27,631$ $328,182$ $7-Aug$ $934$ $755,241$ 28-Jun $30,290$ $358,472$ $8-Aug$ $917$ <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
$\begin{array}{c c c c c c c c c c c c c c c c c c c $						
11-Jun15,000 $81,962$ $22$ -Jul $28,848$ $687,062$ 12-Jun $8,000$ $89,962$ $23$ -Jul $20,629$ $707,691$ 13-Jun $8,000$ $97,962$ $24$ -Jul $11,477$ $719,168$ 14-Jun $10,832$ $108,794$ $25$ -Jul $4,573$ $723,741$ 15-Jun $6,749$ $115,543$ $26$ -Jul $1,453$ $725,194$ 16-Jun $5,217$ $120,760$ $27$ -Jul $1,269$ $726,463$ 17-Jun $5,187$ $125,947$ $28$ -Jul $1,478$ $727,941$ 18-Jun $4,692$ $130,639$ $29$ -Jul $1,314$ $729,255$ 19-Jun $8,097$ $138,736$ $30$ -Jul $858$ $730,113$ 20-Jun $14,532$ $153,268$ $31$ -Jul $1,125$ $731,238$ 21-Jun $14,684$ $167,952$ $1$ -Aug $613$ $731,851$ 22-Jun $25,905$ $193,857$ $2$ -Aug $4,312$ $736,163$ 23-Jun $30,777$ $224,634$ $3$ -Aug $11,517$ $747,680$ 24-Jun $21,815$ $246,449$ $4$ -Aug $4,411$ $752,091$ 25-Jun $15,795$ $262,244$ $5$ -Aug $1,007$ $754,307$ 27-Jun $27,631$ $328,182$ $7$ -Aug $934$ $755,241$ 28-Jun $30,290$ $358,472$ $8$ -Aug $917$ $756,158$ 29-Jun $20,066$ $378,538$ $9$ -Aug $1,541$ $757,699$ 30-Jun $8,988$ $387,526$ $10$ -Aug $744$ </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$					,	
13-Jun $8,000$ 97,962 $24$ -Jul $11,477$ $719,168$ 14-Jun10,832108,794 $25$ -Jul $4,573$ $723,741$ 15-Jun $6,749$ 115,543 $26$ -Jul $1,453$ $725,194$ 16-Jun $5,217$ 120,760 $27$ -Jul $1,269$ $726,463$ 17-Jun $5,187$ 125,947 $28$ -Jul $1,478$ $727,941$ 18-Jun $4,692$ 130,639 $29$ -Jul $1,314$ $729,255$ 19-Jun $8,097$ 138,736 $30$ -Jul $858$ $730,113$ 20-Jun14,532153,268 $31$ -Jul $1,125$ $731,238$ 21-Jun14,684167,952 $1$ -Aug $613$ $731,851$ 22-Jun25,905193,857 $2$ -Aug $4,312$ $736,163$ 23-Jun30,777224,634 $3$ -Aug $11,517$ $747,680$ 24-Jun21,815 $246,449$ $4$ -Aug $4,411$ $752,091$ 25-Jun15,795 $262,244$ $5$ -Aug $1,007$ $754,307$ 27-Jun27,631328,182 $7$ -Aug $934$ $755,241$ 28-Jun30,290 $358,472$ $8$ -Aug $917$ $756,158$ 29-Jun20,066 $378,538$ $9$ -Aug $1,541$ $757,699$ 30-Jun $8,988$ $387,526$ $10$ -Aug $1,467$ $764,644$ 3-Jul $1,123$ $391,677$ $13$ -Aug $1,220$ $759,763$ 2-Jul $1,982$ $390,554$ $12$ -Aug $2,105$ $761,868$ 3-Jul <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
14-Jun $10,832$ $108,794$ $25$ -Jul $4,573$ $723,741$ $15$ -Jun $6,749$ $115,543$ $26$ -Jul $1,453$ $725,194$ $16$ -Jun $5,217$ $120,760$ $27$ -Jul $1,269$ $726,463$ $17$ -Jun $5,187$ $125,947$ $28$ -Jul $1,478$ $727,941$ $18$ -Jun $4,692$ $130,639$ $29$ -Jul $1,314$ $729,255$ $19$ -Jun $8,097$ $138,736$ $30$ -Jul $858$ $730,113$ $20$ -Jun $14,532$ $153,268$ $31$ -Jul $1,125$ $731,238$ $21$ -Jun $14,684$ $167,952$ $1$ -Aug $613$ $731,851$ $22$ -Jun $25,905$ $193,857$ $2$ -Aug $4,312$ $736,163$ $23$ -Jun $30,777$ $224,634$ $3$ -Aug $11,517$ $747,680$ $24$ -Jun $21,815$ $246,449$ $4$ -Aug $4,411$ $752,091$ $25$ -Jun $15,795$ $262,244$ $5$ -Aug $1,007$ $754,307$ $27$ -Jun $27,631$ $328,182$ $7$ -Aug $934$ $755,241$ $28$ -Jun $30,290$ $358,472$ $8$ -Aug $917$ $756,158$ $29$ -Jun $20,066$ $378,538$ $9$ -Aug $1,541$ $757,699$ $30$ -Jun $8,988$ $387,526$ $10$ -Aug $744$ $758,443$ $1$ -Jul $1,046$ $388,572$ $11$ -Aug $1,20$ $759,763$ $2$ -Jul $1,982$ $390,554$ $12$ -Aug $2,105$ $761,868$ $3$ -Jul $1,123$ $391,677$					,	
15-Jun $6,749$ $115,543$ $26$ -Jul $1,453$ $725,194$ 16-Jun $5,217$ $120,760$ $27$ -Jul $1,269$ $726,463$ $17$ -Jun $5,187$ $125,947$ $28$ -Jul $1,478$ $727,941$ $18$ -Jun $4,692$ $130,639$ $29$ -Jul $1,314$ $729,255$ $19$ -Jun $8,097$ $138,736$ $30$ -Jul $858$ $730,113$ $20$ -Jun $14,532$ $153,268$ $31$ -Jul $1,125$ $731,238$ $21$ -Jun $14,684$ $167,952$ $1$ -Aug $613$ $731,851$ $22$ -Jun $25,905$ $193,857$ $2$ -Aug $4,312$ $736,163$ $23$ -Jun $30,777$ $224,634$ $3$ -Aug $11,517$ $747,680$ $24$ -Jun $21,815$ $246,449$ $4$ -Aug $4,411$ $752,091$ $25$ -Jun $15,795$ $262,244$ $5$ -Aug $1,007$ $754,307$ $27$ -Jun $15,795$ $262,244$ $5$ -Aug $1,007$ $754,307$ $27$ -Jun $27,631$ $328,182$ $7$ -Aug $934$ $755,241$ $28$ -Jun $30,290$ $358,472$ $8$ -Aug $917$ $756,158$ $29$ -Jun $20,066$ $378,538$ $9$ -Aug $1,541$ $757,699$ $30$ -Jun $8,988$ $387,526$ $10$ -Aug $744$ $758,443$ $1$ -Jul $1,982$ $390,554$ $12$ -Aug $2,105$ $761,868$ $3$ -Jul $1,123$ $391,677$ $13$ -Aug $1,229$ $762,997$ $4$ -Jul $841$ $392,518$ <					,	
16-Jun $5,217$ $120,760$ $27-Jul$ $1,269$ $726,463$ $17-Jun$ $5,187$ $125,947$ $28-Jul$ $1,478$ $727,941$ $18-Jun$ $4,692$ $130,639$ $29-Jul$ $1,314$ $729,255$ $19-Jun$ $8,097$ $138,736$ $30-Jul$ $858$ $730,113$ $20-Jun$ $14,532$ $153,268$ $31-Jul$ $1,125$ $731,238$ $21-Jun$ $14,684$ $167,952$ $1-Aug$ $613$ $731,851$ $22-Jun$ $25,905$ $193,857$ $2-Aug$ $4,312$ $736,163$ $23-Jun$ $30,777$ $224,634$ $3-Aug$ $11,517$ $747,680$ $24-Jun$ $21,815$ $246,449$ $4-Aug$ $4,411$ $752,091$ $25-Jun$ $15,795$ $262,244$ $5-Aug$ $1,007$ $754,307$ $27-Jun$ $27,631$ $328,182$ $7-Aug$ $934$ $755,241$ $28-Jun$ $30,290$ $358,472$ $8-Aug$ $917$ $756,158$ $29-Jun$ $20,066$ $378,538$ $9-Aug$ $1,541$ $757,699$ $30-Jun$ $8,988$ $387,526$ $10-Aug$ $744$ $758,443$ $1-Jul$ $1,046$ $388,572$ $11-Aug$ $1,320$ $759,763$ $2-Jul$ $1,982$ $390,554$ $12-Aug$ $2,105$ $761,868$ $3-Jul$ $1,123$ $391,677$ $13-Aug$ $1,29$ $762,997$ $4-Jul$ $841$ $392,518$ $14-Aug$ $1,647$ $764,644$ $5-Jul$ $1,795$ $394,313$						,
17-Jun $5,187$ $125,947$ $28$ -Jul $1,478$ $727,941$ $18$ -Jun $4,692$ $130,639$ $29$ -Jul $1,314$ $729,255$ $19$ -Jun $8,097$ $138,736$ $30$ -Jul $858$ $730,113$ $20$ -Jun $14,532$ $153,268$ $31$ -Jul $1,125$ $731,238$ $21$ -Jun $14,684$ $167,952$ $1$ -Aug $613$ $731,851$ $22$ -Jun $25,905$ $193,857$ $2$ -Aug $4,312$ $736,163$ $23$ -Jun $30,777$ $224,634$ $3$ -Aug $11,517$ $747,680$ $24$ -Jun $21,815$ $246,449$ $4$ -Aug $4,411$ $752,091$ $25$ -Jun $15,795$ $262,244$ $5$ -Aug $1,209$ $753,300$ $26$ -Jun $38,307$ $300,551$ $6$ -Aug $1,007$ $754,307$ $27$ -Jun $27,631$ $328,182$ $7$ -Aug $934$ $755,241$ $28$ -Jun $30,290$ $358,472$ $8$ -Aug $917$ $756,158$ $29$ -Jun $20,066$ $378,538$ $9$ -Aug $1,541$ $757,699$ $30$ -Jun $8,988$ $387,526$ $10$ -Aug $744$ $758,443$ $1$ -Jul $1,046$ $388,572$ $11$ -Aug $1,320$ $759,763$ $2$ -Jul $1,982$ $390,554$ $12$ -Aug $2,105$ $761,868$ $3$ -Jul $1,123$ $391,677$ $13$ -Aug $1,29$ $762,997$ $4$ -Jul $841$ $392,518$ $14$ -Aug $1,647$ $764,644$ $5$ -Jul $1,795$ $394,313$		,				
18-Jun4,692130,63929-Jul1,314729,25519-Jun8,097138,73630-Jul858730,11320-Jun14,532153,26831-Jul1,125731,23821-Jun14,684167,9521-Aug613731,85122-Jun25,905193,8572-Aug4,312736,16323-Jun30,777224,6343-Aug11,517747,68024-Jun21,815246,4494-Aug4,411752,09125-Jun15,795262,2445-Aug1,007754,30727-Jun27,631328,1827-Aug934755,24128-Jun30,290358,4728-Aug917756,15829-Jun20,066378,5389-Aug1,541757,69930-Jun8,988387,52610-Aug744758,4431-Jul1,046388,57211-Aug1,320759,7632-Jul1,982390,55412-Aug2,105761,8683-Jul1,123391,67713-Aug1,29762,9974-Jul841392,51814-Aug1,647764,6445-Jul1,795394,31315-Aug1,361766,0056-Jul939395,25216-Aug1,496767,5017-Jul2,113397,36517-Aug4,749772,250		,				
19-Jun8,097138,73630-Jul858730,11320-Jun14,532153,26831-Jul1,125731,23821-Jun14,684167,9521-Aug613731,85122-Jun25,905193,8572-Aug4,312736,16323-Jun30,777224,6343-Aug11,517747,68024-Jun21,815246,4494-Aug4,411752,09125-Jun15,795262,2445-Aug1,007754,30727-Jun27,631328,1827-Aug934755,24128-Jun30,290358,4728-Aug917756,15829-Jun20,066378,5389-Aug1,541757,69930-Jun8,988387,52610-Aug744758,4431-Jul1,046388,57211-Aug1,320759,7632-Jul1,982390,55412-Aug2,105761,8683-Jul1,123391,67713-Aug1,212762,9974-Jul841392,51814-Aug1,647764,6445-Jul1,795394,31315-Aug1,361766,0056-Jul939395,25216-Aug1,496767,5017-Jul2,113397,36517-Aug4,749772,250						
20-Jun14,532153,26831-Jul1,125731,23821-Jun14,684167,9521-Aug613731,85122-Jun25,905193,8572-Aug4,312736,16323-Jun30,777224,6343-Aug11,517747,68024-Jun21,815246,4494-Aug4,411752,09125-Jun15,795262,2445-Aug1,209753,30026-Jun38,307300,5516-Aug1,007754,30727-Jun27,631328,1827-Aug934755,24128-Jun30,290358,4728-Aug917756,15829-Jun20,066378,5389-Aug1,541757,69930-Jun8,988387,52610-Aug744758,4431-Jul1,046388,57211-Aug1,320759,7632-Jul1,982390,55412-Aug2,105761,8683-Jul1,123391,67713-Aug1,129762,9974-Jul841392,51814-Aug1,647764,6445-Jul1,795394,31315-Aug1,361766,0056-Jul939395,25216-Aug1,496767,5017-Jul2,113397,36517-Aug4,749772,250						
21-Jun14,684167,9521-Aug613731,85122-Jun25,905193,8572-Aug4,312736,16323-Jun30,777224,6343-Aug11,517747,68024-Jun21,815246,4494-Aug4,411752,09125-Jun15,795262,2445-Aug1,209753,30026-Jun38,307300,5516-Aug1,007754,30727-Jun27,631328,1827-Aug934755,24128-Jun30,290358,4728-Aug917756,15829-Jun20,066378,5389-Aug1,541757,69930-Jun8,988387,52610-Aug744758,4431-Jul1,046388,57211-Aug1,320759,7632-Jul1,982390,55412-Aug2,105761,8683-Jul1,123391,67713-Aug1,129762,9974-Jul841392,51814-Aug1,647764,6445-Jul1,795394,31315-Aug1,361766,0056-Jul939395,25216-Aug1,496767,5017-Jul2,113397,36517-Aug4,749772,250						
22-Jun25,905193,8572-Aug4,312736,16323-Jun30,777224,6343-Aug11,517747,68024-Jun21,815246,4494-Aug4,411752,09125-Jun15,795262,2445-Aug1,209753,30026-Jun38,307300,5516-Aug1,007754,30727-Jun27,631328,1827-Aug934755,24128-Jun30,290358,4728-Aug917756,15829-Jun20,066378,5389-Aug1,541757,69930-Jun8,988387,52610-Aug744758,4431-Jul1,046388,57211-Aug1,320759,7632-Jul1,982390,55412-Aug2,105761,8683-Jul1,123391,67713-Aug1,647764,6445-Jul1,795394,31315-Aug1,361766,0056-Jul939395,25216-Aug1,496767,5017-Jul2,113397,36517-Aug4,749772,250					,	
23-Jun30,777224,6343-Aug11,517747,68024-Jun21,815246,4494-Aug4,411752,09125-Jun15,795262,2445-Aug1,209753,30026-Jun38,307300,5516-Aug1,007754,30727-Jun27,631328,1827-Aug934755,24128-Jun30,290358,4728-Aug917756,15829-Jun20,066378,5389-Aug1,541757,69930-Jun8,988387,52610-Aug744758,4431-Jul1,046388,57211-Aug1,320759,7632-Jul1,982390,55412-Aug2,105761,8683-Jul1,123391,67713-Aug1,129762,9974-Jul841392,51814-Aug1,647764,6445-Jul1,795394,31315-Aug1,361766,0056-Jul939395,25216-Aug1,496767,5017-Jul2,113397,36517-Aug4,749772,250				•		
24-Jun21,815246,4494-Aug4,411752,09125-Jun15,795262,2445-Aug1,209753,30026-Jun38,307300,5516-Aug1,007754,30727-Jun27,631328,1827-Aug934755,24128-Jun30,290358,4728-Aug917756,15829-Jun20,066378,5389-Aug1,541757,69930-Jun8,988387,52610-Aug744758,4431-Jul1,046388,57211-Aug1,320759,7632-Jul1,982390,55412-Aug2,105761,8683-Jul1,123391,67713-Aug1,129762,9974-Jul841392,51814-Aug1,647764,6445-Jul1,795394,31315-Aug1,361766,0056-Jul939395,25216-Aug1,496767,5017-Jul2,113397,36517-Aug4,749772,250				e		
25-Jun15,795262,2445-Aug1,209753,30026-Jun38,307300,5516-Aug1,007754,30727-Jun27,631328,1827-Aug934755,24128-Jun30,290358,4728-Aug917756,15829-Jun20,066378,5389-Aug1,541757,69930-Jun8,988387,52610-Aug744758,4431-Jul1,046388,57211-Aug1,320759,7632-Jul1,982390,55412-Aug2,105761,8683-Jul1,123391,67713-Aug1,129762,9974-Jul841392,51814-Aug1,647764,6445-Jul1,795394,31315-Aug1,361766,0056-Jul939395,25216-Aug1,496767,5017-Jul2,113397,36517-Aug4,749772,250						
26-Jun38,307300,5516-Aug1,007754,30727-Jun27,631328,1827-Aug934755,24128-Jun30,290358,4728-Aug917756,15829-Jun20,066378,5389-Aug1,541757,69930-Jun8,988387,52610-Aug744758,4431-Jul1,046388,57211-Aug1,320759,7632-Jul1,982390,55412-Aug2,105761,8683-Jul1,123391,67713-Aug1,129762,9974-Jul841392,51814-Aug1,647764,6445-Jul1,795394,31315-Aug1,361766,0056-Jul939395,25216-Aug1,496767,5017-Jul2,113397,36517-Aug4,749772,250				•		
27-Jun27,631328,1827-Aug934755,24128-Jun30,290358,4728-Aug917756,15829-Jun20,066378,5389-Aug1,541757,69930-Jun8,988387,52610-Aug744758,4431-Jul1,046388,57211-Aug1,320759,7632-Jul1,982390,55412-Aug2,105761,8683-Jul1,123391,67713-Aug1,129762,9974-Jul841392,51814-Aug1,647764,6445-Jul1,795394,31315-Aug1,361766,0056-Jul939395,25216-Aug1,496767,5017-Jul2,113397,36517-Aug4,749772,250						
28-Jun30,290358,4728-Aug917756,15829-Jun20,066378,5389-Aug1,541757,69930-Jun8,988387,52610-Aug744758,4431-Jul1,046388,57211-Aug1,320759,7632-Jul1,982390,55412-Aug2,105761,8683-Jul1,123391,67713-Aug1,129762,9974-Jul841392,51814-Aug1,647764,6445-Jul1,795394,31315-Aug1,361766,0056-Jul939395,25216-Aug1,496767,5017-Jul2,113397,36517-Aug4,749772,250				•		
29-Jun20,066378,5389-Aug1,541757,69930-Jun8,988387,52610-Aug744758,4431-Jul1,046388,57211-Aug1,320759,7632-Jul1,982390,55412-Aug2,105761,8683-Jul1,123391,67713-Aug1,129762,9974-Jul841392,51814-Aug1,647764,6445-Jul1,795394,31315-Aug1,361766,0056-Jul939395,25216-Aug1,496767,5017-Jul2,113397,36517-Aug4,749772,250		,				
30-Jun8,988387,52610-Aug744758,4431-Jul1,046388,57211-Aug1,320759,7632-Jul1,982390,55412-Aug2,105761,8683-Jul1,123391,67713-Aug1,129762,9974-Jul841392,51814-Aug1,647764,6445-Jul1,795394,31315-Aug1,361766,0056-Jul939395,25216-Aug1,496767,5017-Jul2,113397,36517-Aug4,749772,250				•		
1-Jul1,046388,57211-Aug1,320759,7632-Jul1,982390,55412-Aug2,105761,8683-Jul1,123391,67713-Aug1,129762,9974-Jul841392,51814-Aug1,647764,6445-Jul1,795394,31315-Aug1,361766,0056-Jul939395,25216-Aug1,496767,5017-Jul2,113397,36517-Aug4,749772,250				e		
2-Jul1,982390,55412-Aug2,105761,8683-Jul1,123391,67713-Aug1,129762,9974-Jul841392,51814-Aug1,647764,6445-Jul1,795394,31315-Aug1,361766,0056-Jul939395,25216-Aug1,496767,5017-Jul2,113397,36517-Aug4,749772,250				-		
3-Jul1,123391,67713-Aug1,129762,9974-Jul841392,51814-Aug1,647764,6445-Jul1,795394,31315-Aug1,361766,0056-Jul939395,25216-Aug1,496767,5017-Jul2,113397,36517-Aug4,749772,250				•		
4-Jul841392,51814-Aug1,647764,6445-Jul1,795394,31315-Aug1,361766,0056-Jul939395,25216-Aug1,496767,5017-Jul2,113397,36517-Aug4,749772,250				•		
5-Jul1,795394,31315-Aug1,361766,0056-Jul939395,25216-Aug1,496767,5017-Jul2,113397,36517-Aug4,749772,250						
6-Jul939395,25216-Aug1,496767,5017-Jul2,113397,36517-Aug4,749772,250				•		
7-Jul         2,113         397,365         17-Aug         4,749         772,250						
				•		
	7-Jul	2,113	397,365		4,749	772,250

Table 10.Sockeye salmon daily and cumulative escapement estimates through the<br/>Chignik weir, 2000.

Table 10. (page 2 of 2)

]	Escapemei	nt <sup>a</sup>	Es	capeme	nt <sup>a</sup>
Date	Daily	Cumulative	Date	Daily	Cumulative
18-Aug	7,302	779,552	27-Aug	685	797,179
19-Aug	4,012	783,564	28-Aug	849	798,028
20-Aug	1,365	784,929	29-Aug	530	798,558
21-Aug	885	785,814	30-Aug	467	799,025
22-Aug	604	786,418	31-Aug	622	799,64′
23-Aug	819	787,237	1-Sep	499	800,14
24-Aug	2,815	790,052	2-Sep	1,982	802,12
25-Aug	3,697	793,749	3-Sep	1,025	803,153
26-Aug	2,745	796,494	4-Sep	2,072	805,22
-			Weir I	Remova	1

<sup>a</sup> Daily escapement counts from June 8 to June 13 are estimates based on reports of fish movement through Chignik Lagoon, buildup of sockeye behind the partial weir, and initial sonar data obtained while calibrating the sonar equipment. Daily escapement counts from June 14 to July 11 are estimates based on sonar data. Approximately 200,000 additional sockeye salmon, above weir and SPA estimates, were observed during aerial surveys of Black Lake tributaries.

	Pink Esc	capement	Chum Escape	ment	Coho Escap	ement		
Date	Daily	Cumulative	Daily Cur	nulative	Daily Cumulative			
12-Jul <sup>a</sup>	102	102	0	0	0	0		
13-Jul	138	240	0	0	0	0		
14-Jul	66	306	0	0	0	0		
15-Jul	0	306	0	0	0	0		
16-Jul	144	450	0	0	0	0		
17-Jul	90	540	0	0	0	0		
18-Jul	42	582	0	0	0	0		
19-Jul	138	720	0	0	0	0		
20-Jul	0	720	0	0	0	0		
20 Jul 21-Jul	198	918	0	0	0	0		
22-Jul	60	978	0	0	0	0		
22 Jul 23-Jul	120	1,098	0	0	0	0		
23 Jul 24-Jul	0	1,098	0	0	0	0		
24-Jul 25-Jul	168	1,266	0	0	0	0		
25-Jul 26-Jul	108	1,200	0	0	0	0		
20-Jul 27-Jul	66	1,278	0	0	0	0		
27-Jul 28-Jul	00	1,344	0	0	0	0		
	120			0	0	0		
29-Jul 30-Jul	84	1,464	0 22	22	0 6			
		1,548				6		
31-Jul	66	1,614	0	22	0	6		
1-Aug	36	1,650	0	22	0	6		
2-Aug	96 122	1,746	0	22	0	6		
3-Aug	132	1,878	0	22	0	6		
4-Aug	84	1,962	0	22	0	6		
5-Aug	30	1,992	6	28	0	6		
6-Aug	54	2,046	0	28	0	6		
7-Aug	84	2,130	0	28	0	6		
8-Aug	36	2,166	0	28	0	6		
9-Aug	114	2,280	0	28	0	6		
10-Aug	36	2,316	0	28	6	12		
11-Aug	96	2,412	0	28	0	12		
12-Aug	54	2,466	0	28	0	12		
13-Aug	90	2,556	0	28	0	12		
14-Aug	142	2,698	0	28	12	24		
15-Aug	60	2,758	0	28	36	60		
16-Aug	228	2,986	6	34	6	66		
17-Aug	120	3,106	0	34	36	102		
18-Aug	102	3,208	0	34	24	126		
19-Aug	72	3,280	0	34	30	156		
20-Aug	66	3,346	0	34	0	156		
21-Aug	136	3,482	0	34	28	184		
22-Aug	127	3,609	1	35	78	262		
23-Aug	150	3,759	0	35	66	328		
24-Aug	216	3,975	6	41	61	389		
25-Aug	171	4,146	6	47	406	795		
26-Aug	30	4,176	0	47	571	1,366		

Table 11. Pink, chum, and coho salmon daily and cumulative escapement estimates through the Chignik weir, 2000.

	Pink Esc	capement	Chum Es	capement	Coho Ese	capement
Date	Daily	Cumulative	Daily	Cumulative	Daily	Cumulative
27-Aug	0	4,176	0	47	242	1,608
28-Aug	18	4,194	0	47	288	1,896
29-Aug	18	4,212	0	47	528	2,424
30-Aug	6	4,218	0	47	730	3,154
31-Aug	30	4,248	0	47	1,007	4,161
1-Sep	0	4,248	0	47	516	4,677
2-Sep	12	4,260	0	47	610	5,287
3-Sep	6	4,266	0	47	717	6,004
4-Sep	18	4,284	1	48	1,058	7,062
Total		4,284		48		7,062

Table 11. (page 2 of 2)

<sup>a</sup> Although first day of counting for pink, chum, and coho salmon was on May 27, the first fish tallied from any of these species was on July 12.

			Black I	Lake <sup>a</sup>					Black Ri	ver		C	hignik L	ake
	Fan		Boulevard	Alec		Broad		Bearskin		Chiaktuak				Hatchery
Year	Creek	Creek	Creek	River	Conglomerate	Creek	Total	Creek	Fork	Creek	Total	River	Creek	Beach
1960	38,500	8,000	40,000	30,000	3,000	30,000	149,500	11,600	23,000	19,000	53,600			
1961	27,000	5,000	28,700	25,000	800	17,000	103,500	2,500	17,100	20,700	40,300			
1962	18,000	7,000	13,000	60,000	200	15,000	113,200	3,000	13,000	24,000	40,000			
1963	39,000	-	36,000	85,000	1,000	61,000	222,000	900	5,000	9,000	14,900			
1964	19,500	3,050	23,850	17,900	9,300	9,500	83,100	500	4,500	7,000	12,000			
1967	20,000	1,000	9,000	156,000	10,000	10,000	206,000	10,000	25,000	31,000	66,000			
1968	32,000	2,400	20,000	60,000	2,000	4,100	120,500	1,200	10,500	10,000	21,700			
1969	103,000	2,100	33,000	50,000	4,000	5,000	197,100	50	800	1,500	2,350			
1970	146,000	9,000	55,500	198,000	5,000	-	413,500	450	4,000	4,000	8,450			
1971	105,000	14,000	85,000	158,000	0	-	362,000	3,500	5,500	47,000	56,000			
1972	18,000	3,500	19,000	74,000	400	-	114,900	1,400	4,300	23,000	28,700			
1973	115,000	4,000	76,000	74,000	5,000	-	274,000	13	4,100	1,500	5,613			
1974	90,000	5,000	50,000	93,000	5,000	-	243,000	450	8,000	7,000	15,450			
1975	40,000	4,500	25,000	87,000	0	-	156,500	65	2,500	2,500	5,065			
1976	78,000	8,900	100,000	119,000	2,000	-	307,900	2,650	23,700	7,700	34,050			
1977	88,000	20,000	127,000	133,000	1,000	-	369,000	200	13,600	6,900	20,700			
1978	114,000	3,300	74,000	83,300	500	-	275,100	410	9,600	8,500	18,510			
1979	37,000	11,800	32,000	105,100	400	26,100	212,400	918	7,610	29,000	37,528			
1980	127,000	16,000	75,000	70,500	1,500	68,000	358,000	3,600	33,000	40,400	77,000			
1981	93,000	4,700	59,000	76,500	20,000	27,000	280,200	950	1,500	18,700	21,150			
1982	50,000	5,500	60,000	43,000	20,000	32,000	210,500	1,066	10,791	5,000	16,857			
1983	-	-	-	-	-	-	-	-	-	6,000	6,000			
1984	50,000	22,200	70,000	30,500	31,000	36,000	239,700	-	-	-	8,200			
1985	28,000	5,500	36,000	65,000	5,500	17,000	157,000	350	450	1,200	2,000			
1986	60,000	15,300	47,000	76,000	39,000	27,000	264,300	-	-	8,300	8,300			
1987	52,000	12,200	133,000	88,400	45,900	32,500	364,000	-	-	1,000	1,000			
1988	54,000	71,000	83,700	106,500	2,300	26,500	344,000	-	-	4,600	4,600			
1989	19,300	21,000	64,000	133,000	1,000	7,500	245,800	-	-	2,100	2,100			
1990	32,600	7,400	35,900	49,800	2,200	18,000	145,900	300	0	50	350			
1991	14,600	19,500	48,000	-	2,000	13,000	97,100	-	-	-	-			
1992 <sup>b</sup>	-			392,000	-	· -		-	-	-	-			
1993	40,900	12,600	97,600	8,000	77,000	18,200	254,300	-	-	16,000	16,000			
1994	70,000	25,000	125,000	350,000	20,000	51,000	641,000	5,000	-	31,000	36,000	18,000	9,200	_
1995	23,000	10,000	60,000	200,000	40,000	60,000	393,000	7,100	18,000	31,000	56,100	13,000	6,000	150,000
1996	40,000	24,000	51,000	100,000	50,000	45,000	310,000	1,800	22,000	22,000	45,800	13,000	5,500	70,000
1997	40,000 60,000	5,000	48,000	166,000	8,000	20,000	307,000	9,000	9,000	23,500	41,500	25,000	8,000	35,000
1997	90,000	14,000	100,000	50,000	9,000	20,000 62,000	325,000	4,700	71,000	23,500	103,200	23,000	6,000	62,000
1998	70,000	8,100	50,000	226,000	1,000	22,000	323,000	4,700 8,300	175,000	13,000	196,300	8,500	1,620	15,000
														48,000
2000	43,500	31,100	166,000	268,000	27,000	93,000	628,600	3,800	3,800	18,600	26,200	28,000	19,700	48,0

Black Lake and Black River tributaries peak aerial sockeye salmon survey escapement estimates, Table 12. 1960-2000.

<sup>a</sup> Dashes or blanks represent no surveys taken or survey results not adequate to make stream estimate. <sup>b</sup> Survey considered incomplete for all streams except the Alec River.

Stream		Visi-			Species			
Date Observer	Location	bility	Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
		-						
Boulevard Creek, 271-083								
08/16/2000	Stream	Е	0	126,000	0	0	0	PLUS 39,000 MORTS.
George Pappas	Mouth	G	0	1,000	0	0	0	
	Bay							
08/23/2000	Stream	G	0	48,000	0	0	0	LARGE NUMBERS OF ADDITIONAL CARCASSES. FISH IN
Arnie Shaul	Mouth			<i>,</i>				UPPER REACHES NEARLY ALL DIED OFF. SURVEY TOO
	Bay							LATE.
Black Lake, 271-084								
07/10/2000	Stream							300,000 - 325,000 IN BLACK LAKE FROM OUTLET TO
George Pappas	Mouth	G	0	0	0	0	0	MOUTH OF ALEC RIVER.
Ocorge r appas	Bay	G	0	315.000	0	0	0	WOUTH OF ALEC NIVER.
	Бау	U	0	515,000	U	0	U	
Alec River, 271-085		_						
07/10/2000	Stream	Е	0	13,000	0	0	0	FLEW 3/4 OF RIVER, DID NOT GET ALL OF FAN CREEK.
George Pappas	Mouth	G	0	2,000	0	0	0	
	Bay							
08/16/2000	Stream	F	0	210,000	0	0	0	PLUS 58,000 MORTS.
George Pappas	Mouth	G	0	0	0	0	0	,
	Bay							
08/23/2000	Stream	G	0	101,000	0	0	0	PLUS LARGE NUMBERS OF CARCASSES.
Arnie Shaul	Mouth	U	0	101,000	0	0	0	TEOS EAROE NOMBERS OF CARCASSES.
Arme Shau	Bay							
	Бау							
Broad Creek, 271-087								
08/16/2000	Stream	Е	0	93,000	0	0	0	PLUS 24,000 MORTS.
George Pappas	Mouth	Е	0	0	0	0	0	
	Bay							
08/23/2000	Stream	G	0	37,000	0	0	0	21,000 IN MAIN STEM AND UNNAMED TRIBS. 14,000 IN
Arnie Shaul	Mouth							BIG SPRING CR., 2,000 IN PETRY'S SPRING BROOK.
	Bay							LARGE NUMBERS OF ADDITIONAL CARCASSES.
Conglomerate Creek, 271-088								
08/16/2000	Stream	Е	0	26,000	0	0	0	PLUS 1,000 MORTS.
George Pappas	Mouth	Ē	0	1,000	0	0	0	1200 1,000 110((10.
George i appas	Bay	г	0	1,000	0	0	0	
08/22/2000	C torra a	C	0	1.000	0	0	0	
08/23/2000	Stream	G	0	1,000	0	0	0	
Arnie Shaul	Mouth							
	Bay							

# Table 13. Salmon escapement aerial survey counts in the Chignik Management Area, 2000.

# Table 13. (page 2 of 30)

Stream		Visi-			Species			
Date Observer	Location	bility	Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Cathedral Creek, 271-089								
08/16/2000	Stream	Е	0	2,800	0	0	0	
George Pappas	Mouth	G	0	18,000	0	0	0	
	Bay							
Milk Creek, 271-090								
08/16/2000	Stream	Е	0	29,000	0	0	0	PLUS 2,000 MORTS.
George Pappas	Mouth	Е	0	100	0	0	0	
	Bay							
08/23/2000	Stream	G	0	24,000	0	0	0	MANY ADDITIONAL CARCASSES.
Arnie Shaul	Mouth Bay	G	0	3,000	0	0	0	
	Бау							
Fan Creek, 271-091	C.	Б	0	41.000	0	0	0	
08/16/2000	Stream Mouth	E E	0 0	41,000 500	0 0	0	0 0	PLUS 2,000 MORTS.
George Pappas		Е	0	500	0	0	0	
	Bay							
08/23/2000	Stream	G	0	9,000	0	0	0	SOME VERY OLD CARCASSES. FISH NEARLY ALL DIED
Arnie Shaul	Mouth			,				OFF. SURVEY TOO LATE.
	Bay							
Chiaktuak Creek, 271-092								
08/16/2000	Stream	Е	0	10,600	0	0	0	
George Pappas	Mouth	G	0	8,000	0	0	0	
	Bay							
08/23/2000	Stream	G	0	8,000	0	0	0	FISH DIED OFF IN UPPER END. MOST OBSERVED WERE
Arnie Shaul	Mouth	G	0	10,000	0	0	0	LIKELY LATE RUN.
	Bay							
Cucumber Creek, 271-093								
08/16/2000	Stream	G	0	2,500	0	0	0	HEAVY BRUSH, POOR VISIBILITY THROUGH IT.
George Pappas	Mouth	G	0	3,000	0	0	0	
	Bay	F	0	2,000	0	0	0	
08/24/2000	Stream	G	0	0	8,000	0	0	
George Pappas	Mouth	Е	0	0	4,000	0	0	
		F	0	0	1,000	0	0	

Table 13. (page 3 of 30)

Stream		Visi-			Species			
Date Observer	Location	bility	Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
West Fork River, 271-094								
08/16/2000	Stream		0	3,700	0	0	0	TWO TRIBS HAD FISH COUNTED, ONLY ONE WAS CLEAR,
George Pappas	Mouth	Р	0	0	0	0	0	PLUS 100 MORTS.
	Bay	Р	0	0	0	0	0	
Bearskin Creek, 271-095								
08/16/2000	Stream	Е	0	2,600	0	0	0	
George Pappas	Mouth	Е	0	0	0	0	0	
George i appus	Bay		0	0	0	0	ů 0	
Hatchery Beach, 271-096								
08/16/2000	Stream	G	0	1,000	0	0	0	
George Pappas	Mouth	F	0	39,000	0	0	0	
George Pappas			0	39,000 0	0	0	0	
	Bay	Р	0	U	U	0	0	
08/24/2000	Stream	Р	0	0	0	0	0	
George Pappas	Mouth		0	39,000	0	Õ	Õ	
8	Bay							
08/25/2000	Stream	G	0	2,000	0	0	0	
George Pappas	Mouth		0	2,000	ů 0	Ő	0	
George Tappas	Bay		0	46,000	0	0	0	
	Бау	U	0	40,000	0	0	0	
Clark River, 271-097								
08/16/2000	Stream	Е	0	2,100	0	0	0	SHARES MOUTH WITH HOME.
George Pappas	Mouth	Е	0	2,000	0	0	0	
• •	Bay	F	0	0	0	0	0	
08/24/2000	Stream	G	0	18,000	0	0	0	CHIGNIK LAKE SYSTEM.
George Pappas	Mouth	Ğ	Ő	10,000	Ő	Ő	Ő	
Storge i uppus	Bay		0	25,000	0	0	0	
Home Creek. 271-099								
08/16/2000	Stream	Е	0	19,700	0	0	0	SHARES MOUTH WITH CLARK.
			0		0	0	0	SHAKES MUUTH WITH CLAKK.
George Pappas	Mouth	E	0	2,000	0	0	0	
	Bay	F	0	0	0	0	0	
08/24/2000	Stream	G	0	6,000	0	0	0	
George Pappas	Mouth	G	0	1,000	0	0	0	
• • • •	Bay	F	0	25,000	0	0	0	
Lake Bay Creek, 271-101b								
08/04/2000	Stream	Е	0	0	0	500	0	
George Pappas	Mouth	Ğ	Ő	Ő	Ő	3,000	Ő	
	Bay	F	0	Ő	Ő	10,000	Ő	

# Table 13. (page 4 of 30)

Stream		Visi-			Species			
Date Observer	Location	bility $\overline{C}$	hinook	Sockeye	Coho	Pink	Chum	Observer Remarks
2010 30501101	2000000	C		2001010	20110		Circlin	
08/11/2000	Stream	G	0	0	0	0	0	
Jim Andel	Mouth	Ğ	Ő	Ő	Ő	Ő	Ő	
	Bay	Ğ	0	0	0	200	0	
	Duy	0	0	0	0	200	0	
08/24/2000	Stream	G	0	0	0	1,000	0	
George Pappas	Mouth	F	Ő	Ō	Õ	3,000	0	
8FF	Bay	F	0	0	Õ	1,000	0	
	24)	-	0	0	0	1,000	Ū.	
Mallard Duck Creek, 271-102								
08/24/2000	Stream	G	0	0	0	900	0	
George Pappas	Mouth	Ğ	0	0	0	0	Õ	
Coorde r abbas	Bay	F	Ő	0 0	Ő	2,000	0	
	Duj	•	÷	ů.		_,000	•	
Marshiniak Creek, 271-102a								
08/24/2000	Stream	F	0	0	0	100	0	OVERGROWN.
George Pappas	Mouth	G	Ő	Ő	Ő	10	Ő	
	Bay	F	Ő	Ő	Ő	0	Ő	
	,							
Metrofania Creek, 271-103								
08/24/2000	Stream	G	0	0	0	300	0	
George Pappas	Mouth	G	0	0	0	0	0	
8 11	Bay	F	0	0	0	0	0	
	,	-		, , , , , , , , , , , , , , , , , , ,	-	, i i i i i i i i i i i i i i i i i i i	-	
Alfred Creek, 271-104								
08/11/2000	Stream	G	0	0	0	0	0	
Jim Andel	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	200	0	
Frank Creek, 271-105								
08/11/2000	Stream	G	0	0	0	0	0	
Jim Andel	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	700	0	
	-							
08/20/2000	Stream	F	0	0	0	2,500	0	
Jim Andel	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
	-							
Through Creek, 271-106								
08/11/2000	Stream	G	0	0	0	0	0	
Jim Andel	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	700	50	
	-							
08/20/2000	Stream	F	0	0	0	800	0	
Jim Andel	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	

# Table 13. (page 5 of 30)

Stream		Visi-			Species			
Date Observer	Location	bility	Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Jack Creek, 272-100								
08/04/2000	Stream	G	0	0	0	0	0	BEAVER DAM.
George Pappas	Mouth	G	0	0	0	0	0	
• • • •	Bay	F	0	0	0	0	0	
Chignik Bay, 272-201								
08/20/2000	Stream	F	0	0	0	0	0	
Jim Andel	Mouth	F	Ő	Ő	Ő	Ő	Ő	
shiri i maar	Bay	F	0	0	0	0	0	
	2							
Chignik Bay, 272-202a	_	_		_	_		_	
08/20/2000	Stream	F	0	0	0	2,000	0	
Jim Andel	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
Neketa Creek, 272-202b								
08/20/2000	Stream	F	0	0	0	800	0	
Jim Andel	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
Thompson Creek, 272-204								
08/06/2000	Stream							LICUTING TOO DOOD TO CONTINUE LIEADED DACK TO
08/06/2000	Mouth							LIGHTING TOO POOR TO CONTINUE, HEADED BACK TO
George Pappas		Б	0	0	0	500	0	CAMP.
	Bay	F	0	0	0	500	0	
08/20/2000	Stream	F	0	0	0	1,500	0	
Jim Andel	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
Mckinsey Creek, 272-205								
08/06/2000	Stream	Р	0	0	0	0	0	POOR LIGHTING, T URNED BACK 1830 HRS.
	Mouth	F			0	0		FOUR LIGHTHING, I URINED DACK 1630 TIKS.
George Pappas			0 0	0 0	0	0	0 0	
	Bay	F	0	U	0	0	0	
Dry Creek, 272-206								
08/06/2000	Stream	Е	0	0	0	400	0	PRETTY DEAD.
George Pappas	Mouth	G	0	0	0	100	0	
0 11	Bay	F	0	0	0	200	0	
08/20/2000	Stream	F	0	0	0	2,000	30	
Jim Andel	Mouth	F	0	0	0	2,000	0	
	Bay	г F	0	0	0	0	0	
	Бау	1,	0	0	U	0	U	

# Table 13. (page 6 of 30)

Stream		Visi-			Species			
Date Observer	Location	bility	Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Hook Creek, 272-302 08/06/2000	Stream	Е	0	0	0	25,000	7,600	
George Pappas	Mouth	ь G	0	0	0	1,000	7,000	
George Pappas	Bay	F	0	0	0	1,000	0	
	Бау	I.	0	0	0	0	0	
08/20/2000	Stream	F	0	0	0	10,000	50	
Jim Andel	Mouth	F	0	0	0	0	0	
	Bay	F	Õ	Õ	0	Õ	0	
Kumlium Creek, 272-501								
08/06/2000	Stream	G	0	0	0	150	0	
George Pappas	Mouth	Е	0	0	0	0	0	
	Bay	Е	0	0	0	0	0	
272 502 272 502								
272-502, 272-502	<b>C</b> .	-	0	0	0	•	0	
08/06/2000	Stream	F	0	0	0	20	0	
George Pappas	Mouth	E	0	0	0	0	0	
	Bay	Е	0	0	0	50	0	
No Name-cape Kumliun, 272-503								
08/06/2000	Stream	G	0	0	0	0	0	
George Pappas	Mouth	E	0	0	0	0	0	
George i appas	Bay	Ē	0	0	Ő	0	0	
		_		-	-	, i i i i i i i i i i i i i i i i i i i	-	
Kujulik Bay, 272-504								
08/06/2000	Stream	G	0	0	0	0	0	
George Pappas	Mouth	Е	0	0	0	0	0	
	Bay	Е	0	0	0	0	0	
	_							
08/19/2000	Stream	F	0	0	0	0	0	CREEK MOUTH DRIED UP.
George Pappas	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	20	0	
Deer Creek 272 505								
Bear Creek, 272-505 08/06/2000	Stream	G	0	0	0	20	0	
George Pappas	Mouth	G	0	0	0	20	0	
Ocorge i appas	Bay	G	0	0	0	200	0	
	Бау	U	0	0	0	200	U	
08/19/2000	Stream	F	0	0	0	600	0	BAD WEATHER.
George Pappas	Mouth	F	0	0	0	100	0 0	
6 TT	Bay	F	Ő	Ő	Ő	0	Ő	
	= *J	-	5	9	2	0	-	

# Table 13. (page 7 of 30)

Stream		Visi-			Species			
Date Observer	Location	bility	Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Packer's Creek, 272-506								
08/06/2000	Stream		0	0	0	0	0	
George Pappas	Mouth		0	0	0	50	0	
	Bay	G	0	0	0	50	0	
08/19/2000	Stream		0	0	0	0	0	BAD WEATHER.
George Pappas	Mouth		0	0	0	25	0	
	Bay	F	0	0	0	50	0	
K								
Kujulik Bay, 272-507	<b>G</b> .	-	0	0	0	150	~	
08/06/2000	Stream		0	0	0	150	0	
George Pappas	Mouth		0	0	0	0	0	
	Bay	G	0	0	0	50	0	
08/10/2000	C.	р	0	0	0	0	0	
08/19/2000	Stream	P	0	0	0	0	0	
George Pappas	Mouth	Р	0	0	0	25	0	
	Bay	F	0	0	0	0	0	
K								
Kujulik Bay, 272-508	C.	Б	C	0	0	200	0	
08/06/2000	Stream	F	0	0	0	300	0	
George Pappas	Mouth		0	0	0	0	0	
	Bay	G	0	0	0	10	0	
08/19/2000	Stream	F	0	0	0	3,500	0	
				0				
George Pappas	Mouth		0		0	0	0	
	Bay	F	0	0	0	0	0	
Rudy's Creek, 272-509								
08/06/2000	Stream	G	0	0	0	8,000	2,700	
George Pappas	Mouth		0	0	0	40	0	
	Bay	Е	0	0	0	100	0	
08/19/2000	Stream	F	0	0	0	9,500	0	
George Pappas	Mouth		0	0	0	100	0	
	Bay	F	0	0	0	0	0	
272-510, 272-510								
08/06/2000	Stream	G	0	0	0	300	0	
George Pappas	Mouth		0	0	0	40	0	
George r appas	Bay		0	0	0	40 40	0	
	Вау	U	0	0	0	40	0	
08/19/2000	Stream	G	0	0	0	2,000	0	
George Pappas	Mouth	F	0	0	0	500	0	
George 1 appas	Bay		0	0	0	0	0	
	Бау	1.	0	0		0	U	

# Table 13. (page 8 of 30)

Stream		Visi-			Species			
Date Observer	Location	bility	Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Kininili Dan 272 511								
Kujulik Bay, 272-511a 08/06/2000	Stream	G	0	0	0	4,000	0	
George Pappas	Mouth	G	0	0 0	0	4,000	0	
George Pappas	Bay	F	0	0	0	200 100	0	
	Бау	I.	0	0	0	100	U	
08/19/2000	Stream	G	0	0	0	5,000	0	
George Pappas	Mouth	G	0	0	0	200	0	
U 11	Bay	Р	0	0	0	0	0	
Kujulik Bay, 272-511b								
08/06/2000	Stream	G	0	0	0	0	0	BLOCKED OFF.
George Pappas	Mouth	Ğ	Ő	Ő	Ő	Ő	0	
	Bay	Ğ	Ő	Ő	Ő	Ő	Ő	
	-							
08/19/2000	Stream	F	0	0	0	0	0	
George Pappas	Mouth	F	0	0	0	10	0	
	Bay	F	0	0	0	50	0	
Kujulik Bay, 272-512								
08/06/2000	Stream	Р	0	0	0	0	0	BAD LIGHTING.
George Pappas	Mouth	Р	0	0	0	0	0	
- 11	Bay	F	0	0	0	200	0	
08/19/2000	Stream	Р	0	0	0	20	0	BAD LIGHTING, COULD NOT SEE FISH.
George Pappas	Mouth	P	0	0	0	20 500	0	DAD EIGHTING, COULD NOT SEE FISH.
George i appas	Bay	P	0	0	0	8	0	
	Day	1	0	0	0	0	0	
North Fork River, 272-514	~	~		<i>c</i>		_	• • • • •	
07/19/2000	Stream	G	0	0	0	0	2,000	
George Pappas	Mouth	F	0	0	0	0	1,000	
	Bay	Р	0	0	0	0	0	
08/06/2000	Stream	Е	0	0	0	27,000	8,000	
George Pappas	Mouth	Ğ	0	0	Ő	1,000	0	
8FF	Bay	Ğ	0	0	0	1,000	0	
00/10/2000	~	-	-	2	~	1	1 1 0 0	
08/19/2000	Stream	F	0	0	0	15,000	1,100	ONLY SURVEYED THE BOTTOM HALF, COULD NOT FINISH
George Pappas	Mouth	F	0	0	0	16,000	0	DUE TO WINDS.
	Bay	Р	0	0	0	0	0	
08/27/2000	Stream							
George Pappas	Mouth	F	0	0	2,000	0	0	
C 11	Bay	F	0	0	50	0	0	

# Table 13. (page 9 of 30)

$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	
BayG0000008/19/2000StreamF00015,0000George PappasMouthF0001,0000BayF000000Wolverine Creek, 272-602 $Kream$ E0000George PappasMouthG0000BayP00000Willage Creek, 272-603 $Kream$ G000Willage Creek, 272-603 $Kream$ G00008/06/2000StreamG0000Ogeorge PappasMouthF0000	
08/19/2000       Stream       F       0       0       0       15,000       0         George Pappas       Mouth       F       0       0       0       1,000       0         Wolverine Creek, 272-602       Bay       F       0       0       0       0       0         Wolverine Creek, 272-602       Stream       E       0       0       0       4,500       0         George Pappas       Mouth       G       0       0       0       0       0         Willage Creek, 272-603       Village Creek	
George PappasMouth BayF0001,0000Wolverine Creek, 272-602 $K$ $K$ $K$ $K$ $K$ $K$ $K$ 08/06/2000StreamE0004,5000George PappasMouthG0000BayP00000Village Creek, 272-603 $K$ $K$ $K$ $K$ $K$ 08/06/2000StreamG0000George PappasMouthF000008/06/2000StreamG0000George PappasMouthF0000	
BayF00000Wolverine Creek, 272-60208/06/2000StreamE0004,5000George PappasMouthG00000BayP000000Village Creek, 272-60308/06/2000StreamG0001000George PappasMouthF000000	
BayF00000Wolverine Creek, 272-60208/06/2000StreamE0004,5000George PappasMouthG00000BayP000000Village Creek, 272-60308/06/2000StreamG0001000George PappasMouthF000000	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
George Pappas         Mouth Bay         George Pappas         Mouth Bay         George Pappas         George Pappa         George	
Bay     P     0     0     0     0       Village Creek, 272-603       08/06/2000     Stream     G     0     0     100     0       George Pappas     Mouth     F     0     0     0     0	
Village Creek, 272-603         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	
08/06/2000         Stream         G         0         0         100         0           George Pappas         Mouth         F         0         0         0         0         0	
George Pappas Mouth F 0 0 0 0 0	
6 11	
Bay P 0 0 0 0 0	
Black Creek, 272-604	
08/06/2000 Stream G 0 0 0 5,000 6,800	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
08/27/2000 Stream COULD NOT SEE THROUGH WATER.	
George Pappas Mouth P 0 0 0 0 0 Poor conditions	
Bay P 0 0 0 0 0	
Aniakchak River, 272-605	
08/06/2000 Stream F 6 3,380 0 134,000 39,400 NORTH FORK 21,600 CHUM, 40,000 PINI	KS MYSTERV
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
Bay P 0 0 0 3,000 0 31,000 PINK. CRATER 1,380 REDS. AJC	
Bay F 0 0 0 5,000 0 51,000 FINE. CRATER 1,580 REDS. AJC PINKS, 2,000 REDS, 4,000 CHUM. 6 KING	
BELOW HELLS GATES.	
BELOW HELLS GATES.	
08/27/2000 Stream COULD NOT SEE FISH DUE TO POOR L	IGHTING
George Pappas Mouth F 0 0 0 0 CONDITIONS.	
Bay P 0 0 0 0 0	
Fred Gungus, 272-606	
08/06/2000 Stream E 0 0 0 45,000 0 LOTS OF FISH!!!	
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
$\begin{array}{cccc} Bay E & 0 & 0 & 0 & 10,000 & 0 \\ Bay E & 0 & 0 & 0 & 8,000 & 0 \end{array}$	

# Table 13. (page 10 of 30)

Stream		Visi-		Species					
Date Observer	Location	bility Chinool	s Sockeye	Coho	Pink	Chum	Observer Remarks		
West Creek, 272-701									
08/06/2000	Stream						COULD NOT COMPLETE.		
George Pappas	Mouth								
0 11	Bay								
08/27/2000	Stream								
George Pappas	Mouth		) 0	100	500	0			
	Bay	P (	) 0	0	0	0			
Main Creek, 272-702									
08/05/2000	Stream	G (	) 200	0	28,000	13,500	200 REDS IN UPPER RIVER.		
				0			200 REDS IN UPPER RIVER.		
George Pappas	Mouth		) 0	0	0	0			
	Bay	F (	) 0	0	0	0			
08/29/2000	Stream	Р (	) 0	0	0	0	TOO WINDY, HEADED BACK TO CAMP. PLANE FORCED INTO		
George Pappas	Mouth	-	) 0	Ő	Ő	Ő	TUNDRA AT 3:45 PM, USCG RESCUE 7 HOURS LATER.		
George Fuppus	Bay		) 0	ŏ	Ő	Ő			
	Day	1	, 0	0	0	0			
Northeast Creek, 272-703									
08/05/2000	Stream	F (	) 0	0	3,600	12,500	JUMPERS IN BAY.		
George Pappas	Mouth	F (	) 0	0	0	0			
0 11	Bay	Р (	) 0	0	1,000	0			
00/00/0000	<b>G</b> .	<i>a</i>		1.5	15000	-			
08/29/2000	Stream		) 0	15	15,000	50	TURNED BACK AFTER FLYING HALF, DUE TO WIND.		
George Pappas	Mouth		) 0	0	0	0			
	Bay	P (	) 0	0	0	0			
Cape Kunmik, 272-704									
08/05/2000	Stream	P (	) 0	0	12	0			
George Pappas	Mouth		) 0	0	0	0			
George Fappas			) 0	0	0	0			
	Bay	r (	) 0	0	0	0			
08/29/2000	Stream	P (	) 0	0	0	0	NO WAY, WIND OVER 40 KNOTS.		
George Pappas	Mouth	Р (	) 0	0	0	0			
0 11	Bay	Р (	) 0	0	0	0			
N D									
Yantarni Bay, 272-720 07/19/2000	Stream	G (	) 0	0	0	0			
	Mouth				0				
George Pappas				0		0			
	Bay	P (	) 0	0	0	0			
08/05/2000	Stream	G (	) 0	0	0	100			
George Pappas	Mouth		) 0	Ő	Ő	0			
George i uppus	Bay		) 0	0	0	Ő			

## Table 13. (page 11 of 30)

Stream	,	Visi-			Species			
Date Observer	Location	bilitv	Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
		2		· ·				
08/19/2000	Stream	Е	0	0	0	25	0	
George Pappas	Mouth	Е	0	0	0	0	0	
	Bay	Е	0	0	0	0	0	
	•							
08/29/2000	Stream	F	0	0	0	200	0	
George Pappas	Mouth	F	0	0	0	0	0	
<b>U</b> 11	Bay	Р	0	0	0	0	0	
Yantarni Creek, 272-721								
07/19/2000	Stream	G	0	0	0	0	0	
George Pappas	Mouth	G	0	0	0	0	0	
0 11	Bay	Р	0	0	0	0	0	
	2							
08/05/2000	Stream	Е	0	0	0	2,100	4,200	
George Pappas	Mouth	Р	0	0	0	100	0	
	Bay	Р	0	0	0	0	0	
	•							
08/19/2000	Stream	G	0	0	0	21,000	2,100	
George Pappas	Mouth	F	0	0	0	0	0	
0 11	Bay	F	0	0	0	0	0	
	•							
08/29/2000	Stream	Р	0	0	0	10,000	6,000	
George Pappas	Mouth	Р	0	0	0	0	0	
0 11	Bay	Р	0	0	0	0	0	
	-							
Ocean Beach, 272-801								
07/19/2000	Stream	G	0	0	0	0	0	
George Pappas	Mouth	G	0	0	0	0	500	
	Bay	Р	0	0	0	0	0	
08/05/2000	Stream	Е	0	0	0	2,200	500	
George Pappas	Mouth	Р	0	0	0	0	0	
	Bay	Р	0	0	0	0	0	
08/19/2000	Stream	G	0	0	0	37,300	3,000	
George Pappas	Mouth	F	0	0	0	0	0	
	Bay	Р	0	0	0	0	0	
	2							
08/27/2000	Stream							
George P appas	Mouth	F	0	0	10	0	0	
	Bay	Р	0	0	0	0	0	
	•							

# Table 13. (page 12 of 30)

Stream		Visi-			Species			
Date Observer	Location	bility	Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/00/2000	C.	р	0	0	0	0.000	0	
08/29/2000	Stream	Р	0	0	0	9,000	0	
George Pappas	Mouth	Р	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
Ocean Beach (north), 272-802								
07/19/2000	Stream	F	0	0	0	0	0	CAMP 88 NOT OPEN YET.
George Pappas	Mouth	F	0	0	0	0	0	
George i appus	Bay	P	0	0	0	0	0	
08/05/2000	C.	Б	0	0	0	0	500	
08/05/2000	Stream	F	0	0	0	0	500	
George Pappas	Mouth	F	0	0	0	100	0	
	Bay	Р	0	0	0	0	0	
08/19/2000	Stream	G	0	0	0	18,000	0	
George Pappas	Mouth	F	0	0	0	0	0	
0 11	Bay	Р	0	0	0	0	0	
08/27/2000	Stream							
George Pappas	Mouth	F	0	0	0	0	0	
George 1 appas	Bay	г Р	0	0	5	0	0	
	Бау	r	0	U	5	0	U	
08/29/2000	Stream	Р	0	0	0	0	7,000	MUDDY, COULD ONLY SEE FISH IN CLEAR TRIBS.
George Pappas	Mouth	Р	0	0	0	0	0	
	Bay	Р	0	0	0	0	0	
Nakalilok Bay, 272-803								
07/19/2000	Stream	G	0	0	0	0	0	
George Pappas	Mouth	G	0	0	0	0	0	
Ocorge 1 appas	Bay	F	0	0	0	0	0	
	Бау	1.	0	0	U	0	0	
08/05/2000	Stream	Е	0	0	0	6,000	60	
George Pappas	Mouth	G	Õ	0	Õ	0	0	
	Bay	P	0	0	0	0	0	
08/19/2000	Stream	Е	0	0	0	600	100	
	Mouth	E	0	0	0	000	100	
George Pappas							-	
	Bay	Р	0	0	0	14,000	3,000	
Nakalilok River, 272-804								
07/19/2000	Stream	G	0	0	0	0	0	
George Pappas	Mouth	G	0	0	0	0	0	
	Bay	F	Õ	0	Õ	Õ	15,000	

# Table 13. (page 13 of 30)

Stream		Visi-			Species			
Date Observer	Location	bility	Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
		-						
08/05/2000	Stream		0	0	0	0	4,700	
George Pappas	Mouth		0	0	0	0	4,000	
	Bay	Р	0	0	0	0	30,000	
08/19/2000	Stream	E	0	0	0	15,000	25,000	
George Pappas	Mouth	Е	0	0	0	14,000	500	
	Bay	Р	0	0	0	0	0	
Nalaslilah Descusath) 272 805								
Nakalilok Bay(north), 272-805 07/19/2000	Stream	G	0	0	0	0	10	
					0			
George Pappas	Mouth		0	0	0	0	100	
	Bay	F	0	0	0	0	0	
08/05/2000	Stream	Е	0	0	0	400	0	
George Pappas	Mouth		0	0	0	0	0	
George rappas	Bay		0	0	0	0	1,000	
	Бау	1,	0	0	0	0	1,000	
08/19/2000	Stream	Е	0	0	0	5,000	0	
George Pappas	Mouth	Ē	0	0	Õ	0	Õ	
<i>8 1 1</i>	Bay		0	0	0	5,000	0	
	-							
272-900, 272-900								
07/19/2000	Stream		0	0	0	0	0	
George Pappas	Mouth		0	0	0	0	0	
	Bay	F	0	0	0	0	0	
08/05/2000	Stream	Б	0	0	0	0	0	DOLLIES AND NEEDLE FISH AT MOUTH.
08/05/2000 George Pappas	Mouth	E E	0 0	0 0	0 0	0 0	0 0	dollies and needle fish A1 MUU1H.
George Pappas			0	0	0	0	0	
	Bay	G	0	0	0	0	0	
Cape Kuyuyukak, 272-901								
07/19/2000	Stream	G	0	0	0	0	0	
George Pappas	Mouth		0	0	0	0	0	
George i uppus	Bay		0	0	0	0	0	
	Day	0	0	0	0	0	0	
08/05/2000	Stream	Е	0	0	0	500	0	
George Pappas	Mouth	Е	0	0	0	0	0	
C 11	Bay		0	0	0	0	0	
08/19/2000	Stream	Е	0	0	0	200	0	
George Pappas	Mouth	E	0	0	0	10	0	
	Bay	F	0	0	0	0	0	

# Table 13. (page 14 of 30)

Stream		Visi-			Species			
Date Observer	Location		Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Cape Kuyuyukak, 272-902								
07/19/2000	Stream	G	0	0	0	0	0	
George Pappas	Mouth	G	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
08/05/2000	Stream	Е	0	0	0	4,000	0	
George Pappas	Mouth	Е	0	0	0	1,000	0	
	Bay	Е	0	0	0	1,200	0	
	_	_		_	_		_	
08/19/2000	Stream	Е	0	0	0	11,000	0	
George Pappas	Mouth	E	0	0	0	1,000	0	
	Bay	Е	0	0	0	5,000	0	
CI::::								
Chiginagak River, 272-903	0.	C	~	0	0	0	0	
07/19/2000	Stream	G	0	0	0	0	0	
George Pappas	Mouth	G	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
08/05/2000	Stream	G	0	0	0	0	0	DRIED UP.
	Mouth	G	0			0	0	DRIED UP.
George Pappas				0	0			
	Bay	G	0	0	0	0	0	
08/19/2000	Stream	Е	0	0	0	5,000	0	
George Pappas	Mouth	E	0	0	0	3,000 0	0	
Ocorge r appas		ь Р	0	0	0	0	0	
	Bay	Р	0	0	0	0	0	
08/27/2000	Stream							250' SOLID FOG.
George Pappas	Mouth	F	0	0	0	1,000	3,000	250 SOLID I OO.
George i appas	Bay	P	0	0	0	1,000	8,000	
	Day	1	0	0	v	0	0,000	
08/29/2000	Stream	G	0	0	0	13,000	8,000	
George Pappas	Mouth	F	0	0	0	1,000	0,000	
George i appas	Bay	P	0	0	0	1,000	0	
	Бау	1	0	0	U	0	U	
Chiginagak River, 272-903a								
07/19/2000	Stream	F	0	0	0	0	0	POOR LIGHTING.
George Pappas	Mouth	F	0	0	0	0	0	i o on Lionni, o.
Ocorge i appas	Bay	P	0	0	0	0	0	
	Бау	г	0	0	U	0	U	
08/05/2000	Stream	G	0	0	0	1,700	1,200	
George Pappas	Mouth	F	0	0	0	0	0	
George i appas	Bay	P	0	0	0	15,000	31,000	
	Бау	r	U	U	0	15,000	51,000	

# Table 13. (page 15 of 30)

Stream		Visi-			Species			
Date Observer	Location b	oility	Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/19/2000	Stream	Е	0	0	0	22,000	100	
George Pappas	Mouth	E	0	0	0	22,000	100	
Ocorge r appas	Bay	ь F	0	0	0	0	0	
	Бау	Г	0	U	U	0	0	
08/29/2000	Stream	F	0	0	0	0	5,000	TOO MURKY TO SEE FISH IN MAIN RIVER, FISH ONLY
George Pappas	Mouth	Р	0	0	0	0	0	COUNTABLE IN TRIBS.
	Bay	Р	0	0	0	0	0	
Chiginagak Bay, 272-903b								
08/05/2000	Stream	G	0	0	0	0	0	DRYED UP ABOUT 1/2 WAY UP.
George Pappas	Mouth	G	0	0	0	25	0	
George i appas	Bay	G	0	0	0	1,000	0	
	Бау	U	0	U	0	1,000	0	
08/19/2000	Stream	Е	0	0	0	11,000	0	
George Pappas	Mouth	Е	0	0	0	0	0	
- 11	Bay	F	0	0	0	0	0	
08/29/2000	Stream	G	0	0	0	0	0	
George Pappas	Mouth	F	0	0	0	0	0	
Ocorge r appas	Bay	г Р	0	0	0	0	0	
	Бау	1	U	U	U	U	U	
Chiginagak Bay, 272-904								
07/19/2000	Stream	F	0	0	0	0	0	
George Pappas	Mouth	F	0	0	0	0	0	
	Bay	Р	0	0	0	0	0	
08/05/2000	Stream	Е	0	0	0	7,000	0	
George Pappas	Mouth	Ē	0	0	0	7,000	0	
Seeige ruppus	Bay	F	0	0	0	0	10,000	
	249	-	5	č	Ŭ	0	-0,000	
08/19/2000	Stream	Е	0	0	0	33,000	0	
George Pappas	Mouth	Е	0	0	0	0	0	
~	Bay	Е	0	0	0	5,000	0	
08/27/2000	Stream							
George Pappas	Mouth	F	0	0	1,000	0	0	
George r appas	Bay	P	0	0	1,000	0	0	
	Бау	г	0	U	0	0	U	
08/29/2000	Stream	G	0	0	0	15,000	0	POOR SALTWATER VISIBILITY. PLUS 2,000 PINK MORTS
George Pappas	Mouth	G	0	0	0	1,000	0	
	Bay	F	0	0	0	0	0	

## Table 13. (page 16 of 30)

Stream		Visi-			Species			
Date Observer	Location	bility	Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Chiginagak Bay, 272-905								
07/19/2000	Stream	F	0	0	0	0	100	
George Pappas	Mouth	F	0	0	0	0	1,000	
George Fappas	Bay	P	0	0	0	0	1,000	
	Day	1	0	0	0	0	0	
08/05/2000	Stream	Е	0	0	0	3,100	300	
George Pappas	Mouth	Е	0	0	0	0	0	
	Bay	G	0	0	0	0	10,000	
08/19/2000	Stream	Е	0	0	0	9,000	300	
George Pappas	Mouth	Ē	0	0	ů 0	1,000	0	
ocorger uppus	Bay	Ē	Ő	Ő	Ő	10,000	Ő	
00/20/2000	-		0	0	0	<b>22</b> 000	1 000	
08/29/2000	Stream	E	0	0	0	23,000	1,000	POOR SALTWATER VISIBILITY. PLUS 10,000 PINK MORTS
George Pappas	Mouth	E P	0 0	0 0	0 0	0 0	0	IN LOWER MOUTH.
	Bay	Р	0	0	0	0	0	
Chiginagak Bay, 272-906								
07/19/2000	Stream	G	0	0	0	0	0	
George Pappas	Mouth	F	0	0	0	0	0	
<b>C</b> 11	Bay	Р	0	0	0	0	0	
08/05/2000	Stream	G	0	0	0	0	0	DEAD.
George Pappas	Mouth	G	0	0	0	0	0	DEAD.
George Tappas	Bay	G	0	0	0	0	0	
	Duj	0	0	Ū.	0	0	0	
Chiginagak Bay, 272-907								
07/19/2000	Stream	F	0	0	0	0	0	
George Pappas	Mouth	F	0	0	0	0	0	
	Bay	Р	0	0	0	0	0	
08/19/2000	Stream	Е	0	0	0	1,000	0	DRIED UP MOUTH.
George Pappas	Mouth	E	0	0	0	1,000	0	DRIED OF MOUTH.
George i uppus	Bay	Ē	0	0	0	0	0	
Port Wrangell Bay, 272-921								
07/19/2000	Stream	G	0	0	0	0	100	
George Pappas	Mouth	F	0	0	0	0	100	
	Bay	Р	0	0	0	0	0	
08/05/2000	Stream	F	0	1,000	0	4,000	3,000	400 REDS IN RIGHT SIDE LAKE (DRAINAGE CREEK DRIED
George Pappas	Mouth	F	0	1,000	0	4,000	3,000 0	UP). 600 REDS IN GRASS FLATS ON LEFT HAND SIDE.
George Luppus	Bay	P	0	0	0	0	0	er, soo kees it okaiss rearis on eer raine side.
	Buj	-	2	5	2	0	~	

# Table 13. (page 17 of 30)

Stream		Visi-			Species			
Date Observer	Location	bility	Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
		-						
08/19/2000	Stream							TURNED BACK, TOO MUCH WIND. ONE MILE ONLY.
George Pappas	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	2,000	0	
08/29/2000	Stream	Р	0	1,700	0	100	1,000	ONLY SAW FISH IN SHALLOW WATER, POOR MURKY
George Pappas	Mouth	Р	0	0	0	0	0	VISIBILITY CONDITIONS.
	Bay	Р	0	0	0	0	0	
D. ( W								
Port Wrangell Bay, 272-922	C.							DI ACIVED AFE
07/19/2000	Stream							BLOCKED OFF.
George Pappas	Mouth	~		-	0	-	0	
	Bay	G	0	0	0	0	0	
08/05/2000	Stream	Е	0	0	0	0	0	
	Mouth	E	0	0	0	0	0	
George Pappas			0	0	0	600	0	
	Bay	E	0	0	0	600	0	
08/19/2000	Stream	Е	0	0	0	0	0	
George Pappas	Mouth	Ē	0	0 0	0	0	0	
George i uppus	Bay		0	0	0	2,000	0	
	Day		0	0	0	2,000	0	
08/29/2000	Stream	Е	0	0	0	5,000	0	PLUS 2,000 PINK MORTS IN STREAM.
George Pappas	Mouth	Е	0	0	0	0	0	
0 11	Bay	F	0	0	0	100	0	
Cape Providence, 272-923	<b>a</b> .	-	c	c	0	c	0	
07/19/2000	Stream	F	0	0	0	0	0	
George Pappas	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
08/05/2000	Stream	Е	0	0	0	0	0	
George Pappas	Mouth	E	0	0	0	0	0	
Ocorge i appas	Bay		0	0	0	2,000	0	
	Бау	Е	0	0	0	2,000	0	
08/29/2000	Stream	Е	0	0	0	2,000	0	
George Pappas	Mouth	Ē	0	Ő	Ő	2,000	0	
Scorge i uppus	Bay		0	0	0	1,000	0	
	Бау	Б	0	0	0	1,000	U	
Agripina Lake, 272-961a								
07/19/2000	Stream	Е	0	0	0	0	2,000	
George Pappas	Mouth	F	ů 0	0	Ő	Ő	0	
George Luppus	Bay		0	0	0	0	0	
	Day		0	0	0	0	0	

# Table 13. (page 18 of 30)

Stream		Visi-			Species			
Date Observer	Location	bility	Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/05/2000	Stream	G	0	0	0	9.000	0	
George Pappas	Mouth	G	0	Ő	0	9,000	0	
George r appus	Bay	P	0	0	0	1,000	0	
00/10/2000	C.	F	0	0	0	22.000	0	
08/19/2000	Stream	E	0	0	0	22,000	0	TURNED BACK, TOO MUCH WIND. ONE MILE ONLY.
George Pappas	Mouth	G	0	0	0	1,000	0	
	Bay	Р	0	0	0	0	0	
08/29/2000	Stream	G	0	0	0	35,000	1,000	ONLY FLEW BOTTOM HALF DUE TO HIGH WINDS. PLUS
George Pappas	Mouth	F	0	0	0	0	0	5,000 PINK MORT S IN MOUTH OF RIVER.
	Bay	F	0	0	0	0	0	
Agripina Slough, 272-961b								
07/19/2000	Stream	G	0	0	0	0	0	
George Pappas	Mouth	F	0	0 0	0	ů 0	Ő	
George i uppus	Bay	F	Ő	Ő	Ő	ŏ	Ő	
	Duj	•	0	-	0	0	0	
08/05/2000	Stream	G	0	2,000	0	0	0	OLD REDS IN LEFT HAND LAKE.
George Pappas	Mouth	G	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
08/19/2000	Stream	G	0	500	0	10,000	0	
George Pappas	Mouth	Ğ	Õ	0	Õ	50	Õ	
	Bay	Е	0	0	0	2,000	0	
08/29/2000	Stream	Р	0	0	0	0	0	SAW FISH FLASHING IN LAKE, BUT COULD NOT ID OR
George Pappas	Mouth	F	0	0	0	0	0	ENUMERATE.
George Pappas	Bay	г F	0	0	2	0	0	ENUMERATE.
	Бау	I.	0	0	2	0	0	
Glacier Creek, 272-962								
07/19/2000	Stream	G	0	0	0	0	100	LAKE FED BY DIFFERNT CREEK THIS YEAR, LAKE OUTLE
George Pappas	Mouth	F	0	0	0	0	0	DRYED UP.
	Bay	Е	0	0	0	0	0	
08/05/2000	Stream	Р	0	0	0	0	3,100	
George Pappas	Mouth	P	0	Ő	0	100	0	
Secret appas	Bay	F	0	0	0	0	0	
08/19/2000	Star	F	0	300	0	C 000	0	200 COCKEVE IN DICHT HAND I AKE MOUTH OF LAVE
	Stream Mouth	F	0	300 0	0	6,000 1,000	0 0	200 SOCKEYE IN RIGHT HAND LAKE, MOUTH OF LAKE OUTLET DRIED UP.
George Pappas					0	,		OUILEI DRIED UP.
	Bay	Р	0	0	0	0	0	

# Table 13. (page 19 of 30)

Stream	Visi-			Species				
Date Observer	Location	bility Ch	inook	Sockeye	Coho	Pink	Chum	Observer Remarks
00/20/2000	<b>C</b>		0	100	0	- 000	600	
08/29/2000	Stream	E	0	400	0	7,000	600	
George Pappas	Mouth	G	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
Glacier Creek, 272-962a								
07/19/2000	Stream	G	0	0	0	0	0	
George Pappas	Mouth	F	õ	ů 0	Ő	Ő	0	
George r appas	Bay	F	0	0	0	0	0	
08/05/2000	Stream	F	0	0	0	0	0	
George Pappas	Mouth	F	0	0	0	0	0	
	Bay	Р	0	0	0	500	0	
08/29/2000	Stream	G	0	0	0	3,000	1,000	PLUS 1,000 PINK MORTS.
	Mouth	G	0	0	0	10	1,000	1205 1,000 I HVX MOR15.
George Pappas	Bay	F	0	0	0	100	0	
	Вау	Г	U	0	0	100	0	
Kilokak Creek, 272-963								
07/19/2000	Stream	Е	0	0	0	0	0	
George Pappas	Mouth	F	0	0	0	0	0	
6 II	Bay	F	0	0	0	0	0	
08/05/2000	Stream	Е	0	0	0	700	0	
George Pappas	Mouth	E	0	0	0	1,000	0	
	Bay	Е	0	0	0	0	0	
08/19/2000	Stream	F	0	0	0	3,000	0	RIVER DRIED UP 100 YARDS UP FROM MOUTH, BUT FISH
George Pappas	Mouth	F	0	0	0	3,000	0	ARE UP RIVER.
George Pappas	Bay	г F	0	0	0	8,000	0	AKE OF KIVEK.
	Бау	Г	0	0	0	8,000	0	
08/29/2000	Stream	Е	0	0	0	5,000	0	
George Pappas	Mouth	G	Ő	Õ	Õ	0	0	
511-81 - HF	Bay	Ğ	ŏ	Ő	100	200	Ő	
<b>B</b> ( <b>B</b> ) ( <b>B</b> )	-							
Red Bluff Creek, 273-702	~		~	2	2	0.000	1 800	
08/04/2000	Stream	Е	0	0	0	8,000	1,700	FIRST TRIB. WATER IS CLEAR. GOOD SURVEY.
George Pappas	Mouth	E	0	0	0	0	0	
	Bay	Р	0	0	0	0	0	
08/08/2000	Stream							
George Pappas	Mouth	Р	0	0	0	0	0	
George Fappas			0	0	0	0	0	
	Bay	Р	0	0	0	0	0	

#### Table 13. (page 20 of 30)

Stream		Visi-			Species			
Date Observer	Location	bility	Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
		-		•				
08/13/2000	Stream		0	0	0	9,000	50	
Jim Andel	Mouth	G	0	0	0	200	0	
	Bay	G	0	0	0	0	0	
08/23/2000	Stream	G	0	0	0	8,000	500	TURBID.
Jim Andel	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
08/25/2000	Stream	G	0	0	0	21,000	0	
George Pappas	Mouth	F	0	0	0	10	0	
0 11	Bay	Р	0	0	0	0	0	
09/14/2000	Stream	G	0	0	1,800	0	0	ONLY COUNTED COHO. SOME OF THESE AREA BEING
Arnie Shaul	Mouth							HARVESTED BY SUBSISTENCE FISHERMEN IN STREAM.
	Bay							
Mitrofania Bay, 273-720								
08/04/2000	Stream	G	0	0	0	0	60	TURBID WATER EXCEPT FOR TRIBS. FIRST TOP RIGHT
George Pappas	Mouth	Р	0	0	0	0	0	TRIBS. HAD FISH.
3. 3. TI	Bay	Р	0	0	0	0	0	
08/23/2000	Stream	G	0	0	0	0	0	NO VISIBILITY.
Jim Andel	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
Ivan River, 273-722								
08/04/2000	Stream	F	0	0	0	6,000	800	BOTTOM 2 MILES HAS PINKS.
George Pappas	Mouth	Р	0	0	0	0	0	
0 11	Bay	Р	0	0	0	0	0	
08/08/2000	Stream							
George Pappas	Mouth	F	0	0	0	1,000	0	
0 11	Bay	F	0	0	0	500	0	
08/13/2000	Stream	G	0	0	0	10,000	1,500	
Jim Andel	Mouth	G	0	0	0	0	0	
	Bay		0	0	0	0	0	
08/23/2000	Stream	G	0	0	0	25,000	0	
Jim Andel	Mouth	Ğ	Õ	Õ	Õ	0	0	
	Bay		0	0	0	0	0	
	Stream	Е	0	0	0	51,000	100	BEST VISIBILITY IN TWO YEARS.
08/24/2000								
08/24/2000 George Pappas	Mouth	F	0	0	0	500	0	

## Table 13. (page 21 of 30)

Stream		Visi-			Species				
Date Observer	Location	bility	Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks	
09/14/2000	Stream	G	0	0	700	0	0	HARD TO SEPERATE COHO FROM CHUMS IN SPOTS. ONLY	
Arnie Shaul	Mouth							COUNTED COHO.	
	Bay								
Eisharah Davi 272 722									
Fishrack Bay, 273-723 08/04/2000	Stream	Е	0	0	0	350	0		
George Pappas	Mouth	E	0			10			
George Pappas	Bay	E F	0	0 0	0 0	300	0 0		
	Бау	Г	0	0	0	500	0		
08/13/2000	Stream	G	0	0	0	0	0		
Jim Andel	Mouth	G	0	0	0	4,000	0		
	Bay	G	0	0	0	0	0		
08/23/2000	Stream	G	0	0	0	600	0		
Jim Andel	Mouth	G	0	0	ů 0	300	0		
Jilli / Hidel	Bay	G	0	0 0	0	0	0		
	Duy	0	0	0	0	0	0		
08/24/2000	Stream	Е	0	0	0	300	0		
George Pappas	Mouth	F	0	0	0	100	0		
	Bay	Р	0	0	0	2,000	0		
Foot Creek, 273-802									
08/04/2000	Stream	Е	0	0	0	1,000	0		
George Pappas	Mouth	Ē	Ő	Ő	Ő	25	Ő		
8FF	Bay	F	0	Õ	Ō	0	Õ		
	~	-				100			
08/08/2000	Stream	E	0	0	0	100	0		
George Pappas	Mouth	E	0	0	0	100	0		
	Bay	G	0	0	0	100	0		
08/13/2000	Stream	G	0	0	0	2,700	100		
Jim Andel	Mouth	G	0	0	0	100	0		
	Bay	G	0	0	0	0	0		
08/23/2000	Stream	G	0	0	0	1,700	50		
Jim Andel	Mouth	G	0	0	0	500	0		
		G	0	0	0	0			
	Bay	G	0	U	0	0	0		
08/24/2000	Stream	G	0	0	0	2,260	0	POOR VISIBILITY.	
George Pappas	Mouth	G	0	0	0	0	0		
	Bay	Р	0	0	0	0	0		

## Table 13. (page 22 of 30)

Stream		Visi-			Species			
Date Observer	Location	bility	Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Windy Creek, 273-821	~	-			0		_	
08/04/2000	Stream	E	0	0	0	0	5	
George Pappas	Mouth	E	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
08/08/2000	Stream							
George Pappas	Mouth	Е	0	0	0	50	0	
George Tappas	Bay	G	0	0	0	200	0	
	,	-		÷	-			
08/23/2000	Stream	G	0	0	0	0	0	
Jim Andel	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
222 222 222 222								
273-822, 273-822 08/04/2000	Stream	Е	0	0	0	200	0	
George Pappas	Mouth	F	0	0	0	100	0	
George rappas	Bay	г F	0	0	0	500	0	
	Бау	Г	U	0	0	300	U	
08/23/2000	Stream	G	0	0	0	0	0	
Jim Andel	Mouth	Ğ	0	0	0	Õ	0	
	Bay	G	0	0	0	0	0	
Spoon Creek, 273-823	<i>a</i>	-	0	0	0	200	500	
08/04/2000	Stream	E	0	0	0	300	500	
George Pappas	Mouth	G	0	0	0	100	0	
	Bay	F	0	0	0	0	0	
08/08/2000	Stream	Е	0	0	0	600	0	
George Pappas	Mouth	Ē	0	0	0	50	0	
Scorger uppus	Bay	G	0	0	0	300	0	
	Day	0	0	0	v	500	Ū	
08/23/2000	Stream	G	0	0	1,200	0	0	
Jim Andel	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
00/24/2000	<u> </u>		c	0	0	100	0	
08/24/2000	Stream	E	0	0	0	100	0	
George Pappas	Mouth	G	0	0	0	10	0	
	Bay	F	0	0	0	2,000	0	
Portage Creek, 273-842								
08/08/2000	Stream	Е	0	0	0	2,000	0	2 BEARS.
George Pappas	Mouth	G	0	0	0	2,000	0	
George 1 appus	Bay	G	0	0	0	0	0	
	Duj	0	5	Ŭ	Ŭ	5	0	

## Table 13. (page 23 of 30)

Stream		Visi-			Species			
Date Observer	Location	bility	Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
	-	_	_	-	_	_		
08/23/2000	Stream	G	0	0	0	0	2,000	
Jim Andel	Mouth	G	0	0	0	0	4,900	
	Bay	G	0	0	0	0	0	
08/24/2000	Stream	G	0	0	0	700	10	
George Pappas	Mouth	G	0	0	0	1,000	0	
	Bay	G	0	0	0	7,000	0	
Seal Dec. 272 942								
Seal Bay, 273-843 08/04/2000	Ctore and	Б	0	0	0	0	0	
	Stream	F	0	0	0	0	0	
George Pappas	Mouth	F	0	0	0	400	0	
	Bay	Р	0	0	0	500	0	
08/23/2000	Stream	G	0	0	0	0	0	
Jim Andel	Mouth	G	0	0	0	0	0	
JIIII AIIUEI								
	Bay	G	0	0	0	0	0	
Seal Bay, 273-844								
08/04/2000	Stream	F	0	0	0	0	0	
George Pappas	Mouth	F	0	0	0	500	0	
Ocorge r appas	Bay	P	0	0	0	0	0	
	Бау	Г	0	U	0	0	0	
08/23/2000	Stream	G	0	0	0	0	0	
Jim Andel	Mouth	G	0	0	0	0	0	
	Bay	Ğ	Õ	0	Õ	Õ	Õ	
	Duj	0	0	0	0	0	0	
Dog Bay, 273-845								
08/04/2000	Stream	F	0	0	0	0	20	LOOSING LIGHTING.
George Pappas	Mouth	Е	0	0	0	0	0	
0 11	Bay	Р	0	0	0	0	0	
	Duj	-	5			5	0	
08/23/2000	Stream	G	0	0	0	0	0	
Jim Andel	Mouth	G	0	0	0	0	0	
· · ·	Bay	Ğ	Õ	0	0	0	Õ	
	5							
Owen Creek, 273-940								
08/04/2000	Stream	Е	0	0	0	100	0	
George Pappas	Mouth	Е	0	0	0	50	0	
	Bay	Е	0	0	0	100	0	
Castle Creek, 273-941	C.	г	0	0	0	0	0	
08/04/2000	Stream	E	0	0	0	0	0	
George Pappas	Mouth	E	0	0	0	0 100	0	
	Bay	F	0	0	0	100	0	

## Table 13. (page 24 of 30)

Stream		Visi-			Species			
Date Observer	Location	bility	Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
		-						
08/13/2000	Stream	G	0	0	0	0	0	
Jim Andel	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
08/23/2000	Stream	G	0	0	0	0	0	
Jim Andel	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
Hag Creek, 275-400								
08/04/2000	Stream							BLOCKED MOUTH.
George Pappas	Mouth							
Scorge i uppus	Bay	G	0	0	0	0	0	
	Duy	0	5	0	v	0	0	
08/23/2000	Stream	G	0	0	0	0	0	LOG JAM, MORTS AT MOUTH.
Jim Andel	Mouth	G	0	0	0	1,500	0	
	Bay	G	0	0	0	1,500	0	
	Duy	0	0	0	0	0	0	
Kupreanof Peninsula, 275-401								
07/18/2000	Stream	G	0	0	0	0	0	
George Pappas	Mouth	G	0	0	0	0	0	
Scorge r uppus	Bay	P	0	0	0	0	0	
	Бау		0	0	0	0	0	
08/04/2000	Stream	Е	0	0	0	2,000	200	
George Pappas	Mouth	Ē	0	0	0	1,000	200	
George i appas	Bay	G	0	0	0	1,000	0	
	Бау	U	U	0	0	0	U	
08/08/2000	Stream							
George Pappas	Mouth	Е	0	0	0	100	0	
George i appas	Bay	G	0	0	0	2,000	0	
	Бау	U	0	0	0	2,000	0	
08/23/2000	Stream	G	0	0	0	7,000	0	
Jim Andel	Mouth	G	0	0	0	7,000	0	
	Bay	G	0	0	0	0	0	
	Бау	U	0	0	0	0	U	
Smokey Hollow Creek, 275-402								
07/18/2000	Stream	G	0	0	0	0	10	
	Mouth	G	0	0	0	0	3,000	
George Pappas	Bay	P	0	0	0	0	3,000 0	
	Бау	r	0	0	U	0	0	
08/04/2000	Stream	Е	0	0	0	0	25	
		F		0		500	0	
George Pappas	Mouth		0		0			
	Bay	G	0	0	0	50	0	

## Table 13. (page 25 of 30)

Stream		Visi-			Species					
Date Observer	Location	bility Chine	ook	Sockeye	Coho	Pink	Chum	Observer Remarks		
00/00/2000	C.									
08/08/2000	Stream		0	0	0	0	0			
George Pappas	Mouth	E	0	0	0	0	0			
	Bay	Е	0	0	0	0	0			
08/23/2000	Stream	G	0	0	0	0	0	MUDDY WATER, LOW VISIBILITY.		
Jim Andel	Mouth	G	0	0	0	0	0	MODD1 WATER, LOW VISIBILITT.		
Jill Ander		G	0	0	0	0	0			
	Bay	G	0	0	0	0	0			
08/25/2000	Stream	G	0	0	0	300	0			
George Pappas	Mouth	G	0	0	0	0	0			
	Bay	F	0	0	0	0	0			
	2									
Ivanof Bay, 275-403	C.	C	0	0	0	0	0			
07/18/2000	Stream	G	0	0	0	0	0			
George Pappas	Mouth	G	0	0	0	0	0			
	Bay	Р	0	0	0	0	0			
08/08/2000	Stream									
George Pappas	Mouth	Е	0	0	0	0	0			
George rappas	Bay	G	0	0	0	0	0			
	Day	U	0	0	0	0	0			
09/14/2000	Stream	G	0	0	800	0	0	ONLY COUNTED COHO.		
Arnie Shaul	Mouth	G	0	0	0	0	0			
	Bay									
Wasco's Creek, 275-404	C.	C	0	0	0	0	25			
08/04/2000	Stream	G	0	0	0	0	25			
George Pappas	Mouth	G	0	0	0	0	0			
	Bay	Р	0	0	0	0	0			
08/08/2000	Stream									
George Pappas	Mouth	Е	0	0	0	0	0			
Scorger uppus	Bay	G	0	0	0	0	0			
	Day	0	0	0	0	0	0			
08/23/2000	Stream	G	0	0	0	5,000	0	TURBID, LOW VISIBLILITY.		
Jim Andel	Mouth	G	0	0	0	0	0			
	Bay	G	0	0	0	0	0			
08/25/2000	0		0	0	0	1 000	10			
08/25/2000	Stream	C	0	0	0	1,000	10			
George Pappas	Mouth	G	0	0	0	20	0			
	Bay	G	0	0	0	0	0			

## Table 13. (page 26 of 30)

Stream		Visi-			Species			
Date Observer	Location		Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
09/14/2000	Stream	G	0	20	1,400	0	0	COUNTED ONLY REDS AND COHOS. COHO IN LOWER END
Arnie Shaul	Mouth	G	0	0	200	0	0	REDS SPAWNING IN UPPER SPAWNING GROUNDS.
	Bay							
Sunnyside Creek, 275-405								
07/18/2000	Stream	Е	0	0	0	0	0	
George Pappas	Mouth	G	0	0	0	0	0	
• 11	Bay	Р	0	0	0	0	0	
08/23/2000	Stream	G	0	0	0	0	0	
Jim Andel	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
08/25/2000	Stream	G	0	0	0	20	0	
George Pappas	Mouth	F	0	0	0	1	0	
	Bay	F	0	0	0	10	0	
Ivanof River, 275-406								
07/06/2000	Stream	Р	0	0	0	0	0	13,000 EASTSIDE OF BAY AND FRONT OF TOWN.
George Pappas	Mouth	F	0	0	0	0	3,000	
	Bay	F	0	0	0	0	13,000	
07/18/2000	Stream	G	0	0	0	0	3,700	WIND SWEPT BAY.
George Pappas	Mouth	Р	0	0	0	0	2,000	
	Bay	Р	0	0	0	0	0	
08/04/2000	Stream	Е	0	0	0	100	6,000	VISIBILITY FINE, BUT WHERE DID FISH GO, POOR
George Pappas	Mouth	G	0	0	0	0	0	RET URN.
	Bay	F	0	0	0	0	0	
08/08/2000	Stream	Е	0	0	0	100	0	
George Pappas	Mouth	Е	0	0	0	1,000	0	
	Bay	G	0	0	0	15,000	3,000	
08/23/2000	Stream	G	0	0	0	10,000	1,000	
Jim Andel	Mouth	G	0	0	0	1,000	500	
	Bay	G	0	0	0	500	30,000	
08/25/2000	Stream	Е	0	0	0	25,000	0	
George Pappas	Mouth	Е	0	0	0	1,000	0	
	Bay	G	0	0	0	15,000	0	

## Table 13. (page 27 of 30)

Stream		Visi-			Species			
Date Observer	Location	bility	Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Wolverine Cove, 275-408								
08/04/2000	Stream	Е	0	0	0	0	0	
		E			0			
George Pappas	Mouth		0	0	0	400	0	
	Bay	Е	0	0	0	700	0	
08/08/2000	Stream							
George Pappas	Mouth	Е	0	0	0	100	0	
oconge i appao	Bay	Ē	ŏ	Ő	Ő	500	ŏ	
	,							
08/23/2000	Stream	G	0	0	0	100	0	
Jim Andel	Mouth	G	0	0	0	1,500	0	
	Bay	G	0	0	0	0	0	
00/05/0000	0.	0	0	0	0	0	0	
08/25/2000	Stream	G	0	0	0	0	0	DRY, ONLY 2" OF WATER IN RIVER.
George Pappas	Mouth	E	0	0	0	2	0	
	Bay	Е	0	0	0	1,100	0	
Humpback Creek, 275-502								
07/18/2000	Stream	G	0	0	0	0	1,000	
George Pappas	Mouth	F	0	0	0	0	1,000	
George i appas	Bay	P	0	0	0	0	0	
	Duy	1	0	0	0	0	0	
08/04/2000	Stream	Е	0	0	0	8,000	180	
George Pappas	Mouth	G	0	0	0	0	0	
6 11	Bay	F	0	0	0	0	0	
08/08/2000	Stream							
George Pappas	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	2,000	0	
08/23/2000	Stream	G	0	0	0	12,000	0	
Jim Andel	Mouth	G				· ·		
Jim Andei			0 0	0	0	0	0 0	
	Bay	G	0	0	0	0	0	
08/25/2000	Stream	G	0	0	0	5,000	0	
George Pappas	Mouth	Ğ	ŏ	Ő	Ő	0	Ő	
0 "PP"00	Bay	F	0	0	0	0	0	
	-							
09/14/2000	Stream	G	0	0	300	0	0	
Arnie Shaul	Mouth							
	Bay							

## Table 13. (page 28 of 30)

Stream		Visi-			Species			
Date Observer	Location	bility	Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Humpback Bay, 275-503								
07/18/2000	Stream	G	0	0	0	0	0	
	Mouth	F	0		0		0	
George Pappas				0		0		
	Bay	Р	0	0	0	0	0	
08/04/2000	Stream	Е	0	0	0	0	0	LOG JAM PAST MOUTH.
George Pappas	Mouth	Е	0	0	0	0	0	
ocorgo r uppus	Bay	F	Ő	Ő	Ő	500	Ő	
08/23/2000	Stream	G	0	0	0	0	0	
Jim Andel	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
08/25/2000	Stream	G	0	0	0	0	0	
George Papp as	Mouth	G	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
09/14/2000	Stream	G	0	0	0	0	0	
Arnie Shaul	Mouth	0	0	0	Ũ	Ŭ	Ŭ	
7 time bladi	Bay							
	Duy							
Humpback Bay Creek, 275-504								
07/18/2000	Stream	Е	0	0	0	0	0	
George Pappas	Mouth	G	0	0	0	0	0	
	Bay	Р	0	0	0	0	0	
00/04/2000	<b>a</b> .		0	0	0	100	0	
08/04/2000	Stream	E	0	0	0	100	0	
George Pappas	Mouth	E	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
08/08/2000	Stream							
George Pappas	Mouth	Е	0	0	0	0	0	
George i appas		G	0	0	0	2,000	0	
	Bay	U	0	0	U	2,000	0	
08/23/2000	Stream	G	0	0	0	0	0	LOW VISIBILITY.
Jim Andel	Mouth	Ğ	Ő	Ő	Ő	Ő	Ő	
	Bay	G	0	0	0	0	0	
	Бау	U	0	U	0	0	0	
08/25/2000	Stream	G	0	0	0	20	0	
George Pappas	Mouth	G	0	0	0	2,500	0	
C 11	Bay	F	0	0	0	0	0	
			-	-	-		-	

## Table 13. (page 29 of 30)

Stream		Visi-			Species			
Date Observer	Location	bility	Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Alexander Point, 275-505								
07/18/2000	Stream	E	0	0	0	0	0	
George Pappas	Mouth	G	0	0	0	0	0	
	Bay	Р	0	0	0	0	0	
08/04/2000	Stream	Е	0	0	0	1,200	0	
	Mouth	E	0	0	0	1,200	0	
George Pappas			0	0	0	100 500	0	
	Bay	Е	0	0	0	500	0	
08/23/2000	Stream	G	0	0	0	300	0	
Jim Andel	Mouth	G	0	0	0	900	0	
	Bay	G	0	0	0	0	0	
08/25/2000	Stream	F	0	0	0	100	0	VERY DRY.
George Pappas	Mouth	г Е	0	0	0	20	0	YERT DRT.
George Pappas	Bay		0	0	0	20	0	
	Бау	U	0	U	U	U	U	
Long Beach River, 275-600								
07/18/2000	Stream	Р	0	0	0	0	0	TO DARK TO SEE ANYTHING.
George Pappas	Mouth	Р	0	0	0	0	0	
~ 11	Bay	Р	0	0	0	0	0	
08/04/2000	Stream	G	0	0	0	0	0	NO FISH SEEN, CLEAR WATER FOR FIRST TIME.
George Pappas	Mouth	Е	0	0	0	0	0	MAJORITY OF WATER SHIFTED TO 275-601.
	Bay	Р	0	0	0	0	0	
08/08/2000	Stream							
George Pappas	Mouth	Е	0	0	0	0	0	
Scorge r appas	Bay		0	0	0	100	0	
	Day		0	0	0	100	0	
08/23/2000	Stream	G	0	0	0	0	0	TURBID, LOW VISIBILITY.
Jim Andel	Mouth	Ğ	Ő	Ő	Ő	Ő	Ő	- , - · · · ·
	Bay	Ğ	Ő	0	ů	Ő	Ő	
00/05/0000	<b>a</b> .	~	c	c	0	200	0	
08/25/2000	Stream	G	0	0	0	200	0	
George Pappas	Mouth	G	0	0	0	10	0	
	Bay	F	0	0	0	0	0	
Kametolook River, 275-601								
07/18/2000	Stream	Р	0	0	0	0	0	COULD NOT SEE ANYTHING DUE TO LIGHTING, HEADED
George Pappas	Mouth	P	0	0 0	0	0	0	HOME.
George i appas	Bay	P	0	0	0	0	0	nome.
	Бау	1	U	0	0	0	0	

## Table 13. (page 30 of 30)

Stream		Visi-			Species			
Date Observer	Location	bility	Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/04/2000	Stream	Р	0	0	0	150	0	MUDDY WATER, FIRST TRIB. HAD 150 PINKS.
George Pappas	Mouth	Р	0	0	0	0	0	
	Bay	Р	0	0	0	0	0	
08/08/2000	Stream							TOO MUDDY TO SEE ANYTHING.
George Pappas	Mouth	Р	0	0	0	0	0	
• •	Bay	Р	0	0	0	0	0	
08/23/2000	Stream	G	0	0	0	0	0	
Jim Andel	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
08/25/2000	Stream	Р	0	0	0	300	6	ONLY 3 TRIBS WERE CLEAR ENOUGH TO SEE FISH.
George Pappas	Mouth		0	0	0	0	0	
	Bay	Р	0	0	0	0	0	
09/14/2000	Stream	G	0	0	0	0	0	GOOD VISIBILITY ON SPAWNING GROUNDS. POOR AS
Arnie Shaul	Mouth							ALWAYS BELOW. BASED ON OBSERVATIONS ON OTHER
	Bay							CREEKS.

Year	Catch <sup>a,b</sup>	Escapement <sup>c</sup>	Run	Year	Catch <sup>a,b</sup>	Escapement <sup>c</sup>	Run
Tear	Catch 44	Escapement	Kull	Teal		Escapement	Kull
1962	1,519,305	913,100	2,432,405	1982	873,384	389,300	1,262,684
1963	1,662,363	706,500	2,368,863	1983	321,178	158,800	479,978
1964	1,682,365	993,800	2,676,165	1984	444,804	1,001,500	1,446,304
1965	1,118,158	375,600	1,493,758	1985	160,128	522,200	682,328
1966	683,215	705,400	1,388,615	1986	647,125	926,900	1,574,025
1967	108,981	340,000	448,981	1987	246,775	385,300	632,075
1968	1,290,660	817,800	2,108,460	1988	2,997,159	1,657,900	4,655,059
1969	1,779,736	767,900	2,547,636	1989	27,712	1,434,800	1,462,512
1970	1,157,172	580,600	1,737,772	1990	550,008	1,082,000	1,632,008
1971	612,290	417,100	1,029,390	1991	1,169,248	778,600	1,947,848
1972	72,161	41,200	113,361	1992	1,554,073	1,826,900	3,380,973
1973	25,472	159,100	184,572	1993	1,648,377	1,181,800	2,830,177
1974	69,515	227,600	297,115	1994	431,063	1,383,500	1,814,563
1975	66,165	238,100	304,265	1995	2,057,998	3,432,000	5,489,998
1976	395,287	510,600	905,887	1996	183,806	1,956,400	2,140,206
1977	604,806	749,800	1,354,606	1997	844,431	2,469,500	3,313,931
1978	985,114	912,100	1,897,214	1998	776,988	1,881,800	2,658,788
1979	1,905,198	858,800	2,763,998	1999	1,698,651	1,344,200	3,042,851
1980	1,093,184	742,200	1,835,384	2000	428,064	1,213,000	1,641,064
1981	1,162,613	597,900	1,760,513				
				Average			
				1970-79	589,318	469,500	1,058,818
				1980-89	797,406	781,680	1,579,086
				1990-99	1,091,464	1,733,670	2,825,134

Table 14. Total pink salmon catch, escapement, and run numbers in the Chignik Management Area, 1962-2000.

<sup>a</sup> Catches (1970-2000) were updated using historical electronic fish ticket databases.

<sup>b</sup> Personal use or other subsistence fish are not included.

<sup>c</sup> Escapement estimates were based on Chignik River weir counts and aerial surveys. Post 1984 aerial survey escapement estimates computed by area-under-the-curve methodology using a 15.0 day average stream life (Johnson and Barrett 1988). September 15 was the assumed last day of stream entry.

	Thompson V		Hook B		Cape Kun		Bear C	
	272-20		272-30		272-50		272-50	
Year	Pink	Chum	Pink	Chum	Pink	Chum	Pink	Chum
1953	25.3	0.0	13.0	6.3			0.0	0.7
1954	28.2	4.5	14.3	5.3			0.2	0.2
1955	115.0	3.0	78.0	0.0			1.0	0.0
1956								
1957								
1958								
1959								
1960								
1961								
1962	7.0	0.0	18.9	4.1	7.0	0.0	0.0	12.4
1963	23.3	0.0	33.0	7.5	23.0	0.0	0.0	9.5
1964	4.1	0.0	42.0	1.2	8.7	0.0	0.0	8.8
1965	9.4	0.0	23.3	2.1	13.7	0.0	0.0	8.5
1966	4.1	0.0	10.0	0.5	3.8	0.0	0.0	4.3
1967	2.0	0.4	7.3	2.5	5.2	0.0	0.0	8.0
1968			5.0	0.0			0.0	2.7
1969	19.0	0.0	30.0	0.0			0.0	4.5
1970	12.0	0.0	11.0	1.0	5.0	0.0	0.0	10.0
1971	7.5	0.0	13.0	8.0	51.0	0.0	0.0	10.0
1972	0.2	0.0	0.4	1.1	0.2	0.0	0.0	2.5
1973	2.3	0.2	4.9	4.7	40.0	0.0	0.0	4.0
1974	1.6	0.1	3.8	0.8	0.6	0.0	0.0	2.3
1975	10.2	0.0	1.3	6.0	17.8	0.0	0.0	1.5
1976	5.5	0.2	8.0	2.5	2.6	0.0	0.0	1.4
1977	29.4	0.0	22.6	2.0	124.0	0.0	0.5	2.6
1978	14.0	0.0	14.5	2.8	6.1	0.0	0.1	1.5
1979	35.5	1.0	42.7	11.0	153.0	0.0	0.0	5.0
1980	0.7	0.0	24.5	4.2	2.6	0.0	0.2	0.0
1981	6.5	0.5	13.9	9.0	36.2	0.0	0.1	0.0
1982	1.2	0.0	7.3	10.0	0.9	0.0	0.0	2.5
1983	2.3	0.0	0.2	0.3	0.0	0.0	2.0	7.9
1984	14.0	0.0	16.2	0.1	3.7	0.0	0.3	2.3
1985	0.0	0.0	2.0	0.0			0.0	7.2
1986	0.3	0.0	66.9	0.0	38.2	0.0	0.0	7.5
1987			9.5	0.3	46.9	0.3	0.0	12.0
1988	9.6	3.3	26.4	0.7	18.0	0.0	0.0	0.7
1989	16.6	3.7	45.5	10.2	63.0	0.0	0.0	3.6
1990	4.8	0.0	16.7	0.2	3.2	0.0	0.3	Т
1991	0.0	0.0	0.0	0.0	109.7	0.0	0.0	0.9
1992	61.2	0.0	7.2	7.5	15.4	0.0	0.0	20.8
1993	0.0	19.0	26.2	9.3	82.0	0.0	0.0	1.4
1994	48.0	4.0	21.5	8.9	21.0	0.0	0.0	22.0
1995	8.3	0.0	61.4	0.6	252.4	0.0	6.0	10.1
1996	38.2	6.0	42.9	2.0	7.2	0.0	0.2	7.2
1997	48.7	0.2	29.9	2.9	285.8	0.0	2.0	21.7
1998	46.1	0.0	28.4	0.5	2.0	0.0	6.0	5.6
1999	3.0 2.0	2.1	0.0	4.6 8.0	135.4 0.2	0.0	1.3 1.0	0.4
2000	2.0	0.0	35.0	8.0 Continued.		0.0	1.0	0.0

Table 15. Pink and chum salmon escapement estimates (in thousands of fish) for select<br/>Chignik Management Area streams, 1953-2000.

Table 15.	(page 2 of 8)
-----------	---------------

_	Rudys		North F		Aniakcha		Cape Age	
	272-509		272-51	4	272-60	)5	272-606	
Year	Pink	Chum	Pink	Chum	Pink	Chum	Pink	Chum
1953	0.7	0.2	1.3	3.5	0.0	35.0	0.2	0.7
1954			55.0	4.6	100.0	37.2	3.9	1.5
1955	15.0	4.0	13.5	1.0	16.0	0.0	1.2	0.0
1956								
1957								
1958								
1959								
1960								
1961								
1962	4.5	5.2	34.0	0.8	126.0	25.0	17.6	0.5
1963	0.0	12.0	9.7	1.8	6.0	14.6	0.4	0.0
1964	0.5	5.0	68.0	3.0	175.0	82.5	11.0	1.
1965	0.0	1.1	8.7	2.0	10.8	4.0	5.1	0.1
1966	2.0	3.0	2.0		90.8	9.0	7.7	0.2
1967	1.0	3.0	20.0	1.1	2.0	10.5	1.1	0.1
1968	2.0	7.0	26.0	0.0	85.0	10.0	22.3	0.0
1969	0.2	1.0	5.2	4.0	0.1	0.5	4.6	2.0
1970	0.0	3.0	24.0	8.0	40.0	30.5	10.0	2.0
1971	0.0	1.3	0.0	4.5	0.0	11.5	2.0	3.0
1972	0.2	1.7	1.7	6.9	1.8	7.1	2.5	1.
1973	0.0	1.2	2.8	1.5	2.7	4.0	1.5	1.
1974	0.8	4.2	2.5	4.2	29.8	25.7	1.6	0.
1975	0.0	1.8	0.4	3.7	2.4	5.5	1.9	0.2
1976	6.2	3.7	17.5	7.9	165.0	34.0	5.9	0.3
1977	6.3	0.9	6.6	2.3	3.0	14.8	1.0	0.
1978	4.0	2.2	46.0	6.9	215.5	23.2	8.0	0.2
1979	12.0	7.7	12.7	5.6	0.0	0.2	13.0	1.
1980	9.3	0.0	38.5	29.5	40.0	43.0	20.0	5.5
1981	0.7	0.0	15.8	16.5	2.7	32.0	5.8	0.0
1982	0.2	8.7	19.0	3.5	130.0	47.0	21.0	0.0
1983	0.2	1.3	4.1	1.3	1.0	3.1	0.1	0.0
1984	4.5	5.0	32.4	17.4	56.4	47.0	17.2	1.2
1985	4.5 0.0	0.0	4.7	17.4	0.0	0.0	0.0	0.0
1985	38.0	10.9	34.3	5.0	1.5	0.0	65.0	0.4
1980 1987	0.0	0.0	8.8	4.0	2.5	0.3	4.2	0.
1987	34.9	16.6	48.5	4.0	95.1	17.4	4.2 84.4	0.0
1989	7.3	0.4	23.0	17.0	5.0	2.5	1.8	0.0
			10.0	- <b>-</b>				
1990	8.0	1.3	40.9	0.7	19.7	11.6	46.5	0.0
1991 1992	0.0 15.0	7.4 48.2	2.1 42.3	2.9 59.7	0.0 96.6	7.6 53.8	4.1 161.9	0.0 16.8
1993	3.7	0.0	24.5	8.0	0.0	7.8	53.0	[
1994	4.0	35.0	31.0	5.2	60.0	40.0	35.0	0.0
1995	49.0	2.5	84.5	15.0	70.0	50.0	91.1	0.0
1996	22.9	5.3	63.9	11.0	198.0	51.5	82.6	0.
1997	20.0	5.3	33.0	8.8	167.1	8.2	39.8	2.:
1998	17.0	11.9	53.6	9.1	165.7	72.3	64.2	0.
1999	51.0	4.3	64.4	20.6	2.0	15.0	50.0	4.0
2000	20.0	2.7	45.0	12.0 Continued	205.0	40.0	63.0	0.

_	Main		Northeast		Yantarn		Ocean Be	
	272-70	02	272-70	03	272-72	21	272-80	)1
Year	Pink	Chum	Pink	Chum	Pink	Chum	Pink	Chum
1953	0.2	17.0	3.5	2.0				
1954	6.9	21.5	1.1	0.8				
1955	25.2	0.8			7.5	7.0	8.0	3.0
1956								
1957								
1958								
1959								
1960								
1961								
1962	33.0	3.6	1.6	2.5	52.5	0.1	45.0	2.0
1963	16.0	5.8	5.0	0.9	16.0	0.3	3.4	0.0
1964	40.5		2.3	3.0	42.0	21.0	34.6	10.1
1965	5.0	4.8	2.3	6.0	4.0	7.6	0.4	1.0
1966	3.0	0.0	1.3	0.2	18.5	5.0	11.0	3.3
1967	16.5	2.0	2.0	0.2				
1968	28.0	8.0	7.7	1.0	25.0	6.5	26.5	0.0
1969	3.0	15.0	7.0	4.5	1.5	11.0	6.0	3.5
1970	13.0	7.0	7.0	6.0	1.5	11.5	7.5	5.0
1971	1.0	20.0	2.0	5.5	0.0	18.0	0.0	3.5
1972	2.0	8.0	1.7	0.5	2.1	21.0	0.5	4.0
1973	1.0	7.0	1.1	3.1	0.3	6.5	0.6	1.1
1974	6.6	6.3	3.0	2.0	3.7	3.8	2.3	2.2
1975	4.7	8.0	0.4	0.7	0.3	1.6	0.8	0.2
1976	5.5	8.5	3.8	2.0	5.8	12.5	4.2	3.0
1977	4.5	3.5	10.0	0.8	1.9	3.5	1.1	0.4
1978	5.6	7.6	4.4	4.6	7.9	3.3	7.1	0.5
1979	13.5	14.0	7.0	7.5	14.0	9.5	1.5	0.0
1980	53.5	17.0	4.8	3.0	60.0	11.0	27.6	0.0
1981	6.3	16.3	5.9	2.5	13.5	18.2	10.5	5.5
1982	36.0	12.3	6.2	3.7	8.5	25.5	0.0	14.5
1983	9.2	6.7	3.2	4.7	3.6	13.4	3.1	1.5
1984	15.7	14.5	7.0	4.3	26.5	18.7	19.0	13.2
1985	13.7	4.0	9.0	0.0	67.8	0.7	9.9	0.0
1986	85.0	0.0	13.6	0.0	3.1	0.3	1.8	0.2
1987	14.3	1.5	7.5	0.4	18.0	3.0	13.0	2.7
1988	43.6	5.5	41.4	10.6	33.7	30.3	32.8	12.8
1989	53.0	3.2	17.0	4.0	10.9	3.4	10.9	4.3
1990	54.3	5.7	80.3	13.3	23.6	9.3	45.0	1.3
1991	0.0	8.4	1.9	8.8	5.3	1.7	0.0	2.8
1992	30.3	45.2	31.9	50.5	14.9	26.2	15.6	7.
1993	26.5	14.0	24.2	0.0			10.0	23.0
1994	30.0	0.5	44.4	6.1	57.3	4.6	42.5	10.0
1995	123.3	9.0	98.7	7.4	54.0	10.0	74.8	3.
1996	94.8	10.0	68.6	3.0	61.1	5.0	49.5	2.0
1997	85.3	14.4	68.0	16.9	81.3	18.0	80.0	5.2
1998	127.0	0.5	70.9	0.0	82.5	3.8	70.2	1.
1999	20.0	4.0	17.0	0.0	10.0	5.5	32.0	5.5
2000	30.0	14.0	30.0	15.0	25.0	11.0	40.0	4.0

_	Nakalilo	<u>k R</u>	Chigina	gak	Chiginaga	ak R.	Chiginag	gak
	272-80	)4	272-90	)2	272-903	3A	272-90	4
Year	Pink	Chum	Pink	Chum	Pink	Chum	Pink	Chum
1953								
1954								
1955	3.0	0.5			0.0	15.9		
1956								
1957								
1958								
1959								
1960								
1961								
1962	22.0	0.1	16.0	0.0	0.3	34.3	20.1	0.0
1963	10.4	0.1	1.2	0.0	0.0	15.0	43.0	0.0
1964	89.0	3.0	20.0	0.0	6.0	24.4	41.4	0.0
1965	0.5	9.0	0.4	0.0	0.0	13.8	12.4	0.1
1966	12.5	0.0	5.8	0.0	0.0	33.2	16.0	0.0
1967	3.5	18.5	0.5	0.1	0.0	27.0	12.4	0.0
1968	7.4	2.0	21.0	0.0	2.0	29.5	20.0	0.0
1969	8.0	3.5	1.3	0.0		20.0	6.0	0.0
1970	10.0	6.5	11.0	0.0	0.0	31.0	4.0	0.0
1971	1.0	44.0	2.8	0.0	0.0	86.0	1.1	0.0
1972	0.0	6.0	0.1	0.3	1.0	33.0	0.1	0.1
1973	0.5	5.2	0.3	0.0	0.2	28.3	0.5	0.0
1974	2.2	4.8	0.2	0.2	8.5	28.5	0.9	0.0
1975	3.0	4.8	0.5	0.5	2.9	20.3	0.8	0.0
1976	2.4	14.2	0.7	0.0	0.7	35.0	2.2	0.0
1977	3.8	4.9	2.7	0.0	1.8	19.4	3.8	0.0
1978	8.1	4.2	4.4	0.4	1.3	9.1	3.5	0.0
1979	12.0	2.9	11.0	15.0	0.4	24.3	7.2	0.0
1980	25.6	14.0	17.9	0.0	16.3	5.7	14.5	0.0
1981	6.5	8.0	5.0	0.0	6.0	23.4	6.9	0.0
1982	4.0	12.3	2.2	0.0	2.0	18.5	1.7	0.4
1983	4.8	4.2	0.7	0.0	1.8	9.6	1.9	0.0
1984	15.0	36.5	16.6	0.0	6.9	53.8	19.5	3.0
1985	27.0	0.0	0.0	0.0	1.0	0.0	5.0	0.0
1986	12.7	1.0	42.3	0.0	21.1	3.3	8.9	0.0
1987	1.4	3.8	3.2	0.4	67.5	15.7	11.0	3.3
1988	16.8	8.0	33.7	0.0	12.6	13.2	40.0	30.0
1989	10.6	4.1	22.0	0.0	70.4	4.2	32.0	11.5
1990	47.0	6.3	19.2	0.0	63.0	4.2 9.8	18.7	5.0
1991	-7.0 0.0	4.1	19.2	0.0	0.3	0.0	0.5	5.5
1991	16.7	27.3	27.6	0.6	0.0	0.0 4.5	0.5	0.0
1992	30.0	33.0	35.3	0.0	59.8	10.0	59.3	10.0
1993	50.0 71.4	6.1	35.0	0.0	35.0	3.0	109.0	5.0
1994 1995	101.0	0.1 1.9	63.0	5.0	0.0	0.3	109.0	0.0
1996 1997	71.3 75.0	32.1	26.3 97.9	0.0	22.0 56.2	0.0	32.7 35.0	0.0
		62.0		1.5		45.1		10.0
1998 1999	125.4 25.0	8.9 16.0	19.5	0.1 4.2	105.9 23.0	7.2	35.0 40.0	1.7
		16.0	30.0			3.5		0.2
2000	30.0	40.0	20.0	0.0 Continued	25.0	30.0	40.0	10.0

#### Table 15. (page 4 of 8)

-	Chigina	gak	Agripina	<u> R.</u>	Glacier		Kiloka	
	272-90		272-96	1A	272-96	2	272-96	53
Year	Pink	Chum	Pink	Chum	Pink	Chum	Pink	Chum
1953								
1954								
1955					0.0	0.0		
1956								
1957								
1958								
1959								
1960								
1961								
1962	17.1	0.0	12.0	3.0	0.5	3.0	16.2	0.0
1963	1.0	0.0	19.2	0.1	0.0	10.0	0.8	0.0
1964	100.0	0.3	8.5	0.0	0.5	6.0	14.2	0.0
1965	1.2	0.0	20.1	0.0	0.0	1.3	0.1	0.0
1966	90.5	0.0					24.5	0.0
1967	5.8	1.8	7.3	0.5	0.0	5.6	0.3	0.0
1968	53.0	0.0	12.0	0.0	0.0	0.2	65.6	0.0
1969	2.4	0.0	2.5	0.0	0.0	2.0	0.2	0.0
1970	24.0	0.0	15.5	0.0	0.0	5.0	55.0	0.0
1971	4.3	2.0	6.6	0.0	0.0	6.0	0.0	0.0
1972	2.4	0.0	1.6	0.0	0.0	4.6	2.1	0.
1973	1.0	0.0	4.2	0.5	0.0	3.0	0.1	0.
1974	1.9	0.0	1.2	0.2	0.0	0.9	0.3	0.
1975	2.1	0.2	2.7	0.0	0.2	0.5	0.6	0.
1976	20.1	0.4	4.9	0.0	0.0	1.8	4.9	0.
1977	22.0	1.3	4.3	0.0	0.0	1.0	0.5	0.
1978	41.0	0.4	7.4	0.1	0.6	1.1	5.9	0.0
1979	61.1	0.0	23.5	0.0	0.0	1.6	1.1	0.0
1980	38.5	0.0	14.3	0.0	5.2	0.7	61.0	0.0
1981	48.0	0.1	13.4	0.0	0.0	0.6	0.3	0.0
1982	34.1	0.0	33.0	0.0	0.0	1.1	20.0	0.0
1983	3.6	5.0	5.0	0.0	1.3	0.2	0.3	0.0
1984	117.2	0.2	39.8	0.0	1.0	3.2	75.8	0.0
1985	17.0	0.2	10.0	0.0	0.0	0.0	0.0	0.0
1986	85.0	0.0	0.0	0.0	0.0	0.0	175.0	0.0
1987	20.0	0.1	1.0	0.0	6.2	0.0	0.0	0.0
1988	52.9	14.4	78.0	20.6	0.2	0.0	137.8	0.0
1989	89.0	4.0	53.0	0.0	0.3	0.0	10.5	0.
1989				0.0	1.1			0.0
1991	84.8 5.2	2.4 5.0	33.3 9.6	5.0	0.2	0.2 1.2	83.4 9.7	0.
1991 1992	137.8	5.0	9.0 180.5	5.7	0.2 10.4	0.0	157.8	0.
1992	87.3	10.0	47.2		0.0			
1995 1994	87.3 45.0	6.0	47.2 65.0	0.0 25.0	0.0 3.0	0.0 0.1	105.7 70.0	0. 0.
1995	8.5 7.5	0.0	100.0	4.7	9.0	0.2	29.0	0.
1996	7.5	0.0	7.0	0.5	6.5	0.5	30.0	0.
1997	3.5	2.0	56.2	53.0	4.0	11.0	54.0	0.
1998	11.9	1.0	41.5	0.0	8.2	1.0	37.3	0.0
1999	9.0	0.0	70.0	1.0	18.0	1.0	11.0	0.0
2000	35.0	3.0	60.0	<u>3.0</u> Continued.	15.0	4.0	15.0	0.

## Table 15. (page 5 of 8)

_	Red Bluff	Creek	Ivan Riv	ver	Foot B	av	Spoon C	Cr.
-	273-70		273-72		273-80		273-82	
Year	Pink	Chum	Pink	Chum	Pink	Chum	Pink	Chum
1953							1.0	1.5
1954								
1955							15.0	0.0
1956								
1957								
1958								
1959								
1960								
1961								
1962	129.0	12.0	85.0	36.0	13.3	1.0	10.6	2.0
1963	127.5	0.0	124.0	4.5	11.0	1.0	3.5	0.0
1964	60.0	10.0	65.5		12.0	0.9	13.2	0.0
1965	48.0	5.9	89.1	0.0	5.3	0.0	1.4	0.0
1966	9.7	2.0	94.5	1.0	18.4	0.2	15.5	0.0
1967	9.0	1.0	35.0	7.0	4.7	0.0	2.4	0.0
1968	39.0		85.0	0.0	14.2	0.0	7.8	0.0
1969	77.0	0.0	302.0	0.0	14.2	0.1	6.5	0.0
1970	69.0	0.0	103.0	17.0	14.5	3.0	10.5	0.0
1971	8.0	0.0	205.0	90.0	30.0	5.2	7.0	0.0
1972	2.5	4.5	4.4	13.0	0.6	0.6	0.2	0.0
1973	1.6	1.0	43.8	17.2	7.5	0.3	0.8	0.2
1974	62.8	5.1	3.9	22.3	2.1	0.3	1.7	0.0
1975	21.0	4.5	96.0	24.5	9.8	0.0	4.5	0.0
1976	70.3	13.4	17.3	22.1	7.0	1.1	9.3	1.9
1977	78.5	0.0	236.0	36.0	18.3	0.8	5.7	0.1
1978	218.5	0.1	73.7	0.8	16.6	2.0	7.5	0.1
1979	50.2	2.0	90.0	32.0	9.6	0.4	7.1	1.0
1980	53.0	12.5	51.0	22.1	3.5	1.0	4.5	0.9
1981	84.9	3.0	117.0	28.0	10.0	4.6	6.7	0.8
1982	30.5	3.3	21.0	16.3	1.4	2.8	0.1	0.4
1983	17.8	0.5	12.2	7.2	1.2	1.1	0.8	0.0
1984	60.2	6.5	103.0	40.0	6.0	1.8	0.3	0.1
1985	3.5	0.5	49.6	23.3	5.9	1.7	0.3	0.0
1986	22.0	0.0	10.1	0.0	4.9	0.0	0.5	0.0
1987	13.4	0.4	14.8	2.4	6.6	1.0	0.0	0.0
1988	135.6	10.6	57.0	5.6	13.0	0.9	3.1	0.3
1989	2.9	1.5	32.0	0.8	10.8	0.6	1.7	0.1
1990	7.5	0.8	23.1	14.3	8.2	0.2	0.8	2.0
1991	53.6	0.0	42.2	3.1	0.0	4.9	0.0	1.7
1992	0.0	0.3	31.4	45.1	1.1	0.0	0.8	0.2
1993	16.1	0.0	17.3	1.7	6.1	0.0	0.3	0.3
1994	17.0	7.5	35.5	0.0	7.0	0.2	0.5	0.5
1995	174.1	0.1	161.2	1.0	19.0	0.0	10.1	0.0
1996	63.4	0.6	105.7	4.2	4.0	0.2	1.1	0.5
1997	79.3	2.0	125.8	12.6	6.0	T	10.5	0.0
1998	31.2	1.3	93.1	0.8	6.3	0.2	0.9	0.0
1999	88.9	2.0	18.0	0.1	0.5	0.0	0.6	0.0
2000	35.0	2.5	65.0	2.5	5.0	0.2	4.0	0.5

#### Table 15. (page 6 of 8)

# Table 15. (page 7 of 8)

_	Portag	ge	Seal B	av	Kuprea	nof	Smokey H	ollow
	273-842		273-84	3	275-40	)1	275-40	)2
Year	Pink	Chum	Pink	Chum	Pink	Chum	Pink	Chum
1953	5.3	0.5	2.0	2.0				
1954								
1955	0.0	20.0	0.0	0.6				
1956								
1957								
1958								
1959								
1960								
1961								
1962	0.0	23.8	0.0	1.8	12.2	0.0	3.6	3.9
1963	27.0	4.4	6.0	0.0	3.5	0.0	1.5	2.0
1964	0.0	20.4	1.3	0.0	13.0	1.1	0.8	17.0
1965	1.7	8.3	3.3	0.0	3.0	0.0	0.0	0.5
1966	24.4	8.9	4.0	0.0			0.0	7.4
1967	28.5	15.0	6.0	0.5	6.7	0.0	0.0	0.3
1968	3.3	5.0	2.5	0.0	14.0	0.0	0.0	0.9
1969	0.1	27.5	7.5	0.0	6.8	0.2	0.0	0.2
1970	9.0	27.6	5.2	0.0	11.0	0.0	0.0	2.5
1971	10.2	60.1	5.0	10.1	3.5	0.0	0.0	1.5
1972	0.1	21.4	0.0	11.1	1.0	0.5	0.0	2.0
1973	2.9	18.1	2.0	0.1	0.2	0.5	0.2	0.6
1974	0.0	8.7	1.2	1.0	1.2	0.5	0.4	0.8
1975	0.4	9.2	5.3	2.3	1.0	0.1	0.1	0.1
1976	0.9	8.5	0.6	4.6	4.0	0.0	0.6	0.8
1977	5.0	20.5	3.1	5.2	5.1	0.0	2.3	1.6
1978	4.1	19.0	1.5	1.4	16.1	0.0	0.5	0.5
1979	17.7	4.5	0.2	0.6	28.0	0.0	0.6	0.4
1980	10.2	18.5	1.0	0.5	11.6	0.0	0.5	0.3
1981	6.5	33.3	9.0	0.0	22.5	0.1	1.5	0.0
1982	0.0	6.3	0.0	3.5	5.5	0.0	0.0	0.0
1983	0.0	7.3	0.8	0.0	3.5	0.0	0.0	2.6
1984	1.0	14.6	4.6	5.5	5.2	0.0	0.2	1.4
1985	0.0	9.1	7.3	0.0	5.2	0.0	0.2	0.0
1986	0.0	5.0	0.0	0.0			0.2	0.0
1987	0.0	10.2	0.5	3.9			1.4	0.1
1988	4.0	6.1	0.0	0.8	5.1	0.0	0.9	1.0
1989	1.2	1.6	1.7	0.8	4.2	0.0	9.4	0.1
1989	0.9	8.9	0.0	2.2	13.5	0.1	1.3	1.5
1991	0.0	22.0	0.0	3.4	7.1	0.0	0.0	1.5
1991 1992	2.5	5.3	1.5	2.0	28.8	0.0	1.2	0.8
1992 1993	2.3 0.0			2.0 1.3				
		10.6	1.0	3.0	10.0 9.4	0.0	0.0	7.3
1994 1995	17.3	6.0 22.0	5.0 27.0	0.1		0.0	1.6 23.7	3.5
	41.8	33.9 30.0	27.0 6.4		26.0	0.5	23.7	1.5
1996	7.1	30.0		1.0	22.5	0.0		3.0
1997	2.5	38.2	30.0	1.9	33.1	1.1	4.0	7.0
1998	0.0	17.6	0.0	4.0	13.7	1.2	0.5	2.6
1999	2.0	7.0	10.0	0.5	1.1	3.0	0.5	3.2
2000	10.0	7.0	0.9	0.0 Continued.	10.0	0.0	1.0	3.2

-Continued-

_	Wasco's		Ivanof R		Humpback	
	275-40	4	275-40	)6	275-50	2
Year	Pink	Chum	Pink	Chum	Pink	Chum
1953						
1954						
1955						
1956						
1957						
1958						
1959						
1960						
1961						
1962	23.0	0.0	48.5	2.5	64.5	3.0
1963	1.0	0.0	128.0	4.0	26.4	0.4
1964	0.0	6.5	15.0	0.8	40.7	0.2
1965	2.0	0.0	61.4	5.5	13.8	0.0
1966	10.5	0.0	39.5	9.0	30.0	0.0
1967	2.0	0.0	98.5	3.0	36.7	0.0
1968	0.3	0.0	60.0	0.5	52.3	0.0
1969	4.0	0.0	122.4	0.5	75.0	0.0
1970	2.5	0.0	51.0	10.0	31.0	0.0
1971	3.0	4.0	25.0	21.0	13.4	1.5
1972	0.3	0.0	6.3	7.8	0.5	1.0
1973	0.0	0.0	24.7	8.2	6.1	0.6
1974	6.3	1.9	41.9	8.1	10.2	0.7
1975	0.9	0.0	33.4	15.0	9.2	3.5
1976	6.2	0.2	55.0	6.8	20.3	0.7
1977	1.6	0.5	51.8	9.0	48.2	1.2
1978	9.7	0.0	71.5	4.2	51.0	0.2
1979	2.0	0.1	89.0	7.1	59.0	5.0
1980	0.0	3.0	40.5	22.7	18.7	3.1
1981	0.0	0.2	39.9	17.0	46.5	2.0
1982	0.1	2.3	2.7	9.4	4.8	11.0
1983	2.0	0.0	34.3	5.6	17.8	0.0
1984	14.6	1.4	61.0	42.5	18.3	0.7
1985	0.3	0.0	181.6	10.6	36.8	0.3
1986	10.0	0.0	150.0	7.6	12.0	0.0
1987	11.9	0.1	24.7	6.9	15.5	0.8
1988	14.0	1.1	126.0	30.6	30.8	0.4
1989	3.8	0.3	161.0	4.0	51.0	0.5
1990	0.5	4.4	47.3	33.7	7.4	0.5
1991	0.0	0.1	118.3	332.9	28.8	0.0
1992	9.0	0.0	109.3	285.8	36.1	2.3
1993	0.0	1.0	230.2	203.0	96.9	4.8
1994	2.1	0.0	74.2	120.2	40.0	2.0
1995	14.0	3.4	234.2	128.0	195.7	0.7
1995	14.0	1.2	227.9	128.0	85.7	0.7 T
1990	8.3	0.1	77.4	124.7 128.2	62.7	6.0
1997	8.5 16.1	0.1	130.0	208.1	37.7	1.0
1998	10.1	0.0	150.0	100.0	20.0	6.2
2000	1.0 6.1	0.2	50.0	46.0	20.0	0.2 1.2

#### Table 15. (page 8 of 8)

Escapements from 1953-1984 are based on index estimates described by Shaul and Schwartz (1989) and from 1985-1999 estimates are based on area-under-the-curve methodology described by Johnson and Barrett (1988). September 15 was assumed to be last day of entry. Missing values indicate that escapement estimates are not available for the given stream and year.

	ab	0			ab		
Year	Catch <sup>a,b</sup>	Escapement <sup>c</sup>	Run	Year	Catch <sup>a,b</sup>	Escapement <sup>c</sup>	Run
1962	364,335	220,300	584,635	1982	390,096	255,200	645,296
1963	112,697	107,000	219,697	1983	159,412	95,600	255,012
1964	333,336	255,100	588,436	1984	63,303	370,200	433,503
1965	120,589	112,200	232,789	1985	22,806	62,000	84,806
1966	238,883	104,900	343,783	1986	176,640	52,500	229,140
1967	75,543	140,700	216,243	1987	127,261	85,400	212,661
1968	223,861	89,900	313,761	1988	267,775	361,800	629,575
1969	67,721	103,100	170,821	1989	1,624	136,500	138,124
1970	437,252	233,100	670,352	1990	270,004	253,800	523,804
1971	353,952	469,500	823,452	1991	261,096	469,700	730,796
1972	78,298	195,400	273,698	1992	222,134	573,700	795,834
1973	8,717	116,900	125,617	1993	122,360	255,700	378,060
1974	34,312	148,400	182,712	1994	227,276	382,400	609,676
1975	25,161	126,100	151,261	1995	380,949	347,800	728,749
1976	81,403	206,400	287,803	1996	99,791	368,500	468,291
1977	110,452	151,600	262,052	1997	155,905	587,400	743,305
1978	120,889	104,300	225,189	1998	128,841	379,200	508,041
1979	188,907	181,200	370,107	1999	140,594	335,400	475,994
1980	252,521	227,100	479,621	2000	120,957	303,400	424,357
1981	580,332	242,200	822,532				
				Average			
				1970-79	143,934	193,290	337,224
				1980-89	204,177	188,850	393,027
				1990-99	200,895	395,360	596,255

Table 16. Total chum salmon catch, escapement, and run numbers in the Chignik Management Area, 1962-2000.

<sup>a</sup> Catches (1970-1999) were updated using historical electronic fish ticket databases.

<sup>b</sup> Personal use or other subsistence fish are not included.

<sup>c</sup> Escapement estimates were based on Chignik River weir counts and aerial surveys. Post 1984 aerial survey escapement estimates computed by area-under-the-curve methodology using a 15.0 day average stream life (Johnson and Barrett 1988). September 15 was the assumed last day of stream entry.

	Chin	ook	Socker	Ne.	Coh	0	Pinl	c	Chur	n		Number Of Permits	Total Value
-	Cilli	<u></u>	BOCKC	<u>yc</u>	Con	.0	1 111	<u> </u>	Chu	<u> </u>	Total	Fished	Per
Date	Total	Average	Total	Average	Total	Average	Total	Average	Total	Average	Value	(Active)	Permit
Dute	Totul	Tiverage	Total	Tiverage	Total	Tronge	Total	Trendge	Total	Tiverage	Vulue	(neuve)	<u>r crimt</u>
1970	6,129	89	2,190,272	31,743	18,397	267	635,673	9,213	376,025	5,450	3,226,496	69	46,761
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	28	825,498	11,308	35,699	489	48,401	663	87,759	1,202	999,385	79	12,650
1973	5,255	72	3,030,057	41,508	73,663	1,009	20,610	282	10,180	139	3,139,765	77	40,776
1974	2,941	32	3,618,781	39,767	31,933	351	64,069	704	51,125	562	3,768,849	94	40,094
1975	6,561	76	1,384,271	16,240	213,539	2,581	104,115	12,211	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	212	14,553,720	163,525	104,819	1,178	920,881	10,347	368,066	4,136	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	317	11,345,503	112,332	710,192	7,031	2,622,269	25,963	126,866	1,256	14,836,880	101	146,900
1980	67,657	670	5,532,290	54,775	520,655	5,155	1,477,060	14,624	1,061,963	10,514	8,659,625	101	85,739
1981	75,231	730	17,262,119	167,593	439,900	4,271	1,881,334	18,265	2,431,421	23,606	22,090,005	103	214,466
1982	75,276	717	13,038,510	124,176	1,782,027	16,972	578,184	5,506	1,356,597	12,920	16,830,594	105	160,291
1983	96,159	962	10,728,088	107,281	219,650	2,197	240,171	2,402	421,713	4,217	11,705,781	100	117,058
1984	114,502	1,134	20,402,076	202,000	759,972	7,525	330,916	3,276	146,024	1,446	21,753,490	101	215,381
1985	67,088	664	7,997,834	79,186	1,471,418	14,568	140,076	1,387	59,475	589	8,735,891	101	86,494
1986	84,800	848	16,882,290	168,823	667,740	6,677	356,147	3,562	456,546	4,565	18,447,523	100	184,475
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	102	259,810
1988	286,740	2,811	14,350,354	140,690	4,153,424	40,720	6,771,266	66,385	2,189,293	21,464	27,751,077	102	272,069
1989 <sup>a</sup>	78,999	790	13,047,378	130,474	436,892	4,369	32,994	3,299	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	486	11,002,784	106,823	650,626	6,317	402,916	3,912	502,860	4,882	12,609,213	101	124,844
1992	193,326	1,858	12,552,025	120,693	1,323,107	12,722	811,882	7,807	414,005	3,981	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	2,208	430,888	4,352	11,836,148	99	119,557

 Table 17.
 Economic value of salmon and average income per commercial salmon permit holder, in dollars, in the Chignik Management Area, 1970-2000.

# Table 17. (page 2 of 2)

	Chin	ook	Sockey	19	Coh		Pinl	7	Chu	n		Number Of Permits	Total Value
-	Chin	00K	SOCKE		Con	10	1 111	<u> </u>	Cliu	.11	Total	Fished	Per
Date	Total	Average	Total	Average	Total	Average	Total	Average	Total	Average	Value	(Active)	Permit
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	5,922,577	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	299	21,132,550	232,226	170,931	1,878	578,861	6,361	118,547	1,303	22,028,101	91	242,067
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
Averages													
1970-79	15,076	169	5,938,688	66,932	146,588	1,623	648,251	8,344	199,659	2,435	6,948,262	84	78,121
1980-89	101,919	1,003	14,402,397	141,561	1,148,681	11,250	1,207,802	12,133	846,760	8,267	17,607,558	102	173,179
1990-99	80,740	802	12,155,518	123,829	680,289	6,819	482,153	4,875	357,293	3,575	13,755,993	98	140,587

<sup>a</sup> Exxon Valdez oil spill occurred this year.

Year	Escapement <sup>a</sup>	Catch <sup>b</sup>	Total Run
1960	-	643	643
1961	-	409	409
1962	-	435	435
1963	564	1,744	2,308
1964	914	1,099	2,013
1965	942	1,592	2,534
1966	822	636	1,458
1967	1,500	882	2,382
1968	1,000	674	1,674
1969	600	3,448	4,048
1970	2,500	1,226	3,726
1971	2,000	2,010	4,010
1972	1,500	464	1,964
1973	822	525	1,347
1974	672	255	927
1975	877	549	1,426
1976	700	2,290	2,990
1977	798	710	1,508
1978	1,197	1,603	2,800
1979	1,050	1,253	2,303
1980	876	2,344	3,220
1981	1,603	2,694	4,297
1982	2,412	5,236	7,648
1983	1,943	5,488	7,431
1984	5,806	4,318	10,124
1985	3,144	1,888	5,032
1986	3,612	3,037	6,649
1987	2,624	2,651	5,275
1988	4,868	7,296	12,164
1989	3,316	3,542	6,858
1990	4,364	9,901	14,265
1991	4,531	3,157	7,702
1992	3,806	10,832	14,638
1993	1,946	19,515	21,461
1994	2,963	3,919	6,935
1995	4,288	5,261	9,549
1996	3,488	3,105	6,593
1997	3,824	3,032	6,856
1997	3,075	4,395	7,470
1998	3,728	3,296	7,470
2000	4,285	2,592	6,877
Avg. (1970-79)	1,212	1,089	2,300
Avg. (1980-89)	3,020	3,849	6,870
Avg. (1990-99)	3,601	6,641	10,249

Table 18. Chignik River chinook salmon escapement, Chignik Management Area catch, and total run, 1960-2000.

<sup>a</sup> No escapement adjustments are made for chinook salmon that spawn below the weir, or those removed by the sport fishery.
<sup>b</sup> Does not include chinook salmon utilized for personal use or

subsistence.

						Ages				
Period		0.2	0.3	1.2	1.3	1.4	2.2	2.3	3.3	Total <sup>a</sup>
6/20/00	Numbers	1	71	29	554	2	4	116	1	778
	Percent	0.1	9.1	3.7	71.2	0.3	0.5	14.9	0.1	
6/24/00	Numbers	0	30	22	255	3	1	41	0	352
	Percent	0.0	8.5	6.3	72.4	0.9	0.3	11.6	0.0	
6/25/00	Numbers	0	34	16	250	2	2	51	0	355
	Percent	0.0	9.6	4.5	70.4	0.6	0.6	14.4	0.0	
Total	Numbers	1	135	67	1,059	7	7	208	1	1,485
	Percent	0.1	9.1	4.5	71.3	0.5	0.5	14.0	0.1	

Table 19. Age composition of Black Lake sockeye salmon sampled at the Black Lake outlet, 2000.

<sup>a</sup> Percentages may not total to 100% due to errors in rounding.

Table 20. Estimated sockeye salmon escapement through the Chignik River weir bound for Chignik Lake and Black Lake using daily percentages attributable to Chignik Lake, derived from the inseason scale pattern analysis and time of entry curve, 2000.

	Tota	la	Ch	ignik Lake		В	lack Lake	
Date	Daily	Cumulative	Percent	Daily	Cumulative	Percent	Daily	Cumulative
28-May	30	30	0%	0	0	100%	30	30
29-May	60	90	0%	0	0	100%	60	90
30-May	57	147	0%	0	0	100%	57	147
31-May	439	586	0%	0	0	100%	439	586
1-Jun	653	1,239	0%	0	0	100%	653	1,239
2-Jun	900	2,139	0%	0	0	100%	900	2,139
3-Jun	466	2,605	0%	0	0	100%	466	2,605
4-Jun	1,015	3,620	0%	0	0	100%	1,015	3,620
5-Jun	4,268	7,888	0%	17	17	100%	4,251	7,871
6-Jun	4,133	12,021	1%	21	38	100%	4,112	11,983
7-Jun	9,941	21,962	1%	60	97	99%	9,881	21,865
8-Jun	15,000	36,962	1%	105	202	99%	14,895	36,760
9-Jun	15,000	51,962	1%	105	307	99%	14,895	51,655
10-Jun	15,000	66,962	1%	135	442	99%	14,865	66,520
11-Jun	15,000	81,962	1%	150	592	99%	14,850	81,370
12-Jun	8,000	89,962	1%	88	680	99%	7,912	89,282
13-Jun	8,000	97,962	1%	104	784	99%	7,896	97,178
14-Jun	10,832	108,794	2%	162	947	99%	10,670	107,847
15-Jun	6,749	115,543	2%	102	1,062	98%	6,634	114,481
16-Jun	5,217	120,760	2%	104	1,166	98%	5,113	119,594
17-Jun	5,187	125,947	2%	104	1,100	98%	5,073	119,594
18-Jun	4,692	130,639	3%	114	1,200	97%	4,570	124,007
18-Jun 19-Jun	4,092 8,097	130,039	3%	235		97% 97%	4,370 7,862	129,237
20-Jun	14,532	158,756	3%	255 494	1,637	97% 97%	14,038	
20-Jun 21-Jun	14,532	167,952	3% 4%	494 558	2,131	97% 96%		151,137
21-Jun 22-Jun	25,905	<i>,</i>	4% 4%		2,689	90% 96%	14,126	165,263
		193,857		1,140	3,829		24,765	190,028
23-Jun	30,777	224,634	5%	1,539	5,368	95%	29,238	219,266
24-Jun	21,815	246,449	6% 70/	1,243	6,611	94%	20,572	239,838
25-Jun	15,795	262,244	7% 7%	1,027	7,638	94%	14,768	254,606
26-Jun	38,307	300,551	7%	2,835	10,472	93%	35,472	290,079
27-Jun	27,631	328,182	8%	2,321	12,793	92%	25,310	315,389
28-Jun	30,290	358,472	10%	2,878	15,671	91%	27,412	342,801
29-Jun	20,066	378,538	11%	2,167	17,838	89%	17,899	360,700
30-Jun	8,988	387,526	12%	1,097	18,935	88%	7,891	368,591
1-Jul	1,046	388,572	14%	144	19,079	86%	902	369,493
2-Jul	1,982	390,554	16%	307	19,386	85%	1,675	371,168
3-Jul	1,123	391,677	17%	195	19,582	83%	928	372,095
4-Jul	841	392,518	20%	164	19,746	81%	677	372,772
5-Jul	1,795	394,313	22%	390	20,135	78%	1,405	374,178
6-Jul	939	395,252	24%	227	20,362	76%	712	374,890
7-Jul	2,113	397,365	27%	566	20,929	73%	1,547	376,436
8-Jul	10,227	407,592	30%	3,027	23,956	70%	7,200	383,636
9-Jul	14,901	422,493	33%	4,858	28,814	67%	10,043	393,679
10-Jul	21,306	443,799	36%	7,606	36,420	64%	13,700	407,379
11-Jul	25,275	469,074	40%	10,034	46,454	60%	15,241	422,620
12-Jul	31,165	500,239	43%	13,526	59,980	57%	17,639	440,259
13-Jul	23,579	523,818	47%	11,129	71,109	53%	12,450	452,709
14-Jul	25,835	549,653	51%	13,176	84,285	49%	12,659	465,368
15-Jul	28,671	578,324	55%	15,712	99,996	45%	12,959	478,328
16-Jul	15,644	593,968	59%	9,152	109,148	42%	6,492	484,820
17-Jul	4,057	598,025	63%	2,548	111,696	37%	1,509	486,329

	Tot		Ch	ignik Lake		Bl	ack Lake	
Date	Daily	Cumulative	Percent	Daily	Cumulative	Percent	Daily	Cumulative
18-Jul	4,644	602,669	66%	3,060	114,756	34%	1,584	487,913
19-Jul	13,572	616,241	70%	9,473	124,230	30%	4,099	492,011
20-Jul	23,401	639,642	74%	17,223	141,453	26%	6,178	498,189
21-Jul	18,572	658,214	77%	14,375	155,828	23%	4,197	502,386
22-Jul	28,848	687,062	81%	23,396	179,223	19%	5,452	507,839
23-Jul	20,629	707,691	85%	17,514	196,737	15%	3,115	510,954
24-Jul	11,477	719,168	89%	10,180	206,917	11%	1,297	512,251
25-Jul	4,573	723,741	93%	4,230	211,147	8%	343	512,594
26-Jul	1,453	725,194	96%	1,398	212,545	4%	55	512,649
27-Jul	1,269	726,463	100%	1,269	213,814	0%	0	512,649
28-Jul	1,478	727,941	100%	1,478	215,292	0%	0	512,649
29-Jul	1,314	729,255	100%	1,314	216,606	0%	0	512,649
30-Jul	858	730,113	100%	858	217,464	0%	0	512,649
31-Jul	1,125	731,238	100%	1,125	218,589	0%	0	512,649
1-Aug	613	731,851	100%	613	219,202	0%	0	512,649
2-Aug	4,312	736,163	100%	4,312	223,514	0%	0	512,649
3-Aug	11,517	747,680	100%	11,517	235,031	0%	0	512,649
4-Aug	4,411	752,091	100%	4,411	239,442	0%	0	512,649
5-Aug	1,209	753,300	100%	1,209	240,651	0%	0	512,649
6-Aug	1,007	754,307	100%	1,007	241.658	0%	0	512,649
7-Aug	934	755,241	100%	934	242,592	0%	0	512,649
8-Aug	917	756,158	100%	917	243,509	0%	0	512,649
9-Aug	1,541	757,699	100%	1,541	245,050	0%	0	512,649
10-Aug	744	758,443	100%	744	245,794	0%	0	512,649
11-Aug	1,320	759,763	100%	1,320	247,114	0%	0	512,649
12-Aug	2,105	761,868	100%	2,105	249,219	0%	0	512,649
12-Aug	1,129	762,997	100%	1,129	250,348	0%	0	512,649
13-Aug 14-Aug	1,129	764,644	100%	1,647	251,995	0%	0	512,649
15-Aug	1,361	766,005	100%	1,361	253,356	0%	0	512,649
15-Aug 16-Aug	1,301	767,501	100%	1,301	254,852	0%	0	512,649
10-Aug 17-Aug	4,749	772,250	100%	4,749	259,601	0%	0	512,649
e	7,302	779,552	100%		266,903	0%	0	
18-Aug 19-Aug	4,012	783,564	100%	7,302 4,012	270,915	0%	0	512,649 512,649
20-Aug	1,365	784,929	100%	1,365	272,280	0%	0	512,649
e	885	785,814	100%		272,280	0%	0	
21-Aug 22-Aug	604		100%	885 604	273,769	0%	0	512,649
		786,418						512,649
23-Aug	819	787,237	100%	819	274,588	0%	0	512,649
24-Aug	2,815	790,052	100%	2,815	277,403	0%	0	512,649
25-Aug	3,697	793,749	100%	3,697	281,100	0%	0	512,649
26-Aug	2,745	796,494	100%	2,745	283,845	0%	0	512,649
27-Aug	685	797,179	100%	685	284,530	0%	0	512,649
28-Aug	849	798,028	100%	849	285,379	0%	0	512,649
29-Aug	530	798,558	100%	530	285,909	0%	0	512,649
30-Aug	467	799,025	100%	467	286,376	0%	0	512,649
31-Aug	622	799,647	100%	622	286,998	0%	0	512,649
1-Sep	499	800,146	100%	499	287,497	0%	0	512,649
2-Sep	1,982	802,128	100%	1,982	289,479	0%	0	512,649
3-Sep	1,025	803,153	100%	1,025	290,504	0%	0	512,649
4-Sep	2,072	805,225	100%	2,072	292,576	0%	0	512,649

<sup>a</sup> Daily escapement counts from June 8 to June 13 are estimates based on reports of fish movement through Chignik Lagoon, buildup of sockeye behind the partial weir, and initial sonar data obtained while calibrating the sonar equipment. Daily escapement counts from June 14 to July 11 are estimates based on sonar data. Approximately 200,000 additional sockeye salmon were observed during aerial surveys of Black Lake tributaries.

Table 21. Daily estimated Chignik River sockeye salmon escapement, catch destined to the Chignik Lakes system, and total run, by day and area (adjusted to Chignik Lagoon date), 2000.

					Catch Are	eas <sup>a</sup>				
	Chignik Weir	Chignik	Outer Chignik		Eastern	Cape	Western	Perryville	SEDM	Daily
Date	Escapement b	Lagoon	Bay / Kujulik	Kumlik	District	Igvak	District	District		Total
27-May	30	0	0	0	0	0	0	0	0	30
28-May	60	0	0	0	0	0	0	0	0	60
29-May	57	0	0	0	0	0	0	0	0	57
30-May	439	0	0	0	0	0	0	0	0	439
31-May	653	0	0	0	0	0	0	0	0	653
1-Jun	900	0	0	0	0	0	0	0	0	900
2-Jun	466	0	0	0	0	0	0	0	0	466
3-Jun	1,015	0	0	0	0	0	0	0	0	1,015
4-Jun	4,268	0	0	0	0	0	0	0	0	4,268
5-Jun	4,133	0	0	0	0	0	0	0	0	4,133
6-Jun	9,941	0	0	0	0	0	0	0	0	9,941
7-Jun	15,000	0	0	0	0	0	0	0	0	15,000
8-Jun	15,000	1,293	0	0	0	0	0	0	0	16,293
9-Jun	15,000	0	0	0	0	0	0	0	0	15,000
10-Jun	15,000	5,480	0	0	0	0	0	0	0	20,480
11-Jun	8,000	133,198	0	0	0	0	0	0	0	141,198
12-Jun	8,000	104,939 69,750	2,046	0 0	0 0	0	0	0 0	0 0	114,985
13-Jun 14-Jun	10,832 6,749		10,150	4,720		0	0			90,732 97,043
14-Jun 15-Jun	5,217	68,641 62,129	16,933 15,222	4,720 3,141	0 0	0 0	0 0	0 0	0 0	97,043 85,709
15-Jun 16-Jun	5,187	69,031	22,778	7,250	21,396	0	0	0	0	125,642
10-Jun 17-Jun	4,692	65,157	11,441	10,582	4,485	0	0	0	0	96,357
18-Jun	8,092	05,157	24,438	25,237	32,532	0	0	0	0	90,304
19-Jun 19-Jun	14,532	0	24,450	1,686	4,129	0	0	0	0	20,347
20-Jun	14,684	1,182	0	0	2,944	78,224	0	0	10,275	107,309
20 Jun 21-Jun	25,905	0	0	0	2,>11	71,363	0	0	22,691	119,959
22-Jun	30,777	0	0	0	0	46,820	0	0	17,390	94,987
23-Jun	21,815	530	0	0	0	24,614	0	0	12,697	59,655
24-Jun	15,795	0	0	0	0	0	0	0	0	15,795
25-Jun	38,307	0	0	0	0	0	0	0	0	38,307
26-Jun	27,631	585	0	0	0	0	0	0	0	28,216
27-Jun	30,290	0	0	0	0	0	0	0	0	30,290
28-Jun	20,066	0	0	0	0	0	0	0	0	20,066
29-Jun	8,988	56,698	0	0	0	0	0	0	0	65,686
30-Jun	1,046	41,234	1,769	0	0	0	0	0	0	44,049
1-Jul	1,982	51,471	7,644	0	0	0	0	0	0	61,097
2-Jul	1,123	46,072	5,553	6,365	0	0	0	0	0	59,113
3-Jul	841	33,897	8,309	6,095	0	0	0	0	0	49,142
4-Jul	1,795	40,049	5,664	4,014	0	0	0	0	0	51,522
5-Jul	939	44,035	16,737	10,051	0	0	0	0	0	71,762
6-Jul	2,113	27,100	7,023	3,570	0	0	0	0	0	39,806
7-Jul	10,227	0	13,755	3,957	0	0	0	0	0	27,939
8-Jul	14,901	0	0	6,521	0	0	0	0	0	21,422
9-Jul	21,306	654	0	$\frac{0}{Contin}$	0	0	0	0	0	21,960

Table 21. (page 2 of 3)

					Catch Are	eas <sup>a</sup>				
	Chignik Weir	Chignik	Outer Chignik		Eastern	Cape	Western	Perryville	SEDM	Daily
Date	Escapement b	Lagoon	Bay / Kujulik	Kumlik	District	Igvak	District	District		Total
10-Jul	25,275	0	0	0	0	0	0	0	0	25,275
11-Jul	31,165	0	0	0	0	0	0	0	0	31,165
12-Jul	23,579	1,190	0	0	0	0	0	0	0	24,769
13-Jul	25,835	0	0	0	0	0	0	0	0	25,835
14-Jul	28,671	0	0	0	0	0	0	0	0	28,671
15-Jul	15,644	116,219	0	0	0	0	0	0	0	131,863
16-Jul	4,057	30,340	2,859	0	0	0	0	0	0	37,256
17-Jul	4,644	25,890	12,440	2,976	0	0	302	0	0	46,252
18-Jul	13,572	0	10,916	5,115	0	0	1,477	0	0	31,080
19-Jul	23,401	0	0	2,408	2,523	0	513	0	0	28,845
20-Jul	18,572	690	0	0	1,324	402	0	0	4,071	25,059
21-Jul	28,848	0	0	0	0	10,279	0	0	11,798	50,925
22-Jul	20,629	0	0	0	0	9,691	0	0	0	30,320
23-Jul	11,477	0	0	0	0	8,084	0	0	9,166	28,727
24-Jul	4,573	28,144	0	0	0	9,779	0	0	0	42,496
25-Jul	1,453	10,732	3,646	0	0	6,967	0	0	0	22,798
26-Jul	1,269	12,788	1,555	868	0	3,783	3,365	0	4,526	28,155
27-Jul	1,478	11,027	1,550	565	371	774	3,152	310	0	19,227
28-Jul	1,314	7,585	1,002	969	104	0	4,742	0	129	15,845
29-Jul	858	8,452	974	371	0	386	221	0	5,132	16,394
30-Jul	1,125	7,657	1,855	799	0	1,642	0	0	5,544	18,622
31-Jul	613	8,668	1,756	344	0	0	0	0	0	11,381
1-Aug	4,312	0	1,708	365	0	0	0	0	0	6,385
2-Aug	11,517	0	0	871	0	0	0	0	0	12,388
3-Aug	4,411	0	0	0	0	0	0	0	0	4,411
4-Aug	1,209	12,135	0	0	0	0	0	0	0	13,344
5-Aug	1,007	8,534	2,355	0	0	0	0	0	0	11,896
6-Aug	934	6,142	2,161	0	0	0	377	0	0	9,614
7-Aug	917	3,837	2,817	308	304	0	266	628	0	9,077
8-Aug	1,541	4,942	1,970	335	0	0	0	659	0	9,447
9-Aug	744	5,403	2,459	220	0	0	0	0	0	8,826
10-Aug	1,320	3,036	2,016	450	0	0	0	0	0	6,822
11-Aug	2,105	5,903	193	601	0	0	0	0	0	8,802
12-Aug	1,129	8,430	450	1,716	0	0	0	0	0	11,725
13-Aug	1,647	5,465	1,147	488	0	0	328	0	0	9,075
14-Aug	1,361	6,326	932	860	0	0	291	403	0	10,173
15-Aug	1,496	7,231	513	617	0 0	0	0	0	0	9,857
16-Aug	4,749	0	752	489 0		0	0	385	0	6,375
17-Aug	7,302	0	0		0	0	0	0	0	7,302
18-Aug	4,012	7,463	0	0	89	0	0	0	0	11,564
19-Aug	1,365	8,174	887	0	0	0 0	0	0	0 0	10,426
20-Aug	885 604	9,138	1,140	0 0	0		0	0		11,163
21-Aug 22-Aug	804 819	4,648	1,521	0	0 0	0 0	0 0	0 0	0 0	6,773 9,390
		7,569	1,002	0	509	0		0		9,390 6,700
23-Aug 24-Aug	2,815	2,202	1,174	0			0		0	
24-Aug 25-Aug	3,697	0 3,807	234 0	0	263 239	0 0	0 0	0 0	0 0	4,194 6,791
∠J-Aug	2,745	5,807	0		239 nued_	0	0	0	U	0,791

					Catch Are	as <sup>a</sup>				
	Chignik Weir	Chignik	Outer Chignik		Eastern	Cape	Western	Perryville	SEDM	Daily
Date	Escapement b	Lagoon	Bay / Kujulik	Kumlik	District	Igvak	District	District		Total
26-Aug	685	4,744	1,250	0	55	0	0	0	0	6,734
27-Aug	849	3,868	3,331	0	0	0	0	0	0	8,048
28-Aug	530	2,810	2,150	0	305	0	0	0	0	5,795
29-Aug	467	1,725	1,858	0	0	0	0	0	0	4,050
30-Aug	622	1,210	977	0	0	0	0	0	0	2,809
31-Aug	499	0	1,049	0	0	0	0	0	0	1,548
1-Sep	1,982	0	0	0	0	0	0	0	0	1,982
2-Sep	1,025	0	0	0	0	0	0	0	0	1,025
3-Sep	2,072	0	0	0	0	0	0	0	0	2,072
4-Sep	0	0	0	0	0	0	0	0	0	0
5-Sep	0	0	0	0	0	0	0	0	0	0
6-Sep	0	0	0	0	0	0	0	0	0	0
7-Sep	0	0	0	0	0	0	0	0	0	0
8-Sep	0	0	0	0	0	0	0	0	0	0
9-Sep	0	0	0	0	0	0	0	0	0	0
10-Sep	0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0	0
Total	805,225	1,327,249	244,061	114,924	71,572 2	272,808	15,034	2,385	103,419	2,956,677

- <sup>a</sup> Assigned travel time to Chignik Lagoon from Cape Igvak and Southeastern District Mainland = 5 days, Eastern and Perryville Districts = 3 days, Western and Cape Kumlik = 2 days, Outer Chignik Bay and Kujulik Bay = 1 day, and Chignik Weir = (-) 1 day. Does not include catch designated for personal or subsistence use. Includes 80% of the catches through July 25 from Cape Igvak and Southeastern District Mainland. Included department test fish harvests. All sockeye salmon catch in the Chignik Management Area is assigned to the Chignik Lakes system.
- <sup>b</sup> Daily escapement counts from June 8 to June 13 are estimates based on reports of fish movement through Chignik Lagoon, buildup of sockeye behind the partial weir, and initial sonar data obtained while calibrating the sonar equipment. Daily escapement counts from June 14 to July 11 are estimates based on sonar data. Approximately 200,000 additional sockeye salmon were observed during aerial surveys of Black Lake tributaries.

Table 22.Estimated harvest of Chignik bound sockeye salmon in the Chignik, Cape Igvak, and<br/>Southeastern District Mainland Areas from 1964-2000.

_	Chignik A	Area <sup>a</sup>	Cape Ig	vak <sup>b</sup>	Mainland A	Area <sup>b</sup>	Total
Year	Catch	Percent	Catch	Percent	Catch	Percent	All Areas
1964 <sup>c</sup>	556,890	90.57	14,980	2.44	43,021	7.00	614,891
1965	599,553	89.94	11,021	1.65	56,020	8.40	666,594
1966	219,794	87.99	18,003	7.21	12,011	4.81	249,808
1967	462,000	91.48	23,014	4.56	20,021	3.96	505,035
1968	977,382	82.53	135,951	11.48	70,959	5.99	1,184,292
1969	394,135	78.96	97,982	19.63	7,013	1.41	499,130
1970 <sup>d</sup>	1,325,734	72.51	434,394	23.76	68,181	3.73	1,828,309
1971	1,016,136	80.33	197,614	15.62	51,272	4.05	1,265,022
1972	378,218	87.99	33,865	7.88	17,752	4.13	429,835

1964-72 catch and percentage figures are total for the entire season. Catch figures and percentages after 1972 are only through July 25.

1973 <sup>e</sup>	760 259	88.97	57 249	6.63	27.092	4.39	864,859
	769,258		57,348		37,983		,
1974	530,278	73.61	122,071	16.95	68,029	9.44	720,378
1975	115,984	81.78	23,635	16.67	2,205	1.55	141,824
1976	792,024	82.96	117,926	12.35	44,730	4.69	954,680
1977	1,547,285	90.40	128,852	7.53	35,502	2.07	1,711,639
1978 <sup>f,g</sup>	1,454,389	85.38	227,014	13.33	22,064	1.30	1,703,467
1979 <sup>h</sup>	794,504	91.81	13,950	1.61	56,878	6.57	865,332
1980	670,001	91.31	32	0.00	63,724	8.68	733,757
1981	1,606,300	79.85	282,727	14.06	122,533	6.09	2,011,560
1982	1,250,768	84.46	167,401	11.30	62,767	4.24	1,480,936
1983	1,450,832	72.68	318,048	15.93	227,392	11.39	1,996,272
1984	2,474,405	73.93	449,372	13.43	423,068	12.64	3,346,845
1985 <sup>i</sup>	696,169	79.91	123,627	14.19	51,421	5.60	871,217
1986	1,456,729	82.64	188,017	10.67	118,006	6.69	1,762,752
1987	1,659,615	77.99	321,506	15.11	146,886	6.90	2,128,007
1988	675,487	95.67	11,218	1.59	19,320	2.74	706,025
1989	496,044	99.10	0	0.00	4,485	0.90	500,529
1990	1,205,575	83.61	107,706	7.47	128,599	8.92	1,441,880
1991 <sup>j</sup>	1,958,954	80.42	324,329	13.31	152,714	6.27	2,435,997
1992 <sup>k</sup>	1,054,309	81.07	152,358	11.72	93,845	7.22	1,300,512
1993	1,495,098	77.72	300,055	15.60	128,536	6.68	1,923,689
1994 <sup>1</sup>	1,632,435	80.61	250,230	12.36	142,350	7.03	2,025,015
1995	1,024,785	79.90	169,530	13.22	88,301	6.88	1,282,616
1996 <sup>m</sup>	1,710,249	79.70	308,327	14.37	127,201	5.93	2,145,777
1997	443,892	100.00	0	0.0	0	0.0	443,892
1998 <sup>n,o</sup>	786,466	91.2	8,812	1.0	66,893	7.8	862,171
1999	2,326,811	78.7	456,147	15.4	173,621	5.9	2,956,579
2000	1,509,652	80.05	272,808	14.46	103,419	5.48	1,885,879

- <sup>a</sup> All sockeye salmon catch from the Chignik Management Area is assigned to the Chignik Lakes system.
- <sup>b</sup> The Cape Igvak and Southeastern District Mainland figures represent 80% of the total sockeye salmon catches for those areas as it is estimated that roughly 80% of the sockeye salmon caught in the Cape Igvak section and Southeastern District Mainland Area (excluding sockeye salmon caught in Northwest Stepovak Section from 1964-1991 and 1996-2000 and in Orzinski Bay in 1992 are destined for Chignik).
- <sup>c</sup> The data from 1964-1972 are based on total yearly catches. Prior to 1973, Cape Igvak and Southeastern District Mainland fisheries were set by regulation to weekly fishing periods, usually 5 days per week. Time modifications were implemented when poor escapements occurred at Chignik.
- <sup>d</sup> Catches (1970-1992) were updated using historical electronic fish ticket databases.
- <sup>e</sup> During 1973 through 1977 all three fisheries were managed on a day by day basis.
- <sup>f</sup> From 1978-1991, the Cape Igvak Fishery Management Plan allocated 15 percent of the total sockeye catch destined for Chignik.
- <sup>g</sup> During 1978, seining prior to July 11 was disallowed in the Southeastern District Mainland. The set gillnet fishery was allowed to fish 3 days per week through July 10 after which the fishery was managed on the basis of local stocks.
- <sup>h</sup> During 1979-1984 and prior to July 11, fishing was allowed 5 days per week in the Southeastern District Mainland Area with a ceiling of an estimated 60,000 sockeye destined for Chignik. If the Chignik Area sockeye catch was 1,000,000 or more before July 11, the 60,000 ceiling was to be dropped.
- <sup>i</sup> Beginning in 1985, Southeastern District Mainland Area (excluding the Northwest Stepovak Section from 1964-1991 and Orzinski Bay statistical area) was placed on an allocation of 6.2 percent of the total estimated Chignik sockeye salmon catch through July 25. After July 25, the Southeastern District Mainland was managed on a local stock basis. The allocation changed to 6.0 percent beginning in 1988. Seining is still not allowed prior to July 11.
- <sup>j</sup> Includes overescapement of 278,305 sockeye salmon counted past the weir during the Chignik Area seiners' boycott (Jun 23-Jul 4).
- <sup>k</sup> Review of Orzinski Lake historical and current escapement records led the Alaska Board of Fisheries to redefine the Southeastern District Mainland Management Plan. Beginning in 1992, the Southeastern District Mainland fishery (excluding Orzinski Bay) was placed on an allocation of 7.0 percent of the total estimated Chignik sockeye salmon catch through July 25.

Table 22. (page 3 of 3)

- <sup>1</sup> Includes overescapement of 208,921 sockeye salmon counted past the weir during the Chignik Area seiners' strike (Jun 22-Jun 25).
- <sup>m</sup> During their January 1996 meeting, the BOF increased the area to be managed for local Orzinski Lake sockeye salmon from only Orzinski Bay to the entire Northwest Stepovak Section. Prior to July 1, the entire Northwest Stepovak Section will be managed on an allocation based on the strength of the Chignik sockeye salmon runs. Beginning July 1, the Northwest Stepovak Section will be managed entirely on local stocks. The BOF also decreased the percentage of sockeye salmon allocated to the SEDM fishery from 7% to 6% to attempt to maintain traditional harvest levels of Chignik bound sockeye salmon in the SEDM fishery.
- <sup>n</sup> During their January 1998 meeting, the BOF reduced the area managed entirely for local Orzinski Lake sockeye salmon from the entire Northwest Stepovak Section to only Orzinski Bay. All sockeye salmon caught in the Northwest Stepovak Section beginning July 1 will still be considered 100% local fish and not counted toward the 6% allocation. Remainder of SEDM sockeye salmon harvest allocated as 80% Chignik bound fish. Assures minimum harvest of 600,000 sockeye salmon in Chignik through July 25.
- <sup>o</sup> Includes 7,714 sockeye salmon caught by the Chignik Seiners Association (CSA) and an overescapement of 52,131 sockeye salmon escapement counted past the weir during the CSA boycott (Jun 16-29, 1998).

		st to July 25 Only <sup>a</sup>	Harve	
Tot	SEDM	Cape Igvak	Chignik	Year
864,58	37,983	57,348	769,258	1973
720,37	68,029	122,071	530,278	1974
141,82	2,205	23,635	115,984	1975
954,68	44,730	117,926	792,024	1976
1,711,63	35,502	128,852	1,547,285	1977
1,703,46	22,064	227,014	1,454,389	1978
865,33	56,878	13,950	794,504	1979
733,75	63,724	32	670,001	1980
2,011,56	122,533	282,727	1,606,300	1981
1,480,93	62,767	167,401	1,250,768	1982
1,996,27	227,392	318,048	1,450,832	1983
3,346,84	423,068	449,372	2,474,405	1984
871,21	51,421	123,627	696,169	1985
1,762,75	118,006	188,017	1,456,729	1986
2,128,00	146,886	321,506	1,659,615	1987
706,02	19,320	11,218	675,487	1988
500,52	4,485	0	496,044	1989
1,441,88	128,599	107,706	1,205,575	1990
2,435,99	152,714	324,329	1,958,954	1991 <sup>b</sup>
1,300,51	93,845	152,358	1,054,309	1992
1,923,68	128,536	300,055	1,495,098	1993
2,025,01	142,350	250,230	1,632,435	1994°
1,282,61	88,301	169,530	1,024,785	1995
2,018,57	127,201	308,327	1,710,249	1996
443,89	0	0	443,892	1997
862,17	66,893	8,813	786,466	1998 <sup>d</sup>
2,956,57	173,621	456,147	2,326,811	1999
1,885,87	103,419	272,808	1,509,652	2000
				Average
1,669,09	110,206	207,750	1,363,857	1990-99

Table 23. Total Chignik Management Area and 80 percent of the sockeye salmon harvest in the Cape Igvak and Southeastern District Mainland (SEDM) Areas through July 25, 1973-2000.

<sup>a</sup> Catches (1973-1996) were updated using historical electronic fish ticket databases. Data does not include test fishery catches.

<sup>b</sup> Includes overescapement of 278,305 sockeye salmon counted past the weir during the Chignik Seiners' Association boycott (June 23-July 4).

<sup>c</sup> Includes overescapement of 208,921 sockeye salmon counted past the weir during the Chignik Seiners' Association strike (June 22-June 25).

<sup>d</sup> Includes overescapement of 52,131 sockeye salmon counted past the weir to June 28 during the Chignik Seiners Association strike and 7,714 fish caught for a strike fund by the Chignik Seiners' Association June 18.

	-					A	Ages								
Date		0.2	0.3	1.1	1.2	1.3	1.4	2.1	2.2	2.3	2.4	3.1	3.2	3.3	Tota
6/8/00 <sup>t</sup>	<sup>b</sup> Numbers	0	10	0	19	278	3	0	2	68	0	0	0	0	38
	Percent	0	3	0	5	73	1	0	1	18	0	0	0	0	
6/10/00 <sup>b</sup>	<sup>b</sup> Numbers	0	1	0	8	163	3	0	4	71	0	0	0	0	25
		0	0	0	3	65	1	0	2	28	0		0	0	20
	Percent											0			10
6/14/00	Numbers	0	1	0	2	349	1	0	0	71	1	0	0	0	42
	Percent	0	0	0	0	82	0	0	0	17	0	0	0	0	
6/17/00	Numbers	0	4	0	3	102	2	0	2	20	0	0	0	0	13
	Percent	0	3	0	2	77	2	0	2	15	0	0	0	0	
6/23/00	<sup>b</sup> Numbers	0	38	0	17	306	3	0	3	62	0	0	0	0	42
	Percent	0	9	0	4	71	1	0	1	14	0	0	0	0	
6/26/00	<sup>b</sup> Numbers	0	28	0	15	309	1	0	2	75		0	0	1	43
6/26/00				0	13	309 72		0	0	17	0				4.
6/20/00	Percent Numbers	0 0	6 13	0	5 10	262	0 1	0	3	133	0 1	0 0	0 0	0 0	42
6/30/00	Percent	0	3	0	2	62	0	0	1	31	0	0	0	0	4.
7/3/00	Numbers	0	23	0	20	278	2	0	9	147	0	0	0	0	4
7/3/00	Percent	0	5	0	4	58	0	0	2	31	0	0	0	0	т
7/7/00	Numbers	1	24	0	18	269	2	0	4	158	0	0	0	0	4′
	Percent	0	5	0	4	57	0	Õ	1	33	0	0	0	0	-
7/9/00	Numbers	0	22	0	13	243	2	0	2	179	0	0	0	0	4
	Percent	0	5	0	3	53	0	0	0	39	0	0	0	0	
7/12/00	Numbers	1	44	0	11	190	3	0	7	225	0	0	0	0	4
	Percent	0	9	0	2	40	1	0	1	47	0	0	0	0	
7/15/00	Numbers	3	37	0	10	169	0	0	4	190	0	0	0	0	4
	Percent	1	9	0	2	41	0	0	1	46	0	0	0	0	
7/18/00	Numbers	0	35	0	21	178	3	0	5	256	0	0	0	0	49
	Percent	0	7	0	4	36	1	0	1	51	0	0	0	0	
7/20/00	Numbers	1	56	0	29	147	1	0	8	236	0	0	0	0	4′
	Percent	0	12	0	6	31	0	0	2	49	0	0	0	0	
7/25/00	Numbers	4	19	0	51	104	0	0	11	245	2	0	1	0	4
= 12 0 10 0	Percent	1	4	0	12	24	0	0	3	56	0	0	0	0	_
7/30/00	Numbers	3	23	0	19	102	4	0	36	316	0	0	0	0	50
0/1/00	Percent	1	5	0	4	20	1	0	7	63	0	0	0	0	4
8/1/00	Numbers	3 1	10 2	0 0	26	174 37	1	0 0	17 4	235 50	2 0	$\begin{array}{c} 0\\ 0\end{array}$	0 0	0 0	40
8/10/00	Percent Numbers	1	$\frac{2}{2}$	1	6 8	71	$0 \\ 2$	0	4 31	205	1	1	0	0	3
	Percent	0	1	0	2	22	1	0	10	63	0	0	0	0	5.
8/13/00	Numbers	1	6	0	19	100	0	1	36	266	0	0	0	0	42
	Percent	0	1	0	4	23	0	0	8	62	0	0	0	0	
8/21/00	Numbers	0	1	0	15	66	3	0	17	159	0	0	0	0	2
	Percent	0	0	0	6	25	1	0	7	61	0	0	0	0	
8/26/00	Numbers	0	7	0	33	121	1	0	55	255	1	0	0	0	4
	Percent	0	1	0	7	26	0	0	12	54	0	0	0	0	
8/30/00	Numbers	0	0	0	21	65	2	2	64	140	4	0	0	2	3
	Percent	0	0	0	7	22	1	1	21	47	1	0	0	1	10
Total	Numbers	18	404	1	388	4,046	40	3	322	3,712	12	1	1	3	8,9
	Percent	0	5	0	4	45	0	0	4	41	0	0	0	0	

Table 24. Sockeye salmon age compositions of Chignik Lagoon commercial and test fishery samples, 2000.

<sup>a</sup> Percentages may not total to 100% due to errors in rounding.
 <sup>b</sup> Sample was collected from the department's test fishery.

Sample	Unknown		Adjusted	Smoothed
Date	Sample Size	Stock	Estimate	Estimate <sup>a</sup>
14 1	109	Diash Laka	1 000	1 000
14 Jun	108	Black Lake Chignik Lake	$1.000 \\ 0.000$	1.000 0.000
		Chighik Lake	0.000	0.000
17 Jun	103	Black Lake	1.000	1.000
		Chignik Lake	0.000	0.000
23 Jun	102	Black Lake	1.000	0.986
23 Juli	102	Chignik Lake	0.000	0.980
		Chighik Lake	0.000	0.014
26 Jun	107	Black Lake	0.957	0.958
		Chignik Lake	0.043	0.042
30 Jun	112	Black Lake	0.918	0.888
		Chignik Lake	0.082	0.112
03 Jul	122	Black Lake	0.789	0.813
		Chignik Lake	0.211	0.187
07 1-1	110		0.722	0.740
07 Jul	112	Black Lake	0.732	0.749
		Chignik Lake	0.268	0.251
09 Jul	108	Black Lake	0.725	0.673
		Chignik Lake	0.275	0.327
12 Jul	102	Black Lake	0.561	0.528
12 Jul	102	Chignik Lake	0.439	0.328
		Chighik Lake	0.+37	0.472
15 Jul	99	Black Lake	0.298	0.446
		Chignik Lake	0.702	0.554
17 Jul	112	Black Lake	0.479	0.374
1 / JUI	114	Chignik Lake	0.521	0.626
		Chighik Lake	0.521	0.020
20 Jul	112	Black Lake	0.345	0.275
		Chignik Lake	0.655	0.725

Table 25. Estimated stock composition of age 1.3 Chignik sockeye salmon from commercial catch and test fishery samples, based on postseason scale pattern analysis, 2000.

<sup>a</sup> Smoothing was done using a three point running average, assuming an initial proportion of 0.0 on May 28 and an ending proportion of 1.0 on July 31 for Chignik Lake.

Sample	Unknown		Adjusted	Smoothed <sup>a</sup>
Date	Sample Size	Stock	Estimate	Estimate
14 Jun	35	Black Lake	1.000	1.000
		Chignik Lake	0.000	0.000
17 Jun	30	Black Lake	1.000	0.993
1 / Juli	50	Chignik Lake	0.000	0.007
			0.000	0.007
23 Jun	43	Black Lake	0.980	0.918
		Chignik Lake	0.020	0.082
		0		
26 Jun	47	Black Lake	0.774	0.847
		Chignik Lake	0.226	0.153
20.1	4.5		0.704	0.025
30 Jun	45	Black Lake	0.786	0.835
		Chignik Lake	0.214	0.165
03 Jul	51	Black Lake	0.944	0.826
00 0 0	01	Chignik Lake	0.056	0.174
		8		
06 Jul	40	Black Lake	0.749	0.759
		Chignik Lake	0.251	0.241
09 Jul	50	Black Lake	0.584	0.661
		Chignik Lake	0.416	0.339
12 Jul	61	Black Lake	0.649	0.616
12 JUI	01	Chignik Lake	0.351	0.384
			0.551	0.364
15 Jul	45	Black Lake	0.614	0.552
		Chignik Lake	0.386	0.448
		0		
17 Jul	86	Black Lake	0.393	0.473
		Chignik Lake	0.607	0.527
20 1 1	<i>c</i> 2		0.410	0.000
20 Jul	62	Black Lake	0.412	0.268
		Chignik Lake	0.588	0.732

Table 26. Estimated stock composition of age 2.3 Chignik sockeye salmon from commercial catch and test fishery samples, based on postseason scale pattern analysis, 2000.

<sup>a</sup> Smoothing was done using a three point running average, assuming an initial proportion of 0.0 on May 28 and an ending proportion of 1.0 on July 31 for Chignik Lake.

	Cumulative	D 11			
Cumulativ	Catch and	Daily		Escapement	
Percen	Escapement	Total	Catch <sup>a,b</sup>	Counts	Date
0.0	0	0	0	0	27-May
0.0	0	0	0	0	28-May
0.0	0	0	0	0	29-May
0.0	0	0	0	0	30-May
0.0	0	0	0	0	31-May
0.0	0	0	0	0	1-Jun
0.0	0	0	0	0	2-Jun
0.0	0	0	0	0	3-Jun
0.0	0	0	0	0	4-Jun
0.0	0	0	0	0	5-Jun
0.0	0	0	0	0	6-Jun
0.0	0	0	0	0	7-Jun
0.0	0	0	0	0	8-Jun
0.0	0	0	0	0	9-Jun
0.0	0	0	0	0	10-Jun
0.0	0	0	0	0	11-Jun
0.0	0	0	0	0	12-Jun
0.0	0	0	0	0	13-Jun
0.0	0 34	0 34	0 32	0 2	14-Jun 15-Jun
0.0			32 99	4	15-Jun 16-Jun
0.0 0.0	137 261	103 124	99 118	4 6	16-Jun 17-Jun
0.0	201 754	493	449	44	17-Juli 18-Jun
0.0	734 946	493 192	55	137	18-Jun 19-Jun
0. 0.1	2,358	1,412	1,219	193	20-Jun
0	4,432	2,074	1,626	448	20-Jun 21-Jun
0.3	6,470	2,038	1,378	660	22-Jun
0.9	8,002	1,532	972	560	23-Jun
1.0	8,615	613	0	613	24-Jun
1.	10,627	2,012	0	2,012	25-Jun
1.:	12,510	1,883	39	1,844	26-Jun
1.3	15,047	2,537	0	2,537	27-Jun
2.	17,052	2,005	0	2,005	28-Jun
2.	24,623	7,571	6,535	1,036	29-Jun
3.	30,340	5,717	5,581	136	30-Jun
4.′	39,350	9,010	8,718	292	1-Jul
5.	49,105	9,755	9,570	185	2-Jul
6.	58,070	8,965	8,811	154	3-Jul
8.	68,403	10,333	9,973	360	4-Jul
10.	84,115	15,712	15,506	206	5-Jul
11.	93,562	9,447	8,946	501	6-Jul
11.9	100,811	7,249	4,596	2,653	7-Jul

Table 27.Daily and cumulative sockeye salmon escapement and catch estimates<br/>as determined by postseason scale pattern analysis for the Chignik<br/>Lake stock (adjusted to Chignik Lagoon date), 2000.

## Table 27. (page 2 of 3)

~	Cumulative	~		_	
Cumulative	Catch and	Daily		Escapement	
Percent	Escapement	Total	Catch <sup>a,b</sup>	Counts	Date
12.7	107,143	6,332	1,927	4,405	8-Jul
13.5	114,427	7,284	217	7,067	9-Jul
14.6	123,725	9,298	0	9,298	10-Jul
16.1	136,318	12,593	0	12,593	11-Jul
17.4	147,223	10,905	524	10,381	12-Jul
18.9	159,246	12,023	0	12,023	13-Jul
20.5	173,309	14,063	0	14,063	14-Jul
28.6	241,299	67,990	59,924	8,066	15-Jul
31.0	261,897	20,598	18,355	2,243	16-Jul
34.2	289,193	27,296	24,555	2,741	17-Jul
36.6	308,959	19,766	11,135	8,631	18-Jul
38.9	328,626	19,667	3,712	15,955	19-Jul
41.1	346,860	18,234	4,720	13,514	20-Jul
45.6	385,175	38,315	16,610	21,705	21-Jul
48.4	408,738	23,563	7,531	16,032	22-Jul
51.1	431,774	23,036	13,833	9,203	23-Jul
55.3	466,904	35,130	31,350	3,780	24-Jul
57.6	486,315	19,411	18,174	1,237	25-Jul
60.5	510,983	24,668	23,556	1,112	26-Jul
62.5	528,306	17,323	15,991	1,332	27-Jul
64.3	542,974	14,668	13,452	1,216	28-Jul
66.1	558,556	15,582	14,767	815	29-Jul
68.3	576,717	18,161	17,064	1,097	30-Jul
69.6	588,098	11,381	10,768	613	31-Jul
70.4	594,483	6,385	2,073	4,312	1-Aug
71.8	606,871	12,388	871	11,517	2-Aug
72.4	611,282	4,411	0	4,411	3-Aug
73.9	624,626	13,344	12,135	1,209	4-Aug
75.4	636,522	11,896	10,889	1,007	5-Aug
76.5	646,136	9,614	8,680	934	6-Aug
77.6	655,213	9,077	8,160	917	7-Aug
78.7	664,660	9,447	7,906	1,541	8-Aug
79.7	673,486	8,826	8,082	744	9-Aug
80.5	680,308	6,822	5,502	1,320	10-Aug
81.6	689,110	8,802	6,697	2,105	11-Aug
83.0	700,835	11,725	10,596	1,129	12-Aug
84.0	709,910	9,075	7,428	1,647	13-Aug
85.2	720,083	10,173	8,812	1,361	14-Aug
86.4	729,940	9,857	8,361	1,496	15-Aug
87.2	736,315	6,375	1,626	4,749	16-Aug
88.0	743,617	7,302	0	7,302	17-Aug
89.4	755,181	11,564	7,552	4,012	18-Aug

## Table 27. (page 3 of 3)

				Cumulative	
	Escapement	Catch and	Cumulative		
Date	Counts	Catch <sup>a,b</sup>	Total	Escapement	Percent
19-Aug	1,365	9,061	10,426	765,607	90.6
20-Aug	885	10,278	11,163	776,770	92.0
21-Aug	604	6,169	6,773	783,543	92.8
22-Aug	819	8,571	9,390	792,933	93.9
23-Aug	2,815	3,885	6,700	799,633	94.7
24-Aug	3,697	497	4,194	803,827	95.2
25-Aug	2,745	4,046	6,791	810,618	96.0
26-Aug	685	6,049	6,734	817,352	96.8
27-Aug	849	7,199	8,048	825,400	97.7
28-Aug	530	5,265	5,795	831,195	98.4
29-Aug	467	3,583	4,050	835,245	98.9
30-Aug	622	2,187	2,809	838,054	99.2
31-Aug	499	1,049	1,548	839,602	99.4
1-Sep	1,982	0	1,982	841,584	99.6
2-Sep	1,025	0	1,025	842,609	99.8
3-Sep	2,072	0	2,072	844,681	100.0

<sup>a</sup> Includes 80% of the catches through July 25 form Cape Igvak and Southeastern District Mainland. Includes department test fish harvest.
 <sup>b</sup> Does not include catch designated for personal or subsistence use.

				Cumulative	
J	Escapement		Daily	Catch and	Cumulative
Date	Counts <sup>a</sup>	Catch b,c	Total	Escapement	Percent
27-May	30	0	30	30	0.0
27-May 28-May	50 60	0	30 60	30 90	0.0
29-May	57	0	57	147	0.0
30-May	439	0	439	586	0.0
31-May	653	0	653	1,239	0.0
1-Jun	900	0	900	2,139	0.0
2-Jun	466	0	466	2,605	0.1
3-Jun	1,015	0	1,015	3,620	0.1
4-Jun	4,268	0	4,268	7,888	0.2
5-Jun	4,133	0	4,133	12,021	0.4
6-Jun	9,941	0	9,941	21,962	1.0
7-Jun	15,000	0	15,000	36,962	1.8
8-Jun	15,000	1,293	16,293	53,255	2.5
9-Jun	15,000	0	15,000	68,255	3.2
10-Jun	15,000	5,480	20,480	88,735	4.2
11-Jun	8,000	133,198	141,198	229,933	10.9
12-Jun	8,000	106,985	114,985	344,918	16.3
12 Jun 13-Jun	10,832	79,900	90,732	435,650	20.6
14-Jun	6,749	90,294	97,043	532,693	25.2
15-Jun	5,215	80,460	85,675	618,368	29.2
16-Jun	5,183	120,356	125,539	743,907	35.2
17-Jun	4,686	91,547	96,233	840,140	39.8
18-Jun	8,053	81,758	89,811	929,951	44.0
19-Jun	14,395	5,760	20,155	950,106	45.0
20-Jun	14,491	91,406	105,897	1,056,003	50.0
20 Jun 21-Jun	25,457	92,428	117,885	1,173,888	55.6
22-Jun	30,117	62,832	92,949	1,266,837	60.0
23-Jun	21,255	36,869	58,124	1,324,961	62.7
24-Jun	15,182	0	15,182	1,340,143	63.5
25-Jun	36,295	0	36,295	1,376,438	65.2
26-Jun	25,787	546	26,333	1,402,771	66.4
27-Jun	27,753	0	27,753	1,430,524	67.7
28-Jun	18,061	0	18,061	1,448,585	68.6
29-Jun	7,952	50,163	58,115	1,506,700	71.3
30-Jun	910	37,422	38,332	1,545,032	73.2
1-Jul	1,690	50,397	52,087	1,597,119	75.6
2-Jul	938	48,420	49,358	1,646,477	78.0
3-Jul	687	39,490	40,177	1,686,654	79.9
4-Jul	1,435	39,754	41,189	1,727,843	81.8
5-Jul	733	55,317	56,050	1,783,893	84.5

Table 28. Daily and cumulative sockeye salmon escapement and catch as determined by postseason scale pattern analysis for the Black Lake stock (adjusted to Chignik Lagoon date), 2000.

-Continued-

Table 28. (page 2 of 2)

				Cumulative	
	Escapement		Daily	Catch and	Cumulative
Date	Counts <sup>a</sup>	Catch b,c	Total	Escapement	Percent
6-Jul	1,612	28,747	30,359	1,814,252	85.9
7-Jul	7,574	13,116	20,690	1,834,942	86.9
8-Jul	10,496	4,594	15,090	1,850,032	87.6
9-Jul	14,239	437	14,676	1,864,708	88.3
10-Jul	15,977	0	15,977	1,880,685	89.0
11-Jul	18,572	0	18,572	1,899,257	89.9
12-Jul	13,198	666	13,864	1,913,121	90.6
13-Jul	13,812	0	13,812	1,926,933	91.2
14-Jul	14,608	0	14,608	1,941,541	91.9
15-Jul	7,578	56,295	63,873	2,005,414	95.0
16-Jul	1,814	14,844	16,658	2,022,072	95.7
17-Jul	1,903	17,053	18,956	2,041,028	96.6
18-Jul	4,941	6,373	11,314	2,052,342	97.2
19-Jul	7,446	1,732	9,178	2,061,520	97.6
20-Jul	5,058	1,767	6,825	2,068,345	97.9
21-Jul	7,143	5,467	12,610	2,080,955	98.5
22-Jul	4,597	2,160	6,757	2,087,712	98.9
23-Jul	2,274	3,417	5,691	2,093,403	99.1
24-Jul	793	6,573	7,366	2,100,769	99.5
25-Jul	216	3,171	3,387	2,104,156	99.6
26-Jul	157	3,329	3,486	2,107,642	99.8
27-Jul	146	1,758	1,904	2,109,546	99.9
28-Jul	98	1,079	1,177	2,110,723	99.9
29-Jul	43	769	812	2,111,535	100.0
30-Jul	28	433	461	2,111,996	100.0

<sup>a</sup> Approximately 200,000 additional sockeye salmon were observed during aerial surveys of Black Lake tributaries.

<sup>b</sup> Includes 80% of the catches through July 25 from Cape Igvak and Southeastern District Mainland. Includes department test fish harvest.

<sup>c</sup> Does not include catch designated for personal or subsistence use.

	Stat.							А	ge Class							
Week	Week		0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	3.2	2.4	3.3	Other	Total <sup>a</sup>
May 24-May 30	22	Number	0	0	12	31	0	430	3	5	105	0	0	0	0	586
		Percent	0	0	2	5.3	0	73.4	0.5	0.9	17.9	0	0	0	0	
May 31-Jun 6	23	Number	0	0	451	1,128	0	15,680	113	169	3,835	0	0	0	0	21,376
		Percent	0	0	2.1	5.3	0	73.4	0.5	0.8	17.9	0	0	0	0	
Jun 7-Jun 13	24	Number	0	0	967	3,073	0	62,206	766	647	19,173	0	0	0	0	86,832
		Percent	0	0	1.1	3.5	0	71.6	0.9	0.7	22.1	0	0	0	0	
Jun 14-Jun 20	25	Number	0	0	3,471	2,054	0	43,359	487	335	9,066	0	0	0	0	58,772
		Percent	0	0	5.9	3.5	0	73.8	0.8	0.6	15.4	0	0	0	0	
Jun 21-Jun 27	26	Number	0	0	14,066	6,916	0	127,112	1,028	839	31,885	0	0	0	0	181,846
		Percent	0	0	7.7	3.8	0	69.9	0.6	0.5	17.5	0	0	0	0	
Jun 28-Jul 4	27	Number	0	0	1,433	882	0	20,293	221	76	8,769	0	0	0	0	31,674
		Percent	0	0	4.5	2.8	0	64.1	0.7	0.2	27.7	0	0	0	0	
Jul 5-Jul 11	28	Number	0	0	3,642	2,622	0	39,046	583	291	23,019	0	0	0	0	69,203
		Percent	0	0	5.3	3.8	0	56.4	0.8	0.4	33.3	0	0	0	0	
Jul 12-Jul 18	29	Number	0	0	3,045	2,192	0	32,642	487	244	19,244	0	0	0	0	57,854
		Percent	0	0	5.3	3.8	0	56.4	0.8	0.4	33.3	0	0	0	0	
Jul 19-Jul 25	30	Number	0	0	1,449	1,043	0	15,531	232	116	9,156	0	0	0	0	27,527
		Percent	0	0	5.3	3.8	0	56.4	0.8	0.4	33.3	0	0	0	0	
Jul 26-Aug 1	31	Number	0	0	25	18	0	265	4	2	157	0	0	0	0	471
		Percent	0	0	5.3	3.8	0	56.3	0.8	0.4	33.3	0	0	0	0	
Total		Number	0	0	28,561	19,959		356,564	3,924		124,409	0	0	0	0	536,141
		Percent	0.0	0.0	5.3	3.7	0.0	66.5	0.7	0.5	23.2	0.0	0.0	0.0	0.0	

Table 29.Black Lake weekly sockeye salmon escapement, by age class, estimated by postseason scale pattern<br/>analysis, 2000.

<sup>a</sup> Approximately 200,000 additional sockeye salmon were observed during aerial surveys of Black Lake tributaries.

							e Class	Ag							Stat.	
Total	Other	3.3	2.4	3.2	2.3	1.4	2.2	1.3	2.1	1.2	0.3	1.1	0.2		Week	Week
386	0	0	0	0	56	2	3	277	0	17	31	0	0	Number	25	Jun 14-Jun 20
	0.0	0.0	0.0	0.0	14.5	0.5	0.8	71.8	0.0	4.4	8.0	0.0	0.0	Percent		
8,674	0	0	0	0	1,675	32	47	5,995	0	309	616	0	0	Number	26	Jun 21-Jun 27
	0.0	0.0	0.0	0.0	19.3	0.4	0.5	69.1	0.0	3.6	7.1	0.0	0.0	Percent		
4,167	0	0	0	0	1,176	10	31	2,643	0	119	188	0	0	Number	27	Jun 28-Jul 4
	0.0	0.0	0.0	0.0	28.2	0.2	0.7	63.4	0.0	2.9	4.5	0.0	0.0	Percent		
36,723	0	0	0	0	12,215	155	309	20,719	0	1,392	1,933	0	0	Number	28	Jul 5-Jul 11
	0.0	0.0	0.0	0.0	33.3	0.4	0.8	56.4	0.0	3.8	5.3	0.0	0.0	Percent		
58,148	0	0	0	0	19,342	245	490	32,807	0	2,204	3,060	0	0	Number	29	Jul 12-Jul 18
	0.0	0.0	0.0	0.0	33.3	0.4	0.8	56.4	0.0	3.8	5.3	0.0	0.0	Percent		
81,426	0	0	0	0	27,085	343	686	45,940	0	3,086	4,286	0	0	Number	30	Jul 19-Jul 25
	0.0	0.0	0.0	0.0	33.3	0.4	0.8	56.4	0.0	3.8	5.3	0.0	0.0	Percent		
10,498	0	0	0	0	3,492	44	88	5,923	0	398	553	0	0	Number	31	Jul 26-Aug 1
	0.0	0.0	0.0	0.0	33.3	0.4	0.8	56.4	0.0	3.8	5.3	0.0	0.0	Percent		
21,536	0	0	0	0	7,164	91	181	12,151	0	816	1,133	0	0	Number	32	Aug 2-Aug 8
	0.0	0.0	0.0	0.0	33.3	0.4	0.8	56.4	0.0	3.8	5.3	0.0	0.0	Percent		
9,802	0	0	0	0	3,260	41	83	5,531	0	371	516	0	0	Number	33	Aug 9-Aug 15
	0.0	0.0	0.0	0.0	33.3	0.4	0.8	56.4	0.0	3.8	5.3	0.0	0.0	Percent		

Table 30. Chignik Lake weekly sockeye salmon escapement, by age class, estimated by postseason scale pattern analysis, 2000.

-Continued-

Table 30. (page 2 of 2)

	Stat.													Ag	e Class	
Week	Week		0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	3.2	2.4	3.3	Other	Total
Aug 16-Aug 22	34	Number	0	0	1,039	748	0	11,135	166	83	6,565	0	0	0	0	19,736
		Percent	0.0	0.0	5.3	3.8	0.0	56.4	0.8	0.4	33.3	0.0	0.0	0.0	0.0	
Aug 23-Aug 29	35	Number	0	0	620	447	0	6,651	99	50	3,921	0	0	0	0	11,788
		Percent	0.0	0.0	5.3	3.8	0.0	56.4	0.8	0.4	33.3	0.0	0.0	0.0	0.0	
Aug 30-Sep 5	36	Number	0	0	326	235	0	3,499	52	26	2,062	0	0	0	0	6,200
		Percent	0.0	0.0	5.3	3.8	0.0	56.4	0.8	0.4	33.3	0.0	0.0	0.0	0.0	
Total		Number	0	0	14,301	10,142	0	153,271	2,235	1,122	88,013	0	0	0	0	269,084
		Percent	0.0	0.0	5.3	3.8	0.0	57.0	0.8	0.4	32.7	0.0	0.0	0.0	0.0	,

	Stat.	_						Age Cl	ass							
Week	Week		0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	3.2	2.4	3.3	Other	Total <sup>a,b,c</sup>
Jun 7-Jun 13	24	Number	0	0	1,094	6,154	0	238,570	2,891	2,145	76,002	0	0	0	0	326,856
		Percent	0.0	0.0	0.3	1.9	0.0	73.0	0.9	0.7	23.3	0.0	0.0	0.0	0.0	
Jun 14-Jun 20	25	Number	0	0	24,647	15,830	0	422,694	5,170	3,248	89,992	0	0	0	0	561,581
		Percent	0.0	0.0	4.4	2.8	0.0	75.3	0.9	0.6	16.0	0.0	0.0	0.0	0.0	
Jun 21-Jun 27	26	Number	0	0	17,157	8,345	0	137,240	1,156	1,210	27,567	0	0	0	0	192,675
		Percent	0.0	0.0	8.9	4.3	0.0	71.2	0.6	0.6	14.3	0.0	0.0	0.0	0.0	
Jun 28-Jul 4	27	Number	0	0	11,023	8,297	0	160,414	2,944	677	82,291	0	0	0	0	265,646
		Percent	0.0	0.0	4.1	3.1	0.0	60.4	1.1	0.3	31.0	0.0	0.0	0.0	0.0	
Jul 5-Jul 11	28	Number	0	0	5,380	3,873	0	57,668	861	430	33,999	0	0	0	0	102,211
		Percent	0.0	0.0	5.3	3.8	0.0	56.4	0.8	0.4	33.3	0.0	0.0	0.0	0.0	
Jul 12-Jul 18	29	Number	0	0	5,012	3,609	0	53,730	802	401	31,677	0	0	0	0	95,231
		Percent	0.0	0.0	5.3	3.8	0.0	56.4	0.8	0.4	33.3	0.0	0.0	0.0	0.0	
Jul 19-Jul 25	30	Number	0	0	1,278	920	0	13,703	205	102	8,079	0	0	0	0	24,287
		Percent	0.0	0.0	5.3	3.8	0.0	56.4	0.8	0.4	33.3	0.0	0.0	0.0	0.0	
Jul 26-Aug 1	31	Number	0	0	388	279	0	4,157	62	31	2,451	0	0	0	0	7,368
		Percent	0.0	0.0	5.3	3.8	0.0	56.4	0.8	0.4	33.3	0.0	0.0	0.0	0.0	
Total		Number	0	0	65,979	47,307	0	1,088,176	14,091	8,244	352,058	0	0	0	0	1,575,855
		Percent	0.0	0.0	4.2	3.0	0.0	69.1	0.9	0.5	22.3	0.0	0.0	0.0	0.0	

Table 31. Weekly sockeye salmon catch bound for Black Lake, by age class, estimated by postseason scale pattern analysis, 2000.

<sup>a</sup> Includes 80% of the catches through July 25 from Cape Igvak and Southeastern District Mainland.
 <sup>b</sup> Does not include catch designated for personal or subsistence use.
 <sup>c</sup> Includes catches from the Chignik Lagoon test fishery.

				Age Class				
	0.3	1.2	2.1	1.3	2.2	1.4	2.3	Total
Black Lake								
Escapement <sup>a</sup>	28,561	19,959	0	356,564	3,924	2,724	124,409	536,141
Catch <sup>b</sup>	65,979	47,307	0	1,088,176	14,091	8,244	352,058	1,575,855
Run	94,540	67,266	0	1,444,740	18,015	10,968	476,467	2,111,996
Percent	4.5	3.2	0.0	68.4	0.9	0.5	22.6	100.0
Chignik Lake								
Escapement	14,301	10,142	0	153,271	2,235	1,122	88,013	269,084
Catch <sup>b</sup>	30,005	21,584	0	327,337	4,992	2,358	189,321	575,597
Run	44,306	31,726	0	480,608	7,227	3,480	277,334	844,681
Percent	5.2	3.8	0.0	56.9	0.9	0.4	32.8	100.0
Total Run								
Escapement <sup>a</sup>	42,862	30,101	0	509,835	6,159	3,846	212,422	805,225
Catch <sup>b</sup>	95,984	68,891	0	1,415,513	19,083	10,602	541,379	2,151,452
Run	138,846	98,992	0	1,925,348	25,242	14,448	753,801	2,956,677
Percent	4.7	3.3	0.0	65.1	0.9	0.5	25.5	100.0

Table 32. Black Lake and Chignik Lake sockeye salmon escapement, catch, and total run estimates, by age class, based on post season scale pattern analysis, 2000.

<sup>a</sup> Approximately 200,000 additional sockeye salmon were observed during aerial surveys of Black Lake tributaries.

<sup>b</sup> Includes 80% of the catches through July 25 from Cape Igvak and Southeastern District Mainland. Does not include catch designated for personal or subsistence use. Includes catches from the Chignik Lagoon test fishery.

														Stat. Week Week		
Total <sup>a,b,c</sup>	Other	3.3	2.4	3.2	2.3	1.4	2.2	1.3	2.1	1.2	0.3	1.1	0.2		k Week	Week
1,972	0	0	0	0	291	11	16	1,415	0	86	153	0	0	Number	0 25	Jun 14-Jun 20
<u>-</u>	0.0	0.0	0.0	0.0	14.8	0.6	0.8	71.8	0.0	4.4	7.8	0.0	0.0	Percent		
4,015	0	0	0	0	577	25	24	2,860	0	172	357	0	0	Number	7 26	Jun 21-Jun 27
	0.0	0.0	0.0	0.0	14.4	0.6	0.6	71.2	0.0	4.3	8.9	0.0	0.0	Percent		
49,188	0	0	0	0	15,345	130	570	29,435	0	1,605	2,103	0	0	Number	4 27	Jun 28-Jul 4
	0.0	0.0	0.0	0.0	31.2	0.3	1.2	59.8	0.0	3.3	4.3	0.0	0.0	Percent		
31,192	0	0	0	0	10,375	131	263	17,599	0	1,182	1,642	0	0	Number	1 28	Jul 5-Jul 11
	0.0	0.0	0.0	0.0	33.3	0.4	0.8	56.4	0.0	3.8	5.3	0.0	0.0	Percent		
114,493	0	0	0	0	38,084	482	964	64,598	0	4,339	6,026	0	0	Number	8 29	Jul 12-Jul 18
	0.0	0.0	0.0	0.0	33.3	0.4	0.8	56.4	0.0	3.8	5.3	0.0	0.0	Percent		
95,930	0	0	0	0	31,909	404	808	54,125	0	3,635	5,049	0	0	Number	.5 30	Jul 19-Jul 25
	0.0	0.0	0.0	0.0	33.3	0.4	0.8	56.4	0.0	3.8	5.3	0.0	0.0	Percent		
97,671	0	0	0	0	32,488	411	822	55,108	0	3,701	5,141	0	0	Number	1 31	Jul 26-Aug 1
	0.0	0.0	0.0	0.0	33.3	0.4	0.8	56.4	0.0	3.8	5.3	0.0	0.0	Percent		
48,641	0	0	0	0	16,180	205	410	27,443	0	1,843	2,560	0	0	Number	8 32	Aug 2-Aug 8
	0.0	0.0	0.0	0.0	33.3	0.4	0.8	56.4	0.0	3.8	5.3	0.0	0.0	Percent		-
55,478	0	0	0	0	18,454	234	467	31,301	0	2,102	2,920	0	0	Number	5 33	Aug 9-Aug 15
	0.0	0.0	0.0	0.0	33.3	0.4	0.8	56.4	0.0	3.8	5.3	0.0	0.0	Percent		

Table 33. Weekly sockeye salmon catch bound for Chignik Lake, by age class, estimated by postseason scale pattern analysis, 2000.

Table 33. (page 2 of 2)

	Stat.													Ag	e Class	
Week V	Veek		0.2	1.1	0.3	1.2	2.1	1.3	2.2	1.4	2.3	3.2	2.4	3.3	Other	Total <sup>a,b,c</sup>
Aug 16-Aug 22	34	Number	0	0	2,277	1,639	0	24,406	364	182	14,389	0	0	0	0	43,257
0 0		Percent	0.0	0.0	5.3	3.8	0.0	56.4	0.8	0.4	33.3	0.0	0.0	0.0	0.0	
Aug 23-Aug 29	35	Number	0	0	1,607	1,157	0	17,221	257	129	10,153	0	0	0	0	30,524
		Percent	0.0	0.0	5.3	3.8	0.0	56.4	0.8	0.4	33.3	0.0	0.0	0.0	0.0	
Aug 30-Sep 05	36	Number	0	0	170	123	0	1,826	27	14	1,076	0	0	0	0	3,236
		Percent	0.0	0.0	5.3	3.8	0.0	56.4	0.8	0.4	33.3	0.0	0.0	0.0	0.0	
Total		Number	0	0	30,005	21,584	0	327,337	4,992	2,358	189,321	0	0	0	0	575,597
		Percent	0.0	0.0	5.2	3.7	0.0	56.9	0.9	0.4	32.9	0.0	0.0	0.0	0.0	

Includes 80% of the catches through July 25 from Cape Igvak and Southeastern District Mainland. Does not include catch designated for personal or subsistence use. Includes catches from the Chignik Lagoon test fishery. а

b

c

Year H 1954 <sup>°</sup> 1955 1956 1957	Escapement 184,953 256,757	Black Lake Catch	Total		hignik Lake			Combined	
1954 <sup>°</sup> 1955 1956	184,953		Total		Catal	Tatal	Esserent		Tatal
1954 1955 1956				Escapement	Catch	Total	Escapement	Catch	Total
1956	256.757	72,334	257,287	277,912	19,232	297,144	462,865	91,566	554,431
	200,101	179,539	436,296	201,409	168,987	370,396	458,166	348,526	806,692
1957	289,096	246,442	535,538	483,024	421,251	904,275	772,120	667,693	1,439,813
	192,479	77,423	269,902	328,779	224,757	553,536	521,258	302,180	823,438
1958	120,862	141,180	262,042	212,594	179,949	392,543	333,456	321,129	654,585
1959	112,226	165,000	277,226	308,645	251,547	560,192	420,871	416,547	837,418
1960	251,567	274,048	525,615	357,230	418,356	775,586	608,797	692,404	1,301,201
1961	140,714	53,852	194,566	254,970	278,609	533,579	395,684	332,461	728,145
1962	167,602	71,562	239,164	324,860	292,528	617,388	492,462	364,090	856,552
1963	332,536	80,258	412,794	200,314	323,080	523,394	532,850	403,338	936,188
1964	137,073	142,380	279,453	166,625	472,510	639,135	303,698	614,890	918,588
1965	307,192	497,018	804,210	163,151	169,576	332,727	470,343	666,594	1,136,937
1966	383,545	87,169	470,714	183,525	162,638	346,163	567,070	249,807	816,877
1967	328,000	154,134	482,134	189,000	350,901	539,901	517,000	505,035	1,022,035
1968	342,343	542,598	884,941	244,836	641,693	886,529	587,179	1,184,291	1,771,470
1969	366,589	263,170	629,759	132,055	235,960	368,015	498,644	499,130	997,774
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 <sup>d</sup>	538,462	610,488	1,148,950	243,729	355,195	598,924	782,191	965,683	1,747,874
1974	364,603	204,722	569,325	313,343	648,283	961,626	677,946	853,005	1,530,951
1975	319,890	7,873	327,763	257,508	417,560	675,068	577,398	425,433	1,002,831
1976	548,953	599,341	1,148,293	281,810	727,043	1,008,854	830,763	1,326,384	2,157,147
1977	364,557	534,198	898,755	328,916	1,602,363	1,931,278	693,473	2,136,561	2,830,034
1978	419,732	940,188	1,359,919	262,815	885,173	1,147,988	682,547	1,825,361	2,507,908
1979	491,467	186,537	678,004	246,349	933,788	1,180,137	737,816	1,120,325	1,858,141
1980	369,580	73,742	443,322	294,481	849,980	1,144,461	664,061	923,722	1,587,783
1981	570,210	800,364	1,370,573	261,239	1,444,365	1,705,605	831,449	2,244,729	3,076,178
1982 <sup>c</sup>	616,117	1,325,041	1,941,158	305,193	451,789	756,982	921,310	1,776,830	2,698,140
1983	426,178	1,128,246	1,554,423	428,034	1,241,369	1,669,404	854,212	2,369,615	3,223,827
1984	597,713	2,919,984	3,517,697	267,861	613,075	880,936	865,574	3,533,059	4,398,633
1985	373,040	654,756	1,027,796	372,798	442,443	815,241	745,838	1,097,199	1,843,037
1986	557,772	1,364,295	1,922,067	215,547	587,561	803,108	773,319	1,951,856	2,725,175
1987	589,299	1,946,938	2,536,237	214,444	419,992	634,436	803,743	2,366,931	3,170,674
1988	420,580	272,074	692,654	255,177	554,304	809,481	675,757	826,379	1,502,136
1989	384,001	234,237	618,238	557,174	929,535	1,486,709	941,175	1,163,772	2,104,947
1990	434,550	582,520	1,017,070	335,860	1,747,435	2,083,295	770,410	2,329,955	3,100,365
1991	662,660	1,711,683	2,374,343	377,438	661,025	1,038,463	1,040,098	2,372,708	3,412,806
1992	360,681	746,341	1,107,022	403,755	777,311	1,181,066	764,436	1,523,652	2,288,088
1993	364,261	926,892	1,291,154	333,116	1,199,050	1,532,166	697,377	2,125,942	2,823,319
1994	769,465	1,595,176	2,364,641	197,444	416,377	613,821	966,909	2,011,553	2,978,462
1995	366,495	666,800	1,033,295	373,425	1,315,862	1,689,287	739,920	1,982,662	2,722,582
1996	464,748	1,688,224	2,152,972	284,389 -Contin	705,657	990,046	749,137	2,393,881	3,143,018

Table 34. Sockeye salmon escapement, catch, and total run for Black Lake, Chignik Lake, and combined runs, based on postseason scale pattern analysis, 1954-2000.

Table 34. (page 2 of 2)

				Escape					
		Black Lake		Cl	hignik Lake			Combined	
Year	Escapement	Catch	Total	Escapement	Catch	Total	Escapement	Catch	Total
1997	396,668	234,492	631,160	378,950	535,191	914,141	775,618	769,683	1,545,301
1998	410,659	313,027	723,686	290,469	816,851	1,107,320	701,128	1,129,878	1,831,006
1999	457,424	2,022,354	2,479,777	258,542	1,723,915	1,982,458	715,966	3,746,269	4,462,235
2000 <sup>e</sup>	536,141	1,575,855	2,111,996	269,084	575,597	844,681	805,225	2,151,452	2,956,677
Average									
1970-79	458,191	524,846	983,037	251,819	692,745	944,565	710,010	1,217,592	1,927,602
1980-89	490,449	1,071,968	1,562,417	317,195	753,441	1,070,636	807,644	1,825,409	2,633,053
1990-99	468,761	1,048,751	1,517,512	323,339	989,867	1,313,206	792,100	2,038,618	2,830,718

<sup>a</sup> Escapement, catch, and total run for Black Lake and Chignik Lake were recalculated in 2001 for all years between 1973-1999, excluding 1982, where stock separation data were not available. The 2001 recalculations were done using stock separation percentages, daily weir counts, and updated fish ticket catch information, including 80% of the Cape Igvak and SEDM harvest through July 25 only. These numbers supersede any previously published numbers. Numbers could not be recalculated for years prior to 1973 because data were not available.

- <sup>b</sup> Does not include personal use or subsistence fish. Includes catches from the Chignik Lagoon test fishery.
- <sup>c</sup> Includes 80% of the catches for the entire season from Cape Igvak and SEDM for years between 1954-1972 and 1982.
- <sup>d</sup> From 1973 to the present, includes 80% of the catch from Cape Igvak and SEDM through July 25 only.
- <sup>e</sup> Approximately 200,000 additional sockeye salmon were observed during aerial surveys of Black Lake tributaries.

-	Chin		Avg.		keye	Avg.	Co		Avg.	Piı		Avg.	Chu		Avg.
Year <sup>a</sup>	Number	Pounds	Weight	Number	Pounds	Weight	Number	Pounds	Weight	Number	Pounds	Weight	Number	Pounds	Weight
Chignik	Bay Distri	ct													
1983	3,560	80,193	22.5	1,597,059	10,536,850	6.6	29,519	250,786	8.5	27,284	97,222	3.6	16,747	130,154	7.8
1984	3,696	93,096	25.2	1,942,822	13,579,107	7.0	72,722	658,240	9.1	165,178	670,923	4.1	8,173	61,159	7.5
1985	1,810	43,396	24.0	812,605	4,820,590	5.9	156,579	1,431,798	9.1	14,429	55,900	3.9	4,906	31,307	6.4
1986	2,592	60,723	23.4	1,389,172	9,488,499	6.8	60,197	481,706	8.0	191,264	767,714	4.0	18,167	134,735	7.4
1987	1,931	42,848	22.2	1,559,757	11,508,187	7.4	77,333	654,640	8.5	13,887	51,855	3.7	5,163	38,429	7.4
1988	4,331	96,241	22.2	529,540	3,873,621	7.3	94,292	819,677	8.7	119,794	460,519	3.8	7,013	55,911	8.0
1989	3,532	76,491	21.7	1,156,782	7,950,548	6.9	68,231	559,127	8.2	27,691	94,218	3.4	1,587	11,546	7.3
1990	3,719	80,915	21.8	1,400,069	9,374,800	6.7	61,260	497,901	8.1	94,528	319,928	3.4	11,460	77,739	6.8
1991	1,996	47,206	23.7	1,487,421	10,196,187	6.9	56,574	481,741	8.5	76,163	231,960	3.0	17,545	115,553	6.6
1992	3,181	67,840	21.3	792,889	5,177,003	6.5	80,946	676,752	8.4	178,105	729,324	4.1	12,711	79,207	6.2
1993	5,240	85,848	16.4	762,730	4,675,799	6.1	48,808	349,816	7.2	55,909	174,334	3.1	8,116	44,235	5.5
1994	1,808	36,773	20.3	908,042	5,696,656	6.3	70,541	669,451	9.5	59,425	261,622	4.4	25,250	174,189	6.9
1995	3,008	76,580	25.5	1,083,707	7,335,791	6.8	54,646	460,937	8.4	106,939	416,116	3.9	14,588	114,029	7.8
1996	1,579	38,326	24.3	1,003,683	7,915,161	7.9	45,361	416,985	9.2	1,523	5,861	3.8	639	5,140	8.0
1997	1,296	25,997	20.1	406,763	2,579,448	6.3	32,847	298,021	9.1	1,523	5,861	3.8	639	5,140	8.0
1998	1,721	31,397	18.2	621,868	3,751,669	6.0	23,063	223,668	9.7	26,054	100,971	3.9	7,352	55,053	7.5
1999	2,101	38,372		2,356,122	15,740,123	6.7	23,144	177,906	7.7	59,001	178,705	3.0	12,147	96,377	7.9
2000	581	12,762			10,363,643	7.8	11,620	99,559	8.6	28,067	97,256	3.5	8,389	66,917	8.0
	e Weight (	Fen Year													
1990-199	99		20.9			6.6			8.6			3.7			7.2
All othe	er Districts	ł													
1983	1,928	15,966	8.3	227,116	1,389,979	6.1	32,408	237,417	7.3	293,894	1,103,666	3.8	142,665	1,075,112	7.5
1984	622	6,471	10.4	717,797	4,957,180	6.9	37,406	291,725	7.8	279,626	980,326	3.5	55,130	424,808	7.7
1985	78	1,508	19.3	109,546	629,469	5.7	34,609	278,049	8.0	145,699	587,831	4.0	17,900	113,974	6.4
1986	445	6,049	13.6	256,662	1,766,361	6.9	56,436	385,489	6.8	455,861	1,606,597	3.5	158,473	1,169,683	7.4
1987	720	6,634	9.2	339,081	2,493,527	7.4	73,081	535,163	7.3	232,888	847,705	3.6	122,098	905,512	7.4
1988	2,965	32,639	11.0	266,301	1,840,831	6.9	276,128	2,069,750	7.5		10,262,986	3.6	260,762	2,140,466	8.2
1989	10	207	20.7	2,505	18,732	7.5	2	13	6.5	21	51	2.4	37	342	9.2
1990	6,182	53,350	8.6	693,581	4,434,969	6.4	68,871	435,844	6.3	455,480	1,355,716	3.0	258,544	1,679,280	6.5
1991	1,161	19,497	16.8	408,244	2,748,265	6.7	109,051	701,216	6.4	1,093,085	3,125,671	2.9	243,551	1,560,646	6.4
1992	7,651	70,250	9.2	484,560	3,195,899	6.6	,	1,685,939	7.3	1,375,968	5,069,835	3.7	209,423	1,513,119	7.2
1993	14,275	148,405	10.4	934,621	5,586,833	6.0		1,111,428	6.2	1,592,468	5,139,463	3.2	114,244	691,812	6.1
1994	2,111	35,092	16.6	710,931	4,449,179	6.3		1,327,375	8.0	371,638	1,233,037	3.3	202,026	1,456,822	7.2
1995	2,253	34,607	15.4	640,338	4,186,530	6.5	225,959	1,601,149	7.1	1,951,059	6,934,270	3.6	366,361	2,700,958	7.4
							-Cor	tinued-							

Table 35.Comparison of average weights of salmon, based on weights from fish tickets, caught in the Chignik Bay<br/>District and all other districts combined, 1983-2000.

Table 35. (page 2 of 2)

	Chin	ook	Avg.	Soci	keye	Avg.	Co	ho	Avg.	Pi	nk	Avg.	Ch	um	Avg.
Year <sup>a</sup>	Number	Pounds	Weight	Number	Pounds	Weight	Number	Pounds	Weight	Number	Pounds	Weight	Number	Pounds	Weight
1996	1,526	24,277	15.9	954,670	6,987,584	7.3	147,865	1,068,962	7.2	182,283	530,357	2.9	99,152	774,700	7.8
1997	1,736	21,227	12.2	362,920	2,281,141	6.3	58,061	458,488	7.9	842,908	2,778,472	3.3	155,266	1,191,859	7.7
1998	2,674	35,133	13.1	432,304	2,686,381	6.2	106,449	822,155	7.7	750,934	2,485,055	3.3	121,489	862,595	7.1
1999	1,195	17,725	14.8	760,379	4,790,393	6.3	66,266	408,206	6.2	1,639,650	4,396,947	2.7	904,866	2,595,937	7.0
2000	2,011	21,995	10.9	447,976	3,302,581	7.4	111,602	843,977	7.6	399,997	1,085,748	2.7	112,568	966,748	8.6
Average	e Weight (1	Fen Year	Average)												
1990-99	40,764	459,563	11.3	6,382,548	41,347,174	6.5	1,359,833	9,620,762	7.1	10,255,473	33,048,823	3.2	2,674,922	15,027,728	5.6

<sup>a</sup> Does not include salmon caught for personal use or subsistence. Does not include salmon caught at Cape Igvak or Southeastern District Mainland considered by regulation as destined to Chignik. Does include salmon caught in the Department's test fishery.

V	Courte a.b	Ec.d	Deer	V	Catal ab	E	Deer
Year	Catch <sup>a,b</sup>	Escapement c,d	Run	Year	Catch <sup>a,b</sup>	Escapement c,d	Run
10/0	267	20.0		1000	02.0	2.4	05.4
1962	36.7	30.0	66.7	1982	83.0	2.4	85.4
1963	63.7	20.7	84.4	1983	27.3	1.0	28.3
1964	123.6	20.0	143.6	1984	165.2	123.2	288.4
1965	31.5	11.0	42.5	1985	14.4	0.0	14.4
1966	18.3	71.3	89.6	1986	191.3	0.0	191.3
1967	27.4	5.7	33.1	1987	13.9	0.0	13.9
1968	230.2	81.4	311.6	1988	119.8	22.4	142.2
1969	29.5	11.7	41.2	1989	27.7	13.5	41.2
1970	46.3	43.6	89.9	1990	94.5	6.0	100.5
1971	65.3	5.5	70.8	1991	76.2	12.2	88.4
1972	31.6	5.8	37.4	1992	178.2	55.8	234.0
1973	22.7	2.2	24.9	1993	55.9	2.0	57.9
1974	33.5	4.0	37.5	1994	59.4	75.8	135.2
1975	27.4	1.2	28.6	1995	106.9	180.5	287.4
1976	108.8	12.3	121.1	1996	1.5	43.1	44.6
1977	60.9	3.0	63.9	1997	39.5	59.4	98.9
1978	137.1	10.7	147.8	1998	26.1	24.4	50.5
1979	312.4	1.2	313.6	1999	59.0	37.3	96.3
1980	180.9	3.0	183.9	2000	28.1	27.4	55.5
1981	121.4	1.4	122.8				
				Average			
				1970-79	84.6	9.0	93.6
				1980-89	94.5	16.7	111.2
				1990-99	69.7	49.7	119.4
				-			

Table 36. Pink salmon catch, estimated escapement, and estimated run numbers (in thousands of fish) in the Chignik Bay District, 1962-2000.

<sup>b</sup> Personal use or other subsistence fish are not included.

<sup>c</sup> Chignik River salmon escapement was incompletely monitored all years except 1996-2000 when the weir was installed until September 4.

Year	Catch <sup>a,b</sup>	Escapement <sup>c</sup>	Run	Year	Catch <sup>a,b</sup>	Escapement <sup>c</sup>	Run
1962	84.3	83.9	168.2	1982	80.6	26.1	106.7
1963	121.3	92.6	213.9	1983	7.9	11.0	18.9
1964	71.9	131.1	203.0	1984	47.3	94.0	141.3
1965	69.5	65.8	135.3	1985	16.1	7.4	23.5
1966	17.4	62.6	80.0	1986	44.1	121.9	166.0
1967	26.0	18.5	44.5	1987	7.8	65.7	73.5
1968	45.4	66.1	111.5	1988	318.4	216.4	534.8
1969	1.4	69.6	71.0	1989	0.0	215.0	215.0
1970	27.9	60.7	88.6	1990	233.7	131.9	365.6
1971	20.5	74.8	95.3	1991	174.0	201.1	375.1
1972	0.8	3.1	3.9	1992	205.7	223.8	429.5
1973	0.3	50.2	50.5	1993	198.5	160.9	359.4
1974	22.1	9.8	31.9	1994	99.1	178.9	278.0
1975	31.3	26.4	57.7	1995	469.7	715.5	1,185.2
1976	16.6	66.0	82.6	1996	15.8	237.1	252.9
1977	120.0	199.9	319.9	1997	600.0	594.6	1,194.6
1978	61.2	101.2	162.4	1998	233.7	210.9	444.6
1979	284.4	297.0	581.4	1999	664.2	374.3	1,038.5
1980	108.7	99.4	208.1	2000	271.4	163.7	435.1
1981	210.0	76.5	286.5				
				Average			
				1970-79	58.5	88.9	147.4
				1980-89	84.1	93.3	177.4
				1990-99	289.4	302.9	592.3

Table 37. Pink salmon catch, estimated escapement, and estimated run numbers (in thousands of fish) in the Central District, 1962-2000.

<sup>b</sup> Personal use or other subsistence fish are not included.

<b>X</b> 7	a lab		P	37			D
Year	Catch <sup>a,b</sup>	Escapement <sup>c</sup>	Run	Year	Catch "	<sup>°</sup> Escapement <sup>°</sup>	Run
10.60	1 100 0			1000	00.1	201.5	<b>2</b> 00 f
1962	1,109.9	401.7	1,511.6	1982	89.1	301.5	390.6
1963	26.9	126.2	153.1	1983	7.8	46.3	54.1
1964	1,251.5	605.7	1,857.2	1984	57.7	486.5	544.2
1965	25.7	64.8	90.5	1985	6.6	212.1	218.7
1966	386.2	302.2	688.4	1986	49.6	580.7	630.3
1967	22.6	56.1	78.7	1987	2.1	215.6	217.7
1968	523.4	390.3	913.7	1988	1,006.4	1,005.4	2,011.8
1969	1.7	46.0	47.7	1989	0.0	881.0	881.0
1970	268.9	201.7	470.6	1990	40.6	811.4	852.0
1971	29.0	23.0	52.0	1991	28.0	125.0	153.0
1972	12.9	15.9	28.8	1992	183.1	1,318.1	1,501.2
1973	2.5	12.8	15.3	1993	59.3	524.7	584.0
1974	0.6	76.2	76.8	1994	13.0	863.3	876.3
1975	0.0	23.5	23.5	1995	8.6	1,399.3	1,407.9
1976	28.8	228.8	257.6	1996	7.2	1,059.6	1,066.8
1977	0.2	76.0	76.2	1997	72.3	1,287.7	1,360.0
1978	86.8	309.3	396.1	1998	66.7	1273.2	1,339.9
1979	292.4	194.3	486.7	1999	40.6	615.1	655.7
1980	472.5	425.5	898.0	2000	10.5	793.1	803.6
1981	173.3	154.7	328.0				
				Average			
				1970-79	72.2	116.2	188.4
				1980-89	186.5	430.9	617.4
				1990-99	51.9	927.7	979.7

Table 38. Pink salmon catch, estimated escapement, and estimated run numbers (in<br/>thousands of fish) in the Eastern District, 1962-2000.

<sup>b</sup> Personal use or other subsistence fish are not included.

Year	Catch <sup>a,b</sup>	Escapement <sup>c</sup>	Run	Year	Catch <sup>a,1</sup>	<sup>b</sup> Escapement <sup>c</sup>	Run
1062	01.0	242.0	222.0	1002	(02.4	45.0	(10.2
1962	81.0	242.0	323.0	1982	602.4	45.9	648.3
1963	516.9	305.0	821.9	1983	164.3	36.0	200.3
1964	112.9	165.0	277.9	1984	173.8	188.0	361.8
1965	345.6	152.0	497.6	1985	80.6	67.5	148.1
1966	173.2	179.3	352.5	1986	200.8	43.8	244.6
1967	27.1	104.4	131.5	1987	187.7	38.3	226.0
1968	295.6	151.3	446.9	1988	1,141.4	232.4	1,373.8
1969	485.0	422.0	907.0	1989	0.0	57.9	57.9
1970	442.7	202.0	644.7	1990	135.8	44.3	180.1
1971	285.4	268.8	554.2	1991	419.3	96.8	516.1
1972	14.9	8.6	23.5	1992	628.9	38.8	667.7
1973	0.0	62.4	62.4	1993	685.6	45.8	731.4
1974	13.4	77.4	90.8	1994	174.6	111.6	286.2
1975	7.4	141.7	149.1	1995	791.7	554.7	1,346.4
1976	135.8	114.2	250.0	1996	100.9	220.8	321.7
1977	379.0	355.5	734.5	1997	118.9	306.3	425.2
1978	419.3	333.4	752.7	1998	343.2	150.4	493.6
1979	744.6	185.0	929.6	1999	771.4	137.9	909.3
1980	216.5	139.5	356.0	2000	106.1	142.6	248.7
1981	433.6	249.3	682.9				
				Average			
				1970-79	244.3	174.9	419.2
				1980-89	320.1	109.9	430.0
				1990-99	417.0	170.7	587.8
				1//0///	11,10	1,0.1	207.0

Table 39.Pink salmon catch, estimated escapement, and estimated run numbers (in<br/>thousands of fish) in the Western District, 1962-2000.

<sup>b</sup> Personal use or other subsistence fish are not included.

Year	Catch <sup>a,b</sup>	Escapement <sup>c</sup>	Run	Year	Catch <sup>a,</sup>	<sup>b</sup> Escapement <sup>c</sup>	Run
				1.000	cuton	p	
1962	207.4	155.5	362.9	1982	18.3	13.4	31.7
1963	933.6	162.0	1,095.6	1983	113.9	64.5	178.4
1964	122.6	72.0	194.6	1984	0.8	109.8	110.6
1965	644.8	82.0	726.8	1985	42.5	235.2	277.7
1966	88.2	90.0	178.2	1986	161.3	180.5	341.8
1967	5.2	155.3	160.5	1987	35.3	65.7	101.0
1968	196.1	128.7	324.8	1988	411.2	181.3	592.5
1969	1,262.2	218.6	1,480.8	1989	0.0	267.4	267.4
1970	371.4	72.6	444.0	1990	45.4	88.4	133.8
1971	212.1	45.0	257.1	1991	471.9	343.5	815.4
1972	12.0	7.8	19.8	1992	358.2	190.4	548.6
1973	0.0	31.5	31.5	1993	649.1	448.4	1,097.5
1974	0.0	60.2	60.2	1994	84.9	153.9	238.8
1975	0.0	45.3	45.3	1995	681.0	582.1	1,263.1
1976	105.2	89.3	194.5	1996	58.5	395.7	454.2
1977	44.6	115.4	160.0	1997	13.8	221.5	235.3
1978	280.8	157.5	438.3	1998	107.3	222.8	330.1
1979	271.4	181.3	452.7	1999	163.5	179.7	343.2
1980	114.6	74.8	189.4	2000	11.9	86.2	98.1
1981	224.3	116.0	340.3				
				Average			
				1970-79	129.8	80.6	210.3
				1980-89	112.2	130.9	243.1
				1990-99	263.4	282.6	546.0

Table 40.Pink salmon catch, estimated escapement, and estimated run numbers (in<br/>thousands of fish) in the Perryville District, 1962-2000.

<sup>b</sup> Personal use or other subsistence fish are not included.

Year	Catch <sup>a,b</sup>	Escapement c,d	Run	Year	Catch <sup>a,b</sup>	Escapement c,d	Run
1962	5.2	6.7	11.9	1982	16.0	1.4	17.4
1963	5.3	0.8	6.1	1983	16.7	0.1	16.8
1964	8.5	2.5	11.0	1984	8.2	0.3	8.5
1965	1.2	3.0	4.2	1985	4.9	0.0	4.9
1966	6.6	4.5	11.1	1986	18.2	0.0	18.2
1967	5.9	4.0	9.9	1987	5.2	0.1	5.3
1968	5.4	1.0	6.4	1988	7.0	15.3	22.3
1969	2.9	1.5	4.4	1989	1.6	4.2	5.8
1970	1.7	21.0	22.7	1990	11.5	1.5	13.0
1971	19.4	7.1	26.5	1991	17.5	0.0	17.5
1972	18.2	3.3	21.5	1992	12.7	0.1	12.8
1973	7.3	0.7	8.0	1993	8.1	0.3	8.4
1974	17.3	2.1	19.4	1994	25.3	1.5	26.8
1975	21.2	2.1	23.3	1995	14.6	10.3	24.9
1976	19.2	2.4	21.6	1996	0.6	16.4	17.0
1977	8.6	2.0	10.6	1997	21.0	18.5	39.5
1978	15.0	2.1	17.1	1998	7.4	4.5	11.9
1979	32.2	1.6	33.8	1999	12.2	2.3	14.5
1980	19.9	0.3	20.2	2000	8.4	7.1	15.5
1981	38.1	0.5	38.6				
				Average			
				1970-79	16.0	4.4	20.5
				1980-89	13.6	2.2	15.8
				1990-99	13.1	5.5	18.6

Table 41.Chum salmon catch, estimated escapement, and estimated run numbers (in<br/>thousands of fish) in the Chignik Bay District, 1962-2000.

<sup>b</sup> Personal use or other subsistence fish are not included.

<sup>c</sup> Chignik River salmon escapement was incompletely monitored all years except 1996-1999 when the weir was installed until September 4.

Year	Catch <sup>a,t</sup>	<sup>c</sup> Escapement <sup>c</sup>	Run	Year	Catch <sup>a,b</sup>	Escapement <sup>c</sup>	Run
1000	Cuton	Liseupennent	Itun	1000	Cuton	Liseupenient	11011
1962	132.0	40.4	172.4	1982	33.7	49.4	83.1
1963	23.1	34.0	57.1	1983	9.8	17.0	26.8
1964	50.3	24.2	74.5	1984	8.2	35.4	43.6
1965	37.8	19.2	57.0	1985	5.2	9.6	14.8
1966	20.9	10.0	30.9	1986	29.5	31.0	60.5
1967	9.9	17.2	27.1	1987	9.4	17.5	26.9
1968	4.2	14.5	18.7	1988	39.3	55.8	95.1
1969	3.2	6.5	9.7	1989	0.0	34.7	34.7
1970	28.6	23.4	52.0	1990	113.7	28.0	141.7
1971	13.7	29.1	42.9	1991	51.4	18.0	69.4
1972	1.6	14.2	15.8	1992	45.5	173.1	218.6
1973	0.2	12.2	14.4	1993	43.0	39.4	82.4
1974	13.5	18.1	31.6	1994	69.6	102.6	172.2
1975	3.2	18.8	22.0	1995	107.1	44.5	151.6
1976	3.4	17.8	21.2	1996	26.1	45.1	71.2
1977	8.9	9.3	18.2	1997	103.4	65.7	169.1
1978	10.3	13.8	24.1	1998	43.0	32.0	75.0
1979	11.4	44.8	56.2	1999	75.5	32.4	107.9
1980	38.9	34.2	73.1	2000	66.9	29.5	96.4
1981	160.7	26.1	186.8				
				Average			
				1970-79	9.5	20.2	29.8
				1980-89	33.5	31.1	64.5
				1990-99	67.8	58.1	125.9

Table 42.Chum salmon catch, estimated escapement, and estimated run numbers (in<br/>thousands of fish) in the Central District, 1962-2000.

<sup>b</sup> Personal use or other subsistence fish are not included.

Year	Catch <sup>a,b</sup>	Escapement <sup>c</sup>	Run	Year	Catch <sup>a,t</sup>	<sup>c</sup> Escapement <sup>c</sup>	Run
		F					
1962	74.7	79.6	154.3	1982	64.5	145.4	209.9
1963	20.5	55.2	75.7	1983	8.3	50.2	58.5
1964	242.7	165.4	408.1	1984	21.1	214.7	235.8
1965	32.4	58.0	90.4	1985	0.9	4.9	5.8
1966	130.1	58.0	188.1	1986	17.9	8.5	26.4
1967	24.4	89.8	114.2	1987	8.9	38.3	47.2
1968	110.1	63.0	173.1	1988	77.5	221.9	299.4
1969	3.7	66.5	70.2	1989	0.0	74.3	74.3
1970	241.1	126.0	367.1	1990	27.5	139.7	167.2
1971	102.3	219.2	321.5	1991	4.9	70.4	75.3
1972	27.7	107.4	135.1	1992	61.2	306.9	368.1
1973	1.2	59.1	60.3	1993	21.4	135.2	156.6
1974	0.3	76.3	76.5	1994	4.3	129.2	133.5
1975	0.0	41.3	41.3	1995	8.0	112.8	120.8
1976	10.0	122.3	132.3	1996	19.7	130.5	150.2
1977	1.5	54.5	56.0	1997	11.4	290.0	301.4
1978	17.5	55.8	73.3	1998	5.2	97.7	102.9
1979	36.1	79.5	115.6	1999	11.3	167.1	178.4
1980	56.8	107.0	163.8	2000	8.0	209.2	217.2
1981	108.7	126.0	234.7				
				Average			
				1970-79	43.8	94.1	137.9
				1980-89	36.5	99.1	135.6
				1990-99	17.5	158.0	175.4

Table 43.Chum salmon catch, estimated escapement, and estimated run numbers (in<br/>thousands of fish) in the Eastern District, 1962-2000.

<sup>b</sup> Personal use or other subsistence fish are not included.

		_	_				_
Year	Catch <sup>a,b</sup>	Escapement <sup>c</sup>	Run	Year	Catch <sup>a,b</sup>	Escapement <sup>c</sup>	Run
1962	134.4	83.1	217.5	1982	253.3	35.4	288.7
1963	44.7	10.0	54.7	1983	102.0	20.1	122.1
1964	21.2	37.0	58.2	1984	25.4	73.8	99.2
1965	36.4	25.0	61.4	1985	10.7	34.6	45.3
1966	73.8	12.0	85.8	1986	74.1	5.3	79.4
1967	33.6	24.0	57.6	1987	86.9	19.7	106.6
1968	90.1	9.6	99.7	1988	102.7	27.4	130.1
1969	36.8	27.6	64.4	1989	0.0	7.4	7.4
1970	139.6	49.7	189.3	1990	91.6	28.8	120.4
1971	177.5	184.1	361.6	1991	98.6	38.1	136.7
1972	18.5	59.0	77.5	1992	65.5	53.3	118.8
1973	0.0	35.6	35.6	1993	25.0	14.0	39.0
1974	3.2	39.4	42.6	1994	94.1	23.0	117.1
1975	0.8	43.4	44.2	1995	158.3	45.7	204.0
1976	33.1	55.0	88.1	1996	36.3	44.5	80.8
1977	88.0	70.4	158.4	1997	17.1	60.5	77.6
1978	46.0	27.3	73.3	1998	41.4	30.6	72.0
1979	82.3	42.5	124.8	1999	37.1	16.3	53.4
1980	91.9	56.5	148.4	2000	34.8	16.1	50.9
1981	221.6	70.3	291.9				
				Average			
				1970-79	58.9	60.6	119.5
				1980-89	96.9	35.1	131.9
				1990-99	66.5	35.5	102.0

Table 44.Chum salmon catch, estimated escapement, and estimated run numbers (in<br/>thousands of fish) in the Western District, 1962-2000.

<sup>b</sup> Personal use or other subsistence fish are not included.

Year	Catch <sup>a,b</sup> E	scapement <sup>c</sup>	Run	Year	Catch <sup>a,b</sup>	Escapement <sup>c</sup>	Run
1.041		see persone	1.0011	1.000	cutth	2.5000000000000000000000000000000000000	11011
1962	17.9	10.5	28.4	1982	22.6	23.6	46.2
1963	19.1	7.0	26.1	1983	22.6	8.2	30.8
1964	10.6	26.0	36.6	1984	0.5	46.0	46.5
1965	12.8	7.0	19.8	1985	1.1	12.9	14.0
1966	7.9	20.4	28.3	1986	37.0	7.7	44.7
1967	1.7	5.7	7.4	1987	16.9	9.8	26.7
1968	14.0	1.8	15.8	1988	41.2	41.4	82.6
1969	21.1	1.0	22.1	1989	0.0	15.9	15.9
1970	26.3	13.0	39.3	1990	25.7	55.8	81.5
1971	40.9	30.0	70.9	1991	88.6	343.2	431.8
1972	12.3	11.5	23.8	1992	37.2	40.3	77.5
1973	0.0	9.3	9.3	1993	24.7	66.8	91.5
1974	0.0	12.5	12.5	1994	34.0	126.0	160.0
1975	0.0	20.5	20.5	1995	93.0	134.6	227.6
1976	15.7	8.9	24.6	1996	17.0	132.0	149.0
1977	3.4	15.4	18.8	1997	3.0	152.8	155.8
1978	32.1	5.3	37.4	1998	31.8	214.5	246.3
1979	26.9	12.8	39.7	1999	4.5	117.3	121.8
1980	45.0	29.1	74.1	2000	2.8	48.5	51.3
1981	51.3	19.3	70.6				
				Average			
				1970-79	15.8	13.9	29.7
				1980-89	23.8	21.4	45.2
				1990-99	36.0	138.3	174.3

Table 45.Chum salmon catch, estimated escapement, and estimated run numbers (in<br/>thousands of fish) in the Perryville District, 1962-2000.

<sup>b</sup> Personal use or other subsistence fish are not included.

				Estimated							
	Number	of Permits <sup>a</sup>	Percentage	Number	Percentage	Estimated Harvests					
Year	Issued	Returned	Returned	Fished	Fished	Chinook	Sockeye	Coho	Pink	Chum	Total
								·			
1976						100	6,000	1,500	500	150	8,250
1977						50	9,700	2,400	1,800	600	14,550
1978						50	6,000	500	2,100	600	9,250
1979						14	7,750	34	262	0	8,060
1980	82	37	45.1%	70.0	85.4%	6	12,475	32	478	169	13,160
1981	29	7	24.1%	18.0	62.1%	0	2,049	0	0	0	2,049
1982	59	15	25.4%	56.0	94.9%	3	8,532	12	2	0	8,548
1983	32	21	65.6%	26.5	82.8%	0	3,078	1,319	1,250	850	6,497
1984	77	64	83.1%	57.7	74.9%	23	8,747	464	330	204	9,768
1985	59	48	81.4%	49.0	83.1%	1	7,177	50	26	25	7,279
1986	74	38	51.4%	70.0	94.6%	4	10,347	205	98	77	10,730
1987	NA	NA	NA	NA	NA	10	7,021	278	204	261	7,774
1988	80	34	42.5%	77.0	96.3%	9	9,073	1,455	54	142	10,733
1989	68	23	33.8%	46.8	68.8%	24	7,552	384	81	147	8,187
1990	72	23	31.9%	62.0	86.1%	103	8,099	210	470	115	8,996
1991	95	58	61.1%	83.0	87.4%	42	11,483	13	275	81	11,893
1992	98	19	19.4%	85.8	87.5%	55	8,648	709	305	145	9,862
1993	202	141	69.8%	163.6	81.0%	122	14,710	3,765	1,265	642	20,503
1994	219	122	55.7%	159.9	73.0%	165	13,978	4,055	1,720	382	20,300
1995	111	95	85.6%	95.2	85.8%	98	9,563	1,191	723	150	11,725
1996	119	104	87.4%	104.1	87.5%	48	7,357	2,126	2,204	355	12,090
1997	126	103	81.7%	118.7	94.2%	28	13,442	2,678	2,035	840	19,023
1998	104	72	69.2%	89.6	86.2%	91	7,750	1,390	1,007	186	10,424
1999	106	88	83.0%	99.1	93.5%	243	9,040	1,679	1,191	136	12,290
2000	130	112	86.2%	111.0	85.4%	163	9,516	1,783	1,154	517	13,132
Avg.	97.1	61.2	63.0%	80.6	83.0%	58	8,763	1,129	781	271	11,003
Avg.											
1993-00	139.6	104.6	74.9%	117.7	84.3%	120	10,669	2,333	1,412	401	14,936

Table 46.Estimated subsistence harvests of salmon in the Chignik Management Area,<br/>1976 - 2000.

In 1993, the Division of Subsistence, ADF&G, obtained copies of all available subsistence permits for the Chignik Management Area from the Division of Commercial Fisheries archive in Kodiak. Permits issued prior to 1980 and for 1987 could not be located. All permit data were entered into a data base. The estimated harvests reported in this table differ slightly from that reported in earlier annual management reports for several reasons. There are small discrepancies in some years for the number of permits issued or returned. Estimated harvests in earlier annual management reports were based on a simple expansion from harvests reported on returned permits to the total number of permits issued. Harvest estimates in this table are based on the sum of expanded community harvest estimates, similar to the method used in the Bristol Bay and Alaska Peninsula Management Areas. Since 1993, the Division of Subsistence has been responsible for permit data entry and harvest estimates for the Chignik Management Area. Increases in permits issued beginning in 1993, and consequently higher harvest estimates, reflect the use of local vendors to issue permits and post-season surveys by department staff and local research assistants.

Sources: Quimby and Owen 1994:90, for 1976 - 1979 and 1987; Division of Subsistence, ADF&G, Chignik Subsistence Salmon Permit Database, Anchorage, for the remaining years.

Catch	Fishing Effort		Number of Salmon						
Date	Permits Landings		Chinook	Sockeye	Coho	Pink	Chum		
3-Jul	1	1	3	0	0	0	0		
5-Jul	1	1	3	0	0	0	0		
6-Jul	3	3	14	0	0	0	0		
Total	5	5	20	0	0	0	0		

Table 47.Number of permits, landings, and salmon species harvested for personal use in<br/>the commercial salmon fishery in the Chignik Management Area, 2000.

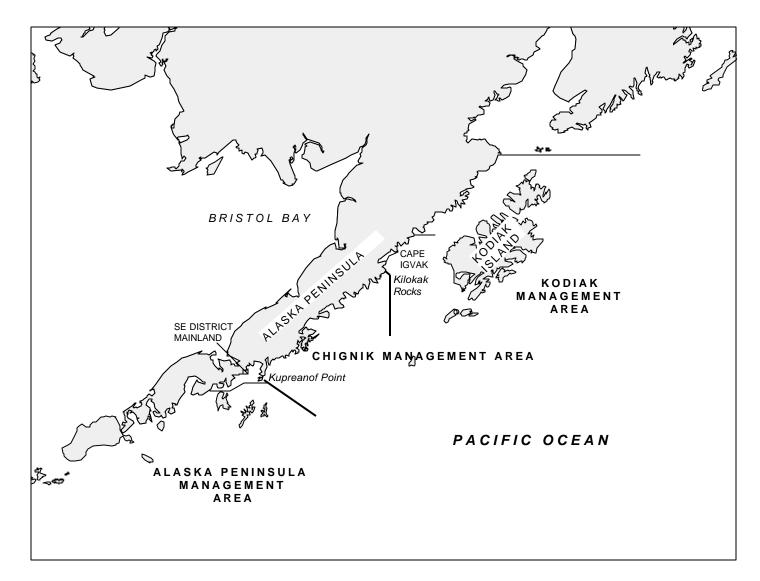


Figure 1. Map of the Alaska Peninsula illustrating the relative locations of the Chignik, Kodiak, and Alaska Peninsula Management Areas.

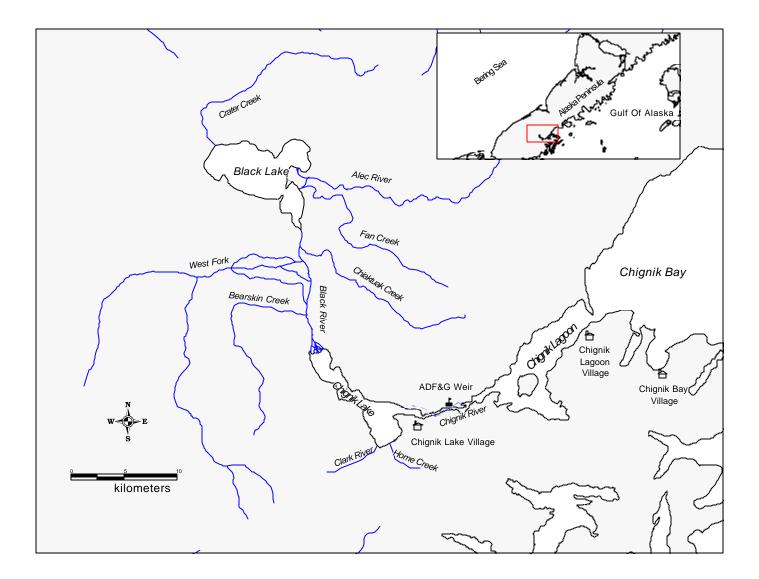
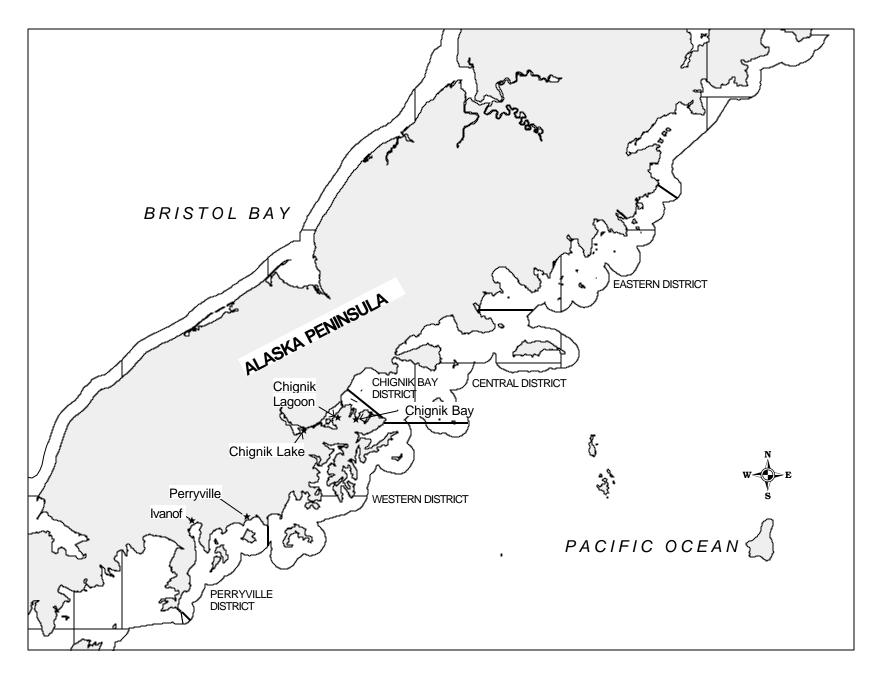


Figure 2. Map of the Chignik River watershed.



Map illustrating district boundaries and village locations within the Chignik Management Area.  $^{130}_{130}$ Figure 3.

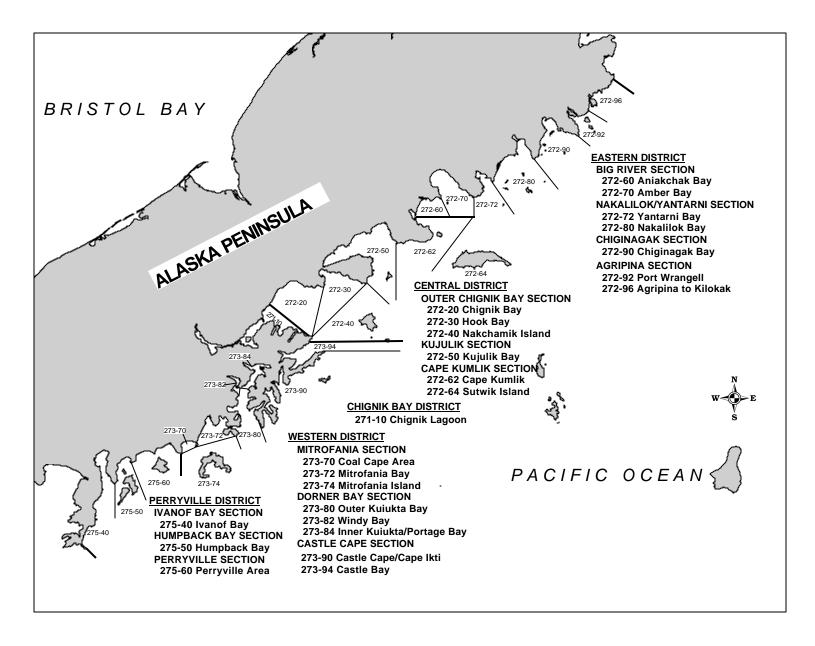


Figure 4. Map of the Chignik Management Area illustrating district boundaries and statistical areas.

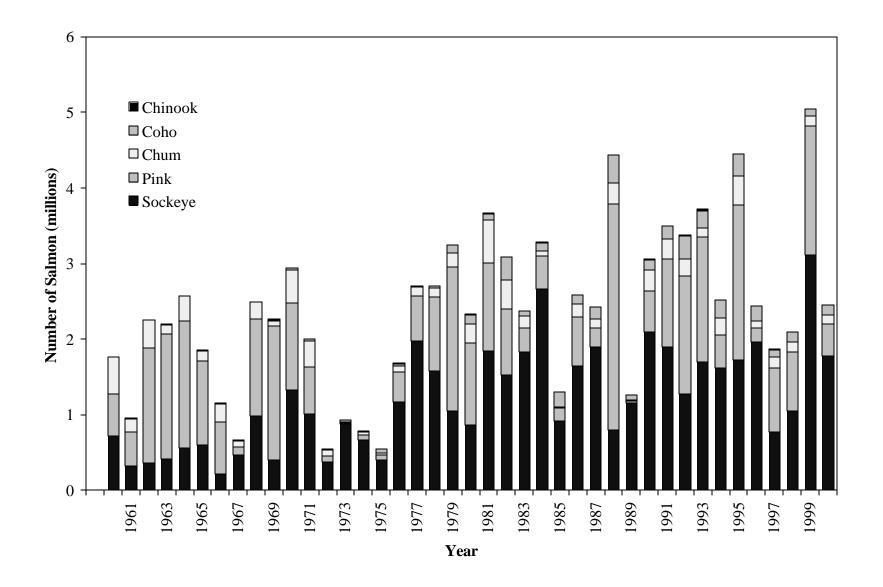


Figure 5. Total salmon harvest by species in the Chignik Management Area, 1960-2000.

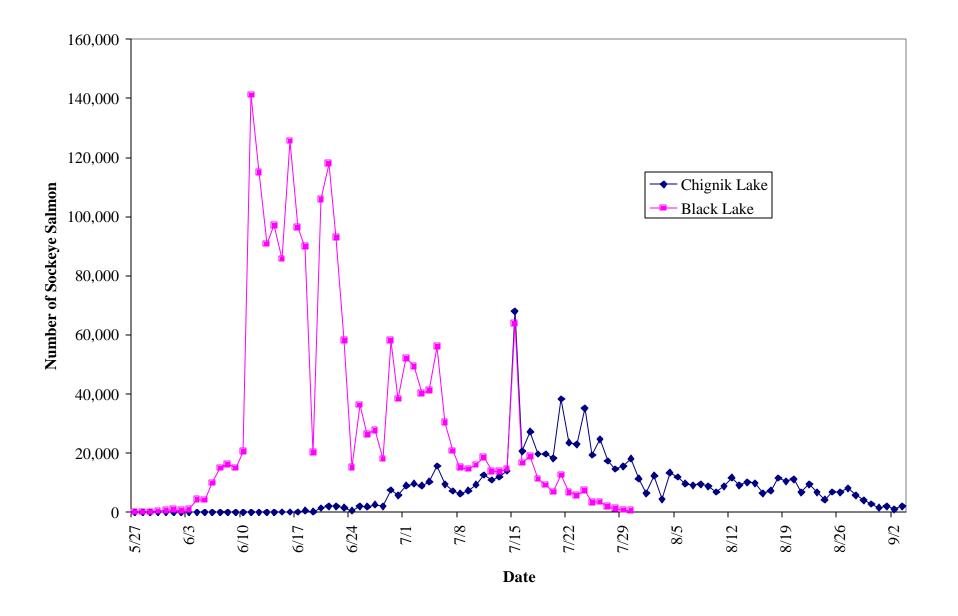


Figure 6. Black and Chignik Lakes sockeye salmon run (catch and escapement) timing estimated using scale pattern analysis, 2000.

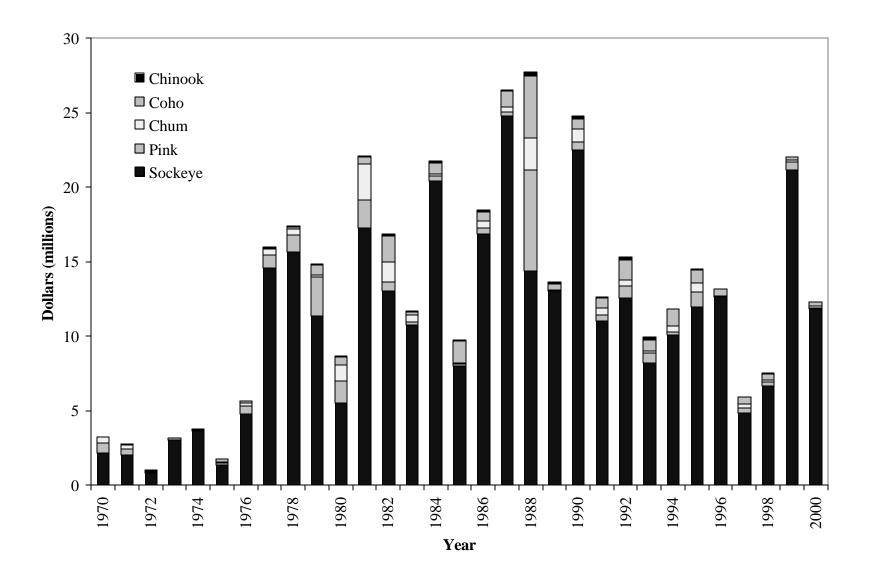


Figure 7. Exvessel value of salmon harvested in the Chignik Management Area by species, 1970-2000.

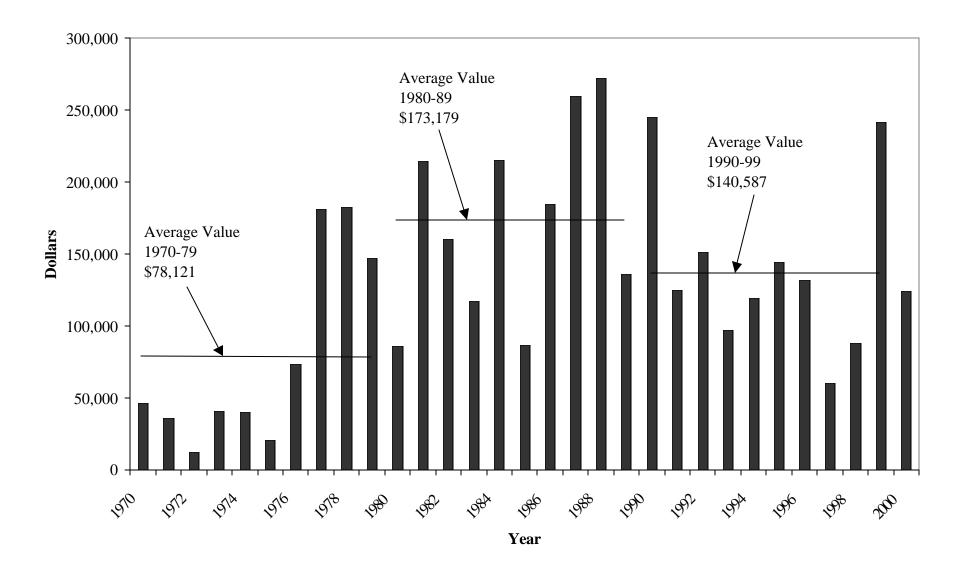


Figure 8. Average economic value of salmon per Chignik Management Area permit holder, 1970-2000.

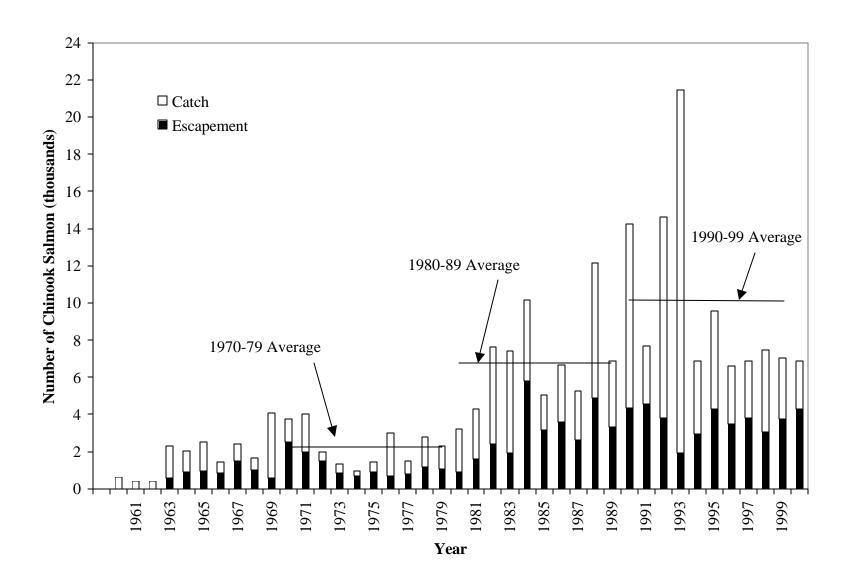


Figure 9. Chinook salmon catch and escapement in the Chignik Management Area, 1960-2000.

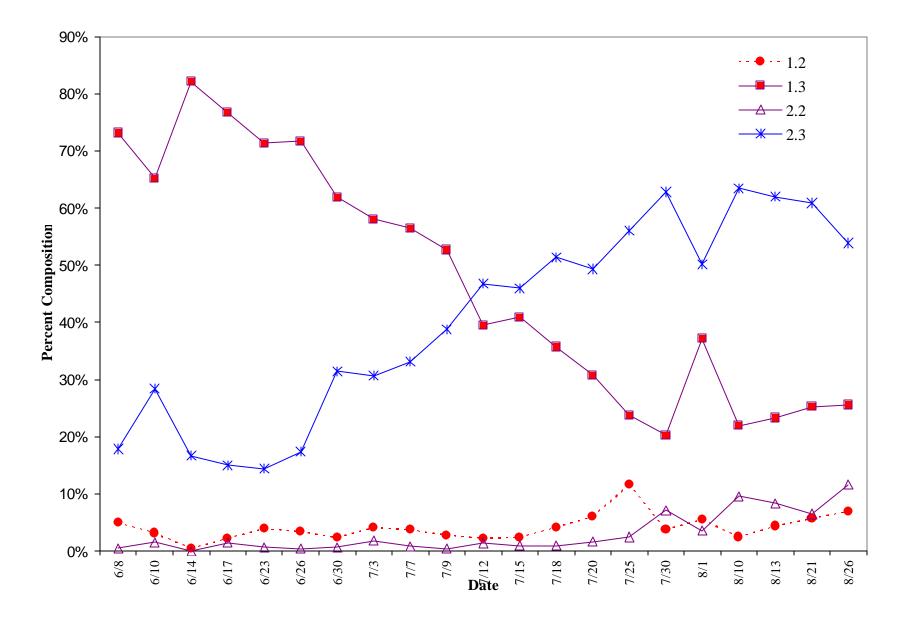


Figure 10. Age composition of sockeye salmon sampled in the Chignik Lagoon fishery, 2000.

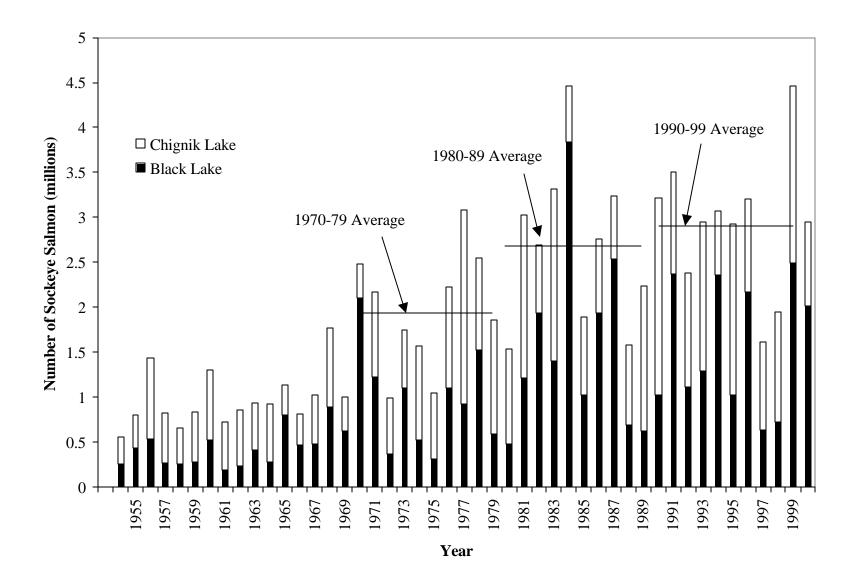
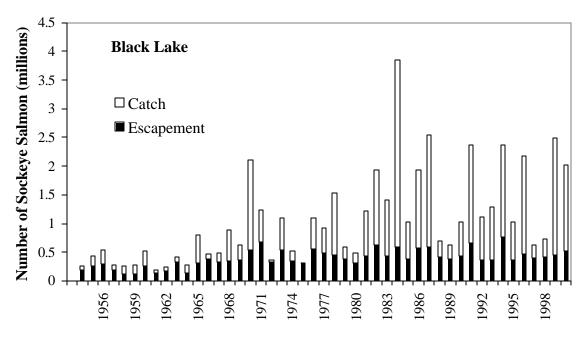


Figure 11. Estimated total sockeye salmon runs to Black and Chignik Lakes, 1954-2000.



Year

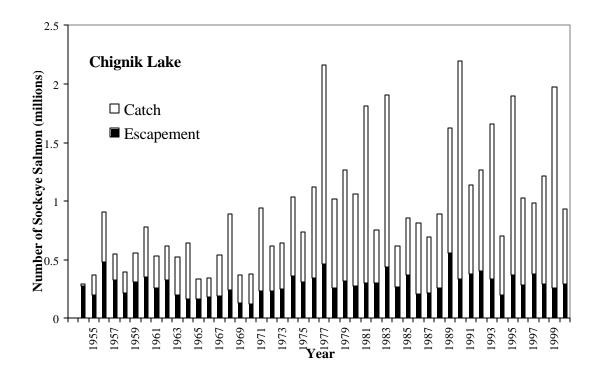


Figure 12. Black Lake (upper panel) and Chignik Lake (lower panel) sockeye salmon catch and escapement estimates, 1954-2000.

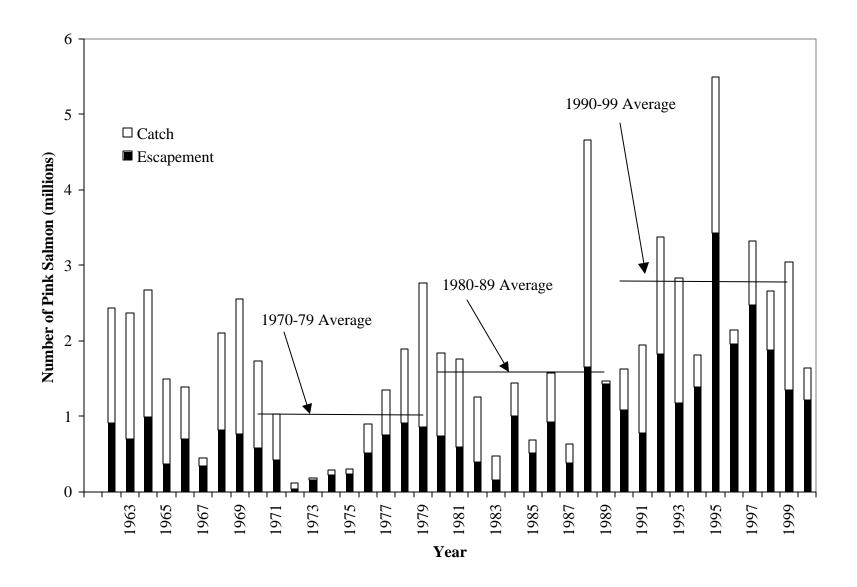


Figure 13. Pink salmon catch and estimated escapement in the Chignik Management Area, 1962-2000.

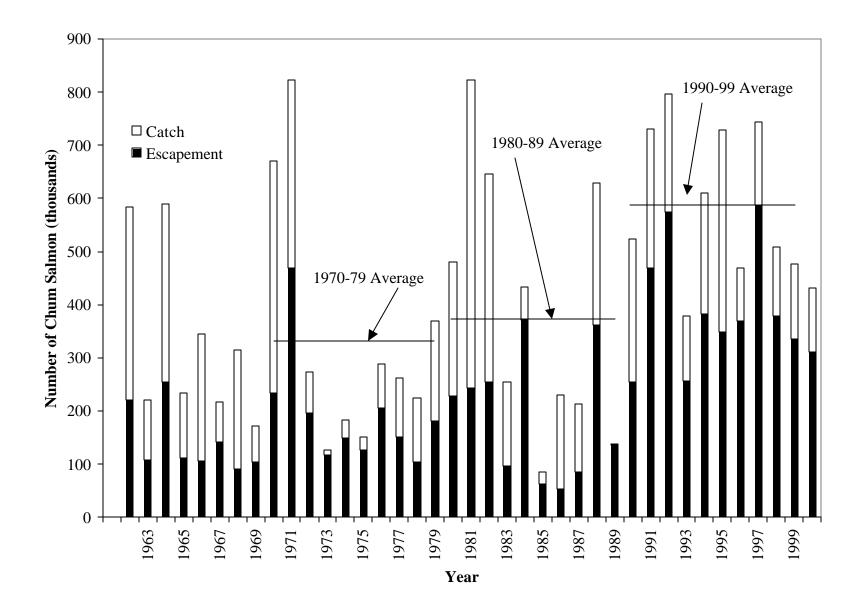


Figure 14. Chum salmon catch and estimated escapement in the Chignik Management Area, 1962-2000.

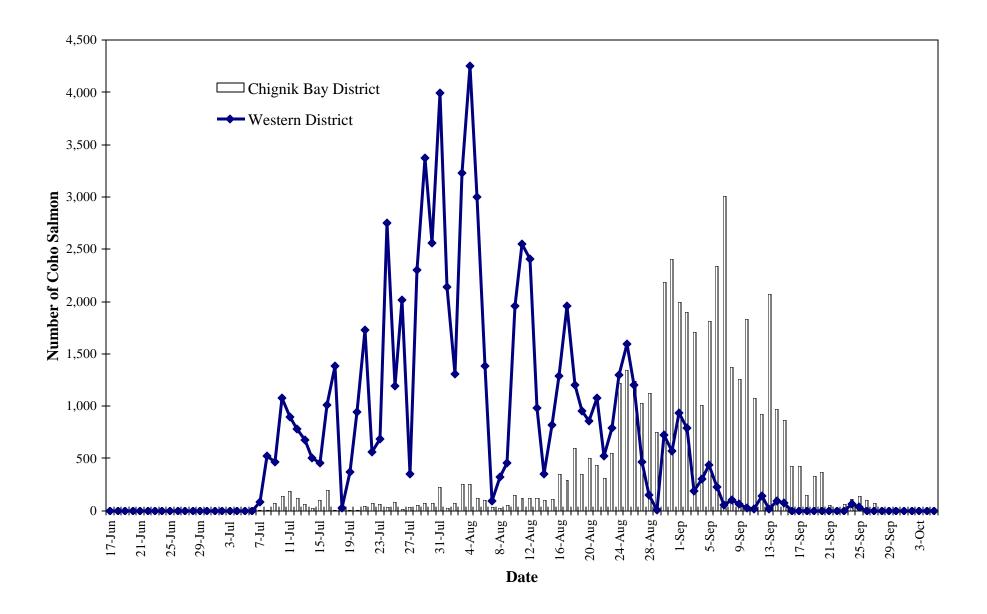


Figure 15. Average catch of coho salmon by day in the Western District compared to the Chignik Bay District, 1991- 2000.

APPENDIX

# Appendix A. Chignik Management Area salmon forecasts, 2000.

Forecast Area: Chignik Management Area Species: Sockeye Salmon

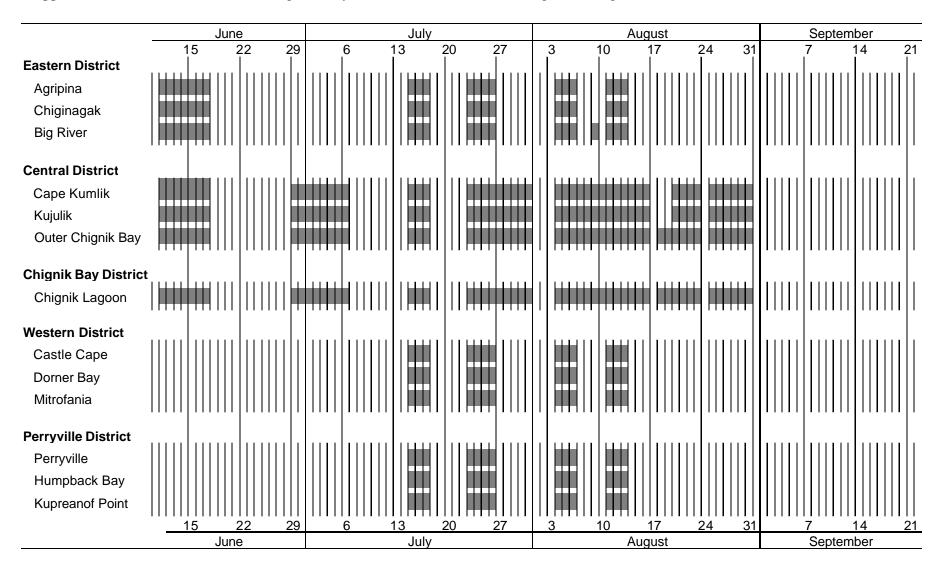
Preliminary Forecast of 2000 Run	Forecast Estimate	Forecast Range
Total Production		
Early Run (Black Lake)		
Total Run	3,900,000	
Escapement	400,000	
Commercial Common Property	3,500,000	
Harvest		
Late Run (Chignik Lake)		
Total Run	1,090,000	
Escapement	250,000	
Commercial Common Property	840,000	
Harvest		
Total Chignik Area Run		
Total Run	4,990,000	3,720,000 - 6,260,000
Escapement	650,000	
<b>Commercial Common Property</b>	4,330,000	
Harvest <sup>a</sup>		

<sup>a</sup> Includes portion of harvest by the Southeast District Mainland and Cape Igvak Fisheries; approximately 3,470,000 sockeye salmon are forecasted to be harvested in the Chignik Management Area.

Species: Chinook, Coho, Pink, and Chum Salmon.

Harvest Forecast Estimates (in thousands of fish)						
Chinook <sup>1</sup>	Coho <sup>2</sup>	Chum <sup>4</sup>	Total			
				(All Species)		
3,800	185,000	1,000,000	200,000	4,858,800		

- <sup>1</sup> Chinook salmon harvest is dependent upon the amount of fishing time allowed for sockeye salmon in July; the harvest projection approximates a 6-year average, 1994-1999.
- <sup>2</sup> Fishing time for coho salmon harvests will be related to the strength of the Chignik Lake sockeye salmon run; the harvest projection approximates a 10-year average, 1990-1999.
- <sup>3</sup> The 2000 pink salmon harvest projection approximates a 10-year average, 1990-1999. Slightly more harvest should come from the Western and Perryville Districts than the Central and Eastern Districts.
- <sup>4</sup> The 2000 chum salmon forecast projection approximates a 10-year average, 1990-1999. The Western and Perryville Districts should experience the largest proportion of the catch.



Appendix B. Commercial salmon fishing time, by district and section in the Chignik Management Area, 2000.

Appendix C. Chignik Management Area salmon regulations, 2000.

## CHAPTER 15. CHIGNIK AREA

### ARTICLE 01. DESCRIPTION OF AREA

**5 AAC 15.001. APPLICATION OF THIS CHAPTER.** Requirements set forth in this chapter apply to commercial fishing only, unless otherwise specified. Subsistence fishing regulations affecting commercial fishing vessels or affecting any other commercial fishing activity are set forth in the subsistence fishing regulations in chs. 01 and 02 of this title.

**5 AAC 15.100. DESCRIPTION OF AREA.** The Chignik Area includes all waters of Alaska on the south side of the Alaska Peninsula bounded by a line extending 135 southeast for three miles from a point near Kilokak Rocks at 57 10.34' N. lat., 156 20.22' W. long., (the longitude of the southern entrance to Imuya Bay then due south, and a line extending 135 southeast from Kupreanof Point at 55 33.98' N. lat., 159 35.88' W. long.

### ARTICLE 02. FISHING DISTRICTS.

**5 AAC 15.200. FISHING DISTRICTS.** (a) The Eastern District includes all waters from the latitude of the southernmost ADF&G regulatory marker 500 yards from the mouth of Aniakchak Lagoon to the eastern boundary of the Chignik Area.

(1) Agripina Section: all waters bounded by the eastern boundary of the Chignik Area described in 5 AAC 15.100 and a line extending 130 from Cape Providence at 56 58.67' N. lat., 156 33.47' W. long.;

(2) Chiginagak Section: all waters bounded by a line extending 130 from Cape Providence at 56 58.67' N. lat., 156 33.47' W. long., and a line extending 150 from Cape Kuyuyukak at 56 53.85' N. lat., 156 49.72' W. long.;

(3) Nakalilok-Yantarni Section: all waters bounded by a line extending 150 from Cape Kuyuyukak at 56 53.85' N. lat., 156 49.72' W. long., the longitude of Cape Kunmik at 56 45.88' N. lat., 157 12.05' W. long., and the southern boundary of the Eastern District;

(4) Big River Section: all waters of Amber and Aniakchak Bays bounded by 157 12.05' W. long., and the latitude of the southernmost ADF&G regulatory marker 500 yards from the mouth of Aniakchak Lagoon.

(b) The Chignik Bay District includes all waters of Chignik Bay and Lagoon west of a line from a point near Jack Bay at 56 17.60' N. lat., 158 12.80' W. long., to the creek at 56 24.12' N. lat., 158 27.73' W. long.

(c) The Western District includes all waters south of the latitude of a point southwest of Jack Point at 56 16.40' N. lat., 158 12.50' W. long., excluding the waters of Chignik Lagoon, and north and east of a line extending 170 from Coal Cape at 55 53.42' N. lat., 159 00.45' W. long.

(1) Castle Cape Section: all waters bounded by the latitude of a point southwest of Jack Point at 56 16.40' N. lat., 158 12.50' W. long., and a line extending 165 from a point northwest of Cape Ikti at 56 00.32' N. lat., 158 32.02' W. long.;

(2) Dorner Bay Section: all waters bounded by a line extending 165 from a point northwest of Cape Ikti at 56 00.32' N. lat., 158 32.02' W. long., and a line extending 165 from a point on the west side of Dorner (Kuiukta) Bay's entrance at 55 57.00' N. lat., 158 40.00' W. long.;

(3) Mitrofania Section: all waters, including Mitrofania Island, bounded by a line extending 165 from a point on the west side of Dorner (Kuiukta) Bay's entrance at 55 57.00' N. lat., 158 40.00' W. long., and a line extending 170 from Coal Cape at 55 53.42' N. lat., 159 00.45' W. long.;

(4) repealed 5/29/99.

(d) The Perryville District includes all waters bounded by a line extending 170 from Coal Cape at 55 53.42' N. lat., 159 00.45' W. long., and a line extending 135 southeast from Kupreanof Point at 55 33.98' N. lat., 159 35.88' W. long.

(1) Perryville Section: all waters, including the Chiachi Islands, bounded by a line extending 170 from Coal Cape at 55 53.42' N. lat., 159 00.45' W. long., and a line extending 155 from Coal Point at 55 51.47' N. lat., 159 18.95' W. long.;

# Appendix C. (page 2 of 4)

(2) Humpback Bay Section: all waters, including Paul and Jacob Islands, bounded by a line extending 155 from Coal Point at 55 51.47' N. lat., 159 18.95' W. long., and the longitude of Alexander Point at 55 47.32' N. lat., 159 24.68' W. long.;

(3) Ivanof Bay Section: all waters bounded by the longitude of Alexander Point at 55 47.32' N. lat., 159 24.68' W. long., and a line extending 135 southeast from Kupreanof Point at 55 33.98' N. lat., 159 35.88' W. long.

(e) The Central District includes all waters, excluding the waters of the Chignik Bay District, bounded by the latitude of a point southwest of Jack Point at 56 16.40' N. lat., 158 12.50' W. long., and the latitude of the southernmost ADF&G regulatory marker 500 yards from the mouth of Aniakchak Lagoon.

(1) Cape Kumlik Section: all waters, including Sutwik Island, bounded by the latitude of the southernmost ADF&G regulatory marker 500 yards from the mouth of Aniakchak Lagoon and the longitude of a point on the southwest side of Cape Kumilk at 56 36.48' N. lat., 157 40.53' W. long.;

(2) Kujulik Section: all waters bounded by the longitude of a point on the southwest side of Cape Kumlik at 56 36.48' N. lat., 157 40.53' W. long., and a line extending 145 from a point on Cape Kumliun at 56 28.58' N. lat., 157 51.55' W. long.;

(3) Outer Chignik Bay Section: all waters, including Nakchamik Island, bounded by a line extending 145 from a point on Cape Kumliun at 56 28.58' N. lat., 157 51.55' W. long., and the latitude of a point southwest of Jack Point at 56 16.40' N. lat., 158 12.50' W. long., excluding the waters of the Chignik Bay District.

### **ARTICLE 03. SALMON FISHERY**

**5 AAC 15.310. FISHING SEASONS.** (a) In the Chignik Bay District, salmon may be taken only from June 1 through October 31.

(b) The Perryville, Western, Central and Eastern Districts are opened by emergency order.

**5 AAC 15.320. WEEKLY FISHING PERIODS.** (a) Salmon fishing periods shall be established by emergency order.

(b) Repealed 3/13/75.

**5 AAC 15.330. GEAR.** (a) Salmon may be taken only by purse seine and hand purse seine.

(b) Repealed 4/24/80.

**5 AAC 15.332. SEINE SPECIFICATIONS AND OPERATIONS.** (a) In the Eastern, Central, Western and Perryville Districts no purse seine less than 100 fathoms or more than 225 fathoms in length may be used.

(b) In the Eastern, Central, Western and Perryville Districts no hand purse seine less than 100 fathoms or more than 225 fathoms in length may be

used.

(c) In the Chignik Bay District, purse seines and hand purse seines may not be less than 100 fathoms or more than 125 fathoms in length.

(d) No seine may be less than three fathoms nor more than 375 meshes in depth; in addition, up to twenty-five meshes of chafing gear with a maximum mesh size of seven inches may be used.

(e) No lead may be more than 75 fathoms in length. The aggregate length of seine and lead may not be more than 225 fathoms in the Eastern, Central,

Western and Perryville Districts.

(f) When a purse seine or hand purse seine is in the water for the purpose of taking fish, the seine shall be attached to the licensed vessel operating the gear.

-Continued-

5 AAC 15.350. CLOSED WATERS. Salmon may not be taken in the following waters:

(1) Chignik Lagoon:

(A) southwest of a line from the tip of Hume Point to the northside of Chignik Island (56 17.42' N. lat., 158 35.50' W. long.);

(B) Mallard Duck Bay: southwest of a line from the tip of Green Point to Chignik Island (56 16.63' N. lat., 158 34.90' W. long.);

(2) Kilokak Rocks Bay: northwest of a line from the southern entrance of the bay at 57 09.78' N. lat., 156 20.78' W. long., then to the opposite shore 500 yards northeast of the mouth of Kilokak Rocks Creek at 57 10.07' N. lat., 156 20.78' W. long.;

(3) Agripina River: west of a line from 57 06.72' N. lat., 156 28.22' W. long., to 57 06.44' N. lat., 156 28.67' W. long.;

(4) Chiganagak Bay: north of a line from 57 00.50' N. lat., 156 45.75' W. long., to 57 01.68' N. lat., 156 41.97' W. long.;

(5) Nakalilok Lagoon: the lagoon and within 500 yards of the entrance;

(6) Yantarni Lagoon: the lagoon and within 500 yards of the entrance;

(7) Aniakchak River: northwest of a line from approximately 500 yards northeast of the mouth at 56 45.86' N. lat., 157 28.88' W. long., to an ADF&G regulatory marker on the southern tip of the island directly off the mouth and then to approximately 1,000 yards southwest of the mouth at 56 45.28' N. lat., 157 31.53' W. long.;

(8) Aniakchak Lagoon: the lagoon and within 500 yards of the entrance;

(9) Kujulik Bay: the southwest end of the bay southwest of a line from 56 35.85' N. lat., 157 59.12' W. long., to the opposite shore at 56 34.50' N. lat., 157 54.63' W. long.;

(10) Portage Bay: west of a line from 56 11.68' N. lat., 158 33.07' W. long., to 56 10.58' N. lat., 158 33.07' W. long.;

(11) Ivan Bay: north of a line from the ADF&G regulatory marker on the northwest shore, 1,000 yards from the stream mouth, to the ADF&G regulatory marker on the southeast shore 750 yards from the stream mouth;

(12) Humpback Bay: within 1,000 yards of the terminus of Humpback Bay stream at 55 52.68' N. lat., 159 20.12' W. long.;

(13) Ivanof Bay: all waters northwest of a line from a point on the northeast shore at 55 52.42' N. lat., 159 28.40' W. long., to a point on the north end of the spit at 55 50.95' N. lat., 159 31.02' W. long. (all waters northwest of Road Island are closed);

(14) Alfred Creek: before August 1, the 500-yard closure at the terminus described in 5 AAC 39.290 does not apply; the 500-yard closure does apply from August 1 to the end of the salmon fishing season;

(15) Dago Frank Creek: before August 1, the 500-yard closure at the terminus described in 5 AAC 39.290 does not apply; the 500-yard closure does apply from August 1 to the end of the salmon fishing season;

(16) Hook Bay: southwest of a line from the tip of Hook Bay Spit at 56 30.07' N. lat., 158 08.18' W. long., to a point northwest of the spit at 56 30.61' N. lat., 158 09.27' W. long.;

(17) unnamed stream at 55 48.98' N. lat.; 159 24.45' W. long.; the 500-yard closure at the terminus described in 5 AAC 39.290 does not apply;

(18) Lake Bay: all waters southwest of a line drawn at the entrance to Lake Bay at 56 18.80' N. lat., 158 17.62' W. long., extending across the entrance to Lake Bay to a point at 56 18.32' N. lat., 158 16.20' W. long.;

(19) Mud Bay: all waters southwest of a line from 56 19.42' N. lat., 158 25.10' W. long., extending across the entrance to Mud Bay;

(20) from July 6 through August 31, all waters of Alaska in the Ivanof Bay Section, between a line extending 135 from Kupreanof Point at 55 33.98' N. lat., 159 35.88' W. long., and a line extending 65 from 55 34.90' N. lat., 159 37.10' W. long.

**5** AAC 15.355. **REPORTING REQUIREMENTS.** (a) The operator of a floating salmon processing vessel or tender, or a shorebased processing operation, and a company employing aircraft used for transporting salmon, shall report in person, or by radio or telephone, to a local representative of the department located in the management area

# -Continued-

of intended operation before the start of processing or buying operations. The report must include the location and the date of intended operation, and identify and describe each vessel or other method of transport employed in hauling or processing salmon.

(b) A commercial fisherman shall report, on an ADF&G fish ticket at the time of landing, the number of salmon taken but not sold.

**5 AAC 15.357. CHIGNIK AREA SALMON MANAGEMENT PLAN.** (a) The department shall manage the commercial salmon fishery in the Chignik Area in accordance with the guidelines set out in the management plan under this section. The goal of this management plan is to allow traditional fisheries in the area to be conducted on Chignik Area salmon stocks, and to achieve the department's biological escapement goals for both Black Lake (early-run) and Chignik Lake (late-run) sockeye salmon and local stocks of pink,chum, coho, and chinook salmon.

(b) In the Chignik Bay and Central Districts, the commercial salmon fishery shall open concurrently based on escapement objectives for the Chignik

Lakes' system sockeye salmon runs, except that

(1) the first fishing period shall occur when the following conditions have been met

(A) a minimum escapement of 40,000 sockeye salmon past the weir at Chignik River by June 12 or until a subsequent interim escapement goal is achieved; and

(B) there is a strong buildup of sockeye salmon in Chignik Lagoon, as indicated by the department's test fishing program;

(2) during the period of transition from the predominance of the early-run sockeye salmon to that of the late-run sockeye salmon, (usually late June through mid-July), the commissioner shall open and close, by emergency order, the fishing periods to harvest surplus early-run sockeye salmon without jeopardizing the late-run sockeye salmon escapement objectives;

(3) from the end of the transition period, described in (2) of this subsection until September 14, the commissioner shall open and close, by emergency order, fishing periods in the Chignik Bay and Central Districts based on the Chignik Lakes' system sockeye salmon escapement goals; the commissioner may take additional emergency order actions to protect or harvest local pink, chum, chinook and coho salmon runs; and

(4) beginning September 15, fishing periods in the Chignik Bay and Central Districts may be no more than 48hours per week, and shall be based on the department's evaluation of the sockeye salmon run strength and the subsistence needs for Chignik Lake late-season sockeye salmon.

(c) In the Eastern District,

(1) during June, the commercial salmon fishery shall open concurrently with the Chignik Bay and Central Districts, and the openings shall be based on achieving the Black Lake sockeye salmon escapement goals;

(2) from approximately June 26 through July 9,

(A) the department shall evaluate the strength of the sockeye salmon late run; and

(B) in order to continue managing the Black Lake sockeye salmon harvest and escapement, while assessing the Chignik Lake sockeye salmon run strength, commercial salmon fishing in the Eastern District will, in the department's discretion, be disallowed or severely restricted;

(3) from the end of the transition period, described in (b)(2) of this section, until the end of the fishing season, the department shall manage the commercial salmon fishery based on its evaluation of local pink, chum, and coho salmon runs, and the escapement objectives of the Chignik Lakes' system sockeye salmon.

(d) In the Western and Perryville Districts, the department may open the commercial salmon fishery beginning July 6, except that

(1) from approximately late June to mid-July (transition period),

(A) the department shall evaluate the strength of the sockeye salmon late run; and

(B) in order to allow the department to assess the Chignik Lake run strength, commercial salmon fishing in the Western and Perryville Districts will, in the department's discretion, be disallowed or severely restricted;

(2) from the end of the transition period, described in (b)(2) of this section, until approximately August 20, fishing periods shall be based on the department's evaluation of local pink and chum salmon runs, and its evaluation of the Chignik Lake sockeye salmon run; and

(3) from approximately August 20 until the end of the fishing season, fishing periods shall be based on the department's evaluation of local coho salmon runs, and its evaluation of the Chignik Lake sockeye salmon run.

E.O.#	Issued	Effective	Action Taken
4-FS-L-01-00	8:00 PM 6/10/00	11:00 AM 6/11/00	<u>Opening</u> : 24-hour announced for Chignik Bay, Central, and Eastern Districts from 11:00 AM 6/11/00 until 11:00 AM 6/12/00.
4-FS-L-02-00	10:00 PM 6/11/00	11:00 AM 6/12/00	Extension: 24-hour announced for Chignik Bay, Central, and Eastern Districts from 11:00 AM 6/12/00 until 11:00 AM 6/13/00.
4-FS-L-03-00	9:00 PM 6/12/00	11:00 AM 6/13/00	Extension: 30-hour announced for Chignik Bay, Central, and Eastern Districts from 11:00 AM 6/13/00 until 5:00 PM 6/14/00.
4-FS-L-04-00	10:30 AM 6/14/00	5:00 PM 6/14/00	Extension: 24-hour announced for Chignik Bay, Central, and Eastern Districts from 5:00 PM 6/14/00 until 5:00 PM 6/15/00.
4-FS-L-05-00	10:30 AM 6/15/00	5:00 PM 6/15/00	Extension: 26-hour announced for Chignik Bay, Central, and Eastern Districts from 5:00 PM 6/15/00 until 7:00 PM 6/16/00.
4-FS-L-06-00	11:00 AM 6/16/00	7:00 PM 6/16/00	<u>Extension</u> ; 24-hour announced for Chignik Bay, Central, and Eastern Districts from 7:00 PM 6/16/00 until 7:00 PM 6/17/00.
4-FS-L-07-00	10:00 AM 6/29/00	4:00 PM 6/29/00	<u>Opening</u> ; 24-hour announced for Chignik Bay and Central Districts from 4:00 PM 6/29/00 until 4:00 PM 6/30/00.
4-FS-L-08-00	11:00 AM 6/30/00	4:00 PM 6/30/00	Extension: 48-hour announced for Chignik Bay and Central Districts from 4:00 PM 6/30/00 until 4:00 PM 7/02/00. <u>Closed Waters</u> : Regulatory marker moved to Mensis Point.
4-FS-L-09-00	11:00 AM 7/02/00	4:00 PM 7/02/00	Extension: 48-hour announced for Chignik Bay and Central Districts from 4:00 PM 7/02/00 until 4:00 PM 7/04/00. Closed Waters: Regulatory marker moved to Humes Point.
4-FS-L-10-00	10:00 AM 7/04/00	4:00 PM 7/04/00	Extension: 48-hour announced for Chignik Bay and Central Districts from 4:00 PM 7/04/00 until 4:00 PM 7/06/00.

# Appendix D. Emergency orders for the Chignik Management Area, 2000.

# Appendix D. (page 2 of 3)

E.O.#	Issued	Effective	Action Taken
4-FS-L-11-00	6:00 PM 7/14/00	3:00 PM 7/15/00	<u>Opening</u> : 52-hour announced for Chignik Bay and Central Districts from 3:00 PM 7/15/00 until 7:00 PM 7/17/00.
			<u>Opening</u> : 52-hour announced for Eastern, Western, and Perryville Districts from 3:00 PM 7/15/00 until 7:00 PM 7/17/00.
4-FS-L-12-00	8:15 AM 7/23/00	8:00 PM 7/23/00	<u>Opening</u> ; 52-hour announced for Chignik Bay and Central Districts from 8:00 PM 7/23/00 until 12 midnight 7/25/00.
			<u>Opening</u> : 52-hour announced for Eastern, Western, and Perryville Districts from 8:00 PM 7/23/00 until 12 midnigh 7/25/00.
4-FS-L-13-00	8:30 AM 7/24/00	4:00 PM 7/24/00	<u>Opening</u> : 52-hour announced for Chignik Bay and Central Districts from 8:00 PM 7/23/00 until 12 midnight 7/25/00. <u>Closed Waters</u> : Regulatory marker moved to Mensis Point.
			<u>Opening</u> : 52-hour announced for Eastern, Western, and Perryville Districts from 8:00 PM 7/23/00 until 12 midnigh 7/25/00.
4-FS-L-14-00	10:30 AM 7/25/00	12:00 Midnight 7/25/00	Extension: 72-hour announced for Chignik Bay and Central Districts from 12 midnight 7/25/00 until 12 midnight 7/28/00.
			Extension: 24-hour announced for Eastern, Western, and Perryville Districts from 12 midnight 7/25/00 until 12 midnight 7/26/00.
4-FS-L-15-00	6:30 PM 7/27/00	12 Midnight 7/28/00	Extension: 72-hour announced for Chignik Bay and Central Districts from 12 midnight 7/28/00 until 12 midnight 7/31/00.
4-FS-L-16-00	11:30 AM 8/03/00	6:00 AM 8/04/00	<u>Opening</u> : 52-hour announced for Chignik Bay and Central Districts from 6:00 AM 8/04/00 until 10:00 AM 8/06/00.
			<u>Opening</u> ; 52-hour announced for Eastern, Western, and Perryville Districts from 6:00 AM 8/04/00 until 10:00 AM 8/06/00.

E. O. #	Issued	Effective	Action Taken
4-FS-L-17-00	6:30 PM 8/05/00	10:00 AM 8/06/00	Extension: 96-hour announced for Chignik Bay and Central Districts from 10:00 AM 8/06/00 until 10:00 AM 8/10/00.
			<u>Opening</u> ; 52-hour announced for Eastern, Western, and Perryville Districts from 6:00 AM 8/04/00 until 10:00 AM 8/06/00.
4-FS-L-18-00	6:30 PM 8/08/00	10:00 AM 8/10/00	Extension: 5-hour announced for Chignik Bay and Central Districts from 10:00 AM 8/10/00 until 3:00 PM 8/10/00.
			<u>Opening</u> ; 24-hour announced for Big River Section of Eastern District from 3:00 PM 8/09/00 until 3:00 PM 8/10/00.
4-FS-L-19-00	6:30 PM 8/09/00	2:00 PM 8/11/00	<u>Opening</u> ; 100-hour announced for Chignik Bay and Central Districts from 2:00 PM 8/11/00 until 6:00 PM 8/15/00.
			<u>Opening</u> ; 48-hour announced for Eastern, Western, and Perryville Districts from 2:00 PM 8/11/00 until 2:00 PM 8/13/00.
4-FS-L-20-00	6:30 PM 8/17/00	6:30 AM 8/18/00	<u>Opening</u> : 75-hour announced for Chignik Bay District and Outer Chignik Bay Section of Central District from 6:30 AM 8/18/00 until 9:30 AM 8/21/00. <u>Closed Waters</u> ; Regulatory marker will be Mensis Point.
4-FS-L-21-00	6:30 PM 8/19/00	6:30 AM 8/18/00	<u>Opening</u> : 75-hour announced for Chignik Bay District and Outer Chignik Bay Section of Central District from 6:30 AM 8/18/00 until 9:30 AM 8/21/00.
			<u>Opening</u> : 27-hour announced for Kujulik and Cape Kumlik Sections of Central District from 6:30 AM 8/20/00 until 9:30 AM 8/21/00.
4-FS-L-22-00	6:30 PM 8/20/00	9:30 AM 8/21/00	Extension; 50-hour announced for Chignik Bay and Central Districts from 9:30 AM 8/21/00 until 11:30 AM 8/23/00.
4-FS-L-23-00	6:30 PM 8/22/00	1:00 PM 8/25/00	<u>Opening</u> : 120-hour announced for Chignik Bay and Central Districts from 1:00 PM 8/25/00 until 1:00 PM 8/30/00.
4-FS-L-24-00	5:30 PM 9/19/00	00:01 AM 9/20/00	<u>Restrictions On Commercial Fishermen</u> ; Commercial fishing license holders will be allowed to subsistence fish for salmon within the Chignik Management Area beginning 00:01 AM 9/20/00.

Appendix E. Chignik River system sockeye salmon escapement objectives for the early run (Black Lake) and the late run (Chignik Lake) by time period.

The numbers of fish presented in the escapement tables below were derived from averages over several years of escapements of various timing and magnitude. It should be noted that daily escapement levels will fluctuate considerably throughout the run. The tables listed serve only as a guide for achieving the total escapement for each run. Inseason variations from the figures listed may be due to variations in actual timing and/or strength of the run.

Early Run-400,000						
Escapement						
Date	Lower	Upper				
June 12		40,000				
June 14	50,000	65,000				
June 16	75,000	100,000				
June 18	125,000	150,000				
June 20	175,000	200,000				
June 22	225,000	250,000				
June 25	275,000	325,000				
June 30	350,000	400,000				

Late Run-250,000 Escapement to August 31								
Early EscapementEarly EscapementDateIs AchievedIs Not Achieved								
July 6 July 8			45,000	40,000 50,000				
July 10	50,000	40,000	55,000	65,000				
July 12		60,000	70,000	75,000				
July 14	65,000	75,000	75,000	80,000				
July 16	80,000	90,000	80,000	90,000				
July 19	100,000	115,000	100,000	115,000				
July 21	125,000	135,000	125,000	135,000				
July 23	145,000	160,000	150,000	160,000				
July 26 July 29	170,000 185,000	180,000 180,000 195,000	170,000 190,000	180,000 180,000 195,000				
J uly 31	195,000	200,000	195,000	200,000				
August 31	200,000	250,000	200,000	250,000				

Late Run - 25,000 Suplemental Escapement Objective September 1-15					
Date Goal					
September 1 - 15 25,000					

Black Lake			Chignik Lake			Combined Total Run			
Year	Forecast	Actual	Percent Difference	Forecast	Actual	Percent Difference	Forecast	Actual	Percent Difference
1987	1.8	2.5	-38.9%	1.3	0.7	46.2%	3.1	3.2	-3.2%
1988	1.4	0.7	50.0%	0.8	0.9	-12.5%	2.2	1.6	27.3%
1989	1.2	0.6	50.0%	1.0	1.6	-60.0%	2.2	2.2	0.0%
1990	0.8	1.0	-25.0%	1.0	2.2	-120.0%	1.8	3.2	-77.8%
1991	2.8	2.4	14.3%	1.1	1.1	0.0%	3.9	3.5	10.3%
1992	1.8	1.1	38.9%	0.9	1.3	-44.4%	2.7	2.4	11.1%
1993	1.6	1.3	18.8%	1.0	1.7	-70.0%	2.6	3.0	-15.4%
1994	1.8	2.4	-33.3%	1.3	0.7	46.2%	3.1	3.1	0.0%
1995	1.9	1.0	47.4%	1.9	0.9	52.6%	2.8	2.9	-3.6%
1996	1.4	2.2	-57.1%	1.6	1.2	25.0%	3.0	3.4	-13.3%
1997	1.0	0.6	40.0%	1.6	1.0	37.5%	2.6	1.6	38.5%
1998	0.9	0.7	22.2%	1.1	1.2	-9.1%	2.0	1.9	5.0%
1999	1.1	2.5	-127.3%	1.3	2.0	-53.8%	2.3	4.5	-93.9%
2000	3.9	2.1	-46.1%	1.1	0.8	27.2%	4.9	3.0	38.8%

Appendix F. Comparison of Black Lake (early run) and Chignik Lake (late run) forecasts versus postseason estimated runs in millions of sockeye salmon, 1987-2000.

Appendix G. Chignik Management Area herring regulations, 2000.

# ARTICLE 9. CHIGNIK AREA. (REGISTRATION AREA L).

**5 AAC 27.550. DESCRIPTION OF CHIGNIK AREA.** The Chignik Area includes all waters of Alaska on the south side of the Alaska Peninsula enclosed by 156° 20.22' W. long., (the longitude of the southern entrance to Imuya Bay near Kilokak Rocks) and a line extending southeast (135°) from the southernmost tip of Kupreanof Point at 55° 33.98' N. lat., 159° 35.88' W. long.

### 5 AAC 27.555. DESCRIPTION OF CHIGNIK AREA DISTRICTS

Districts are as described in 5 AAC 15.200.

**5 AAC 27.560. FISHING AND WEEKLY FISHING PERIODS FOR CHIGNIK AREA.** (a) Herring may betaken from April 15 through June 30 (sac roe season) and from August 15 through February 28 (food and bait season).

(b) Herring may be taken only during periods established by emergency order.

(c) A CFEC permit holder must register with the department before participating in the food and bait fishery.

### 5 AAC 27.565. LAWFUL GEAR FOR CHIGNIK AREA.

(a) Herring may be taken only by purse seines.

(b) A herring fishing vessel may operate or assist in operating only one legal limit of herring fishing gear in the aggregate.

(c) Unhung gear sufficient for mending purposes may be carried aboard fishing vessels.

(d) Herring fishing nets shall be measured, either wet or dry, by determining the maximum length of cork line when the net is fully extended with traction applied at one end only.

(e) The interim-use or entry permit holder is responsible for operation of the net.

(f) The use of leads with any net gear used for commercial herring fishing is prohibited during the herring sac roe season.

# 5 AAC 27.575.. SEINE SPECIFICATIONS AND OPERATIONS FOR CHIGNIK AREA.

A purse seine may not be more than 1,000 meshes in depth or more than 100 fathoms in length.

## 5 AAC 27.580. WATERS CLOSED TO HERRING FISHING IN CHIGNIK AREA.

During the period June 12 – October 31, herring may not be taken in waters described in 5 AAC 15.350 and 5 AAC 39.290.

**5** AAC 27.590. BUYER AND TENDER REPORTING REQUIREMENTS FOR CHIGNIK AREA. In addition to the requirements of 5 AAC 39.130(g), each tender operator and each buyer or the tender operator or buyer's agent shall report in person to and register with a local representative of the department upon arrival in the registration area before commencing operations and before changing location of the operation. Each buyer or buyer's agent shall

(1) identify all vessels to be employed in transporting or processing herring and shall register those vessels with a local representative of the department located in the registration area before transporting or processing herring;

(2) make daily reports of all herring purchased from fishermen, and other processing records as specified by a local representative of the department; and

(3) submit fish tickets before departure from the area and no later than 10 days after termination of buying operations in the area, or as otherwise specified by a local representative of the department.

The Alaska Department of Fish and Game administers all programs and activities free from discrimination based on race, color, national origin, age, sex, religion, marital status, pregnancy, parenthood, or disability. The department administers all programs and activities in compliance with Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act of 1990, the Age Discrimination Act of 1975, and Title IX of the Education Amendments of 1972.

If you believe you have been discriminated against in any program, activity, or facility, or if you desire further information please write to ADF&G, P.O. Box 25526, Juneau, AK 99802-5526; U.S. Fish and Wildlife Service, 4040 N. Fairfax Drive, Suite 300 Webb, Arlington, VA 22203 or O.E.O., U.S. Department of the Interior, Washington DC 20240.

For information on alternative formats for this and other department publications, please contact the department ADA Coordinator at (voice) 907-465-6077, (TDD) 907-465-3646, or (FAX) 907-465-6078.