SOUTH PENINSULA ANNUAL SALMON MANAGEMENT REPORT, 1998

By

Rodney D. Campbell
Arnold R. Shaul
Mark J. Witteveen
and
Joseph J. Dinnocenzo

Regional Information Report[1] No. 4K99-29

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

March 1999

[1]The Regional Information Report Series was established in 1987 to provide an information access system for all unpublished division reports.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.

AUTHORS

Rodney D. Campbell is the Alaska Peninsula and Aleutian Islands Management Areas Herring Biologist and Alaska Peninsula-Southeastern District Salmon Management Biologist for Region IV, Alaska Department of Fish and Game, Division of Commercial Fisheries, 211 Mission Road, Kodiak, Alaska, 99615.

Arnold R. Shaul is the Alaska Peninsula and Aleutian Islands Management Areas Salmon Management Biologist for Region IV, Alaska Department of Fish and Game, Division of Commercial Fisheries, 211 Mission Road, Kodiak, Alaska, 99615.

Mark J. Witteveen is the Alaska Peninsula and Aleutian Islands Management Areas Assistant Herring Biologist and Alaska Peninsula-Southeastern District Assistant Salmon Management Biologist for Region IV, Alaska Department of Fish and Game, Division of Commercial Fisheries, 211 Mission Road, Kodiak, Alaska, 99615.

Joseph J. Dinnocenzo is the Alaska Peninsula and Aleutian Islands Management Areas Assistant Salmon Management Biologist for Region IV, Alaska Department of Fish and Game, Division of Commercial Fisheries, 211 Mission Road, Kodiak, Alaska, 99615.

ACKNOWLEDGMENTS

The authors would also like to thank all the Alaska Department of Fish and Game seasonal employees who worked on the South Alaska Peninsula during 1998, and also to the employees of the Department of Public Safety who provided on grounds surveillance and transport of supplies and personnel. Thanks to Lucinda Neel, Mickie Geter, Tonya Brockman, Jim McCullough, and Jim Blackburn, for their technical support and to Wayne Donaldson for his supervisory support.

TABLE OF CONTENTS

Page

LIST OF APPENDICES i

INTRODUCTION 1

South Peninsula Area Wide Information 1

Introduction 1
Historical Salmon Production, 1908-1993 2
Commercial Salmon Harvests for the 1998 Season 2
Commercial Salmon Effort Levels and Harvests, July 1-October 31 2
Effort Levels 2

Commercial Salmon Harvest 3
Chinook 3
Sockeye 4
Coho 4
Pink 4
Chum 4

South Unimak and Shumagin Islands June Fisheries 5

Introduction 5
Regulatory History 5
1998 Season Summary 11

South Peninsula Post June Fisheries 13

Introduction 13
Regulatory History 13
Immature Salmon Concerns 14
1998 Season Summary 15
Salmon Escapement 16

Sockeye 17
Coho 17
Pink 18
Chum 18

Southeastern District Mainland Fishery 18

Introduction 18
Regulatory History 18

TABLE OF CONTENTS (Cont.)

Page

Current Management Plan 21
Effort Levels 22
Local Stock Fisheries 22
Northwest Stepovak Section 22
Stepovak Flats Section 23

1998 Season Summary 23

Shumagin Islands 1998 Post June Season Summary 24

Southeastern District 1998 Post June Season Summary 24

South Central District 1998 Post June Season Summary 25

Southwestern District 1998 Post June Season Summary 25

Unimak District 1998 Post June Season Summary 25

LITERATURE CITED 26

APPENDIX 29

LIST OF APPENDICES

Page

APPENDIX A: AREA WIDE INFORMATION

A.1. Map of the Alaska Peninsula Management Area with the North and South Peninsula defined 30

A.2. Map of the Alaska Peninsula Management Area from Kupreanof Point to Scotch Cap with the salmon fishing districts defined 31

A.3. Map of the Alaska Peninsula Area from Kupreanof Point to McGinty Point (Southeastern District) with the statistical salmon fishing areas shown 32

A.4. Map of the Alaska Peninsula Area from McGinty Point to Arch Point (South Central District) with the statistical salmon fishing areas shown 33

A.5. Map of the Alaska Peninsula Area from Arch Point to Unimak Island (Southwestern District) with the statistical salmon fishing areas shown 34

A.6. Map of the Alaska Peninsula Area from Hague Rock to Unimak Pass (Unimak District) with the statistical salmon fishing areas shown 35

A.7. Number of limited entry permits and fishing effort in the South Peninsula, 1970-98 36

A.8. Map of the Alaska Peninsula Area from Kupreanof Point to Scotch Cap with the legal gear types by district shown 37

A.9. South Peninsula salmon catch and escapement by species and year, 1962-98 38

A.10. South Peninsula pink salmon catch and escapement by year, 1962-98 42

A.11. South Peninsula chum salmon catch and escapement by year, 1962-98 46

A.12. South Peninsula salmon harvest, all gear combined, by species and year, 1908-98 50

A.13. South Peninsula chinook salmon harvest by year, 1908-98 53

A.14. South Peninsula sockeye salmon harvest by year, 1908-98 54

A.15. South Peninsula coho salmon harvest by year, 1908-98 55

A.16. South Peninsula pink salmon harvest by year, 1908-98 56

LIST OF APPENDICES (Cont.)

Page

A.17. South Peninsula chum salmon harvest by year, 1908-98 57

A.18. South Peninsula commercial salmon harvest by species, statistical area, section, and district, 1998 58

A.19. South Peninsula commercial salmon harvest, all gear combined, by species and day, 1998 61

A.20. South Peninsula commercial purse seine salmon harvest by species and day, 1998 64

A.21. South Peninsula commercial drift gillnet salmon harvest by species and day, 1998 66

A.22. South Peninsula commercial set gillnet salmon harvest by species and day, 1998 68

A.23. South Peninsula commercial salmon harvest by species, district, and gear, 1998 70

A.24. South Peninsula post June commercial salmon harvest, all gear combined, by species and year, July 1-October 31, 1970-98 71

A.25. South Peninsula post June commercial purse seine salmon harvest, by species and year, July 1-October 31, 1970-98 72

A.26. South Peninsula post June commercial drift gillnet salmon harvest, by species and year, July 1-October 31, 1970-98 73

A.27. South Peninsula post June commercial set gillnet salmon harvest, by species and year, July 1- October 31, 1970-98 74

A.28. South Peninsula post June commercial salmon harvest, all gear combined, by species and year, July 1-October 31, 1909-98 75

A.29. South Peninsula post June commercial chinook salmon harvest by gear and year, July 1-October 31, 1970-98 78

A.30. South Peninsula post June commercial sockeye salmon harvest by gear and year, July 1-October 31, 1970-98 79

LIST OF APPENDICES (Cont.)

Page

A.31. South Peninsula post June commercial sockeye salmon harvest by gear and year, July 1-October 31, 1970-98 80

A.32. South Peninsula post June commercial coho salmon harvest by gear and year, July 1-October 31, 1970-98 81

A.33. South Peninsula post June commercial coho salmon harvest by gear and year, July 1-October 31, 1970-98 82

A.34. South Peninsula post June commercial pink salmon harvest by gear and year, July 1-October 31, 1970-98 83

A.35. South Peninsula post June commercial chum salmon harvest by gear and year, July 1-October 31, 1970-98 84

APPENDIX B: SOUTH UNIMAK AND SHUMAGIN ISLANDS JUNE FISHERIES

B.1. South Unimak and Shumagin Islands June commercial sockeye and chum salmon harvest, all gear combined, by year, 1911-98 85

B.2. Map of the South Unimak June fishery 87

B.3. History of regulations for the South Unimak and Shumagin Islands June commercial fisheries, 1962-98 88

B.4. South Unimak and Shumagin Islands June fisheries commercial salmon harvest, all gear combined, by species and year, 1970-98 91

B.5. South Unimak June commercial salmon harvest, all gear combined, by species and year, 1970-98 92

B.6. Shumagin Islands June commercial salmon harvest, all gear combined, by species and year, 1970-98 93

B.7. South Unimak and Shumagin Islands June fisheries, sockeye salmon allocations versus actual harvest and allocations if Bristol Bay runs were perfectly forecast, 1975-98 94

LIST OF APPENDICES (Cont.)

Page

B.8. South Unimak June fishery, sockeye salmon allocations versus actual harvest and allocations if Bristol Bay runs were perfectly forecasted, 1975-98 95

B.9. Shumagin Islands June fishery, sockeye salmon allocations versus actual harvest and allocations if Bristol Bay runs were perfectly forecasted, 1975-98 96

B.10. Map of Popof Island with the test fishing sites at Popof Head, Middle Set, and Red Bluff shown 97

B.11. South Unimak and Shumagin Islands June fisheries, number of fishing days and hours by year, 1976-98 98

B.12. South Unimak June test fishery salmon catches by species and date, 1998 99

B.13. Shumagin Islands Section June test fishery salmon catches by species and date, 1998 101

B.14. South Unimak and Shumagin Islands commercial sockeye and chum salmon harvests, all gear combined, by day, 1998 102

B.15. South Unimak June commercial salmon harvest, all gear combined, by species and day, 1998 103

B.16. South Unimak June commercial purse seine salmon harvest by species and day, 1998 104

B.17. South Unimak June commercial drift gillnet salmon harvest by species and day, 1998 105

B.18. South Unimak June commercial set gillnet salmon harvest by species and day, 1998 106

B.19. Shumagin Islands Section commercial salmon harvest, all gear combined, by species and day, 1998 107

B.20. Shumagin Islands Section commercial purse seine salmon harvest by species and day, 1998 109

B.21. Shumagin Islands Section commercial set gillnet salmon harvest by species and day, 1998 110

LIST OF APPENDICES (Cont.)

Page

B.22. South Unimak and Shumagin Islands June fisheries, composition of commercial sockeye and chum salmon harvests in percent by gear type and year, 1970-98 112

B.23. South Unimak and Shumagin Islands June fisheries commercial sockeye salmon harvest by gear type and year, 1970-98 113

B.24. South Unimak and Shumagin Islands June fisheries composition of commercial sockeye salmon harvests in percent by gear type and year, 1970-98 114

B.25. South Unimak and Shumagin Islands June fisheries commercial chum salmon harvest by gear type and year, 1970-98 115

B.26. South Unimak and Shumagin Islands June fisheries composition of commercial chum salmon harvests by gear type and year, 1970-98 116

B.27. South Unimak and Shumagin Islands June fisheries, sockeye to chum salmon ratios, from commercial harvests, all gear combined, by year, 1960-98 117

B.28. South Unimak and Shumagin Islands June fisheries, sockeye per chum salmon ratios, from commercial harvests, by gear type and year, 1970-98 118

B.29. Number and types of commercial salmon gear fished in the South Unimak and Shumagin Islands Section waters during June, by year, 1970-98 119

APPENDIX C: SOUTH PENINSULA POST-JUNE FISHERIES

C.1. Map of the South Peninsula from Kupreanof Point to Scotch Cap, with the general post June fishing areas (Rock Island-Kupreanof Point), and Southeastern District Mainland area shown 120

C.2. Map of the South Peninsula with the areas effected by the Southeastern District Mainland and the post June Salmon Management Plans during 1993-97 shown 121

C.3. Map of the South Peninsula with those areas where fishing time was allowed during July 6-19, 1993-97 shown 122

LIST OF APPENDICES (Cont.)

Page

C.4. Map of the South Peninsula Post June fishery schedule during July 6-21 defined. Fishing may only be permitted in State waters (within three miles of shore) 123

C.5. Map of the South Peninsula with those areas where additional fishing time may be allowed during July 22-31. Fishing may only be permitted in State waters (within three miles of shore) 124

C.6. Summary of the Shumagin Islands Section July salmon test fishery results, 1998 125

C.7. South Peninsula post June commercial salmon harvest, all gear combined, by species July 6-21, 1998 126

C.8. South Peninsula post June commercial salmon harvest, all gear combined, by species July 22-31, 1998 127

C.9. South Peninsula (minus the Southeastern District Mainland fishery July 1-25 salmon harvest) post June (July 1-Oct 31) commercial salmon harvest, all gear combined, by species and year, 1970-98. 128

C.10. South Peninsula (minus the Southeastern District Mainland fishery July 1-25 salmon harvest) post June (July 1-Oct 31) commercial purse seine salmon harvest by species and year, 1970-98. 129

C.11. South Peninsula (minus the Southeastern District Mainland fishery July 1-25 salmon harvest) post June (July 1-Oct 31) commercial drift gillnet salmon harvest by species and year, 1970-98. 130

C.12. South Peninsula (minus the Southeastern District Mainland fishery July 1-25 salmon harvest) post June (July 1-Oct 31) commercial set gillnet salmon harvest by species and year, 1970-98. 131

C.13. Shumagin Islands Section post June commercial salmon harvest, all gear combined, by species and year, July 1-October 31, 1970-98 132

C.14. Shumagin Islands Section post June commercial purse seine salmon harvest by species and year, July 1-October 31, 1970-98 133

C.15. Shumagin Islands Section post June commercial set gillnet salmon harvest by species and year, July 1-October 31, 1970-98 134

LIST OF APPENDICES (Cont.)

Page

C.16. Southeastern District (minus the Southeastern District Mainland fishery July 1-25 salmon harvest) post June commercial salmon harvest, all gear combined, by species and year, July 1-October 31, 1970-98 135

C.17. Southeastern District (minus the Southeastern District Mainland fishery July 1-25 salmon harvest) post June commercial purse seine salmon harvest by species and year, July 1-October 31, 1970-98 136

C.18. Southeastern District (minus the Southeastern District Mainland fishery July 1-25 salmon harvest) post June commercial set gillnet salmon harvest by species and year, July 1-October 31, 1970-98 137

C.19. South Central District post June commercial salmon harvest, all gear combined, by species and year, July 1-October 31, 1970-98 138

C.20. Southwestern District post June commercial salmon harvest, all gear combined, by species and year, July 1-October 31, 1970-98 139

C.21. Unimak District post June commercial salmon harvest, all gear combined, by species and year, July 1-October 31, 1970-98 140

APPENDIX D: SOUTHEASTERN DISTRICT MAINLAND FISHERY

D.1. Map of the Southeastern District Mainland fishery from Kupreanof Point to McGinty Point with the salmon sections shown 141

D.2. History of regulations for the Southeastern District Mainland commercial fishery, 1970-98 142

D.3. Southeastern District Mainland commercial sockeye salmon harvest by gear, through July 25, 1970-98 143

D.4. Southeastern District Mainland fishery sockeye salmon harvest, in percent of harvest, by gear, through July 25, 1970-98 144

D.5. Chignik sockeye salmon contribution to the Southeastern District Mainland harvest, by gear, through July 25, 1970-98 145

D.6. Southeastern District Mainland CFEC permits fished by gear through July 25, 1970-98 147

LIST OF APPENDICES (Cont.)

Page

D.7. Harvest of Chignik bound sockeye salmon in the Chignik, Cape Igvak, and Southeastern District Mainland Areas from 1964-98 148

D.8. Chignik bound sockeye salmon harvest in the Southeastern District Mainland fishery, through July 25, 1970-98 151

D.9. Map of Kupreanof Point with closed waters defined 152

D.10. Southeastern District Mainland, effort and assignment of sockeye salmon harvests June 1 through July 25, 1985-98 153

D.11. Northwest Stepovak Section commercial salmon harvest, all gear combined, by species and day, 1998. 154

D.12. Southeastern District Mainland commercial salmon harvest, all gear combined, by species and day, 1998 155

D.13. Southeastern District Mainland commercial purse seine salmon harvest by species and day, 1998 157

D.14. Southeastern District Mainland commercial set gillnet salmon harvest by species and day, 1998 158

D.15. Southeastern District Mainland commercial sockeye salmon harvest, by gear, for the entire season, 1970-98 160

APPENDIX E: EMERGENCY ORDER SUMMARY

E.1. South Peninsula emergency order summary, 1998 161

APPENDIX F: SALMON ESCAPEMENT DATA

F.1. Salmon escapement survey counts in the South Peninsula, 1998 220

F.2. Method for calculating indexed total escapement 288

F.3. Map of the Alaska Peninsula with the location of remote field camps shown 289

F.4. South Peninsula total indexed salmon escapements by species and year, 1962-98 290

LIST OF APPENDICES (Cont.)

Page

F.5. South Peninsula total indexed salmon escapement by species and district, 1998 292

F.6. South Peninsula total indexed sockeye salmon escapement by year, 1962-98 293

F.7. Escapement summary for systems with fish weirs in the South Peninsula area, 1998 294

F.8. Sockeye salmon daily and cumulative escapement counts through the Orzinski Lake weir, 1998 295

F.9. Sockeye salmon daily and cumulative escapement counts through the Thin Point Lake weir, 1998 297

F.10. South Peninsula total indexed pink salmon escapement by year, 1962-98 298

F.11. South Peninsula total indexed chum salmon escapement by year, 1962-98 299

INTRODUCTION

The Alaska Peninsula Salmon Management Area includes the North Peninsula from Cape Menshikof west to Cape Sarichef, and the South Peninsula from Kupreanof Point west to Scotch Cap on Unimak Island (Appendix A.1). This report describes those fisheries located on the South Peninsula, which is further divided into four districts: (1) the Southeastern District, consisting of waters between Kupreanof Point and McGinty Point; (2) South Central District, consisting of waters between McGinty Point and Arch Point Light; (3) Southwestern District, consisting of waters between Arch Point Light, False Pass, and Cape Pankof; and (4) Unimak District, consisting of waters between Cape Pankof and Scotch Cap, including Sanak Island (Appendices A.2-A.6). The Southeastern District is further subdivided into two areas which have different management plans during part of the season: (1) the Shumagin Islands Section, consisting of the Shumagin Islands archipelago; and (2) the Southeastern District Mainland (SEDM), consisting of the waters of Stepovak, Balboa, and Beaver Bays.

There are two Alaska Department of Fish and Game (ADF&G) offices in the South Peninsula located in Sand Point and Cold Bay (Appendix A.2). In 1990, the Sand Point staff assumed responsibility for managing salmon fisheries in the Southeastern District. The balance of the South Peninsula salmon fisheries are managed from Cold Bay.

Five species of Pacific salmon are commercially harvested in the Alaska Peninsula Management Area: chinook salmon *Oncorhynchus tshawytscha*, sockeye salmon *O. nerka*, coho salmon *O. kisutch,* pink salmon *O. gorbuscha*, and chum salmon *O. keta.*

Only Commercial Fisheries Entry Commission (CFEC) Area M purse seine, drift gillnet, and set gillnet permit holders are allowed to commercially harvest salmon in South Peninsula waters (ADF&G 1998). Most Area M CFEC salmon permits were utilized in the South Peninsula during 1998; 79 of 122 available purse seine permits recorded landings (lowest since 1975), as did 145 of 164 drift gillnet permits (lowest since 1992) and 86 of 115 set gillnet permits (highest since 1993; Appendix A.7).

From 1988-97, about 95% of the purse seine and set gillnet permit holders fished South Peninsula waters throughout the season, while about 90% of the drift gillnet permit holders fished South Unimak waters during June and North Peninsula waters from July into September (Murphy et al. 1998). In South Peninsula waters, drift gillnet gear, by regulation, is only allowed in the Unimak District and the Ikatan Bay Section of the Southwestern District. Purse seine, hand purse seine, and set gillnet gear are permitted in most of the South Peninsula, however, some gear restrictions do exist within specified areas (Appendix A.8).

South Peninsula Area Wide Information

Introduction

Commercial salmon fisheries in the South Peninsula date back to at least 1888 when canneries operated at Orzinski (Orzenoi) Bay and Thin Point Cove. However, the earliest catch records for

the South Peninsula date back to 1908. Computerized fish ticket data have been available since 1970.

Historical Salmon Production, 1908-1998

Historically, South Peninsula salmon production has fluctuated dramatically for all species (Appendix A.9). Pink and chum salmon are the most abundant salmon species in the South Peninsula. Since 1962, annual pink salmon catch and escapement (not including June migrants) has ranged from a low of 149,300 in 1973 to a record high of 22,530,258 in 1995 (Appendix A.10). Since 1962, annual chum salmon catch and escapement (not including June migrants) has ranged from 223,228 in 1975 to a high of 2,172,690 in 1994 (Appendix A.11).

The 1947-77 South Peninsula annual harvests for all species averaged approximately 3,000,000 salmon composed of 2,567 chinook, 591,844 sockeye, 26,747 coho, 1,523,900 pink, and 751,226 chum salmon (Appendix A.12). From 1978 through 1997, the South Peninsula annual harvest averaged 9,588 chinook, 2,227,343 sockeye, 266,203 coho, 6,670,574 pink, and 1,384,710 chum salmon. From 1988 through 1997, the South Peninsula annual harvest has averaged almost 12,000,000 salmon composed of 10,585 chinook, 2,492,516 sockeye, 314,187 coho, 7,753,908 pink, and 1,343,706 chum salmon (Appendices A.12-A.17).

Commercial Salmon Harvests for the 1998 Season

The 1998 South Peninsula commercial harvest was 11,081,976 salmon composed of 4,796 chinook, 2,170,803 sockeye, 154,170 coho, 8,040,681 pink, and 711,526 chum salmon. The highest percent of the salmon harvest (4,508,440 or 40.7%) came from the Southeastern District, while the South Central, Southwestern, and Unimak Districts accounted for 2,880,393 (26.0%), 2,605,125 (23.5%), and 1,088,018 (9.8%), respectively (Appendix A.18).

In 1998, the first South Peninsula commercial salmon landing occurred on June 13, and the last landing was recorded on October 8 (Appendix A.19). South Peninsula purse seiners caught 8,352,853 salmon (Appendix A.20), while drift and set gillnetters accounted for 1,327,771 and 1,401,352, respectively (Appendices A.21 and A.22). During 1998, purse seiners caught 75.4% of the total South Peninsula salmon harvest, while drift and set gillnetters, accounted for 12.0% and 12.6%, respectively (Appendix A.23).

Commercial Salmon Effort Levels and Harvests, July 1-October 31

Effort Levels. The number of South Peninsula (including the SEDM) CFEC permits fished during the period from July 1-October 31 more than doubled between 1978 and 1989 (Appendix A.24). However, the number of permits fished steadily declined from the peak year of 1989 (274) through 1997 (168). In 1998, 209 CFEC permits were fished between July 1-October 31, the highest since 1994. The number of active purse seine permits peaked in 1979 (120), whereas drift gillnet and set gillnet use peaked in 1989 (81) and 1998 (82), respectively (Appendices A.25-A.27). During the 1998 season, 78 purse seine, 49 drift gillnet (highest since 1990), and 82 set gillnet permits (highest on record) were fished after June 30.

The number of landings made in the South Peninsula after June 30 more than doubled between 1978 and 1988 when they peaked at 4,701 (Appendix A.24). Purse seine landings peaked in 1984

(2,307) whereas drift gillnet and set gillnet landings peaked in 1989 (590) and 1998 (2,626), respectively (Appendices A.25-A.27). The number of purse seine and drift gillnet landings generally decreased from 1992 through 1997, and set gillnet landings remained stable. The total number of post June landings declined during those seasons because most of the South Peninsula was closed by regulation to commercial salmon fishing from July 1-19. Also, weak pink salmon runs in the Southeastern District limited fishing time in 1996 and 1997. During the 1998 season, 1,298 purse seine (highest since 1995), 416 drift (highest since 1990), and 2,626 set gillnet (highest on record) landings were reported.

Commercial Salmon Harvest

Most South Peninsula post June fishing periods are based on local pink and chum salmon run strengths. However, fishing time in the SEDM, Thin Point Cove, Morzhovoi Bay, and the fall fisheries are determined by the strength of local sockeye and coho salmon runs.

For this report some non conventional years are used for average harvest figures to better represent the historical nature of the South Peninsula post June fisheries. The 1978 through 1992, and 1993 through 1997 time periods are used for most historical average harvests, and are compared to the 1998 harvests. The 1978-92 average harvests show catches after Alaska salmon populations had recovered from low runs during the 1960s and 1970s. The 1993-97 averages are used because during those years only a few terminal harvest areas were open in post June fisheries from July 6-19.

Since 1992, the South Peninsula, including the SEDM, post June average harvests of sockeye and pink salmon have increased, while the chinook, coho, and chum salmon average catches have decreased (Appendix A.28). The South Peninsula post June total salmon harvest declined dramatically in 1996 and all catches except sockeye salmon (due to a large catch in the SEDM) declined even further in 1997. The 1998 South Peninsula post June (July 1-end of season) total harvest was 9,070,120 salmon (highest since 1995) and was composed of 2,100 chinook, 882,078 sockeye, 153,694 coho, 7,566,341 pink, and 465,907 chum salmon (Appendix A.28).

From 1978 through 1992, post June catches of all species in the South Peninsula averaged 7,451,586 salmon and ranged from 2,813,059 in 1987 to 12,822,334 in 1984 (Appendix A.24). The 1978 through 1992 average harvests were composed of 4,004 chinook, 521,634 sockeye, 277,093 coho, 5,728,901 pink, and 919,953 chum salmon. Since 1992, the South Peninsula post June harvest has averaged 8,847,459 salmon, composed of 2,316 chinook, 605,449 sockeye, 219,609 coho, 7,224,956 pink, and 795,129 chum salmon. The largest reported post June salmon harvest of 18,378,036 fish, composed of 2,079 chinook, 824,679 sockeye, 254,581 coho, 16,123,733 pink, and 1,172,964 chum salmon, occurred in 1995. Most post June South Peninsula salmon are harvested with purse seine gear, however, since 1992 the majority of sockeye salmon has been caught with set gillnet gear.

Chinook. The 1998 South Peninsula post June chinook salmon harvest of 2,100 was well below the 1978-92 and slightly below the 1993-97 average harvests of 4,004, and 2,316 salmon, respectively (Appendix A.29). The largest reported chinook salmon catch of 12,833 occurred in 1983. From 1978 through 1992, purse seiners caught 92.3% of the chinook salmon harvest, and drift and set gillnetters accounted for 1.8% and 5.8%, respectively (Appendix A.29). In 1998, purse seiners caught 84.2% of the chinook salmon harvest, and drift and set gillnetters accounted for

0.9% and 15.0%, respectively. Recent harvest trends indicate that set gillnetters are catching an increasing proportion of the total chinook salmon harvest.

Sockeye. The 1998 South Peninsula post June sockeye salmon harvest of 882,078, was well above both the 1978-92 and 1993-97 average harvests of 521,634 and 605,449 salmon, respectively (Appendix A.30). The largest reported sockeye salmon catch of 1,039,265 occurred in 1990. From 1988 through 1997, purse seiners caught 43.5% of the sockeye salmon harvest, and drift and set gillnetters accounted for 5.9% and 50.6%, respectively (Appendix A.31). In 1998, purse seiners caught 43.3% of the sockeye salmon harvest, and drift and set gillnetters accounted for 4.0% and 52.7%, respectively. Recent harvest trends indicate that set gillnetters are catching an increasing proportion of the total sockeye salmon harvest.

Coho. In the South Peninsula, coho salmon is the only species where long term post June harvest records are available (Appendix A.28). Historically, South Peninsula coho salmon catches have demonstrated long periods of varying abundance. From 1923 through 1946, coho salmon catches fluctuated but maintained a relatively high level. From 1947 through 1958, the average was about one third of the 1923-46 harvest level. The 1959-77 harvests were very low, with only 67 coho salmon caught in 1975 (from 1970 through 1977 only limited fishing periods occurred due to weak pink salmon runs). After 1977, coho salmon harvests increased substantially, as Alaska salmon stocks began to recover from low runs during the 1960s and 1970s, and averaged 262,722 fish from 1978-97. The largest reported coho salmon catch of 505,278 occurred in 1988.

The 1998 South Peninsula post June coho salmon harvest of 153,694 was the second lowest since 1983, and well below both the 1978-92 and 1993-97 average harvests of 277,093 and 219,609 salmon, respectively (Appendix A.32). From 1988-97, purse seiners caught 70.0% of the coho salmon harvest, and drift and set gillnetters accounted for 14.2% and 15.9%, respectively (Appendix A.33). In 1998, purse seiners caught 54.1% of the coho salmon harvest, and drift and set gillnetters accounted for 19.7% and 26.2%, respectively. Recent harvest trends indicate that set gillnetters are catching an increasing proportion of the total coho salmon harvest.

Pink. Pink salmon are the most abundant salmon species produced in South Peninsula streams (Murphy 1992). The 1998 South Peninsula post June pink salmon harvest of 7,566,341 was the second highest since 1994, and above both the 1978-92 and 1993-97 average harvests of 5,728,901 and 7,224,956 salmon, respectively (Appendix A.34). From 1988-97, purse seiners caught 95.0% of the pink salmon harvest, and drift and set gillnetters accounted for 0.7% and 4.3%, respectively. In 1998, purse seiners caught 89.9% of the pink salmon harvest, and drift and set gillnetters accounted for 2.5% and 7.5%, respectively. Recent harvest trends indicate that purse seiners continue to harvest the vast majority of the pink salmon.

During 1996 and 1997, very low prices and smaller than expected pink salmon runs led to reduced fishing effort and a drastic reduction of pink salmon harvests. The 1998 post June pink salmon harvest was above the 6,000,000 preseason forecast but low prices and limited markets continued to restrict pink salmon harvests. Future pink salmon harvests may continue to be limited by low prices and lack of markets, rather than the availability of fish.

Chum. Chum salmon are the second most abundant salmon species produced in South Peninsula streams (Murphy 1992). The 1998 South Peninsula post June chum salmon harvest of 465,907 was the third lowest since 1979 and well below both the 1978-92 and 1993-97 average harvests of

919,953 and 795,129 salmon, respectively (Appendix A.35). The largest reported chum salmon catch of 1,593,590 occurred in 1994, and is attributed to an exceptionally large return of late run chum salmon in the Volcano Bay Section of the Southwestern District. From 1988 through 1997, purse seiners caught 86.4% of the chum harvest, and drift and set gillnetters accounted for 3.7% and 9.9%, respectively. In 1998, purse seiners caught 71.6% of the chum salmon harvest, and drift and set gillnetters accounted for 7.7% and 20.7%, respectively. Recent harvest trends indicate that set gillnetters are catching an increasing proportion of the total chum salmon harvest.

During 1996 and 1997, very low pink and chum salmon prices and smaller than anticipated pink salmon runs led to reduced fishing effort and a drastic reduction in both pink and chum salmon harvests. The 1998 post June chum salmon harvest was only 52% of the 900,000 preseason forecast and low prices and limited markets continued to restrict chum salmon harvests. Therefore, recent harvest trends indicating that set gillnetters are catching an increasing proportion of the total chum salmon harvest, may be a short term event rather than a long term trend.

South Unimak and Shumagin Islands June Fisheries

Introduction

The South Unimak and Shumagin Islands June fisheries first documented harvests occurred in 1911 (Appendices B.1 and B.2). Sockeye salmon bound for Bristol Bay are the dominant stocks targeted by these fisheries (Eggers et al. 1991). During the early to mid 1960s, the South Unimak and Shumagin Islands fisheries were open to commercial salmon fishing five days per week (Appendix B.3). During the late 1960s to early 1970s, the fisheries were open seven days per week regardless of the Bristol Bay sockeye salmon run strength. The seven-day per week fishing schedule was very controversial and caused many debates between Alaska Peninsula and Bristol Bay permit holders. The controversy over the seven-day per week fishing schedule resulted in special Alaska Board of Fisheries (BOF) meetings to address this issue in the early 1970s.

Regulatory History

The South Unimak and Shumagin Islands June management strategy was decided on a year-by-year basis from 1972-1974 due to very low projected Bristol Bay sockeye salmon returns. In 1974, the South Unimak and Shumagin Islands June fisheries were closed because of a weak Bristol Bay run. In 1975, the BOF implemented an allocation plan where the South Unimak and Shumagin Islands June fisheries would be granted an annual guideline harvest level (GHL) based on the predicted Bristol Bay inshore sockeye salmon harvest. Based on historical catch data, 6.8% of the forecasted inshore Bristol Bay harvest was allocated to the South Unimak June fishery and 1.5% was allocated to the Shumagin Islands fishery. To reduce the possibility of overharvesting any

segment of the Bristol Bay run the GHL was apportioned to discrete time periods based on historical catch data. The distribution of the allocation by time period and percent was as follows:

Time Periods	South Unimak	Shumagin Islands
June 1 - 11	5%	9%
12 - 18	29%	28%
19 - 25	51%	41%
26 - 30	15%	22%
Total	100%	100%

If the guideline harvest for an individual time period was not reached, the unharvested portion was lost to the fishery. If the guideline harvest for an individual time period was exceeded, the overharvest was subtracted from the total season allocation.

Chum salmon are also harvested during the South Unimak and Shumagin Islands June fisheries. In 1982, an unusually large harvest of 1,095,044 chum salmon occurred (Appendix B.4-B.6). The 1982 fall Yukon River chum salmon returns were weak and resulted in increased concerns by Arctic-Yukon-Kuskokwim (A-Y-K) permit holders who wanted to curtail or eliminate the South Peninsula June fisheries. Unlike sockeye salmon, which are predominantly bound for Bristol Bay and have recently experienced large returns; chum salmon are bound for numerous areas ranging from Japan to Kotzebue to Prince William Sound, and have recently experienced poor returns, especially in A-Y-K river systems (Eggers et al. 1991; Ogura and Ito 1994; Kron 1994; Seeb et al 1997).

In 1984, the BOF placed further restrictions on the South Unimak and Shumagin Islands June fisheries in an attempt to decrease the chum salmon harvest. The new regulations allowed a maximum of 96 hours of fishing during a seven-day period and no more than 72 consecutive hours of fishing. This BOF action established closed fishing periods (referred to as windows) between open periods to increase the opportunity for chum salmon to escape the South Peninsula June fisheries.

The following additional restrictions applied during the1986 season:

1. No fishing prior to June 11.
2. No fishing during June 26-30 and the loss of that periods allocation.
3. A 400,000 chum salmon catch limit or chum cap (i.e., after 400,000 chum salmon were harvested the fishery would close; Shaul and Schwarz 1989).

These restrictions, plus low availability of sockeye salmon, resulted in only 471,397 of the 1,107,000 sockeye salmon allocation being harvested in 1986.

The fall 1986 BOF meeting adjourned (with three members resigning), without taking action on the South Unimak and Shumagin Islands June fisheries. The regulations passed in 1986 were rescinded and the 1987 fisheries were managed similar to the 1984-1985 June fisheries.

A sockeye and chum salmon tagging project was conducted in the South Unimak and Shumagin Islands fisheries during June 1987. The tagging project indicated that chum salmon harvested in the June fisheries are composed of stocks scattered all around the North Pacific and Bering Sea, from Japan to British Columbia, while the majority of the sockeye salmon were from Bristol Bay (Eggers et al. 1991).

During the spring of 1988, the BOF placed a 500,000 chum salmon harvest cap on the South Unimak and Shumagin Islands June fisheries. The 1988 South Unimak sockeye salmon harvest of 474,457 fish was only about 38% of the GHL. In 1988, the Shumagin Islands fishery harvested its sockeye salmon allocation.

In 1989, the Bristol Bay inshore sockeye salmon run was unexpectedly strong and surpassed the preseason forecast (Appendices B.7-B.9). The South Unimak and Shumagin Islands June sockeye salmon allocations were exceeded because the low Bristol Bay forecast produced relatively small South Unimak and Shumagin Islands allocations (Shaul et al. 1990).

The BOF made the following changes to the South Unimak and Shumagin Islands June fisheries after the 1989 season (Appendix B.3):

1. The starting date of the fishery was delayed until June 13 (the sockeye to chum salmon ratio usually improves after June 12).

2. The chum salmon cap for both fisheries combined was increased from 500,000 to 600,000.

3. The "window regulations" were eliminated, as BOF could not justify both a chum salmon cap and windows (Eggers et al. 1991).

4. The sockeye salmon allocations and time periods became the same for each fishery.

Time Periods	South Unimak and Shumagin Islands
June 13 - 18	35%
19 - 25	45%
26 - 30	20%
Total	100%

   If sockeye salmon catches in either fishery fell below the June 13-18 period guidelines those unharvested sockeye salmon up to a maximum of 5% of the total allocation for that fishery could be harvested during the June 19-25 period. The June 26-30 period could not be used to make up for underharvests during the first two periods. The best available data indicated that the sockeye salmon stock compositions in the June 13-18 and June 19-25 periods were very similar. However, the June 26-30 stock composition at South Unimak and the Shumagin Islands fisheries may be dominated by fewer stocks with a later run timing (Eggers et al. 1991).

5. Unlimited seine leads were eliminated at South Unimak, only leads of 50 to 150 fathoms in length are permitted for the entire Alaska Peninsula.

6. Maximum depth restrictions were placed on all seine and gillnet gear. For the entire Alaska Peninsula Area, seines may not exceed 375 meshes in depth. Seine mesh may not exceed 3-1/2 inches except the first 25 meshes above the lead line may not be more than 7 inches. Gillnet gear used in South Peninsula waters may not exceed 90 meshes in depth.

7. The area comprising the South Unimak fishery was extended to include the following portions of the Southwestern District located outside the Ikatan Bay Section:

   (a) all waters north and west of a line from Cape Pankof Light to Thin Point.
   (b) all waters enclosed by a line from Thin Point to Stag Point on Deer Island to Dolgoi Cape and from Bluff Point on Dolgoi Island to Arch Point.

The ADF&G does not know what impact the reduction in gear depth, adopted by the BOF prior to the 1990 season, has on gear efficiency or if the gear reduction has reallocated salmon resources among gear types. Too many other factors influence the harvest each year to determine how the gear changes alone affect the harvest (Campbell et al. 1998).

In 1990, ADF&G established a test fishing program in the Shumagin Islands during June to help South Peninsula management staff determine sockeye to chum salmon ratios and salmon average weights by species (Shaul et al. 1991). The ADF&G attempts to have commercial salmon fishing periods when a high sockeye to chum salmon ratio is expected in the harvest. The sockeye to chum salmon ratio is normally low in early June, highest during mid to late June when the sockeye salmon run peaks and often drops again in late June (Shaul et al. 1992).

Before the South Unimak and Shumagin Islands June fisheries open, ADF&G conducts a test fishing program to determine the most favorable periods of sockeye to chum salmon ratios. The original ADF&G test fishing program was standardized to include only full size purse seine gear making a minimum of one 20 minute set, more sets are made if time and conditions permit, each at Popof Head, Middle Set, and Red Bluff. All these test fish sites are located on the eastside of Popof Island in the Shumagin Islands Section (Appendix B.10; McCullough and Shaul 1992). In 1994 the test fishing program was expanded to include the South Unimak area. During off-loading, the catch is separated by species, counted, and weighed. In the Shumagin Islands, purse seine vessels are selected randomly from a list of skippers that requested to participate in the test fishery. At South Unimak, ADF&G solicits bids and the lowest bidder(s) are selected to test fish.

The 1990 South Unimak sockeye salmon harvest of 1,090,710 fish was slightly above the 1,087,000 GHL (Appendix B.8). The Shumagin Islands June sockeye salmon harvest of 255,585 fish exceeded the 240,000 allocation (Appendix B.9). The combined South Unimak and Shumagin Islands June fisheries sockeye salmon GHL of 1,327,000 fish was achieved (actual harvest of 1,346,295 fish; Appendix B.7) in spite of inclement weather that plagued fishing operations (Shaul et al. 1991). The combined South Unimak and Shumagin Islands June fisheries chum salmon harvest of 518,739 was below the 600,000 chum salmon cap (Appendix B.4).

The 1991 regulations governing the South Peninsula fisheries were similar to the 1990 regulations. The South Unimak sockeye salmon catch was 1,215,658, well below the 1,573,000 allocation, and the chum salmon harvest was 670,103 (Appendix B.5). The Shumagin Islands June sockeye harvest was 333,272 salmon, slightly below the 347,000 allocation and the chum salmon harvest was 102,602 (Appendix B.6; Shaul et al. 1992). The combined South Unimak and Shumagin

Islands fisheries chum salmon catch of 772,705 exceeded the 600,000 chum salmon cap and by regulation both fisheries were closed.

In November 1991, the BOF changed the South Unimak and Shumagin Islands June chum salmon cap from 600,000 fish to 40 percent of the sockeye salmon allocation, not to exceed 900,000 chum salmon. Due to the large 1992 Bristol Bay sockeye salmon forecast, the chum salmon cap was established at 900,000. The 900,000 chum salmon cap generated considerable debate between Alaska Peninsula and A-Y-K permit holders. The BOF relied extensively on the 1987 South Unimak and Shumagin Islands sockeye and chum salmon tagging study when they increased the chum cap (Eggers et al. 1991). However, an error in the 1987 ADF&G tagging project indicated the study underestimated the impact of the South Unimak and Shumagin Islands June fisheries on A-Y-K chum salmon stocks, including stocks in Norton Sound. This discovery provided the BOF with enough new information to reconsider the South Unimak and Shumagin Islands chum salmon cap. During their March 1992 meeting, the BOF changed the June fisheries chum salmon cap to an annual 700,000 fish limit (Shaul et al. 1993).

Prior to the 1992 South Peninsula June fisheries, ADF&G closed the waters around Sanak Island to commercial salmon fishing during June to minimize the harvest of chum salmon (Appendix B.2; Shaul et al. 1993). Historically, Sanak Island waters had been fished sporadically but produced unacceptably low sockeye to chum salmon ratios.

In 1992, the South Unimak and Shumagin Islands June fisheries total sockeye salmon catch of 2,457,856 exceeded the combined June allocation of 2,391,000 and both fisheries were closed. The combined chum salmon harvest was 426,203, and well below the 700,000 cap (Appendix B.4).

In 1993, the South Unimak and Shumagin Islands fisheries combined harvest was 2,973,744 sockeye and 532,247 chum salmon, 74,744 sockeye more than the allocation and 167,753 chum salmon less than the cap.

Before the 1994 commercial salmon season, the BOF eliminated the time period requirements and designated June 13 as the earliest possible opening date of the South Unimak and Shumagin Islands June fisheries. The BOF action gave ADF&G the flexibility to establish fishing periods based on favorable sockeye to chum salmon ratios (McCullough and Pengilly 1994).

In 1994, the South Unimak and Shumagin Islands fisheries combined harvest was 1,461,263 sockeye and 582,165 chum salmon, which is 2,124,737 sockeye salmon below the GHL and 117,835 chum salmon below the cap. The GHL was not achieved because sockeye salmon were not available in large numbers in either fishery.

Following the 1994 season, the BOF made the following changes to the South Unimak and Shumagin Islands June fisheries management plan:

1. June fishery cannot begin prior to June 11.

2. After June 24, in either the South Unimak or Shumagin Islands fishery, if the sockeye salmon GHL and the maximum allowable harvest of chum salmon have not been attained, and if the ratio of sockeye to chum salmon is two to one or less on any day, the next daily fishing period for seine and drift gillnet gear shall be of six hour duration in that fishery.

After June 24, the South Unimak or Shumagin Islands fishery shall close for all gear types if the ratio of sockeye to chum salmon is two to one or less for any three aggregate days.

3. The BOF stated its intent that the maximum harvest or less of 700,000 chum salmon supersedes attempts to reach the sockeye salmon guideline harvest levels.

4. The BOF eliminated the provision for the fisheries to continue into early July if weather prevented fishing at the end of June.

5. The BOF eliminated mesh size requirements for gillnets during the June fisheries.

In 1995, the South Unimak and Shumagin Islands combined harvest was 2,105,321 sockeye and 537,433 chum salmon; 1,540,679 sockeye salmon below the GHL and 162,567 chum salmon below the 700,000 cap. The sockeye salmon GHL was not achieved, for the second consecutive year, because sockeye salmon were not available in large numbers in either fishery.

In 1996, the sockeye salmon harvest rates were extremely low in both the South Unimak and Shumagin Islands fisheries and almost continuous fishing was allowed. The combined South Unimak and Shumagin Islands harvest was 1,028,970 sockeye and 359,820 chum salmon; 1,535,030 sockeye salmon below the GHL and 340,180 chum salmon below the 700,000 cap. The sockeye salmon GHL was not achieved for the third straight year, because sockeye salmon were not available in large numbers in either fishery.

In 1997, the sockeye salmon harvest rates were low in both the South Unimak and Shumagin Islands fisheries and almost continuous fishing was allowed. The combined South Unimak and Shumagin Islands harvest was 1,628,181 sockeye and 322,325 chum salmon; 617,819 sockeye salmon below the GHL and 377,675 chum salmon below the 700,000 cap. The Shumagin Islands sockeye salmon harvest of 449,002 exceeded the 406,000 sockeye GHL. However, the South Unimak and Shumagin Islands combined sockeye salmon GHL was not achieved for the fourth straight year, because sockeye salmon were not available in large numbers in either fishery.

The BOF made the following changes that affect the South Unimak and Shumagin Islands June fisheries, during their January 1998 meeting:

1. The chum salmon cap was lowered from 700,000 to a floating cap that can range from 350,000 to 650,000 chum salmon depending on an Arctic-Yukon- Kuskokwim (A-Y-K) harvest projection based on the previous year's harvest of summer chum salmon in A-Y-K. The projected A-Y-K summer chum salmon index group harvest will be used to establish the chum salmon cap. The A-Y-K summer chum salmon index group includes chum salmon taken during Yukon River summer commercial and subsistence fisheries, the Kotzebue commercial fishery, the Norton Sound commercial fishery, and the Kuskokwim commercial fishery. Management concerns for specific chum salmon stocks in A-Y-K are also a factor in determining the cap. The 1998 chum salmon harvest cap for the South Unimak and Shumagin Islands June fishery was 350,000 to 400,000 chum salmon. This figure was based on the latest A-Y-K harvest projection, using the A-Y-K summer index group, and an identified management concern for summer chum salmon in the A-Y-K region.

2. A commercial test fishery for all gear types may open as early as June 10. However seine and drift gillnet gear may initially be allowed a six hour fishing period while set gillnet gear will be permitted a minimum of 16 hours. If the sockeye to chum salmon ratio is 2 to 1 or greater, the fishing period may be extended for seine and drift gillnet gear. The set gillnet fishing period may be extended if the set gillnet sockeye to chum salmon ratio is equal to or greater than the recent 10-year average regardless of the seine and drift gillnet ratios.

3. In the Unimak District during June, the shoreward end of a set gillnet may not be placed further than one half mile from the mean high water mark.

4. All salmon caught by CFEC permit holders must be retained, and each CFEC permit holder must report the number of salmon caught, including those taken but not sold, on an ADF&G fish ticket. For purposes of this section, "caught" means brought on board the vessel.

5. A person may not use or employ an aircraft to locate salmon for the commercial taking of salmon or to direct commercial fishing operations in the Alaska Peninsula Area, one hour before, during, and one hour after a commercial salmon fishing period (ADF&G 1998).

1998 Season Summary

Based on the Bristol Bay forecast, the 1998 South Unimak and Shumagin Islands sockeye salmon GHL's were as follows (Beverly Cross, ADF&G Anchorage, personal communication):

June Fishery		
South Unimak	Shumagin Islands	Total
1,529,000	336,000	1,865,000

ADF&G operated test fishing programs were used to assist management biologists establish the opening dates of the South Unimak and Shumagin Islands June fisheries. The South Unimak June 9, 10, and 11 ADF&G test fisheries resulted in sockeye to chum salmon ratios of 1.5, 1.0, and 2.0, respectively (Appendix B.12). The Shumagin Islands June 9, 10, and 11 ADF&G test fisheries sockeye to chum salmon ratios were 1.4, 1.3, and 1.2, respectively (Appendix B.13). The sockeye to chum salmon ratios from the ADF&G June 9, 10, and 11 test fisheries were not high enough to allow a commercial test fishery prior to June 13.

The South Unimak and Shumagin Islands fisheries opened to commercial salmon fishing on June 13. Purse seine and drift gillnet gear were allowed six hours and by regulation set gillnet gear was allowed a 16 hour fishing period. However, the entire seine fleet and approximately 80% of the set gillnetters did not fish due to a dispute over salmon prices. The entire drift gillnet fleet at South Unimak went fishing on June 13. As the fishery progressed more set gillnetters participated and finally at 8:00 p.m. on June 17 the seiners and the balance of the set gillnet fleet went fishing. During the strike the department implemented short closures for seine gear in the Shumagin Islands Section because ADF&G personnel did not receive any reports from seiners on the grounds to

verify ratios or seine effort. In the Shumagin Islands Section, fishing time for set gillnet gear was continuous except for a short closure during June 15, when the sockeye to chum salmon ratio dropped below the previous ten-year average. Fishing time in the Shumagin Islands Section was continuous for all gear types once the price dispute was settled.

The 1998 sockeye salmon harvest rates were low in both the South Unimak and Shumagin Islands June fisheries (Appendix B.14). Despite continuous fishing from June 13 through June 30, only 974,628 sockeye (63.7% of the allocation) and 195,454 chum salmon were harvested at South Unimak (Appendix B.15). During the 1998 South Unimak June fishery, purse seine gear harvested 70,263 sockeye and 26,777 chum salmon (Appendix B.16), drift gillnet gear harvested 856,265 sockeye and 162,566 chum salmon (Appendix B.17), and set gillnet gear harvested 48,100 sockeye and 6,111 chum salmon (Appendix B.18).

A total of 314,097 sockeye salmon (93.5% of the allocation) were harvested in the Shumagin Islands Section (Appendix B.19). During the 1998 Shumagin Islands June fishery, purse seine gear harvested 155,216 sockeye and 39,464 chum salmon (Appendix B.20), and set gillnet gear harvested 158,881 sockeye and 10,701 chum salmon (Appendix B.21).

Purse seine gear harvested 7.2% of the sockeye and 13.7% of the chum salmon at South Unimak, and 49.4% of the sockeye and 78.7% of the chum salmon in the Shumagin Islands Section (Appendix B.22). Drift gillnet gear harvested 87.9% of the sockeye and 83.2% of the chum salmon at South Unimak. Set gillnet gear harvested 4.9% of the sockeye and 3.1% of the chum salmon at South Unimak, and 50.6% of the sockeye and 21.3% of the chum salmon in the Shumagin Islands. For both fisheries combined, purse seine gear harvested 17.5% of the sockeye (Appendices B.23 and B.24), and 27.0% of the chum salmon (Appendices B.25 and B.26). For both fisheries combined, set gillnet gear harvested 16.1% of the sockeye (206,981), and 6.8% (16,812) of the chum salmon

The June fisheries sockeye to chum salmon harvest ratios were 5.0 to 1.0 at South Unimak and 6.3 to 1.0 in the Shumagin Islands Section. The overall ratio for both fisheries combined, was 5.2 to 1.0 (Appendix B.27). In the South Unimak fishery, the sockeye to chum salmon ratio was 2.6:1.0 for purse seine, 5.3:1.0 for drift gillnet, and 7.9:1.0 for set gillnet gear (Appendix B.28). In the Shumagin Islands fishery, the sockeye to chum salmon ratio was 3.9:1.0 for purse seine, and 14.8:1.0 for set gillnet gear. In 1998, 64 purse seine (lowest since 1979), 145 drift gillnet, and 74 set gillnet permit holders fished commercially for salmon in the South Unimak and Shumagin Islands June fisheries (Appendix B.29).

The total 1998 South Unimak and Shumagin Islands June sockeye salmon harvest was 1,288,725 (69.1% of the allocation). The South Unimak and Shumagin Islands combined GHL has not been achieved since 1993 because sockeye salmon have not been available in large numbers in either fishery. The 1998 South Unimak and Shumagin Islands combined June chum salmon harvest was 245,619, which is 154,381 fish below the upper cap limit of 400,000 chum salmon.

South Peninsula Post June Fisheries

Introduction

Until 1974, the South Peninsula post June salmon fisheries were generally open five days per week, with a total season closure on August 10 to provide adequate escapement and maintain product quality (McCullough 1995). During 1974 and 1975, the fisheries were severely restricted to rebuild pink salmon runs. From about 1976 to 1991, the salmon fisheries were managed by emergency order based on local stock run strength. Fishing periods from July 6 to about July 18 were based on chum salmon run strength and from July 18 through about August 20 primarily on pink salmon, and in some areas on chum salmon, run strength. Fishing continued into late August in years of strong pink salmon runs. Migratory salmon were also harvested during these openings, and in some years contributed substantially to the total post June harvest. Before 1992, South Peninsula waters east of Rock Island were opened to commercial salmon fishing about July 6, except in the SEDM fishery, which is managed through July 25 on a separate management plan (5 AAC 09.360. Southeastern District Mainland Salmon Management Plan; Appendix C.1). Beginning September 1, fishing periods were established by emergency orders based on local coho salmon run strength, and to a lesser degree on pink and chum salmon runs.

Regulatory History

In November 1991, the BOF established the Post June Salmon Management Plan for the South Alaska Peninsula (5 AAC 09.366; McCullough 1995). Under this new plan, commercial salmon fishing from July 6-19 would be restricted to terminal fishing areas opened by emergency order, based on local stock run strength as determined by harvest and escapement rates. The balance of the South Peninsula formerly opened in post June fisheries would remain closed (Appendix C.2). The BOF decided that local pink and chum salmon could be caught in terminal areas early in the season without sacrificing product quality, and still allow migratory salmon to pass through South Peninsula waters. The BOF concluded that after July 19, South Peninsula permit holders needed to harvest pink salmon in their traditional cape fishing areas to maintain product quality and to allow for available processing capacity. The terminal areas included Zachary Bay, the northern portion of Pavlof Bay, and the Cold Bay, Thin Point, Canoe Bay, and Morzhovoi Bay Sections (Appendix C.3). From July 20 until the close of the season, the entire South Peninsula could be opened to commercial salmon fishing by emergency order based on local run stock strength (except in the Southeastern District Mainland fishery through July 25; ADF&G 1996).

The Stepovak-Shumagin Setnet Association sued the BOF in early 1992, to stop the implementation of the Post June Salmon Management Plan for the South Alaska Peninsula (5 AAC 09.366). On July 10, 1992, Alaska State Superior Court Judge Hopwood (Third Judicial District, Kodiak) granted an injunction staying the enforcement of the new management plan. On July 13, management of the post June fisheries reverted back to pre 1992 policies (Shaul et al. 1993).

In March 1993, the Alaska State Superior Court reconsidered the 1992 injunction staying the enforcement of the Post June Salmon Management Plan. After reconsideration, the court agreed with the State of Alaska and reinstated the Post June Salmon Management Plan. That version of the post June management plan was fully implemented during the 1993 through 1997 commercial fishing seasons (Shaul and Campbell, 1997).

During their January 1998 meeting, the BOF made the following changes affecting the post June fishery, including some potential benefits to permit holders and processors:

During the July 6-21 time period:

1. Increased fishing opportunities in early July in non-terminal areas, limited fishing periods to a maximum of 24 hours, followed by minimum 48-hour closures to protect migrating sockeye and chum salmon (Appendix C.4).
2. Allowed permit holders the opportunity to recruit and maintain crewmembers, which have been idle in recent years, because most of the South Peninsula has been closed to commercial salmon fishing from late June until late July.
3. Made additional salmon available to local processors in early July.

During the July 22-31 time period:

1. Reduced overall fishing time and restricted continuous fishing in late July in non-terminal areas, to reduce the harvest of migrating sockeye and coho salmon stocks (Appendix C.5).
2. Established a 60,000 coho salmon harvest cap in non-terminal areas from July 22-31, to reduce the harvest of migrating coho salmon.
3. Allowed longer (i.e., 36 hour versus 24 hour) fishing periods from July 22-31 than during July 6-21 in non-terminal areas, to increase the harvest of local pink salmon during the peak of the run. Fishing periods followed by minimum 48-hour closures to protect migrating sockeye and coho salmon
4. Expanded the terminal harvest areas.

Immature Salmon Concerns

Another factor in the 1991 BOF decision to allow commercial salmon fishing only in limited areas within South Peninsula waters were concerns for immature salmon (chinook, sockeye, and chum) which are inadvertently gilled in normal purse seine gear fishing operations (McCullough and Shaul 1992).

The department first became aware of immature salmon catches in 1963. The presence of immature salmon in South Peninsula waters has warranted restrictions to commercial fishing in some years. These restrictions were applied to all gear types, in affected areas during late June into July in 1963, 1968, 1969, 1974, 1979, and for purse seine fishing only during the 1989-92 and 1994 seasons (McCullough et al. 1995).

Immature salmon have been most prevalent in the Shumagin Islands Section and the concern for catching immature salmon is restricted to purse seine gear. Under current regulations, seine mesh size may not exceed 3-1/2 inches except for the first 25 meshes above the lead line, which may not exceed 7 inches (ADF&G 1998). The gillnet gear has larger mesh size (minimum of 5-1/4 inches) which allows the immature salmon to pass through unaffected. After 1979, regulations were adopted curtailing only purse seine fishing in affected areas (McCullough 1995). Immature salmon usually migrate out of the area by July 23, although in 1992 closures remained in effect until July 29.

In 1990, an ADF&G test fishing program was instituted in the Shumagin Islands to determine the presence and abundance of immature salmon in South Peninsula waters prior to commercial fishing periods in July. In the Shumagin Islands Section, most purse seine fishing effort occurs in the near shore waters of Popof Island from Popof Head to Red Bluff, so test fishing sites were established in those areas (Appendix B.10).

1998 Season Summary

During their January 1998 meeting, the BOF changed the earliest general opening date of the post June fishery from July 20 to July 6. Therefore, in 1998 the ADF&G test fish program in the Shumagin Islands to assess the presence of immature salmon was conducted in early July, instead of mid July when concerns for catching immature salmon normally occur. Test fishing prior to the first general fishing period and observations made by ADF&G personnel during the fishery indicated a very low abundance of immature salmon (Appendix C.6).

In accordance with the current South Peninsula post June salmon management plan and exclusive of the SEDM fishery, most of the South Peninsula opened to commercial salmon fishing on July 6 for 21 hours, from 12:01 a.m. until 9:00 p.m. The five subsequent fishing periods in non-terminal areas through July 21 were for 24 hours each from 9:00 p.m. until 9:00 p.m. The July 6 through July 21 commercial salmon harvest from non-terminal areas was 1,051 chinook, 315,505 sockeye, 40,756 coho, 522,661 pink, and 72,353 chum salmon (Appendix C.7). The 1998 South Peninsula (excluding Orzinski Bay) July 6-21 salmon harvest from terminal areas was 4 chinook, 16,050 sockeye, 110 coho, 106,933 pink, and 29,393 chum salmon.

From July 22-31, commercial salmon fishing in the South Peninsula, outside "terminal areas" and outside the SEDM from July 22 through July 25, may be allowed for a maximum of three 36-hour fishing periods interspersed by 48-hour closures. In addition, a 60,000 coho salmon harvest cap was in effect from July 22 through July 31 in the entire South Peninsula except for those areas designated as terminal harvest locations and the SEDM through July 25.

Historically, large numbers of coho salmon have been caught during late July in South Peninsula fisheries. In 1998, only 8,900 coho salmon were caught during the July 21 fishing period in the non-terminal areas of the South Peninsula. However, several drift gillnetters caught substantial numbers of coho salmon during the July 21 fishing period at South Unimak. At the same time, the Port Moller (North Peninsula) salmon fishery was scheduled to close for three to four days, which could have potentially enticed additional drift gillnet vessels to participate in the July 23-24 fishing period at South Unimak. The department estimated the potential increased drift gillnet effort could have substantially increased coho salmon catches in non-terminal areas.

During the July 23-24 fishing period, the department closed several fishing areas with a history of large coho catches in late July. The department took this action to avoid prematurely reaching the 60,000 coho cap and subsequently closing all South Peninsula non-terminal areas (including the SEDM after July 25) until August 1. The extended closed waters included the Unimak District, a portion of the Ikatan Bay Section in the Southwestern District, the southeast side of Unga Island, the eastside of Popof Island, and the eastside of Korovin Island all in the Southeastern District.

Only 8,000 of the 60,000 non-terminal area coho salmon cap were caught during the July 23-24 fishing period. Due to the low coho salmon catches, ADF&G opened all non-terminal areas during the next two late July fishing periods with minimal risk of reaching the coho salmon cap.

The entire South Peninsula (including the SEDM catches from July 26-31) non-terminal harvest during July 22-31 included 296 chinook, 228,587 sockeye, 42,456 coho, 1,198,471 pink, and 72,860 chum salmon (Appendix C.8). The South Peninsula (including the SEDM terminal areas) terminal area harvest during July 22-31 was 6 chinook, 34,378 sockeye, 506 coho, 1,561,738 pink, and 34,234 chum salmon.

The SEDM was closed to commercial salmon fishing from August 11 through August 31, and the Shumagin Islands Section was closed from August 16 through August 31 to allow for additional pink and chum salmon escapements. Product quality began to deteriorate by mid August, and markets were limited.

Historically, the South Peninsula fall fishery opens September 1 and commercial salmon fishing periods are primarily based on local coho salmon catch per unit effort (CPUE) and in some areas on late chum salmon runs. From 1988 through 1997, the South Peninsula fall fishery average harvest was 110,885 salmon composed of 17 chinook, 41,567 sockeye, 26,378 coho, 7,090 pink, and 35,833 chum salmon (Campbell 1997). The 1998 fall harvest was 77,838 salmon composed of 25 chinook, 44,775 sockeye, 20,838 coho 1,818, pink, and 10,382 chum salmon (Appendix A.19)

The 1998 South Peninsula (minus the SEDM July 1-25 harvest) post June (July 1-October 31) commercial salmon harvest was 1,793 chinook, 764,947 sockeye, 150,735 coho, 7,441,311 pink, and 455,978 chum salmon (Appendix C.9). Purse seine permit holders caught 1,558 chinook, 338,672 sockeye, 81,685 coho, 6,711,852 pink, and 327,177 chum salmon (Appendix C.10). Drift gillnet permit holders caught 18 chinook, 35,569 sockeye, 30,219 coho, 192,352 pink, and 35,723 chum salmon (Appendix C.11). Set gillnet permit holders caught 217 chinook, 390,706 sockeye, 38,831 coho, 537,107 pink, and 93,078 chum salmon (Appendix C.12).

Salmon Escapements

There are approximately 185 salmon spawning systems in the South Peninsula area, with sockeye salmon found in 23, pink salmon in at least 110, and chum salmon in 72; coho salmon have been documented in 57 stream systems (Murphy 1992). Most salmon escapements are monitored by aerial observations using small fixed wing aircraft. The coho salmon escapement is probably under estimated because budget restrictions and adverse weather conditions limit late season aerial survey opportunities. The remaining systems are monitored with fish weirs operated by ADF&G employees; foot surveys may also be conducted in certain areas (Appendix F.1). Salmon escapements, except for the sockeye salmon systems of Orzinski Lake, Thin Point Lake, and Mortensen's Lagoon are estimated using an indexed total escapement method (Appendix F.2).

The United States Fish and Wildlife Service (USFWS) operated a weir at Orzinski (Orzenoi) Lake from 1929 through 1941 (Appendix F.3). In 1990 ADF&G reinstated the weir because of the importance of Orzinski Lake sockeye salmon in determining fishing time for the Northwest Stepovak Section, concerns regarding potential Chignik bound sockeye salmon harvests, the difficulties involved with estimating fish from the air, and the pressure to survey Orzinski Lake during marginal flying conditions. The department has operated the Orzinski Lake weir annually

since it was reinstated. Thin Point Lake was first successfully weired in 1994. The Thin Point Lake escapement data is important for determining commercial salmon fishing time in Thin Point Cove and to ensure that King Cove residents achieve their subsistence needs.

Alaska salmon production was low during the 1960s and early 1970s. The Alaska salmon runs began to rebuild in the mid 1970s and most Alaska Peninsula salmon escapements had recovered by 1977. Therefore, the 1962-76 and 1977-97 time periods will be used to better represent average historical escapements. From 1962 through 1976, the South Peninsula total indexed salmon escapement averaged 1,280,100 fish composed of 27,813 sockeye, 957,887 pink, and 294,400 chum salmon (Appendix F.4). From 1977 through 1997, the South Peninsula total indexed salmon escapement averaged 3,380,227 salmon composed of 74,638 sockeye, 2,780,538 pink, and 520,885 chum salmon. No chinook salmon spawn in South Peninsula waters and coho salmon escapement data is not collected annually for most of the area.

A separate report summarizes the Alaska Peninsula Management Area escapement and catch-sampling program, which annually samples salmon catch and escapement for biological characteristics (age, length, and sex: Nelson et al. *In Press*). Also, annual salmon management plans provide overviews of the Alaska Peninsula, Aleutian Islands (Shaul 1999a), and Atka-Amlia Management Areas (Shaul 1999b), and the North Alaska Peninsula (Murphy et al. 1998) commercial, subsistence, and personal use salmon fisheries.

The largest sockeye (52,820) and pink (1,764,310) salmon indexed escapements were observed in the Southwestern District, while the largest chum (1,444,300) salmon escapements were recorded in the South Central District (Appendix F.5).

Sockeye. The 1998 South Peninsula total indexed sockeye salmon escapement of 85,000 fish was below the most recent ten year average of 99,710, but within the escapement goal range of between 67,800 and 135,000 fish (Appendix F.6). From 1977 through 1998, the sockeye salmon indexed escapement ranged from 39,200 in 1982 to 129,110 in 1995.

Orzinski Lake, Thin Point Lake and Middle Lagoon are the primary sockeye salmon producers in the South Peninsula. In 1998, ADF&G personnel installed fish weirs at Orzinski and Thin Point lakes to enumerate salmon escapements (Appendix F.7). Orzinski Lake is located in the Southeastern District and had a sockeye salmon escapement of 25,000, which exceeded the 20,000 escapement goal (Appendix F.8). Thin Point Lake in the Southwestern District had a sockeye salmon escapement of 21,000 which was at the lower end of the 20,000 to 30,000 escapement goal range (Appendix F.9). Middle Lagoon, also located in the Southwestern District, had an estimated sockeye salmon escapement of 20,500 and was within the 16,000 to 32,000 fish escapement range.

Coho. No 1998 South Peninsula coho salmon indexed escapement was calculated due to limited survey data. The most complete coho salmon escapement survey occurred in 1990, and the indexed coho salmon escapement was 87,500 (Appendix F.4). During 1994 through 1998, Thin Point Lake was the only major area surveyed for coho salmon. The highest coho aerial survey counts (not necessarily the peak counts) were about 13,000 in 1994 and 1995. In 1998, the Thin Point Lake peak coho aerial survey count was 4,400 salmon which is near the midpoint of the biological escapement goal. The Thin Point Lake coho escapement goal is 3,000 to 6,000 salmon based on historical aerial survey data.

Pink. The 1998 South Peninsula total indexed pink salmon escapement of 4,668,000 was the third largest escapement on record and exceeded the upper end of the odd year escapement goal range of 1,600,000 to 3,180,000 fish (Appendix F.10). From 1977 through 1997, the pink salmon indexed escapement ranged from 851,200 in 1983 to 6,406,300 in 1995 and averaged 2,780,538 fish. From 1988 through 1997, the South Peninsula total pink salmon indexed escapement averaged 3,344,909 fish. The large 1998 South Peninsula pink salmon escapements appear to be a result of reduced fishing effort due to limited markets rather than a strong run.

Chum. The 1998 South Peninsula total indexed chum salmon escapement of 742,000 was the third largest escapement on record and exceeded the upper escapement goal range of 350,000 to 690,000 fish (Appendix F.11). From 1977 through 1997, the chum salmon indexed escapement ranged from 310,500 in 1989 to 809,050 in 1997 and averaged 520,885 salmon. From 1987 through 1997, the chum salmon indexed escapement averaged 520,658 fish.

In 1998, chum salmon escapements generally met escapement objectives. Escapements were good in most of the SEDM area, and excellent in Canoe Bay, Volcano Bay, Belkofski Bay, and Cold Bay. The 1998 chum salmon escapements were enhanced by reduced fishing effort due to limited markets for chum salmon.

Southeastern District Mainland Fishery

Introduction

The Southeastern District Mainland (SEDM) fishery is located on the south side of the Alaska Peninsula, and occurs in Beaver, Balboa, and Stepovak Bays (Appendix D.1). The SEDM fishery is composed of the East Stepovak, Stepovak Flats, Northwest Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections. The Alaska Board of Fisheries (BOF) originally established the SEDM salmon management plan in 1985, updated in 1991, and most recently revised it in 1998. The SEDM management plan is based on the Cape Igvak Salmon Management Plan, in the Kodiak Management Area (KMA), and the fishery is currently allocated 6% of the total Chignik Management Area (CMA) sockeye salmon harvest through July 25.

Before July 1, the Northwest Stepovak Section is managed entirely on the CMA sockeye salmon allocation (Appendix D.2). Beginning July 1, the Northwest Stepovak Section is managed on the strength of both local Orzinski Lake, and CMA sockeye salmon stocks. The Stepovak Flats Section is managed on local stocks the entire season, however 80% of the sockeye salmon caught in that section through July 25 will be considered Chignik bound. The remainder of the SEDM is managed through July 25 on the 6% allocation based on the strength of the Chignik lakes sockeye salmon runs. After July 25, the entire SEDM area is managed on local salmon stocks (Campbell and Witteveen 1998).

Regulatory History

Prior to 1974, the SEDM was generally open on a five day per week fishing schedule (Appendix D.2). From 1974 through 1977, the SEDM fishery was open on a day per day basis with the CMA. During some years, including 1977, only limited fishing time was needed to harvest large runs in the CMA although daily harvest rates and total harvests were low in the SEDM fishery.

Before the 1978 season, the BOF restricted the SEDM fishery to three days per week, through July 10, and established set gillnet gear as the only legal gear type allowed through July 10. After July 10 both set gillnet and seine permit holders could operate in the SEDM. During the last ten years, set gillnetters have caught about 90% of the total SEDM sockeye salmon harvest through July 25, and purse seiners caught the remaining 10% (Appendices D.3 and D.4). In 1978, the SEDM harvest rates through July 25 were low despite strong Chignik runs, and resulted in a SEDM catch of only 31,197 sockeye, of which 21,952 were considered Chignik bound (Appendix D.5).

Beginning with the 1979 season, the BOF increased fishing time in the SEDM from three days to five days per week but specified that a maximum of 60,000 estimated Chignik bound sockeye salmon could be harvested through July 10. The BOF stipulated that the SEDM fishery could be closed if the CMA sockeye salmon escapement requirements were not assured. The BOF also stated that if the CMA catch exceeded 1,000,000 sockeye before July 10, the SEDM fishery could continue beyond the 60,000 sockeye salmon harvest ceiling. This management plan remained in effect until 1985.

From 1979 through 1982, the annual SEDM sockeye salmon harvest averaged 76,000 fish, with about 61,000 (5.1% of the total Chignik bound sockeye harvest) caught through July 25. These harvests were achieved in spite of numerous fishery closures imposed by the department because of poor Chignik sockeye salmon escapements. The number of active set gillnet permits, through July 25, in the SEDM increased from 23 in 1978 to 37 in 1982 (Appendix D.6).

In 1983 an estimated 227,392 Chignik bound sockeye salmon (11.4% of the total Chignik bound sockeye harvest) were caught in the SEDM fishery through July 25 (Appendices D.7 and D.8). Approximately 76% of the sockeye harvest occurred after July 10.

In 1984 set gillnet effort increased to 54 permits fished through July 25. Five of the set gillnet permit holders also held purse seine permits. Due to an exceptionally strong early Chignik run, the large number of fish available in the SEDM, and increased fishing effort, only six days were required to harvest an estimated 60,000 Chignik bound sockeye salmon. The SEDM fishery was closed for only three days before the Chignik sockeye harvest reached 1,000,000 and the SEDM was reopened on June 14. The late Chignik sockeye salmon run was below the forecast and only reached its escapement goal after the SEDM, Chignik, and Cape Igvak (KMA) fisheries were curtailed during mid-July. The total 1984 SEDM harvest of Chignik bound sockeye salmon through July 25 was 423,068 fish (Appendix D.7).

Before the 1985 season, the BOF developed a management plan based on the Cape Igvak Salmon Management Plan instead of using a set fishing schedule. The BOF plan directed the department to manage the fishery so that the number of sockeye salmon taken in the SEDM (exclusive of the Northwest Stepovak Section) was as near as possible to 6.2% of the total Chignik bound sockeye harvest through July 25. The department re-evaluated the data used to calculate the allocation and determined that 6.0% was the correct figure. Therefore, the BOF changed the allocation to 6.0% beginning with the 1988 season. However, before the SEDM fishery could open the following criteria had to be met:

1) A harvestable surplus beyond the escapement goals for the first and second runs of Chignik River system sockeye salmon was expected to be more than 600,000, and

2) The department determined that the runs were as strong as expected.

In years when a harvestable surplus for the first and second runs of Chignik River system sockeye salmon was expected to be less than 600,000, no commercial salmon fishery targeting Chignik sockeye was allowed in the SEDM fishery until a harvest of 300,000 was achieved in the CMA. After July 8, fishing in the SEDM might occur provided at least 300,000 sockeye salmon had been harvested in the CMA, escapement goals were being met, and the CMA harvest was anticipated to total at least 600,000.

During 1985-91, the harvest of Chignik bound sockeye in the SEDM through July 25 averaged 88,776 fish and 5.5% of the total Chignik bound sockeye salmon harvest.

The BOF revised the SEDM management plan for the 1992 season. This revised plan was in effect from 1992 through 1995, and included two significant changes as follows:

1) The area in the Northwest Stepovak Section to be managed on a local stock basis was reduced to include only the waters of Orzinski Bay; the Stepovak Flats Section would continue to be managed on the basis of the Stepovak River chum salmon stock (Appendix D.1).

2) The allowable harvest of sockeye salmon in the SEDM fishery (exclusive of Orzinski Bay) through July 25 was increased from 6.0% to 7.0% of the total Chignik bound sockeye salmon catch.

From 1992 through 1995, only Orzinski Bay was managed on local stocks, and 7% of the total Chignik bound sockeye salmon harvest through July 25 was allocated to the SEDM fishery. During 1992-95, the harvest of Chignik bound sockeye in the SEDM through July 25 averaged 113,258 fish and 6.9% of the total Chignik bound sockeye salmon harvest.

During their January 1996 meeting the BOF made the following changes to the SEDM salmon management plan:

1) The area to be managed on a local stock basis was increased from only Orzinski Bay to the entire Northwest Stepovak Section (Appendix D.1). 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 as described in 5 AAC 09.360(a)(1) and (b)-(h). Beginning July 1, the Northwest Stepovak Section will be managed entirely on local stocks. The Stepovak Flats Section will continue to be managed on the basis of the Stepovak River chum salmon stocks.

2) The BOF decreased the percentage of sockeye salmon allocated to the SEDM fishery from 7% to 6% of the total Chignik bound sockeye harvest through July 25. This BOF action was taken in an attempt to maintain traditional harvest levels of Chignik bound sockeye salmon in the SEDM fishery and to compensate for the increased area managed for local Orzinski Lake stocks.

3) The BOF established a closed waters area encompassing Kupreanof Point (55°33.98' N. lat., 159°35.88' W. long.), as described in 5 AAC 09.350(38), from July 6 through August 31 (Appendix D.9).

Current Management Plan

The SEDM Management Plan was most recently revised during the January 1998 BOF meeting. Under the current SEDM management plan:

1) The area to be managed for local Orzinski Lake sockeye salmon includes the entire Northwest Stepovak Section (Appendix D.1). Prior to July 1, the SEDM will be managed on an allocation based on the strength of the Chignik sockeye salmon runs as described in 5 AAC 09.360(a)(1) and (b)-(h) and 80% of the sockeye salmon caught will be considered Chignik bound. However, beginning July 1, all sockeye salmon caught in the Northwest Stepovak Section will be considered 100% local fish and not counted toward the Chignik allocation. The Northwest Stepovak Section, outside Orzinski Bay, may open to commercial salmon fishing during July 1 through July 25, if the Orzinski Lake and Chignik sockeye salmon escapements goals are being met, and the CMA sockeye salmon harvest is expected to be at least 300,000 through July 8, and 600,000 through July 25. The BOF mandated fishing schedule for the Northwest Stepovak Section, excluding Orzinski Bay, from July 1 through July 25 will not exceed four days during a seven-day period. The maximum number of consecutive fishing days is two.

2) Beginning July 1, Orzinski Bay will be managed entirely on local stocks. The Stepovak Flats Section will continue to be managed for chum salmon returning to Stepovak Flats streams throughout the entire season, however 80% of the sockeye salmon caught in this section through July 25 will be considered Chignik bound fish.

3) The BOF allocated 6% of the total Chignik bound sockeye salmon harvest through July 25 to the SEDM fishery. The BOF established this percentage during their January 1996 meeting in an attempt to maintain traditional harvest levels of Chignik bound sockeye salmon in the SEDM fishery and to compensate for the increased area managed for local Orzinski Lake sockeye salmon.

4) The BOF directed the department to extend the Kupreanof Point closed waters area, as described in 5 AAC 09.350 (37), through October 31, by emergency order. The Kupreanof Point closed waters extension will remain in effect until the department determines the coho salmon subsistence needs of the residents of Perryville have been satisfied. In addition, the commercial salmon fisheries throughout the Western and Perryville Districts, which are currently closed after August 20 to conserve coho salmon, will need to be reopened during this period.

The total Chignik sockeye salmon harvest is calculated by adding 100% of the CMA sockeye harvest, 80% of the Cape Igvak Section (KMA) sockeye harvest through July 25, and 80% of the SEDM sockeye harvest through July 25, excluding 100% of the sockeye caught within the Northwest Stepovak Section from July 1 through July 25.

There are two distinct sockeye salmon runs into the Chignik lakes system, the Black Lake and the Chignik Lake runs. The Black and Chignik Lakes sockeye salmon run timing overlaps (transition period) during late June to early July (Owen and Sarafin 1998b). During the transition period the strength of the second run (Chignik Lake) cannot be evaluated. In order to prevent overharvest of the second run, the Cape Igvak and SEDM fisheries (except the Northwest Stepovak Section beginning July 1) are usually closed during this period. However, fishing may be allowed in the CMA to harvest excess early run sockeye salmon, even though second run fish are present.

Effort Levels

Since 1978, set gillnet effort has increased substantially in the SEDM fishery. The number of set gillnet permits fished through July 25 increased from 23 in 1978 to a high of 68 permits in 1996 (Appendix D.6). Previously, many permit holders participated in both set gillnet and purse seine fishing, and received a limited entry permit for each gear type. During the late 1970s and throughout the 1980s, many of the dual permit holders sold or transferred their set gillnet permits and retained their purse seine permits. This action increased effort in the SEDM fishery since many permits previously used part-time were now fished full-time. The number of SEDM set gillnet permits fished through July 25 averaged 51 from 1985-91, 59 from 1992-95, and 61 from 1996-97 (Appendix D.10). In 1998, 45 set gillnet permits were fished through July 25 in the SEDM.

The number of SEDM set gillnet landings through July 25 have generally increased in recent years with a high of 1,711 reported in 1996 (Appendix D.10). Set gillnet landings in the SEDM, through July 25, averaged 440 from 1985-91, 702 from 1992-95, and 1,168 from 1996 and 1997. In 1998, only 340 set gillnet landings (lowest since 1990) were reported in the SEDM through July 25. The low number of landings in 1998 were due to below average Chignik sockeye salmon runs which limited fishing time in the SEDM (outside Orzinski Bay) through July 25 to a single 33-hour fishing period.

Purse seine effort through July 25 has fluctuated dramatically since 1986, and ranged from zero in 1994 to a high of 69 in 1990, with 20 permits fished in 1998. The number of purse seine permits fished in the SEDM fishery through July 25 averaged 28 from 1985-91, 21 from 1992-95, and 19 during 1996 and 1997 (Appendix D.6).

The number of purse seine landings, through July 25, has also fluctuated dramatically from zero in 1994 to a high of 69 in 1990, with 25 landings reported in 1998. Purse seine landings in the SEDM through July 25 averaged 56 from 1985-91, 32 from 1992-95, and 35 during 1996 and 1997 (Appendix D.10).

Local Stocks Fisheries

Northwest Stepovak Section. Prior to July 1, the entire SEDM, including the Northwest Stepovak Section, is managed on the basis of the strength of the Chignik lakes sockeye salmon runs. The Northwest Stepovak Section is managed on the strength of the local Orzinski Lake sockeye salmon run from July 1 through July 25. However, the strength of Chignik lakes sockeye salmon runs must be considered when establishing fishing periods in the Northwest Stepovak Section through July 25. Beginning July 1, all sockeye salmon caught within the Northwest Stepovak Section are considered to be Orzinski Lake stock. Eighty percent of those sockeye salmon caught through July 25 in the remainder of the SEDM fishery are considered to be from the Chignik lakes runs. After

July 25, management of the area shifts to local pink salmon, however other local stocks (sockeye, chum, and coho salmon) may be considered when establishing fishing periods.

Historically, Orzinski Lake sockeye salmon escapements were assessed using a weir from 1935 through 1941 and most recently from 1990 through 1998 (Appendix D.10). Orzinski Lake sockeye salmon escapement requirements were developed by time periods using historical aerial surveys and weir counts. The Orzinski Lake sockeye escapement goal is 20,000 adult fish. The escapement goal was first implemented during the 1991 season. From 1990 through 1997, the sockeye escapement averaged about 30,000, and ranged from a high of 40,000 in 1991 to a low of 15,000 in 1990. Since 1990, July 10 has been the average date when 50% of the total escapement requirement of 20,000 adult sockeye salmon has been achieved. In 1998, the Orzinski Lake weir was operated from June 12 through July 31 and 21,194 sockeye were counted through the weir (Appendix F.5). Based on aerial surveys conducted after the weir was removed, approximately 3,800 additional fish were added to the Orzinski Lake weir count for a total estimated sockeye salmon escapement of 25,000 (Appendix F.6).

Stepovak Flats Section. Commercial salmon fishing in the Stepovak Flats Section is managed on the basis of chum salmon returning to Stepovak Flats streams. However, 80% of the sockeye salmon harvested in this section through July 25 are considered Chignik bound fish, and included in the 6.0% allocation criteria stated in the current SEDM salmon management plan. The entire Stepovak Flats Section is closed to salmon fishing by regulation beginning July 29 to protect schooling chum salmon, which are needed to achieve escapement requirements.

1998 Season Summary

The 1998 forecast for the total harvest of Chignik bound sockeye salmon was 500,000 salmon for the first (Black Lake) run and 850,000 salmon for the second (Chignik Lake) run (Owen and Sarafin 1998a). The forecast indicated that a fishery may occur in the SEDM targeting Chignik bound sockeye salmon since a harvest of at least 600,000 sockeye salmon was expected in the CMA which is one of the conditions of the management plan. However, the Chignik first run was weak and no commercial fishing was allowed in the SEDM during June. The CMA opened to commercial salmon fishing on June 16, however, CMA seiners were on strike and no significant fishing effort occurred until June 29 when the strike ended.

The 1998 Chignik second run was slightly below average. As a result, the SEDM fishery was only allowed a single 33-hour commercial fishing period prior to July 25 targeting Chignik bound sockeye salmon. The 1998 Chignik component of the SEDM harvest was 66,893 sockeye salmon, 7.8% of the total CMA bound sockeye salmon harvest through July 25 (Appendix D.5). The 1998 Northwest Stepovak Section sockeye salmon harvest through July 25 was 33,515 (28,572 in Orzinski Bay; Appendix D.11). All of those fish were caught after June 30, and considered local stocks as described under 5 AAC 09.360(a)(1).

The 1998 SEDM annual salmon harvest was 477 chinook, 278,790 sockeye, 23,962 coho, 949,654 pink, and 69,668 chum salmon (Appendix D.12). Purse seine gear caught 332 chinook, 74,164 sockeye, 7,703 coho, 737,685 pink, and 26,705 chum salmon (Appendix D.13). Set gillnet gear caught 145 chinook, 204,626 sockeye, 16,259 coho, 211,969 pink, and 42,963 chum salmon (Appendix D.14). Purse seine gear accounted for 26.6%, and set gillnet gear 73.4% of the annual SEDM sockeye salmon harvest (Appendix D.15).

Shumagin Islands 1998 Post June Season Summary

The department conducted a test fishery in early July to determine the presence and abundance of immature salmon in the Shumagin Islands. The test fishing results indicated that the abundance of immature salmon was not sufficient to justify closing the South Peninsula to purse seine gear (Appendix C.6). The South Peninsula fishery opened to commercial salmon fishing on July 6. During July 6-21, the Shumagin Islands, along with the other South Peninsula non-terminal areas, were open to commercial salmon fishing for one initial 21-hour and five subsequent 24-hour fishing periods interspersed by 48-hour closures.

The 1998 Shumagin Islands Section post June (July 1-October 31) total salmon harvest of 2,471,592 was composed of 1,505 chinook, 353,650 sockeye, 83,032 coho, 1,900,291 pink, and 133,114 chum salmon (Appendix C.13). The 1998 Shumagin Islands post June chinook salmon catch was equal to the 1993-97 (1,502) average harvest. The post June coho and chum salmon catches were below the 1993-97 (136,035 and 166,888, respectively) average harvests. The 1998 sockeye salmon catch was above the 1993-97 (168,951) average harvest. The 1998 Shumagin Islands post June pink salmon catch was below 1993-97 (2,133,313) average harvest.

From the mid 1970s through 1995, the effort levels and the number of landings increased for all gear types in the Shumagin Islands Section post June fishery. However, both effort levels and the number of landings declined dramatically during the 1996 and 1997 seasons. From 1993 through 1997, the effort levels averaged 57 purse seine and 47 set gillnet permits (Appendices C.14 and C.15). During the 1998 season, 46 purse seine, and 61 set gillnet permit holders participated in the Shumagin Islands Section post June fishery. From 1993-97, the annual number of landings averaged 399 for purse seine and 496 for set gillnet permit holders. Purse seine and set gillnet permit holders made 439 (highest since 1995) and 1,036 (highest on record) landings, respectively, during the 1998 Shumagin Islands Section post June fishery.

Recent trends in the Shumagin Islands Section post June fishery indicate set gillnetters are catching an increasing proportion of the total sockeye and coho salmon harvests.

Southeastern District 1998 Post June Season Summary

The Southeastern District (minus the SEDM July 1-25) post June harvests of all species combined averaged 3,173 chinook, 309,200 sockeye, 218,147 coho, 2,656,108 pink, and 427,796 chum salmon from 1978 through 1992 (Appendix C.16). The 1993 through 1997 harvests averaged 1,814 chinook, 298,438 sockeye, 170,147 coho, 3,179,405 pink, and 246,479 chum salmon. Most of the increased harvest was the result of strong pink salmon returns since 1978, including a record harvest of almost 7.5 million pink salmon in 1995. However, the 1996 and 1997 Southeastern District pink salmon runs were much lower than projected and fishing periods were limited in the post June fisheries. The 1998 Southeastern District (minus the SEDM July 1-25) post June salmon harvest was 3,538,787 and composed of 1,675 chinook, 515,309 sockeye, 104,035 coho, 2,724,915 pink, and 192,853 chum salmon. In 1998, purse seine gear caught the majority of all species, except sockeye salmon, in the Southeastern District (minus the SEDM July 1-25) post June fishery (Appendices C.17 and C.18).

The 1998 Southeastern District fall fishery opened on September 1, and the last landing was recorded on October 8. The 1998 Southeastern District fall fishery harvest was 25 chinook, 42,568 sockeye, 13,999 coho, 1,818 pink, and 10,382 chum salmon. The 1998 Southeastern District fall chinook and sockeye salmon harvests were slightly above the 1988-97 average; coho, pink and chum salmon harvests were below the 1988-97 average harvests (Campbell 1997).

The 1998 Southeastern District indexed total escapement was 26,250 sockeye, 1,242,505 pink, and 246,025 chum salmon (Appendix F.5; coho salmon data are not available). Chum and pink salmon escapements were good in most systems throughout the district. The 1998 Orzinski Lake sockeye escapement was 25,000 which exceeded the desired escapement goal of 20,000 sockeye salmon

South Central District 1998 Post June Season Summary

The 1998 South Central District post June harvest of 2,880,393 salmon was composed of 46 chinook, 72,419 sockeye, 2,154 coho, 2,715,694 pink, and 90,080 chum salmon (Appendix C.19). The 1998 South Central District indexed escapement was 1,370 sockeye, 1,613,750 pink, and 144,300 chum salmon (Appendix F.5). Pink salmon escapements exceeded their upper end escapement goal of 840,000. However, sockeye and chum salmon escapements did not reach their escapement goals of 4,000 and 200,000 fish, respectively. The department has not established indexed escapement goals for coho salmon in the South Central District.

Southwestern District 1998 Post June Season Summary

The 1998 Southwestern District post June harvest of 2,238,641 salmon was composed of 67 chinook, 162,876 sockeye, 33,035 coho, 1,888,165 pink, and 154,498 chum salmon (Appendix C.20). The 1998 Southwestern District indexed escapement was 52,820 sockeye, 1,764,310 pink, and 351,410 chum salmon (Appendix F.5). Sockeye, pink, and chum salmon escapements exceeded their upper escapement goals of 47,000, 840,000, and 270,000 fish, respectively. The department has not established indexed escapement goals for coho salmon in the Southwestern District.

Unimak District 1998 Post June Season Summary

The 1998 Unimak District post June harvest of 156,943 salmon was composed of 5 chinook, 14,343 sockeye, 11,511 coho, 112,537 pink, and 18,547 chum salmon (Appendix C.21). The 1998 Unimak District indexed escapement was 5,000 sockeye, 47,500 pink, and 500 chum salmon (Appendix F.5). The vast majority of the Unimak District sockeye salmon escapement comes from Sanak Island. Unfortunately, the department did not survey Sanak Island in 1998 because of budget restraints and adverse flying conditions. Therefore, the 1998 sockeye salmon escapements are based on historical escapement surveys. Sockeye and pink salmon point escapement goals are 6,000 and 55,000 fish, respectively. The department has not established indexed escapement goals for coho or chum salmon in the Unimak District.

LITERATURE CITED

ADF&G (Alaska Department of Fish and Game). 1998. 1998-2000 Bristol Bay, Alaska Peninsula, Atka-Amlia, and Aleutian Islands Areas Commercial Fishing Regulations, 1998 edition. Alaska Department of Fish and Game, Division of Commercial Fisheries, Juneau.

ADF&G (Alaska Department of Fish and Game). 1996. 1996-97 Bristol Bay, Alaska Peninsula, Atka-Amlia, and Aleutian Islands Areas Commercial Fishing Regulations, 1996 edition. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Juneau.

Campbell R.D., Shaul, A.R., and M.J. Witteveen. 1998. Post June Salmon Management Plan for the South Alaska Peninsula, 1998. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Regional Information Report 4K98-18, Kodiak.

Campbell, R.D. and M.J. Witteveen. 1998. Southeastern District Mainland (Alaska Peninsula Area) Salmon Management Plan, 1998. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Regional Information Report 4K98-16, Kodiak.

Campbell, R.D. 1997. South Alaska Peninsula Post June and Aleutian Islands Management Area Salmon Fisheries and Stock Status, 1997. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Regional Information Report 4K97-54, Kodiak.

Campbell, R.D. 1995. The Southeastern District Mainland Salmon Fishery of Area M. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Regional Information Report 4K95-50, Kodiak.

Campbell, R.D., A.R. Shaul, R.S. Berceli, and J.P. Cofske 1997. South Peninsula Annual Salmon Management Report, 1996. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Regional Information Report 4K97-35, Kodiak.

Eggers, D.M., K.A. Rowell, and B.M. Barrett. 1991. Stock Composition of Sockeye and Chum Salmon Catches in Southern Alaska Peninsula Fisheries in June. Alaska Department of Fish and Game, Division of Commercial Fisheries, Fishery Research Bulletin 91-01 (revised March 3, 1992), Juneau.

Kron, T. 1994. Stock Status of Western Alaska-Bering Sea Chum Salmon. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Report to the NPFMC, January, 1994, Anchorage.

LITERATURE CITED (Cont.)

McCullough, J.M. and D. Pengilly. 1994. An Analysis of South Unimak and Shumagin Islands June Fisheries Sockeye Salmon Guideline Harvest Level Time Periods. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Regional Information Report 4K94-45.

McCullough, J.M. and A.R. Shaul. 1992. The Incidence of Immature Salmon in South Peninsula Purse Seine Fisheries, 1963-91. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K92-17, Kodiak.

McCullough, J.M., A.R. Shaul, R.D. Campbell, and R.S. Berceli 1995. South Peninsula Annual Salmon Management Report, 1994. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Regional Information Report 4K95-46, Kodiak.

McCullough, J.N. 1995. South Alaska Peninsula Post June and Aleutian Islands Management Area Salmon Fisheries and Stock Status. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Regional Information Report 4K95-51, Kodiak.

Murphy, R.L. 1992. Number of Salmon Systems and Distribution of Escapements in the Alaska Peninsula and Aleutian Islands Management Areas, 1986-91. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K92-15, Kodiak.

Murphy, R.L., A.R. Shaul, and J.J. Dinnocenzo. 1998. North Alaska Peninsula Commercial Salmon Annual Management Report, 1997. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Regional Information Report 4K98-28, Kodiak.

Nelson, P.A., R.L. Murphy, and C. J. Hicks. *In Press*. Alaska Peninsula Management Area Salmon Escapement and Catch Sampling Results, 1998. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Regional Information Report, Kodiak.

Ogura, M. and S. Ito. 1994. Change in the Known Ocean Distribution of Japanese Chum Salmon, *Oncorhynchus keta*, in Relation to the Progress of Stock Enhancement. Can. J. Fish. Aquat. Sci., Vol. 51: 501-505.

Owen, D.L. and D.R. Sarafin. 1998a. Chignik Management Commercial Salmon Fishery Management Plan, 1998. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division , Regional Information Report 4-K98-19, Kodiak.

Owen, D.L. and D.R. Sarafin. 1998b. Chignik Area Commercial Salmon Fishery Report to the Alaska Board of Fisheries. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4-K98-56, Kodiak.

LITERATURE CITED (Cont.)

Seeb, L.W., P.A. Crane, and E.M. Debevec. 1997. Genetic Analysis of Chum Salmon Harvested in the South Unimak and Shumagin Islands June Fisheries, 1993-96. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Regional Information Report 5J97-17, Anchorage.

Shaul, A.R. and L.J. Schwarz. 1989. Alaska Peninsula and Aleutian Islands Areas Salmon and Herring Annual Management Report, 1988. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K89-11, Kodiak.

Shaul, A.R., L.J. Schwarz, and A.J. Quimby. 1990. Alaska Peninsula and Aleutian Islands Areas Salmon and Herring Annual Management Report, 1989. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K90-10, Kodiak.

Shaul, A.R., J.N. McCullough, A.J. Quimby, R.S. Berceli, and M.E. Stopha. 1991. Annual Salmon and Aleutian Islands Areas Salmon and Herring Annual Management Report, 1990. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K91-12, Kodiak.

Shaul, A.R., J.N. McCullough, M.L. Wood, R.S. Berceli, and M.E. Stopha. 1992. Annual Salmon and Herring Management Report 1991, Alaska Peninsula and Aleutian Islands Areas. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K92-18, Kodiak.

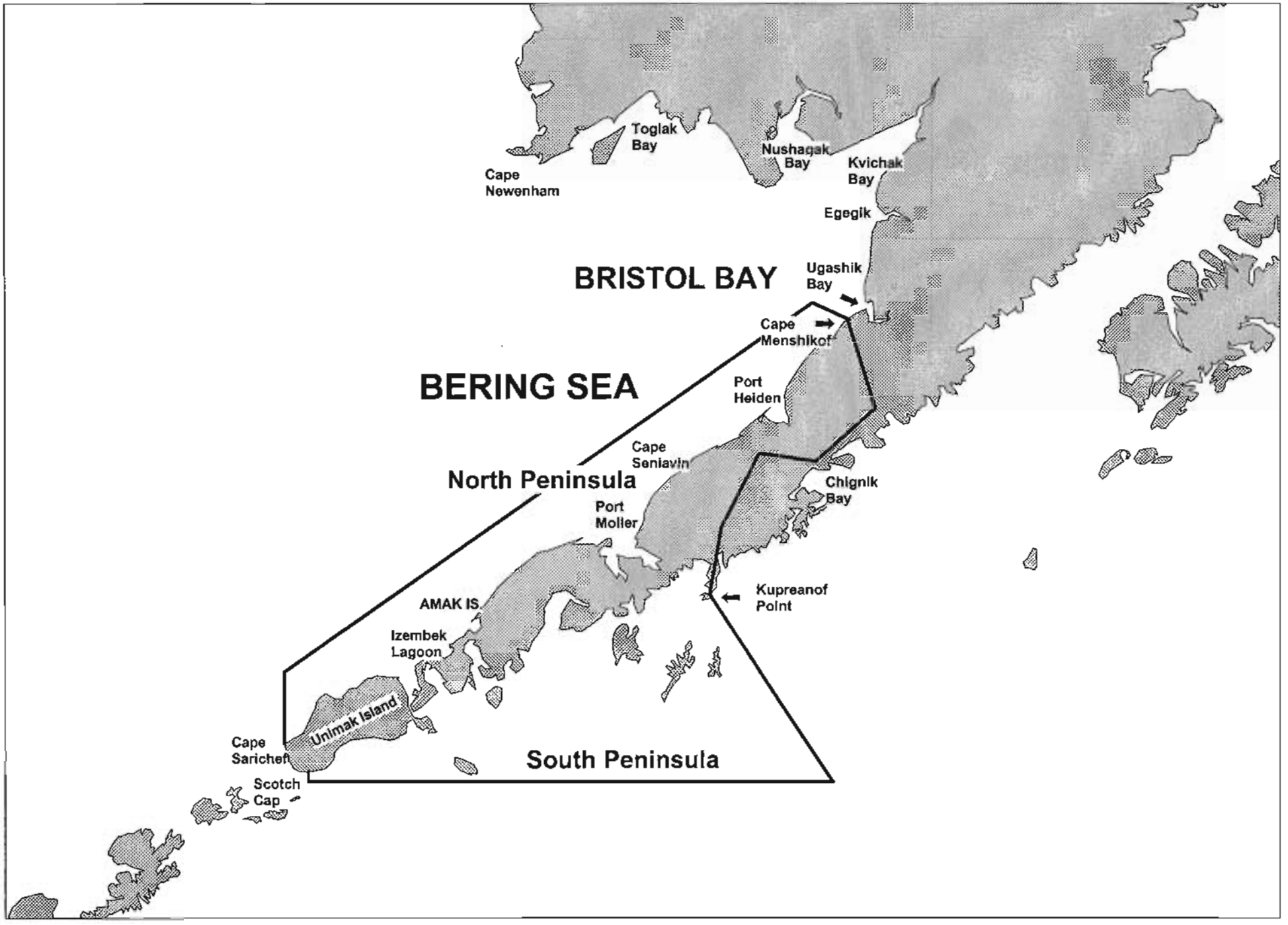
Shaul, A.R., J.N. McCullough, R.L. Murphy, P.B. Holmes, R.S. Berceli, and M.E. Stopha. 1993. Alaska Peninsula and Aleutian Islands Management Areas Annual Salmon Management Report, 1992. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K93-30.

Shaul, A.R. and R.D. Campbell. 1997. Post June Salmon Management Plan for the South Alaska Peninsula, 1998. Alaska Department of Fish and Game, Commercial Fisheries Management and Development Division, Regional Information Report 4K97-19, Kodiak.

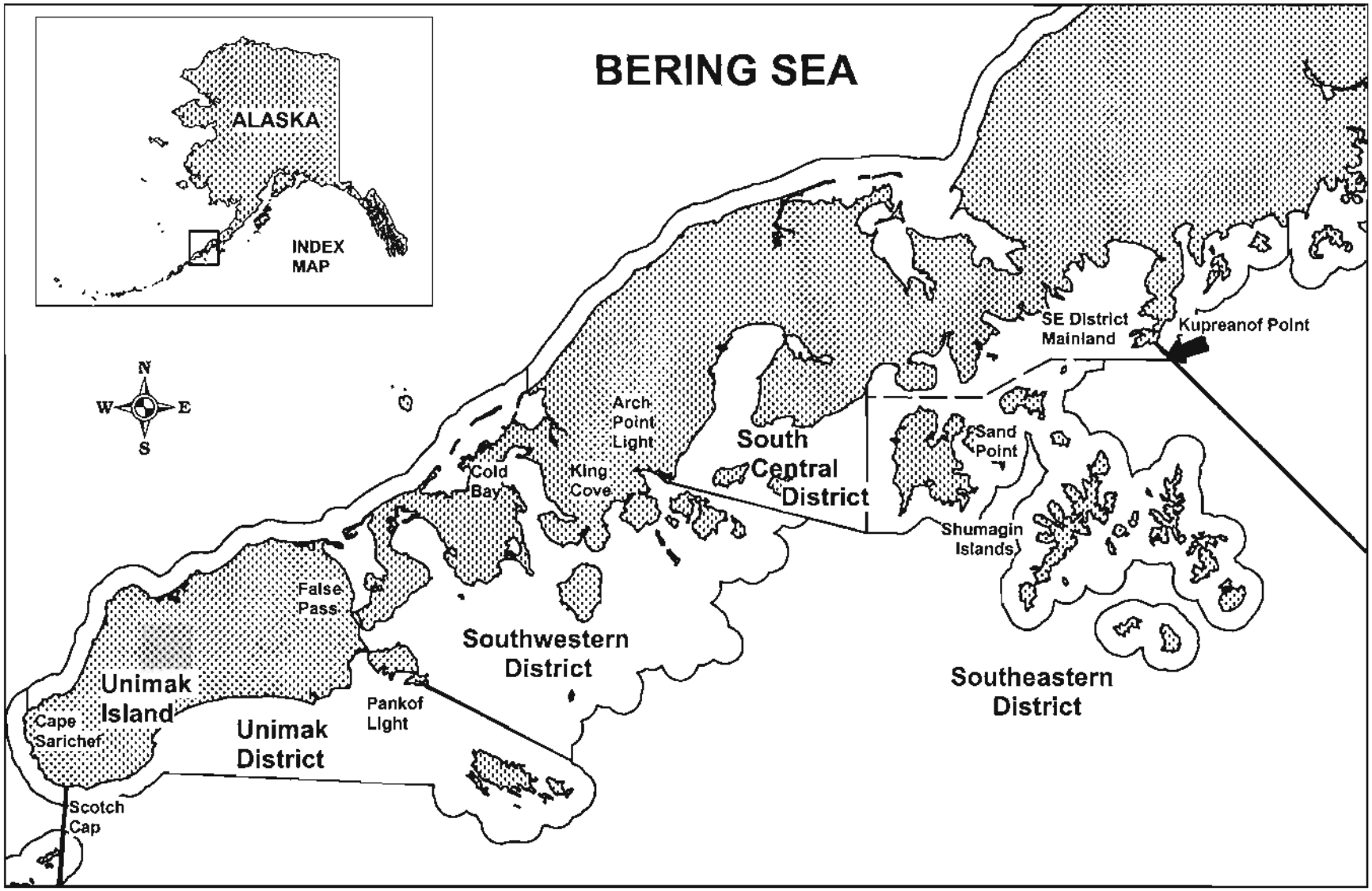
Shaul, A.R. and J.J. Dinnocenzo. 1999a. Annual Summary of the Commercial Salmon Fishery and a Report on Salmon Subsistence and Personnel Use Fisheries for the Alaska Peninsula and Aleutian Islands Management Areas, 1998. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report, 4K99-5, Kodiak.

Shaul, A.R. and J.J. Dinnocenzo 1999b. Aleutian Islands and Atka-Amlia Islands Management Areas Salmon Management Report, 1998. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report, 4K99-7, Kodiak.

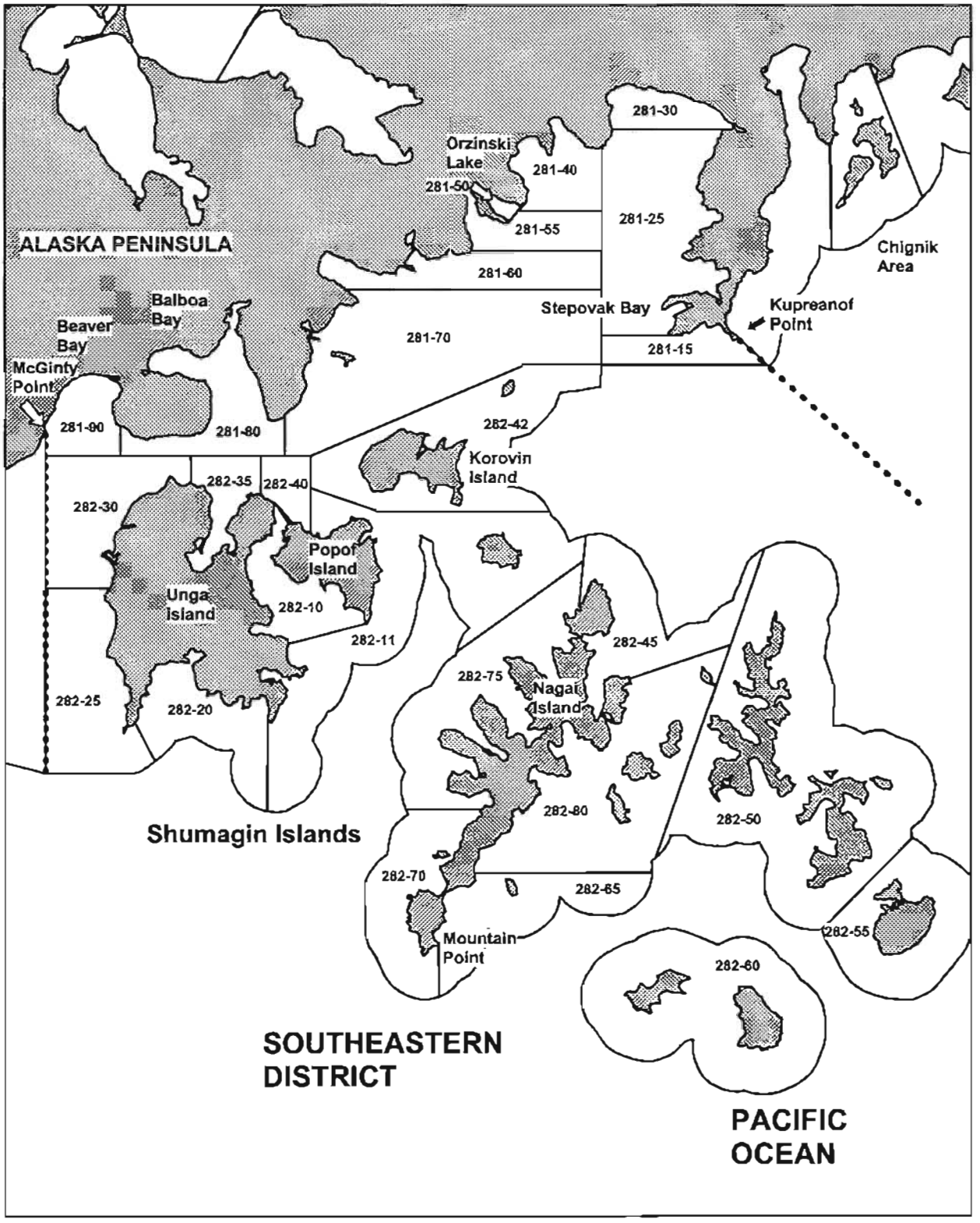
APPENDIX



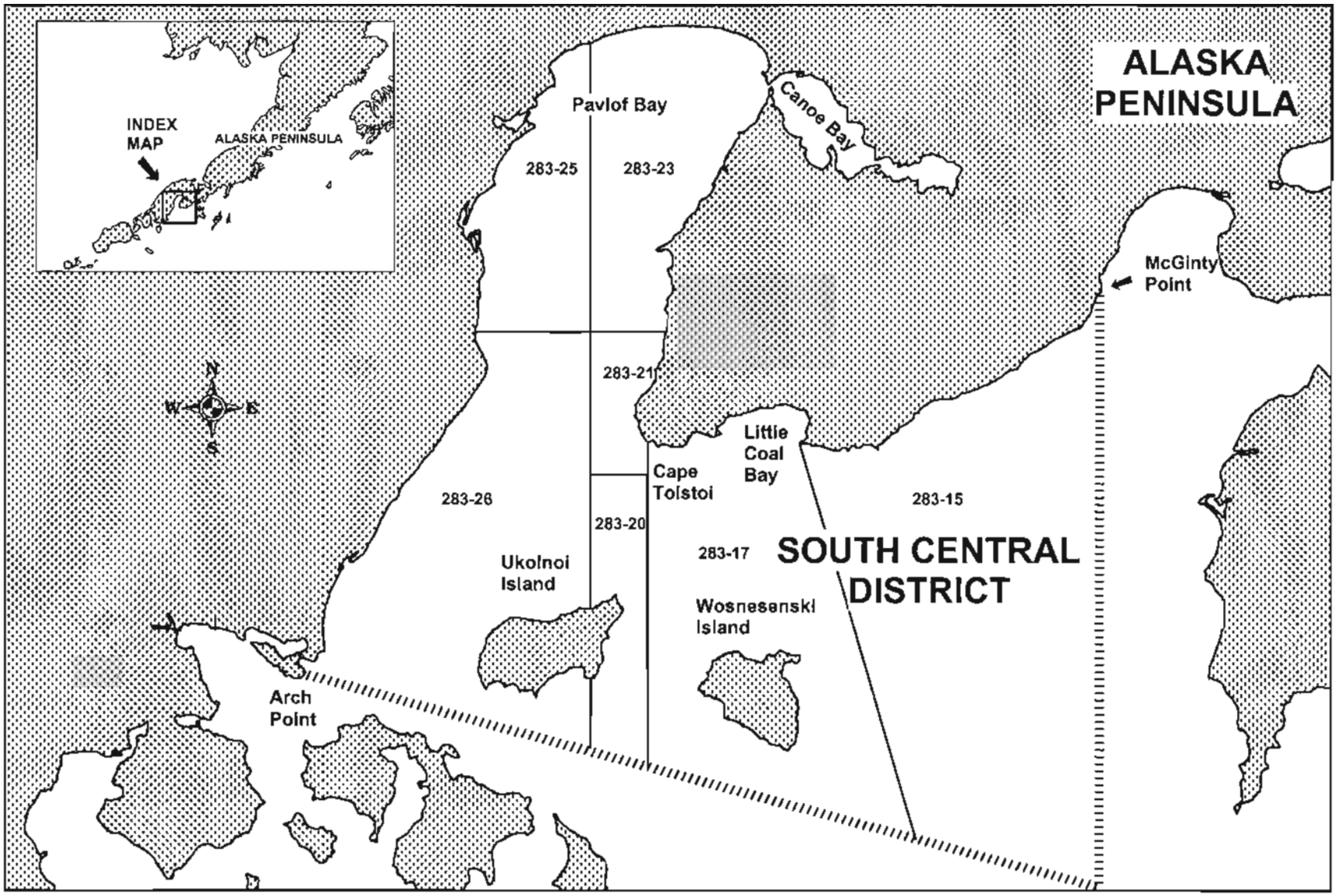
Appendix A.1. Map of the Alaska Peninsula Management Area, with the North and South Peninsula defined.



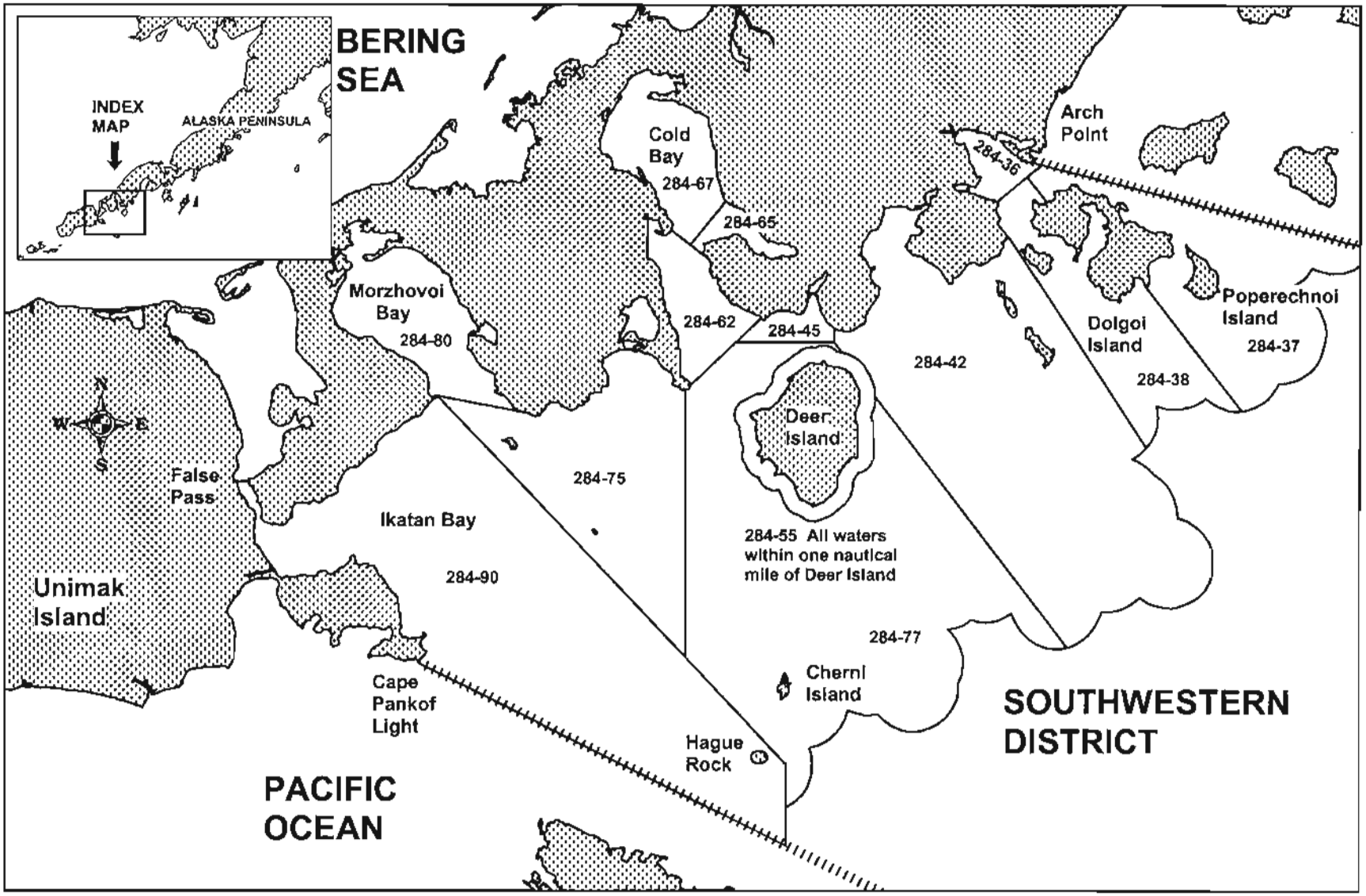
Appendix A.2. Map of the Alaska Peninsula Management Area from Kupreanof Point to Scotch Cap with the salmon fishing districts defined.



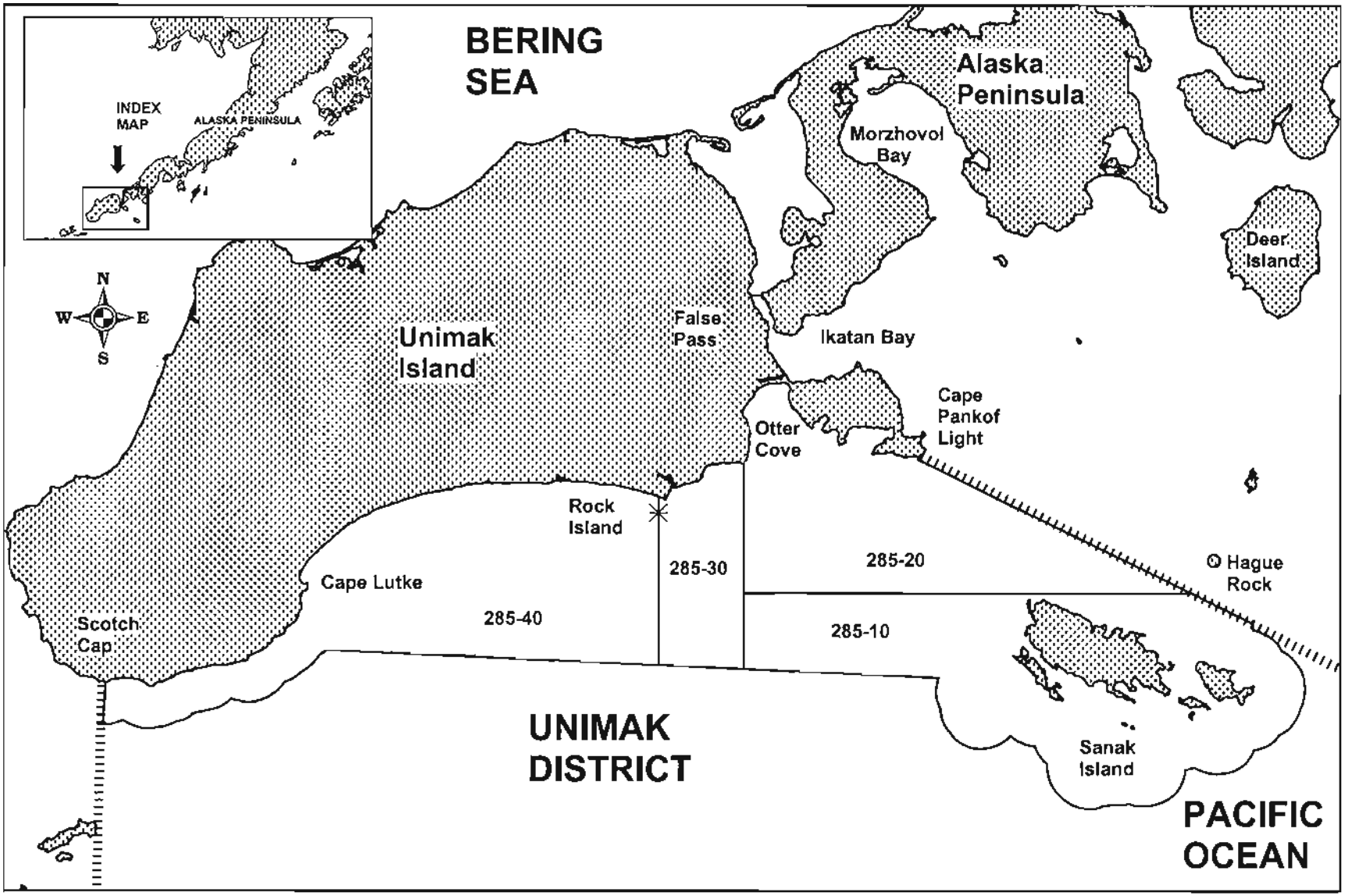
Appendix A.3. Map of the Alaska Peninsula Area from Kupreanof Point to McGinty Point (Southeastern District) with the statistical salmon fishing areas shown.



Appendix A.4. Map of the Alaska Peninsula Area from McGinty Point to Arch Point (South Central District) with the statistical salmon fishing areas shown.



Appendix A.5. Map of the Alaska Peninsula Area from Arch Point to Unimak Island (Southwestern District) with the statistical salmon fishing areas shown.

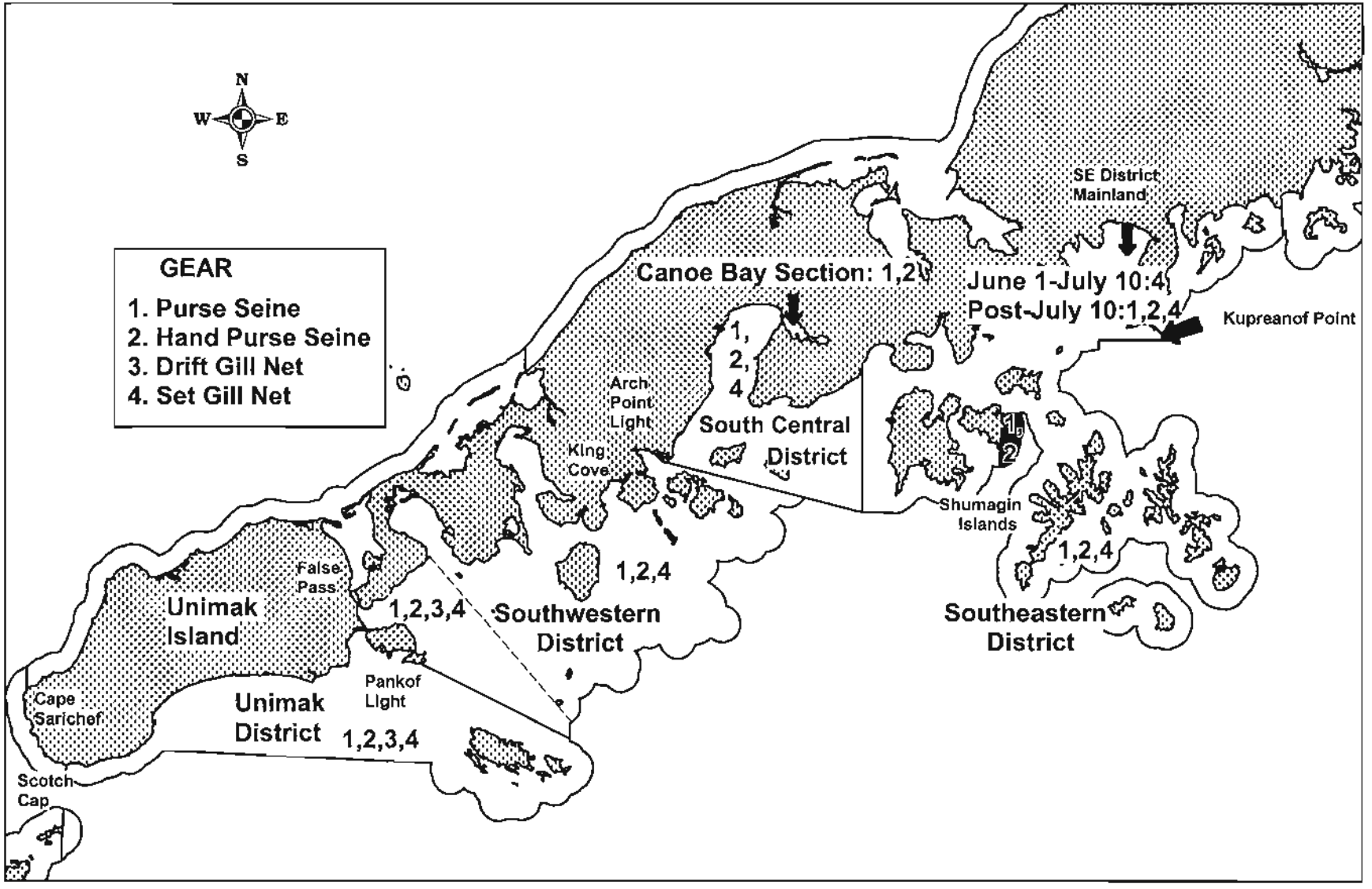


Appendix A.6. Map of the Alaska Peninsula Area from Hague Rock to Unimak Pass (Unimak District) with the statistical salmon fishing areas shown.

Appendix A.7. Number of limited entry permits and fishing effort in the South Peninsula, 1970-98.

	Purse Seine		Drift Gillnet		Set Gillnet	
Year	Permits Available	Permits Fished	Permit Available	Permits Fished	Permits Available	Permits Fished
1970	125	108	165	157	114	30
1971	125	113	165	122	114	24
1972	125	90	165	151	114	25
1973	125	55	165	121	114	26
1974	125	46	165	46	114	42
1975	125	52	165	81	114	12
1976	125	89	165	108	114	24
1977	125	84	165	101	114	26
1978	125	101	165	120	114	30
1979	125	123	165	137	114	46
1980	125	114	165	129	114	45
1981	125	116	165	135	114	53
1982	125	115	165	138	114	52
1983	125	118	165	147	114	59
1984	125	121	165	147	114	66
1985	125	122	165	150	114	64
1986	125	119	165	156	114	60
1987	125	113	165	145	114	69
1988	125	112	165	148	114	70
1989	125	117	165	147	114	76
1990	126	118	164	154	114	81
1991	126	119	164	157	114	78
1992	125	119	164	142	114	79
1993	125	123	164	144	114	86
1994	125	118	164	145	114	79
1995	125	118	164	151	114	82
1996	124	102	164	147	114	82
1997	122	82	164	142	114	82
1998	122	79	164	145	115	86
1978-97 Average	125	115	165	144	114	67
1988-97 Average	125	113	164	148	114	80

Note: Number of permits include permanent permits and interim use permits. Permits fished include those permit holders making at least one delivery during the year.



Appendix A.8. Map of the Alaska Peninsula Management Area from Kupreanof Point to Scotch Cap with the legal gear types by district shown.

Appendix A.9. South Peninsula salmon catch and escapements by species and year, 1962-98.[a]

Year		Chinook	Sockeye	Coho	Pink	Chum
1962	Catch	3,300	420,000	12,500	1,965,400	824,800
	Escapement	0	18,800	-	1,598,800	399,400
	Total	3,300	438,800	-	3,564,200	1,224,200
1963	Catch	1,900	204,400	16,500	2,367,700	461,300
	Escapement	0	23,000	-	1,317,900	446,700
	Total	1,900	227,400	-	3,685,600	908,000
1964	Catch	2,000	370,800	13,600	2,740,300	751,000
	Escapement	0	15,700	-	1,436,400	454,800
	Total	2,000	386,500	-	4,176,700	1,205,800
1965	Catch	2,100	915,700	34,200	2,884,100	556,400
	Escapement	0	12,100	-	1,035,400	228,000
	Total	2,100	927,800	-	3,919,500	784,400
1966	Catch	1,400	606,200	6,300	305,800	494,400
	Escapement	0	17,000	-	719,400	422,000
	Total	1,400	623,200	-	1,025,200	916,400
1967	Catch	1,600	294,100	2,900	78,300	245,200
	Escapement	0	16,200	-	445,500	182,900
	Total	1,600	310,300	-	523,800	428,100
1968	Catch	1,400	699,800	31,100	1,287,100	325,300
	Escapement	0	12,800	-	823,300	279,100
	Total	1,400	712,600	-	2,110,400	604,400
1969	Catch	1,900	912,800	10,900	1,219,100	389,200
	Escapement	0	29,500	-	2,474,900	134,600
	Total	1,900	942,300	-	3,694,000	523,800
1970	Catch	1,806	1,799,525	32,571	1,737,985	993,349
	Escapement	0	16,500	-	1,298,900	280,500
	Total	1,806	1,816,025	-	3,036,885	1,273,849
1971	Catch	2,174	716,087	16,907	1,445,031	1,365,957
	Escapement	0	19,400	-	702,700	343,200
	Total	2,174	735,487	-	2,147,731	1,709,157
1972	Catch	1,332	557,422	8,021	78,221	731,814
	Escapement	0	11,900	-	111,400	254,500
	Total	1,332	569,322	-	189,621	986,314

-Continued-

Appendix A.9. (page 2 of 4)

Year		Chinook	Sockeye	Coho	Pink	Chum
1973	Catch	415	330,091	6,599	58,051	292,943
	Escapement	0	7,300	-	110,800	212,500
	Total	415	337,391	-	168,851	505,443
1974	Catch	581	197,153	9,366	100,601	71,826
	Escapement	0	95,600	-	284,400	257,300
	Total	581	292,753	-	385,001	329,126
1975	Catch	117	243,548	67	60,642	130,750
	Escapement	0	51,700	-	552,100	193,300
	Total	117	295,248	-	612,742	324,050
1976	Catch	2,196	375,027	216	2,366,833	532,503
	Escapement	0	69,700	-	1,456,400	327,200
	Total	2,196	444,727	-	3,823,233	859,703
1977	Catch	559	311,722	2,108	1,448,648	243,167
	Escapement	0	64,900	-	2,677,800	774,900
	Total	559	376,622	-	4,126,448	1,018,067
1978	Catch	773	579,411	60,774	5,590,145	546,182
	Escapement	0	64,800	-	2,858,700	600,500
	Total	773	644,211	-	8,348,845	1,146,682
1979	Catch	2,141	1,149,927	356,867	6,564,914	482,930
	Escapement	0	53,300	-	2,629,500	411,100
	Total	2,141	1,203,227	-	9,194,414	894,030
1980	Catch	4,794	3,613,025	274,181	7,861,470	1,353,112
	Escapement	0	45,900	-	2,641,600	362,400
	Total	4,794	3,658,925	-	10,502,070	1,713,512
1981	Catch	11,182	2,241,513	162,223	5,033,028	1,768,475
	Escapement	0	45,700	-	2,307,500	381,300
	Total	11,182	2,287,213	-	7,340,528	2,149,775
1982	Catch	9,845	2,345,981	256,046	6,734,905	2,272,495
	Escapement	0	39,200	-	2,293,000	386,900
	Total	9,845	2,385,181	-	9,027,905	2,659,395
1983	Catch	26,571	2,556,557	127,657	2,827,622	1,704,072
	Escapement	0	59,200	-	851,200	446,500
	Total	26,571	2,615,757	-	3,678,822	2,150,572

-Continued-

Appendix A.9. (page 3 of 4)

Year		Chinook	Sockeye	Coho	Pink	Chum
1984	Catch	9,198	2,318,028	310,950	11,589,258	1,654,622
	Escapement	0	54,800	-	3,811,600	699,700
	Total	9,198	2,372,828	-	15,400,858	2,354,322
1985	Catch	6,642	2,144,416	172,514	4,431,016	1,348,726
	Escapement	0	49,900	-	1,614,100	503,400
	Total	6,642	2,194,316	-	6,045,116	1,852,126
1986	Catch	5,589	1,223,089	235,854	4,031,487	1,749,651
	Escapement	0	48,000	-	1,716,700	544,500
	Total	5,589	1,271,089	-	5,748,187	2,294,226
1987	Catch	9,174	1,449,753	225,120	1,208,556	1,376,887
	Escapement	0	44,600	-	1,540,500	620,700
	Total	9,174	1,494,353	-	2,749,056	1,997,587
1988	Catch	11,075	1,473,651	505,533	7,044,824	1,908,507
	Escapement	0	74,100	-	2,839,600	496,400
	Total	11,075	1,547,751	-	9,884,424	2,404,907
1989	Catch	7,065	2,660,800	443,843	7,292,658	994,231
	Escapement	0	78,100	-	1,870,900	310,500
	Total	7,065	2,738,900	-	9,163,558	1,304,731
1990	Catch	16,522	2,386,844	307,218	2,865,856	1,237,826
	Escapement	0	95,300	(75.0-100.0)[b]	1,598,400	354,700
	Total	16,522	2,482,144	367.2-397.2[b]	4,464,256	1,592,526
1991	Catch	7,975	2,319,942	317,129	10,616,756	1,588,795
	Escapement	0	124,900	-	2,946,800	587,600
	Total	7,975	2,444,842	-	13,563,556	2,176,395
1992	Catch	8,026	3,445,914	418,232	9,770,386	1,316,709
	Escapement	0	97,600	-	2,834,400	335,500
	Total	8,026	3,543,514	-	12,604,786	1,652,209
1993	Catch	14,413	3,689,074	220,148	9,928,107	1,048,257
	Escapement	0	100,341	-	2,990,140	397,030
	Total	14,413	3,789,415	-	12,918,247	1,445,287
1994	Catch	10,002	2,107,233	255,905	9,179,853	2,192,079
	Escapement	0	120,255	-	3,071,725	579,100
	Total	10,002	2,227,488	-	12,251,578	2,771,179
1995	Catch	17,078	2,996,353	260,686	16,302,593	1,715,067
	Escapement	0	129,110	-	6,406,300	726,400
	Total	17,078	3,125,463	260,686	22,708,893	2,441,467
1996	Catch	5,526	1,543,691	293,374	2,205,094	793,679
	Escapement	0	72,950	-	3,647,550	610,300
	Total	5,526	1,616,641	293,374	5,852,644	1,403,979

-Continued-

Appendix A.9. (page 4 of 4)

Year		Chinook	Sockeye	Coho	Pink	Chum
1997	Catch	7,780	2,281,566	116,136	2,321,371	627,996
	Escapement	0	104,440	-	5,143,275	809,050
	Total	7,780	2,386,006	116,136	7,464,646	1,437,046
1998	Catch	4,919	2,183,195	154,194	8,047,998	721,068
	Escapement	0	85,440	-	4,668,065	742,235
	Total	4,919	2,268,635	154,194	12,716,063	1,463,303

[a] Salmon numbers include commercial and test fish harvests, but exclude subsistence harvests.

[b] Escapements are indexed totals and the figures in parenthesis are rough extrapolated estimates.

Appendix A.10. South Peninsula pink salmon catch and escapements, 1962-98.[a]

		Not including June Migrants			June Migrants		
Year		Southeastern and South Central Districts	Southwestern and Unimak Districts	South Peninsula Totals	South Unimak	Shumagin Islands	Total June Migrants
1962	Catch	922,100	977,300	1,899,400	42,000	24,000	66,000
	Escapement	826,100	772,700	1,598,800			
	Total	1,748,200	1,750,000	3,498,200			
1963	Catch	1,733,900	590,800	2,324,700	14,000	29,000	43,000
	Escapement	886,500	431,400	1,317,900			
	Total	2,620,400	1,022,200	3,642,200			
1964	Catch	1,514,600	1,190,700	2,705,300	18,000	17,000	35,000
	Escapement	902,400	534,000	1,436,400			
	Total	2,417,000	1,724,700	4,141,700			
1965	Catch	2,331,400	474,700	2,806,100	43,000	35,000	78,000
	Escapement	789,900	245,500	1,035,400			
	Total	3,121,300	720,200	3,841,500			
1966	Catch	220,300	68,500	288,800	15,000	2,000	17,000
	Escapement	627,400	92,000	719,400			
	Total	847,700	160,500	1,008,200			
1967	Catch	53,100	4,200	57,300	11,000	10,000	21,000
	Escapement	327,300	118,200	445,500			
	Total	380,400	122,400	502,800			
1968	Catch	863,300	277,800	1,141,100	34,000	112,000	146,000
	Escapement	528,100	295,200	823,300			
	Total	1,391,400	573,000	1,964,400			
1969	Catch	862,800	265,300	1,128,100	68,000	23,000	91,000
	Escapement	1,906,200	568,700	2,474,900			
	Total	2,769,000	834,000	3,603,000			
1970	Catch	1,378,374	252,030	1,630,404	87,717	19,725	107,442
	Escapement	1,007,900	291,000	1,298,900			
	Total	2,386,274	543,030	2,929,304			
1971	Catch	1,211,943	211,585	1,423,528	11,608	7,632	19,240
	Escapement	488,000	214,700	702,700			
	Total	1,699,943	426,285	2,126,228			

-Continued-

Appendix A.10. (page 2 of 4)

Year		Not including June Migrants: Southeastern and South Central Districts	Not including June Migrants: Southwestern and Unimak Districts	South Peninsula Totals	June Migrants: South Unimak	June Migrants: Shumagin Islands	Total June Migrants
1972	Catch	53,312	6,958	60,270	11,906	6,018	17,924
	Escapement	81,800	29,600	111,400			
	Total	135,112	36,558	171,670			
1973	Catch	36,427	2,073	38,500	11,152	8,278	19,430
	Escapement	85,700	25,100	110,800			
	Total	122,127	27,173	149,300			
1974	Catch	95,529	4,650	100,179	0	0	0
	Escapement	238,600	45,800	284,400			
	Total	334,129	50,450	384,579			
1975	Catch	30,052	25,343	55,395	3,205	2,042	5,247
	Escapement	357,800	194,300	552,100			
	Total	387,852	219,643	607,495			
1976	Catch	2,035,814	306,786	2,342,600	18,259	5,643	23,902
	Escapement	1,084,000	372,400	1,456,400			
	Total	3,119,814	679,186	3,799,000			
1977	Catch	1,163,500	279,745	1,443,245	3,397	2,001	5,398
	Escapement	2,168,500	509,300	2,677,800			
	Total	3,332,000	789,045	4,121,045			
1978	Catch	4,167,852	1,332,325	5,500,177	47,380	42,562	89,942
	Escapement	1,966,300	892,400	2,858,700			
	Total	6,134,152	2,224,725	8,358,877			
1979	Catch	4,839,031	1,570,553	6,409,584	49,000	105,813	154,813
	Escapement	2,125,100	504,400	2,629,500			
	Total	6,964,131	2,074,953	9,039,084			
1980	Catch	3,732,127	2,603,032	6,335,159	1,140,611	385,695	1,526,306
	Escapement	1,410,400	1,231,200	2,641,600			
	Total	5,142,527	3,834,232	8,976,759			
1981	Catch	3,950,473	631,170	4,581,643	325,004	126,248	451,252
	Escapement	1,875,000	431,800	2,306,800			
	Total	5,825,473	1,062,970	6,888,443			

-Continued-

Appendix A.10. (page 3 of 4)

Year		Not including June Migrants: Southeastern and South Central Districts	Not including June Migrants: Southwestern and Unimak Districts	South Peninsula Totals	June Migrants: South Unimak	June Migrants: Shumagin Islands	Total June Migrants
1982	Catch	4,104,934	911,131	5,016,065	1,032,154	681,214	1,713,368
	Escapement	1,533,200	759,800	2,293,000			
	Total	5,638,134	1,670,931	7,309,065			
1983	Catch	2,245,429	526,315	2,771,744	40,441	15,434	55,875
	Escapement	639,200	212,000	851,200			
	Total	2,884,629	738,315	3,622,944			
1984	Catch	6,532,654	4,136,235	10,668,889	470,688	449,188	919,876
	Escapement	2,526,700	1,824,900	3,811,600			
	Total	8,519,354	5,961,135	14,480,489			
1985	Catch	3,323,535	1,000,350	4,323,885	69,811	36,804	106,615
	Escapement	1,229,300	384,500	1,614,100			
	Total	4,553,135	1,384,850	5,937,985			
1986	Catch	3,066,556	672,867	3,739,423	150,674	141,315	291,989
	Escapement	1,185,500	531,200	1,716,700			
	Total	4,252,056	1,204,067	5,456,123			
1987	Catch	1,143,374	48,138	1,191,512	11,342	5,640	16,982
	Escapement	1,304,400	236,100	1,540,500			
	Total	2,447,774	284,238	2,732,012			
1988	Catch	4,700,486	2,164,114	6,864,600	86,678	93,546	180,224
	Escapement	1,636,500	1,203,100	2,839,600			
	Total	6,336,986	3,367,214	9,704,200			
1989	Catch	5,582,274	1,507,621	7,089,895	154,168	45,067	199,235
	Escapement	1,179,300	691,600	1,870,900			
	Total	6,761,574	2,199,221	8,960,795			
1990	Catch	1,738,743	607,300	2,346,043	444,442	70,798	515,240
	Escapement	1,018,200	580,200	1,598,400			
	Total	2,756,943	1,187,500	3,944,443			
1991	Catch	7,549,853	2,427,570	9,977,423	500,922	118,215	619,137
	Escapement	2,268,400	678,400	2,946,800			
	Total	9,818,253	3,105,970	12,924,223			

-Continued-

Appendix A.10. (page 4 of 4)

Year		Not including June Migrants: Southeastern and South Central Districts	Not including June Migrants: Southwestern and Unimak Districts	South Peninsula Totals	June Migrants: South Unimak	June Migrants: Shumagin Islands	Total June Migrants
1992	Catch	4,860,628	4,256,851	9,117,479	501,127	140,963	642,090
	Escapement	1,781,000	1,053,400	2,834,400			
	Total	6,641,628	5,310,251	11,951,879			
1993	Catch	7,493,472	2,353,200	9,843,962	37,735	43,401	81,136
	Escapement	2,232,200	757,900	2,990,140			
	Total	9,725,712	3,111,100	12,834,102			
1994	Catch	3,149,763	3,501,426	6,651,189	1,731,741	760,773	2,492,514
	Escapement	1,700,525	1,371,200	3,073,225			
	Total	4,850,288	4,872,626	9,724,414			
1995	Catch	11,362,914	4,761,044	16,123,958	119,094	59,541	178,635
	Escapement	4,404,450	2,001,850	6,406,300			
	Total	15,767,364	6,762,894	22,530,258			
1996	Catch	1,513,954	306,881	1,820,835	146,799	230,885	377,684
	Escapement	2,668,950	978,600	3,647,550			
	Total	4,182,904	1,285,481	5,468,385			
1997	Catch	839,656	869,597	1,709,253	336,238	275,880	612,118
	Escapement	4,021,375	1,221,900	5,243,275			
	Total	4,861,031	2,091,497	6,952,528			
1998	Catch	5,565,639	2,000,702	7,566,341	125,906	348,434	474,340
	Escapement	2,856,255	1,811,810	4,668,065			
	Total	8,421,894	3,812,512	12,234,406			

[a] Salmon numbers exclude test fish and subsistence harvests.

Appendix A.11. South Peninsula chum salmon catch and escapements, 1962-98.[a]

		Not including June Migrants			June Migrants		
Year		Southeastern and South Central Districts	Southwestern and Unimak Districts	South Peninsula Totals	South Unimak	Shumagin Islands	Total June Migrants
1962	Catch	409,500	155,300	564,800	199,000	61,000	260,000
	Escapement	238,600	160,800	399,400			
	Total	648,100	316,100	964,200			
1963	Catch	278,000	80,300	358,300	67,000	36,000	103,000
	Escapement	263,000	183,700	446,700			
	Total	541,000	264,000	805,000			
1964	Catch	378,800	153,300	532,100	153,000	67,000	220,000
	Escapement	160,800	294,000	454,800			
	Total	539,600	447,300	986,900			
1965	Catch	221,700	150,700	372,400	139,000	45,000	184,000
	Escapement	203,300	24,200	228,000			
	Total	425,000	175,400	600,400			
1966	Catch	221,400	36,000	257,400	220,000	17,000	237,000
	Escapement	354,800	67,200	422,000			
	Total	576,800	103,200	679,400			
1967	Catch	118,700	4,500	123,200	71,000	51,000	122,000
	Escapement	132,800	50,100	182,900			
	Total	251,500	54,600	306,100			
1968	Catch	121,400	47,600	169,000	105,000	51,000	156,000
	Escapement	191,700	87,400	279,100			
	Total	313,100	135,000	448,100			
1969	Catch	95,100	43,300	138,400	238,000	13,000	251,000
	Escapement	96,900	37,700	134,600			
	Total	192,000	81,000	273,000			
1970	Catch	485,444	65,254	550,698	397,003	44,896	441,899
	Escapement	171,700	108,800	280,500			
	Total	657,144	174,054	831,198			
1971	Catch	646,351	209,565	855,916	405,311	103,886	509,197
	Escapement	199,100	144,100	343,200			
	Total	845,451	353,665	1,199,116			

-Continued-

Appendix A.11. (page 2 of 4)

Year		Not including June Migrants: Southeastern and South Central Districts	Not including June Migrants: Southwestern and Unimak Districts	South Peninsula Totals	June Migrants: South Unimak	June Migrants: Shumagin Islands	Total June Migrants
1972	Catch	150,784	61,721	212,505	411,019	107,810	518,829
	Escapement	145,000	109,500	254,500			
	Total	295,784	171,221	467,005			
1973	Catch	79,369	12,441	91,810	177,720	22,910	200,630
	Escapement	130,900	81,600	212,500			
	Total	210,269	94,041	304,310			
1974	Catch	56,113	15,317	71,430	0	0	0
	Escapement	169,800	87,500	257,300			
	Total	225,913	102,817	328,730			
1975	Catch	29,419	509	29,928	65,279	35,542	100,821
	Escapement	160,200	33,100	193,300			
	Total	189,619	33,609	223,228			
1976	Catch	106,368	14,914	121,282	336,238	74,109	410,347
	Escapement	225,300	101,900	327,200			
	Total	331,668	116,814	448,482			
1977	Catch	109,132	17,630	126,762	94,215	21,899	116,114
	Escapement	500,900	274,000	774,900			
	Total	610,032	291,630	901,662			
1978	Catch	340,319	83,213	423,532	103,429	18,479	121,908
	Escapement	386,200	214,300	600,500			
	Total	726,519	297,513	1,024,032			
1979	Catch	280,286	98,426	378,712	63,153	40,953	104,106
	Escapement	302,700	108,400	411,100			
	Total	582,986	206,826	789,812			
1980	Catch	674,847	169,141	843,988	458,499	50,366	508,865
	Escapement	241,600	120,800	362,400			
	Total	916,447	289,941	1,206,388			
1981	Catch	961,456	239,998	1,201,454	509,911	54,071	563,982
	Escapement	234,500	146,800	381,300			
	Total	1,195,956	386,798	1,582,754			

-Continued-

Appendix A.11. (page 3 of 4)

Year		Not including June Migrants: Southeastern and South Central Districts	Southwestern and Unimak Districts	South Peninsula Totals	June Migrants: South Unimak	Shumagin Islands	Total June Migrants
1982	Catch	915,847	255,661	1,171,508	933,728	164,975	1,098,703
	Escapement	203,000	183,900	386,900			
	Total	1,118,847	439,561	1,558,408			
1983	Catch	596,053	321,145	917,198	616,390	169,277	785,667
	Escapement	328,900	117,600	446,500			
	Total	924,953	438,745	1,363,698			
1984	Catch	827,717	484,630	1,312,347	227,913	109,207	337,120
	Escapement	446,000	253,700	699,700			
	Total	1,273,717	738,330	2,012,047			
1985	Catch	536,748	375,832	912,580	324,825	109,004	433,829
	Escapement	284,700	218,800	503,500			
	Total	821,448	594,632	1,416,080			
1986	Catch	977,635	416,697	1,394,332	252,721	99,148	351,769
	Escapement	239,600	305,000	544,600			
	Total	1,217,235	721,697	1,938,932			
1987	Catch	750,282	179,500	929,782	406,077	37,064	443,141
	Escapement	329,200	291,500	620,700			
	Total	179,482	471,000	1,550,482			
1988	Catch	829,518	552,278	1,381,796	464,765	61,946	526,711
	Escapement	269,100	227,300	496,400			
	Total	198,618	779,578	1,878,196			
1989	Catch	421,254	116,923	538,177	407,635	47,528	455,163
	Escapement	189,200	121,300	310,500			
	Total	610,454	238,223	848,677			
1990	Catch	563,642	152,298	715,940	455,238	63,501	518,739
	Escapement	210,900	143,800	354,700			
	Total	774,542	296,098	1,070,640			
1991	Catch	571,802	226,088	797,890	670,409	102,602	773,011
	Escapement	345,400	242,200	587,600			
	Total	917,202	468,288	1,385,490			

-Continued-

Appendix A.11. (page 4 of 4)

		Not including June Migrants			June Migrants		
Year		Southeastern and South Central Districts	Southwestern and Unimak Districts	South Peninsula Totals	South Unimak	Shumagin Islands	Total June Migrants
1992	Catch	592,893	287,173	880,066	323,891	102,312	426,203
	Escapement	194,100	141,400	335,500			
	Total	786,993	428,573	1,215,566			
1993	Catch	331,003	182,576	513,579	381,941	150,306	532,247
	Escapement	172,400	224,630	397,030			
	Total	503,403	407,206	910,609			
1994	Catch	690,666	902,924	1,593,590	374,409	207,756	582,165
	Escapement	211,700	367,400	579,100			
	Total	902,366	1,270,324	2,172,690			
1995	Catch	666,344	511,290	1,177,634	342,307	195,126	537,433
	Escapement	324,750	401,650	726,400			
	Total	991,094	912,940	1,904,034			
1996	Catch	287,930	128,126	416,056	129,889	229,931	359,820
	Escapement	307,400	302,900	610,300			
	Total	595,330	431,026	1,026,356			
1997	Catch	106,622	182,559	289,181	206,698	132,117	338,815
	Escapement	542,050	267,000	809,050			
	Total	648,672	449,559	1,098,231			
1998	Catch	292,862	173,045	465,907	195,454	50,165	245,619
	Escapement	390,325	351,910	742,235			
	Total	683,187	524,955	1,208,142			

[a]Salmon numbers exclude test fish and subsistence harvests.

Appendix A.12. South Peninsula salmon harvest, all gear combined, by species and year, 1908-98.

Year	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
1908			0	69,400	0	0	0	69,400
1909			0	108,400	7,200	0	0	115,600
1910			0	46,300	5,500	0	0	51,800
1911			0	240,800	12,400	25,200	83,000	361,400
1912			0	334,400	27,000	40,400	195,000	596,800
1913			1,800	299,700	0	0	7,000	308,500
1914			600	628,900	0	311,000	221,100	1,161,600
1915			4,800	367,900	16,200	120,100	333,100	842,100
1916			6,800	730,900	34,100	576,100	508,900	1,856,800
1917			6,400	1,486,100	4,600	72,100	415,500	1,984,700
1918			8,700	1,014,100	16,300	2,150,000	1,501,000	4,690,100
1919			9,600	619,100	56,100	80,200	921,400	1,686,400
1920			7,800	1,142,300	47,700	2,109,800	934,000	4,241,600
1921			700	830,700	1,500	47,300	84,600	964,800
1922			6,900	3,376,800	2,200	756,700	349,300	4,491,900
1923			4,100	1,827,200	75,300	143,600	538,900	2,589,100
1924			3,900	1,352,000	127,300	3,931,300	1,330,700	6,745,200
1925			10,700	820,500	127,100	382,100	1,116,800	2,457,200
1926			9,500	3,071,500	193,800	3,719,700	1,179,800	8,174,300
1927			9,600	714,700	125,300	1,455,500	1,299,700	3,604,800
1928[a]			7,700	971,500	96,600	900,900	2,416,300	4,393,000
1929[a]			10,500	935,800	84,500	1,793,500	2,429,000	5,253,300
1930[a]			10,900	935,200	161,100	6,094,800	1,278,100	8,480,100
1931[a]			11,000	1,863,200	128,700	997,900	1,216,000	4,216,800
1932[a]			17,400	2,977,300	112,300	3,604,800	817,300	7,529,100
1933[a]			12,600	1,996,700	190,000	3,109,200	1,173,900	6,482,400
1934[a]			17,600	1,372,400	247,100	6,538,500	1,940,300	10,115,900
1935[a]			13,900	978,400	117,200	5,386,200	2,003,100	8,498,800
1936[a]			14,400	3,662,600	284,600	9,471,000	2,310,900	15,743,500
1937[a]			9,300	1,558,000	73,900	9,302,000	1,506,700	12,449,900
1938[a]			6,400	772,100	220,700	7,169,100	1,476,600	9,644,900
1939[a]			16,500	1,881,700	98,900	6,005,300	1,440,600	9,443,000
1940[a]			9,100	1,040,300	184,200	7,182,800	2,326,300	10,742,700
1941[a]			13,000	1,072,000	183,000	5,347,000	1,542,000	8,157,000
1942[a]			4,800	810,100	123,000	6,762,600	1,321,100	9,021,600
1943[a]			21,700	2,397,700	90,600	4,360,200	924,500	7,794,700
1944[a]			9,900	538,600	238,700	2,653,800	985,600	4,426,600
1945[a]			21,400	813,400	116,100	3,639,600	948,900	5,539,400
1946[a]			6,100	752,300	151,400	1,964,000	1,219,900	4,093,700
1947[a]			3,400	1,137,100	55,800	2,319,600	1,219,200	4,735,100
1948[a]			1,200	285,900	39,200	1,683,700	1,139,600	3,149,600
1949[a]			3,800	637,500	19,500	1,544,000	560,900	2,765,700

-Continued-

Appendix A.12. (page 2 of 3)

Year	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
1950[a]			4,000	1,745,300	70,700	1,613,700	562,500	3,996,200
1951			1,500	264,200	55,700	2,844,800	683,100	3,849,300
1952			9,200	894,500	39,200	908,500	1,040,800	2,892,200
1953			7,200	1,039,200	47,900	2,743,900	1,464,600	5,302,800
1954			4,200	636,300	49,400	2,033,300	1,413,400	4,136,600
1955			5,400	550,100	44,800	2,529,200	688,200	3,817,700
1956			4,800	641,400	61,900	2,740,700	1,618,700	5,067,500
1957			5,800	341,900	49,900	913,100	1,281,400	2,592,100
1958			800	186,100	70,600	1,385,200	841,000	2,483,700
1959			900	217,500	8,500	915,600	711,700	1,854,200
1960			1,700	379,000	1,800	1,197,500	904,400	2,484,400
1961			900	456,800	10,400	1,727,800	748,600	2,944,500
1962			3,300	420,000	12,500	1,965,500	824,800	3,226,100
1963			1,900	204,400	16,500	2,367,700	461,300	3,051,800
1964			2,000	370,800	13,600	2,740,400	751,000	3,877,800
1965			2,100	915,700	34,200	2,884,100	556,400	4,392,500
1966			1,400	606,200	6,300	302,300	494,400	1,410,600
1967			1,600	294,100	2,900	77,800	245,200	621,600
1968			1,400	699,800	31,100	1,287,100	325,300	2,344,700
1969			1,900	912,800	10,900	1,219,400	389,200	2,534,200
1970	219	4,679	1,806	1,779,525	32,571	1,737,985	993,349	4,545,236
1971	187	4,444	2,174	716,087	16,907	1,445,031	1,365,957	3,546,156
1972	210	3,124	1,332	557,422	8,021	78,221	731,814	1,376,810
1973	153	1,795	415	330,091	6,599	58,051	292,943	688,099
1974	96	853	581	197,153	9,366	100,601	71,826	379,527
1975	143	600	117	243,548	67	60,642	130,750	435,124
1976	217	2,705	2,196	375,027	216	2,366,833	532,503	3,276,775
1977	205	2,168	559	311,722	2,108	1,448,648	243,167	2,006,204
1978	248	3,860	773	579,411	60,774	5,590,145	546,182	6,777,285
1979	294	4,476	2,141	1,149,927	356,867	6,564,914	482,930	8,556,779
1980	284	5,107	4,794	3,613,025	274,181	7,861,470	1,353,112	13,106,582
1981	304	5,617	11,182	2,241,513	162,223	5,033,028	1,768,475	9,216,421
1982	302	6,286	9,845	2,345,981	256,046	6,734,905	2,272,495	11,619,272
1983	325	5,241	26,571	2,556,557	127,657	2,827,622	1,704,072	7,242,479
1984	334	6,378	9,198	2,318,028	310,950	11,589,258	1,654,622	15,882,056
1985	336	5,322	6,642	2,144,416	172,514	4,431,016	1,348,726	8,103,314
1986	335	5,132	5,589	1,223,089	235,854	4,031,487	1,749,651	7,245,670
1987	327	5,256	9,174	1,449,753	225,120	1,208,556	1,376,887	4,269,490
1988	330	6,478	11,075	1,473,651	505,533	7,044,824	1,908,507	10,943,590
1989	341	5,597	7,065	2,660,800	443,843	7,292,658	994,231	11,398,597
1990[b]	354	6,403	16,522	2,386,844	307,218	2,865,856	1,237,826	6,814,266
1991[b]	355	6,439	7,975	2,319,942	317,129	10,616,756	1,588,795	14,850,597

-Continued-

Appendix A.12. (page 3 of 3)

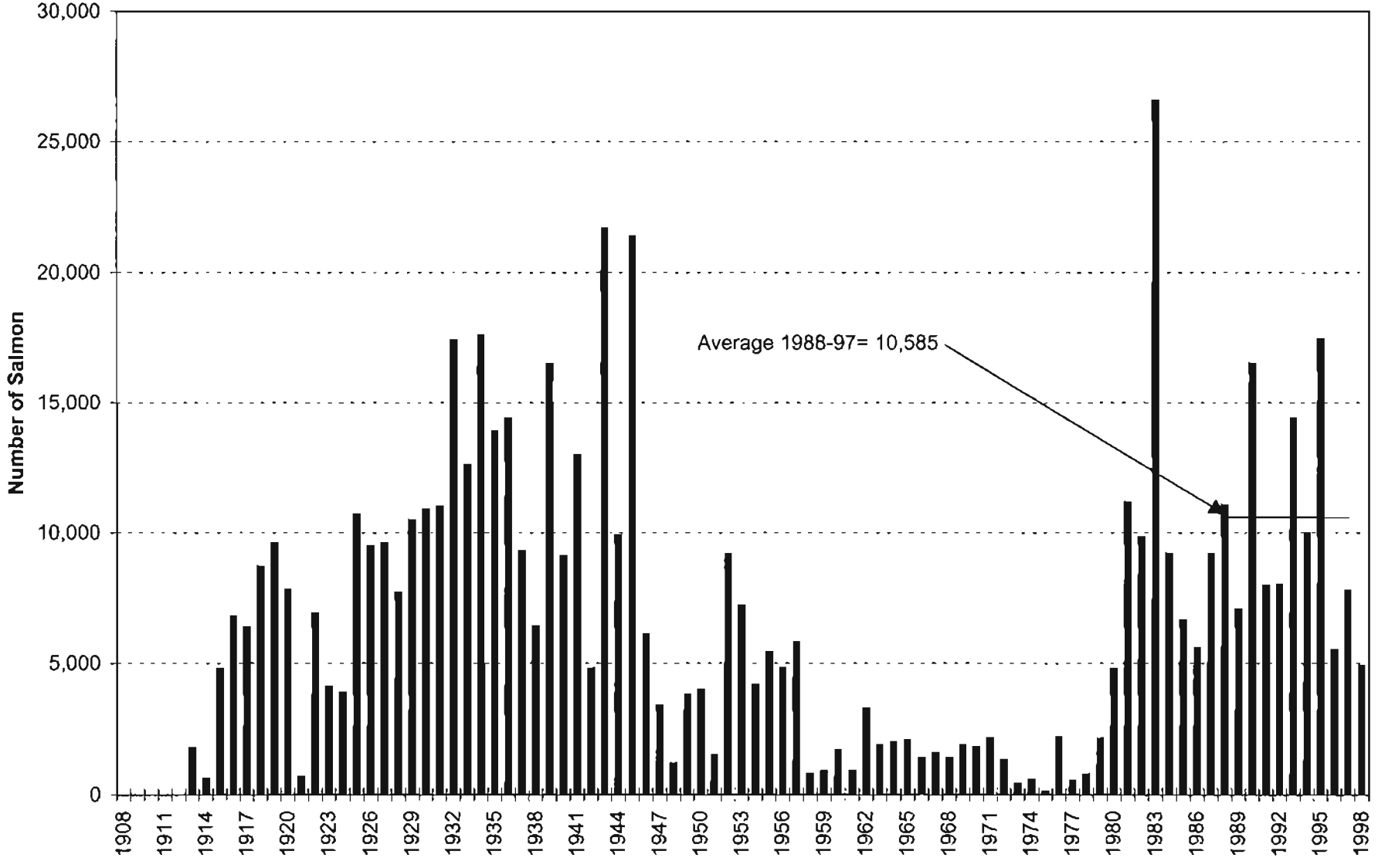
Year	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
1992[b]	341	6,512	8,026	3,445,914	418,232	9,770,386	1,316,709	14,959,267
1993[b]	353	6,204	14,413	3,689,074	220,148	9,928,107	1,048,257	14,899,999
1994[b]	343	6,750	10,002	2,107,233	255,905	9,179,853	2,192,079	13,745,072
1995[b]	352	8,193	17,469	3,017,002	264,347	16,311,770	1,728,013	21,338,601
1996[b]	331	5,875	5,520	1,543,134	293,374	2,207,503	794,642	4,844,173
1997[b]	307	5,803	7,780	2,281,566	116,136	2,321,371	627,996	5,354,849
1998[b]	311	8,014	4,919	2,183,195	154,194	8,047,998	721,068	11,111,374
Average 1918-29[c]			7,475	1,389,683	79,475	1,455,883	1,175,125	4,107,642
Average 1930-46[c]			12,706	1,495,412	160,088	5,269,929	1,437,165	8,375,300
Average 1947-77[c,d]	179	2,546	2,567	591,844	26,747	1,523,900	751,226	2,896,285
Average 1978-97[c]	325	5,846	9,588	2,227,343	266,203	6,670,574	1,384,710	10,558,418
Average 1988-97	341	6,425	10,585	2,492,516	314,187	7,753,908	1,343,706	11,914,901

[a] From 1928 until 1951 commercial salmon catches in the Aleutian Islands and the South Peninsula were combined. The Aleutian Islands catches are generally much smaller than South Peninsula harvests which are dominated by pink salmon. The 1978-95 Aleutian Islands average salmon harvest was 510,317 fish, while the 1978-95 average harvest for the South Peninsula was 11,164,963 salmon.

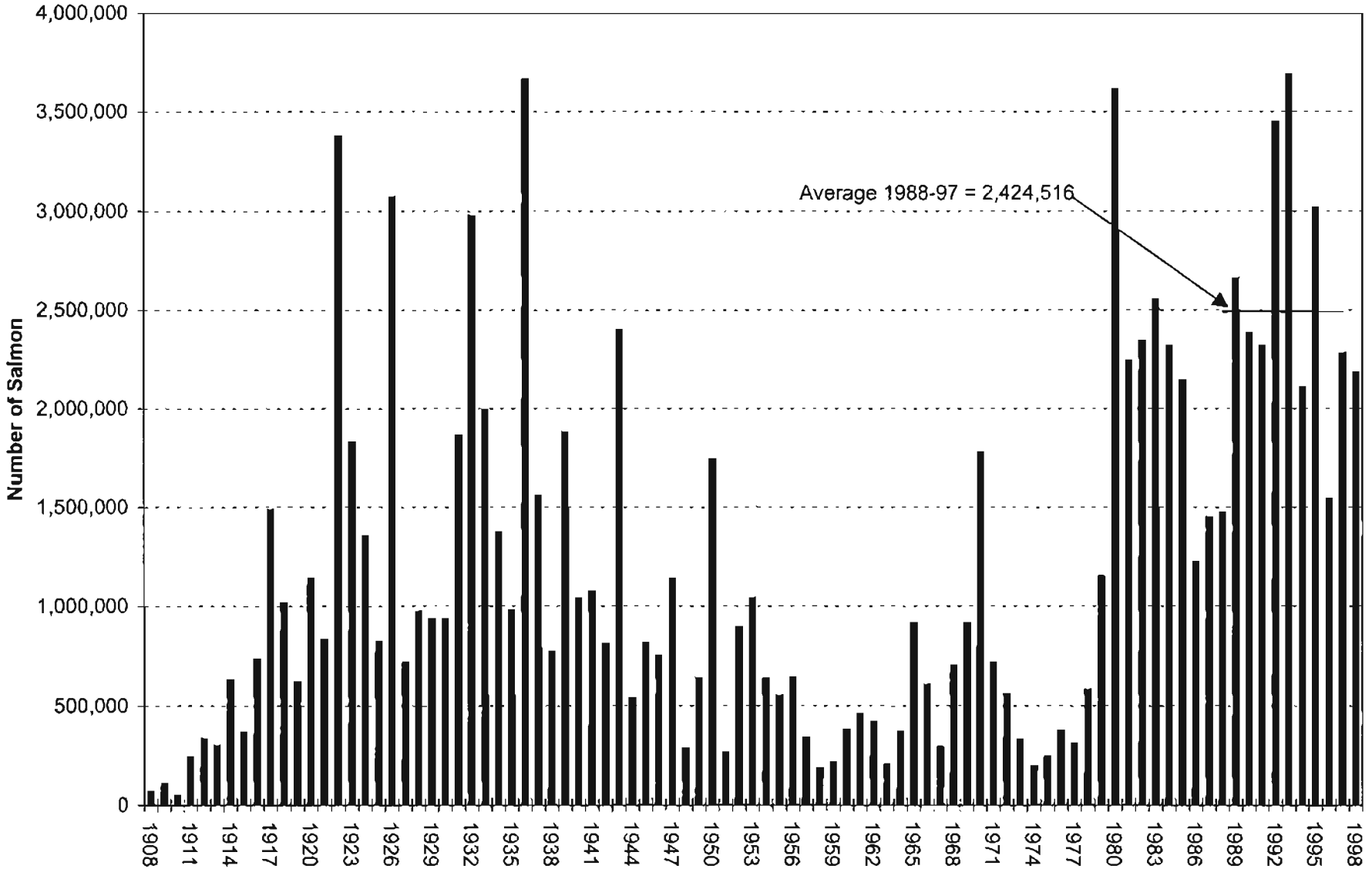
[b] Salmon numbers include test fish harvests.

[c] These historical averages are intended to illustrate how salmon productivity has flucuated in the South Peninsula.

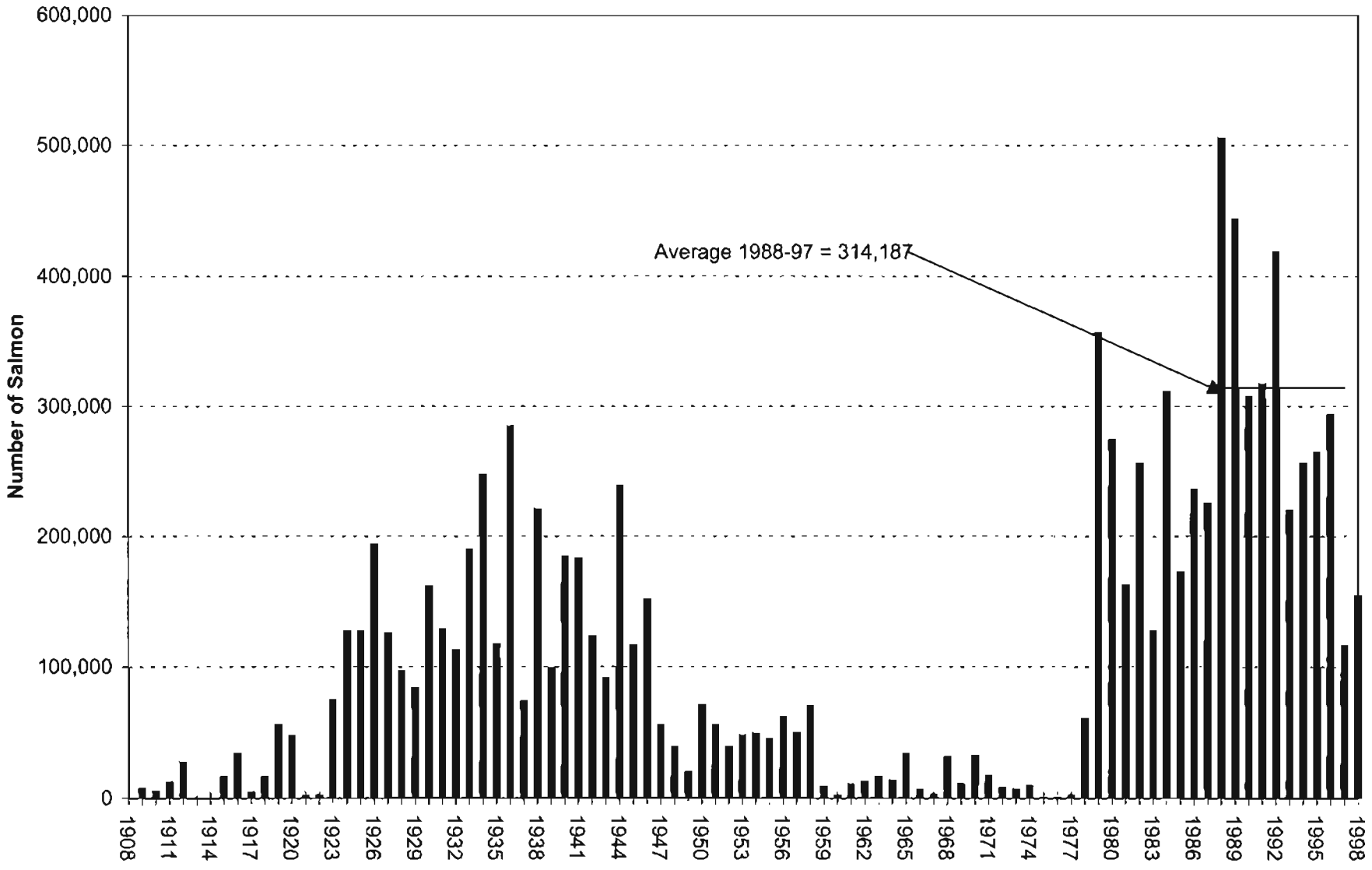
[d] Permit and landing numbers are only available from 1970 through present.



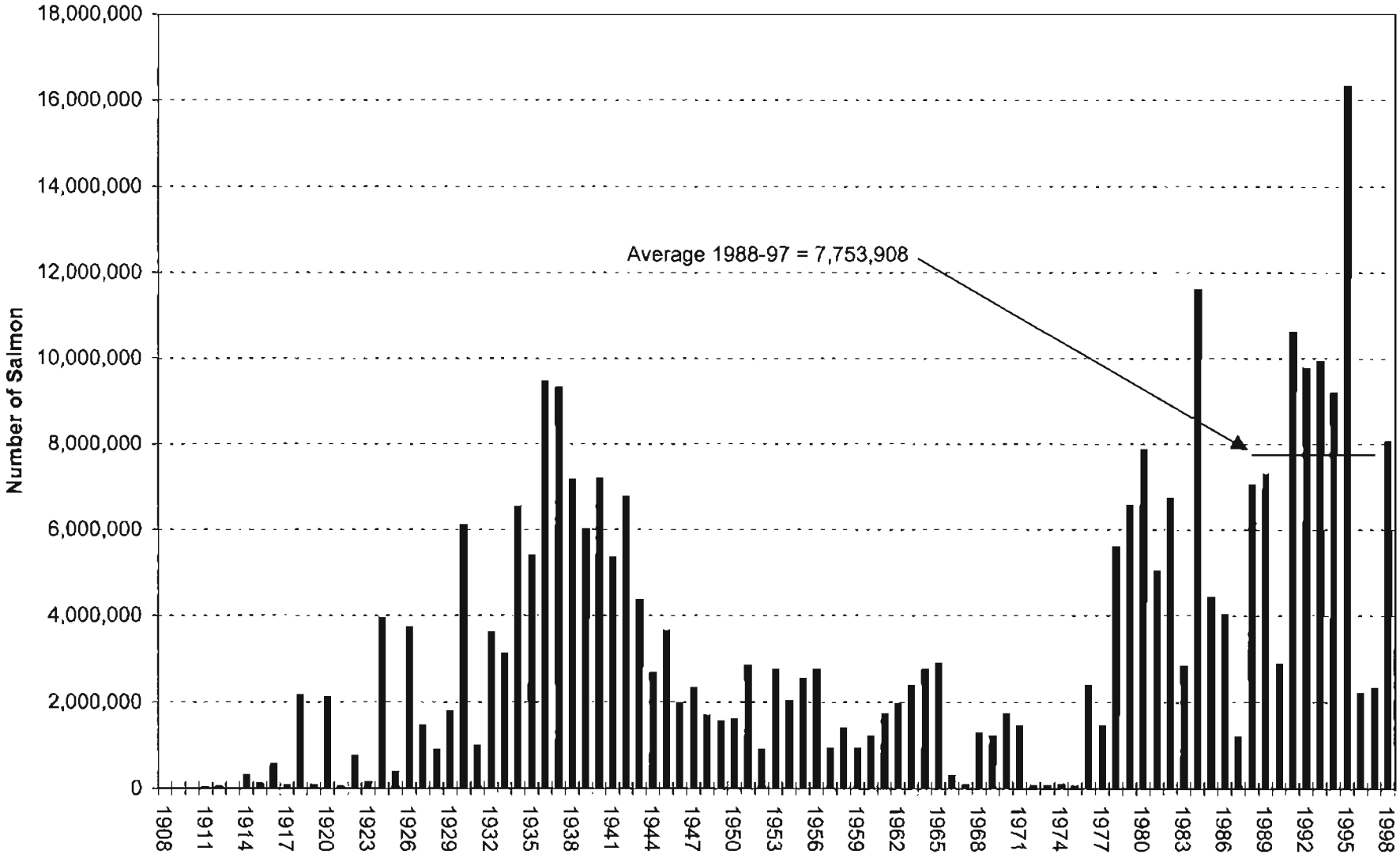
Appendix A.13. South Peninsula chinook salmon harvest by year, 1908-98.



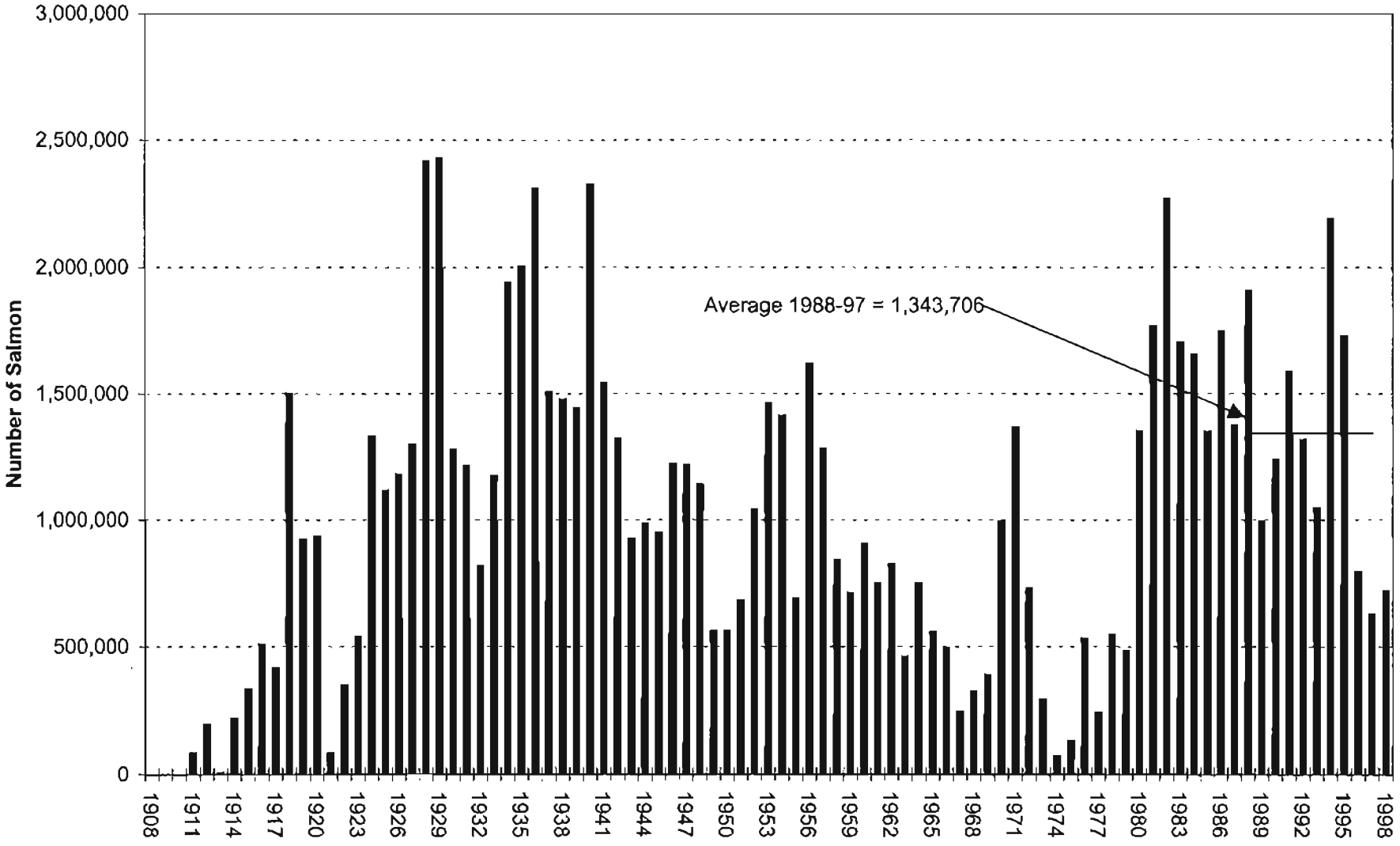
Appendix A.14. South Peninsula sockeye salmon harvest by year, 1908-98.



Appendix A.15. South Peninsula coho salmon harvest by year, 1908-98.



Appendix A.16. South Peninsula pink salmon harvest by year, 1908-98.



Appendix A.17. South Peninsula chum salmon harvest by year, 1908-98.

Appendix A.18. South Penninsula commercial salmon harvest, by species, statistical area, section, and district, 1998.

Statistical Area	Section	Number of Salmon					
		Chinook	Sockeye	Coho	Pink	Chum	Total
SOUTHEASTERN DISTRICT							
281-15		3	9,372	1,066	17,142	1,212	28,795
281-25		155	140,399	14,369	148,276	26,727	329,926
East Stepovak Section Total		**158**	**149,771**	**15,435**	**165,418**	**27,939**	**358,721**
281-40	Grub Gulch/Clark Bay	3	9,979	538	130,255	10,174	150,949
281-50	Orzinski Bay	75	31,675	96	15,173	1,582	48,601
281-55	American Bay	4	4,663	179	10,445	1,910	17,201
281-60	Blunt Pt. to Dorenoi Bay	6	10,541	302	212,703	4,121	227,673
Northwest Stepovak Section Total		**88**	**56,858**	**1,115**	**368,576**	**17,787**	**444,424**
281-70	**Southwest Stepovak Section**	**132**	**44,397**	**6,412**	**240,146**	**16,104**	**307,191**
281-80	**Balboa Bay Section**	**17**	**18,107**	**994**	**123,027**	**7,026**	**149,171**
281-90	**Beaver Bay Section**	**82**	**9,657**	**6**	**52,487**	**812**	**63,044**
282-10	Popof Strait/Squaw Harbor	93	33,646	1,023	132,753	6,053	173,568
282-11	Unga Cape/East Popof	1,753	233,966	59,879	1,304,039	97,710	1,697,347
282-20	Acheredin Bay	51	48,535	2,023	51,544	8,526	110,679
282-25	West Unga Island	202	111,981	7,478	269,366	25,867	414,894
282-30	Bay Point	0	855	24	213	36	1,128
282-35	Zachary Bay	7	5,387	7	24,446	777	30,624
282-40	East Head/West Head	1	1,881	50	1,074	116	3,122
282-42	Korovin Island	427	102,562	5,789	174,413	22,897	306,088
282-45	Cape Wedge/Northeast Nagai	0	79	7	970	32	1,088
282-65	Southeast Nagai Island	59	35,062	2,278	151,657	7,555	196,611
282-70	Southwest Nagai Island	283	74,350	4,170	128,752	11,813	219,368
282-75	Cape Horn/Porpoise Rocks	66	18,258	465	8,907	1,569	29,265
282-80	East Nagai Strait	0	1,185	3	591	328	2,107
Shumagin Islands Section Total		**2,942**	**667,747**	**83,196**	**2,248,725**	**183,279**	**3,185,889**
SOUTHEASTERN DISTRICT TOTAL		***3,419***	***946,537***	***107,158***	***3,198,379***	***252,947***	***4,508,440***

-Continued-

Appendix A.18. (page 2 of 3)

Statistical Area	Section	Number of Salmon					
		Chinook	Sockeye	Coho	Pink	Chum	Total
SOUTH CENTRAL DISTRICT							
283-17	Coal Bay/Cape Tolstoi South	14	35,394	528	286,875	4,433	327,244
Mino Cr. - Little Coal B. Section Total		**14**	**35,394**	**528**	**286,875**	**4,433**	**327,244**
283-21	Northside Cape Tolstoi	1	4,326	18	57,573	3,670	65,588
283-23	Eastside Pavlof Bay	14	15,533	222	1,310,105	15,507	1,341,381
East Pavlof Bay Section Total		**15**	**19,859**	**240**	**1,367,678**	**19,177**	**1,406,969**
283-24	**Canoe Bay Section**	**4**	**1,406**	**11**	**933,330**	**54,640**	**989,391**
283-25	Northwest Pavlof Bay	0	0	0	0	209	209
283-26	Long Beach/Ukolnoi	13	15,760	1,375	127,811	11,621	156,580
West Pavlof Bay Section Total		**13**	**15,760**	**1,375**	**127,811**	**11,830**	**156,789**
SOUTH CENTRAL DISTRICT TOTAL		***46***	***72,419***	***2,154***	***2,715,694***	***90,080***	***2,880,393***
SOUTHWESTERN DISTRICT							
284-36	Volcano Bay	8	3,206	106	291,477	81,683	376,480
284-37	Northside Dolgoi Island	32	83,318	4,712	229,526	17,740	335,328
284-38	South Dolgoi/Moss Cape	20	30,937	1,552	89,921	3,052	125,482
Volcano Bay Section Total		**60**	**117,461**	**6,370**	**610,924**	**102,475**	**837,290**
284-42	Belkofski Bay	5	12,578	246	380,705	20,351	413,885
284-45	King Cove	0	3,718	156	303,371	9,745	316,990
Belkofski Bay Section Total		**5**	**16,296**	**402**	**684,076**	**30,096**	**730,875**
284-55	**Deer Island Section**	**0**	**100**	**15**	**382,620**	**560**	**383,295**
284-62	Outer Cold Bay	0	793	13	13,905	1,121	15,832
284-65	Lenard Harbor	0	0	0	63,085	2,585	65,670
Cold Bay Section Total		**0**	**793**	**13**	**76,990**	**3,706**	**81,502**

-Continued-

Appendix A.18. (page 3 of 3)

Statistical Area	Section	Number of Salmon					
		Chinook	Sockeye	Coho	Pink	Chum	Total
284-75	**Thin Point Section**	**0**	**16,350**	**6,912**	**30,819**	**213**	**54,294**
284-80	**Morzhovoi Bay Section**	**6**	**4,845**	**0**	**199**	**140**	**5,190**
284-90	**Ikatan Bay Section**	**474**	**238,494**	**19,376**	**174,027**	**80,308**	**512,679**
SOUTHWESTERN DISTRICT TOTAL		***545***	***394,339***	***33,088***	***1,959,655***	***217,498***	***2,605,125***
UNIMAK DISTRICT							
295-10	**Sanak Island Section**	**0**	**531**	**342**	**292**	**769**	**1,934**
285-20	Bird Island	92	107,328	3,033	20,909	27,020	158,382
285-30	Cape Lazaref	100	179,407	8,147	96,566	50,784	335,004
Otter Cove Section Total		**192**	**286,735**	**11,180**	**117,475**	**77,804**	**493,386**
285-40	**Cape Lutke Section**	**594**	**470,242**	**248**	**49,186**	**72,428**	**592,698**
UNIMAK DISTRICT TOTAL		***786***	***757,508***	***11,770***	***166,953***	***151,001***	***1,088,018***
SOUTH PENINSULA TOTAL		**4,796**	**2,170,803**	**154,170**	**8,040,681**	**711,526**	**11,081,976**

[a]Harvest numbers do not include test fish catches.

Appendix A.19. South Peninsula commercial salmon harvest, all gear combined, by species and day, 1998.

			Number of Salmon					
Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
13-Jun	141	162	90	67,617	1	379	6,358	74,445
14-Jun	130	159	134	71,267	0	280	9,913	81,594
15-Jun	147	172	79	90,333	1	813	13,527	104,753
16-Jun	165	203	125	111,830	1	433	17,039	129,428
17-Jun	169	208	140	111,919	0	1,014	17,498	130,571
18-Jun	219	254	196	97,384	1	21,995	15,232	134,808
19-Jun	145	160	158	52,973	0	25,888	8,244	87,263
20-Jun	242	287	253	119,524	3	57,184	21,475	198,439
21-Jun	207	246	190	83,034	5	41,293	11,874	136,396
22-Jun	168	191	110	49,707	1	20,602	10,207	80,627
23-Jun	215	258	167	104,937	5	45,058	22,231	172,398
24-Jun	209	230	212	68,273	17	35,281	16,473	120,256
25-Jun	202	222	144	45,350	7	42,328	10,204	98,033
26-Jun	204	235	119	58,382	17	35,500	14,448	108,466
27-Jun	152	186	151	49,854	79	26,238	14,166	90,488
28-Jun	148	186	169	38,417	57	42,462	12,772	93,877
29-Jun	137	164	112	33,689	150	31,566	10,524	76,041
30-Jun	105	134	147	34,235	131	46,026	13,434	93,973
3-Jul	16	20	24	1,685	3	83	100	1,895
4-Jul	15	19	10	1,084	0	40	28	1,162
5-Jul	8	9	3	1,427	0	45	16	1,491
6-Jul	111	133	212	21,518	1,157	28,382	7,708	58,977
8-Jul	9	10	5	1,881	0	106	15	2,007
9-Jul	114	165	130	35,062	2,404	31,112	10,615	79,323
11-Jul	14	27	6	4,594	5	1,043	126	5,774
12-Jul	115	173	219	54,478	3,231	44,240	7,819	109,987
14-Jul	14	27	7	3,900	11	1,061	60	5,039
15-Jul	107	161	193	80,330	6,940	87,507	17,512	192,482
17-Jul	9	12	2	982	0	644	32	1,660
18-Jul	120	165	171	75,489	16,861	160,700	16,542	269,763
19-Jul	27	27	3	12,625	230	35,643	13,921	*
20-Jul	60	82	99	34,093	1,927	75,441	8,583	120,143
21-Jul	138	201	278	119,576	11,056	288,597	28,599	448,106
22-Jul	13	16	1	679	13	130,242	2,889	133,824
23-Jul	103	115	21	21,604	3,187	176,374	9,131	210,317
24-Jul	131	179	41	58,108	5,027	299,276	12,303	374,755

-Continued-

Appendix A.19. (page 2 of 3)

Date	Permits	Landings	Number of Salmon					
			Chinook	Sockeye	Coho	Pink	Chum	Total
25-Jul	24	32	1	2,068	37	212,368	6,611	221,085
26-Jul	41	45	2	7,578	392	209,799	5,548	223,319
27-Jul	139	240	84	81,934	13,267	528,989	22,942	647,216
28-Jul	125	138	65	32031	5031	304165	8696	349,988
29-Jul	20	25	0	4,222	22	135,093	1,019	140,356
30-Jul	124	160	25	21,008	6,309	283,873	17,843	329,058
31-Jul	153	229	62	33,733	9,677	480,030	20,112	543,614
1-Aug	117	151	53	15,805	3,406	341,068	14,778	375,110
2-Aug	123	159	107	25,177	6,396	461,540	24,784	518,004
3-Aug	137	197	76	26,955	10,012	588,347	22,711	648,101
4-Aug	4	4	0	39	46	32,234	6,277	38,596
5-Aug	53	55	2	2,249	1,319	170,779	9,794	184,143
6-Aug	135	157	26	8,661	5,438	307,754	15,765	337,644
7-Aug	106	138	15	7,806	3,084	262,474	13,515	286,894
8-Aug	92	123	7	6,584	2,461	221,405	9,483	239,940
9-Aug	108	144	20	8,874	2,528	468,365	30,446	510,233
10-Aug	104	130	81	12,576	6,490	405,648	29,238	454,033
11-Aug	13	13	0	2	23	81,716	10,174	91,915
12-Aug	56	58	6	618	192	243,385	9,042	253,243
13-Aug	39	49	6	3,632	1,939	155,770	9,108	170,455
14-Aug	75	89	3	3,390	1,209	275,247	27,864	307,713
15-Aug	7	8	4	2,067	1,103	24,234	2,121	29,529
16-Aug	10	25	5	1,179	423	9,704	1,655	12,966
1-Sep	38	48	2	4,863	5,393	146	924	11,328
2-Sep	49	57	3	6,392	2,668	438	2,145	11,646
3-Sep	49	53	3	6,301	1,971	419	1,985	10,679
4-Sep	47	65	2	6,259	2,784	547	2,049	11,641
7-Sep	37	39	1	2,277	1,212	41	594	4,125
8-Sep	40	45	2	5,191	2,155	202	1,331	8,881
9-Sep	14	16	0	978	245	0	223	1,446
10-Sep	12	13	0	1,362	325	21	268	1,976
11-Sep	15	15	1	1,834	1,426	4	314	3,579
12-Sep [a]	*	*	*	*	*	*	*	*
14-Sep	11	11	6	698	248	0	80	1,032
15-Sep	21	21	3	2,098	702	0	171	2,974
17-Sep	11	15	0	2,183	582	0	136	2,901
21-Sep [a]	*	*	*	*	*	*	*	*
22-Sep [a]	*	*	*	*	*	*	*	*
23-Sep [a]	*	*	*	*	*	*	*	*

-Continued-

Appendix A.19. (page 3 of 3)

Date	Permits	Landings	Number of Salmon					
			Chinook	Sockeye	Coho	Pink	Chum	Total
25-Sep [a]	*	*	*	*	*	*	*	*
28-Sep [a]	*	*	*	*	*	*	*	*
30-Sep [a]	*	*	*	*	*	*	*	*
2-Oct [a]	*	*	*	*	*	*	*	*
8-Oct [a]	*	*	*	*	*	*	*	*
Total	310	7,997	4,796	2,170,803	154,170	8,040,681	711,526	11,081,976
Total Sept.1-Oct. 8		430	25	44,775	20,838	1,818	10,382	77,838

[a] Confidentiality requirements prohibit releasing this information.

Appendix A.20. South Peninsula commercial purse seine salmon harvest by species and day, 1998.

			Number of Salmon					
Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
17-Jun [a]	*	*	*	*	*	*	*	*
18-Jun	35	36	125	22,530	1	20,957	3,739	47,352
19-Jun	25	26	112	19,403	0	25,436	3,261	48,212
20-Jun	43	44	203	37,580	0	56,590	8,562	102,935
21-Jun	37	37	154	35,035	0	40,832	6,802	82,823
22-Jun	16	16	74	10,367	0	20,112	1,433	31,986
23-Jun	34	37	95	18,347	2	44,170	5,704	68,318
24-Jun	33	34	138	14,839	2	34,626	4,856	54,461
25-Jun	33	33	93	11,922	0	41,526	3,756	57,297
26-Jun	40	40	91	13,477	4	34,420	5,127	53,119
27-Jun	23	23	94	9,933	6	23,188	2,896	36,117
28-Jun	39	39	118	11,574	17	41,541	8,019	61,269
29-Jun	25	25	64	7,358	15	29,668	4,401	41,506
30-Jun	35	35	94	12,834	49	43,025	7,630	63,632
6-Jul	44	44	169	7,355	798	24,102	5,476	37,900
9-Jul	48	48	99	12,553	1,768	23,251	7,016	44,687
12-Jul	46	46	191	23,687	1,694	33,720	4,588	63,880
15-Jul	34	34	168	40,299	5,067	66,012	12,100	123,646
18-Jul	45	47	160	41,008	14,332	135,902	12,320	203,722
19-Jul	11	11	3	4,215	164	31,591	13,481	49,454
20-Jul	19	19	88	12,865	1,493	64,506	7,725	86,677
21-Jul	55	57	260	71,112	7,138	253,881	24,089	356,480
22-Jul	9	12	1	58	0	128,002	2,777	130,838
23-Jul	33	34	16	8,934	628	158,628	6,573	174,779
24-Jul	54	58	30	37,169	2,718	259,087	8,061	307,065
25-Jul	14	21	1	320	8	205,061	6,096	211,486
26-Jul	22	23	2	3,145	169	201,196	4,826	209,338
27-Jul	52	62	69	37,309	7,212	447,887	13,654	506,131
28-Jul	56	60	60	17,848	3,227	282,879	5,909	309,923
29-Jul	12	13	0	1,158	6	131,604	822	133,590
30-Jul	37	39	24	2,816	2,028	244,514	11,313	260,695
31-Jul	54	57	48	8,156	3,625	418,901	9,006	439,736
1-Aug	42	49	47	4,633	1,726	298,065	8,199	312,670
2-Aug	51	54	103	11,798	4,014	423,292	17,198	456,405
3-Aug	66	71	72	12,402	7,360	537,334	14,365	571,533
4-Aug [a]	*	*	*	*	*	*	*	*
5-Aug	28	28	0	269	126	155,057	7,353	162,805
6-Aug	60	64	23	2,883	3,762	276,093	9,164	291,925
7-Aug	37	39	10	1,702	1,424	225,938	7,669	236,743
8-Aug	32	34	6	1,009	683	185,502	3,970	191,170
9-Aug	54	55	18	2,061	1,007	433,045	24,039	460,170

-Continued-

Appendix A.20. (page 2 of 2)

			Number of Salmon					
Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
10-Aug	60	62	76	6,417	5,711	376,239	24,579	413,022
11-Aug	13	13	0	2	23	81,716	10,174	91,915
12-Aug	45	46	6	192	15	235,174	8,212	243,599
13-Aug	24	24	6	2,178	1,735	146,602	8,023	158,544
14-Aug	51	52	3	1,170	670	260,148	26,149	288,140
15-Aug [a]	*	*	*	*	*	*	*	*
16-Aug [a]	*	*	*	*	*	*	*	*
1-Sep [a]	*	*	*	*	*	*	*	*
2-Sep [a]	*	*	*	*	*	*	*	*
4-Sep [a]	*	*	*	*	*	*	*	*
7-Sep [a]	*	*	*	*	*	*	*	*
8-Sep [a]	*	*	*	*	*	*	*	*
10-Sep [a]	*	*	*	*	*	*	*	*
11-Sep [a]	*	*	*	*	*	*	*	*
14-Sep [a]	*	*	*	*	*	*	*	*
15-Sep [a]	*	*	*	*	*	*	*	*
21-Sep [a]	*	*	*	*	*	*	*	*
Total	79	1,724	3,223	607,213	83,301	7,259,182	399,934	8,352,853

[a] Confidentiality requirements prohibit releasing this information.

Appendix A.21. South Peninsula commercial drift gillnet salmon harvest by species and day, 1998.

			Number of Salmon					
Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
13-Jun	128	143	49	61,697	1	348	5,942	68,037
14-Jun	112	132	110	63,338	0	255	9,250	72,953
15-Jun	129	150	57	83,941	0	793	13,076	97,867
16-Jun	128	145	91	97,718	0	326	14,664	112,799
17-Jun	131	153	99	94,135	0	811	16,353	111,398
18-Jun	134	159	51	62,834	0	904	10,742	74,531
19-Jun	73	75	32	20,931	0	351	4,194	25,508
20-Jun	136	152	33	62,207	0	321	11,645	74,206
21-Jun	110	122	17	30,315	0	140	4,094	34,566
22-Jun	100	108	26	28,142	1	293	7,770	36,232
23-Jun	122	140	59	71,759	2	730	15,072	87,622
24-Jun	130	137	58	44,828	7	532	11,125	56,550
25-Jun	118	128	39	24,768	6	550	5,900	31,263
26-Jun	110	125	18	33,910	6	842	8,569	43,345
27-Jun	75	93	45	31,104	63	2,745	10,396	44,353
28-Jun	48	55	13	16,913	27	519	3,767	21,239
29-Jun	55	60	27	17,235	111	1,508	5,208	24,089
30-Jun	20	23	14	10,490	43	1,986	4,799	17,332
6-Jul	8	8	1	787	50	41	148	1,027
9-Jul [a]	*	*	*	*	*	*	*	*
12-Jul	5	5	1	1,158	652	169	988	2,968
15-Jul	7	7	0	1,755	1,001	1,322	771	4,849
18-Jul	11	11	0	1,799	1,207	1,448	1,165	5,619
21-Jul	11	11	0	3,022	1,687	2,547	887	8,143
23-Jul	14	14	0	1,210	1,993	2,849	576	6,628
24-Jul	12	12	0	634	666	2,139	338	3,777
26-Jul [a]	*	*	*	*	*	*	*	*
27-Jul	20	26	2	2,217	4,305	11,294	2,967	20,785
28-Jul	12	12	1	586	1,238	1,909	710	4,444
30-Jul	29	30	1	2,764	3,297	12,439	2,239	20,740
31-Jul	37	44	7	3,665	3,506	19,601	3,557	30,336
1-Aug	27	28	2	1,641	1,019	17,113	1,946	21,721
2-Aug	16	18	1	1,913	1,669	9,696	1,834	15,113
3-Aug	20	30	0	2,426	1,633	22,858	2,681	29,598
4-Aug [a]	*	*	*	*	*	*	*	*
5-Aug	20	20	0	1,372	1,105	12,892	1,737	17,106
6-Aug	27	27	0	2,115	1,263	14,254	3,121	20,753
7-Aug	26	26	2	1,348	1,038	12,753	1,939	17,080
8-Aug	22	22	0	1,513	979	11,425	2,293	16,210

-Continued-

Appendix A.21. (page 2 of 2)

			Number of Salmon					
Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
9-Aug	22	31	0	1,667	1,046	18,252	3,063	24,028
10-Aug	16	16	0	844	302	9,558	1,599	12,303
12-Aug	6	7	0	209	111	1,705	367	2,392
13-Aug [a]	*	*	*	*	*	*	*	*
14-Aug	4	4	0	196	138	4,340	252	4,926
Total	145	2,516	856	891,834	30,486	206,306	198,289	1,327,771

[a] Confidentiality requirements prohibit releasing this information.

Appendix A.22. South Peninsula commercial set gillnet salmon harvest by species and day, 1998.

			Number of Salmon					
Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
13-Jun	13	19	41	5,920	0	31	416	6,408
14-Jun	18	27	24	7,929	0	25	663	8,641
15-Jun	18	22	22	6,392	1	20	451	6,886
16-Jun	37	58	34	14,112	1	107	2,375	16,629
17-Jun	37	54	41	17,504	0	114	1,090	18,749
18-Jun	50	59	20	12,020	0	134	751	12,925
19-Jun	47	59	14	12,639	0	101	789	13,543
20-Jun	63	91	17	19,737	3	273	1,268	21,298
21-Jun	60	87	19	17,684	5	321	978	19,007
22-Jun	52	67	10	11,198	0	197	1,004	12,409
23-Jun	59	81	13	14,831	1	158	1,455	16,458
24-Jun	46	59	16	8,606	8	123	492	9,245
25-Jun	51	61	12	8,660	1	252	548	9,473
26-Jun	54	70	10	10,995	7	238	752	12,002
27-Jun	54	70	12	8,817	10	305	874	10,018
28-Jun	61	92	38	9,930	13	402	986	11,369
29-Jun	57	79	21	9,096	24	390	915	10,446
30-Jun	50	76	39	10,911	39	1,015	1,005	13,009
3-Jul	16	20	24	1,685	3	83	100	1,895
4-Jul	15	19	10	1,084	0	40	28	1,162
5-Jul	8	9	3	1,427	0	45	16	1,491
6-Jul	59	81	42	13,376	309	4,239	2,084	20,050
8-Jul	9	10	5	1,881	0	106	15	2,007
9-Jul	64	115	31	22,006	563	7,811	3,328	33,739
11-Jul	14	27	6	4,594	5	1,043	126	5,774
12-Jul	64	122	27	29,633	885	10,351	2,243	43,139
14-Jul	14	27	7	3,900	11	1,061	60	5,039
15-Jul	66	120	25	38,276	872	20,173	4,641	63,987
17-Jul	9	12	2	982	0	644	32	1,660
18-Jul	64	107	11	32,682	1,322	23,350	3,057	60,422
19-Jul	16	16	0	8,410	66	4,052	440	12,968
20-Jul	41	63	11	21,228	434	10,935	858	33,466
21-Jul	72	133	18	45,442	2,231	32,169	3,623	83,483
22-Jul	4	4	0	621	13	2,240	112	2,986
23-Jul	56	67	5	11,460	566	14,897	1,982	28,910
24-Jul	65	109	11	20,305	1,643	38,050	3,904	63,913
25-Jul	10	11	0	1,748	29	7,307	515	9,599
26-Jul	17	20	0	4,360	73	7,862	674	12,969
27-Jul	67	152	13	42,408	1,750	69,808	6,321	120,300

-Continued-

Appendix A.22. (page 2 of 2)

			Number of Salmon					
Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
28-Jul	57	66	4	13,597	566	19,377	2,077	35,621
29-Jul	8	12	0	3,064	16	3,489	197	6,766
30-Jul	58	91	0	15,428	984	26,920	4,291	47,623
31-Jul	62	128	7	21,912	2,546	41,528	7,549	73,542
1-Aug	48	74	4	9,531	661	25,890	4,633	40,719
2-Aug	56	87	3	11,466	713	28,552	5,752	46,486
3-Aug	51	96	4	12,127	1,019	28,155	5,665	46,970
5-Aug	5	7	2	608	88	2,830	704	4,232
6-Aug	48	66	3	3,663	413	17,407	3,480	24,966
7-Aug	43	73	3	4,756	622	23,783	3,907	33,071
8-Aug	38	67	1	4,062	799	24,478	3,220	32,560
9-Aug	32	58	2	5,146	475	17,068	3,344	26,035
10-Aug	28	52	5	5,315	477	19,851	3,060	28,708
12-Aug	5	5	0	217	66	6,506	463	7,252
13-Aug	13	23	0	1,341	159	8,627	877	11,004
14-Aug	20	33	0	2,024	401	10,759	1,463	14,647
15-Aug	4	5	0	381	169	2,099	466	3,115
16-Aug	8	23	3	1,095	353	6,154	1,388	8,993
1-Sep	37	47	1	4,829	5,369	80	898	11,177
2-Sep	47	55	3	6,041	2,304	244	2,039	10,631
3-Sep	49	53	3	6,301	1,971	419	1,985	10,679
4-Sep	44	62	2	5,438	2,225	361	1,826	9,852
7-Sep	36	38	1	2,084	1,094	26	565	3,770
8-Sep	38	43	0	4,135	1,634	115	1,206	7,090
9-Sep	14	16	0	978	245	0	223	1,446
10-Sep	11	12	0	1,072	187	3	244	1,506
11-Sep	14	14	1	1,592	1,381	0	298	3,272
12-Sep [a]	*	*	*	*	*	*	*	*
14-Sep	10	10	6	583	211	0	64	864
15-Sep	20	20	3	2,026	648	0	157	2,834
17-Sep	11	15	0	2,183	582	0	136	2,901
22-Sep [a]	*	*	*	*	*	*	*	*
23-Sep	6	6	0	822	185	0	68	1,075
25-Sep	5	8	0	606	96	0	22	724
28-Sep [a]	2	2	0	342	18	0	10	370
30-Sep [a]	*	*	*	*	*	*	*	*
2-Oct [a]	*	*	*	*	*	*	*	*
8-Oct [a]	*	*	*	*	*	*	*	*
Total	86	3,757	717	671,756	40,383	575,193	113,303	1,401,352

[a] Confidentiality requirements prohibit releasing this information.

Appendix A.23. South Peninsula commercial salmon harvest by species, district, and gear, 1998.

	Number of Salmon						
	Chinook	Sockeye	Coho	Pink	Chum	Total	Percent of Harvest
SOUTHEASTERN DISTRICT							
Seine	2,814	417,325	78,356	2,768,757	164,074	3,431,326	76.1
Set gillnet	605	529,212	28,802	429,622	88,873	1,077,114	23.9
Total	**3,419**	**946,537**	**107,158**	**3,198,379**	**252,947**	**4,508,440**	**100.0**
SOUTH CENTRAL DISTRICT							
Seine	37	47,529	1,086	2,674,687	85,784	2,809,123	97.5
Set gillnet	9	24,890	1,068	41,007	4,296	71,270	2.5
Total	**46**	**72,419**	**2,154**	**2,715,694**	**90,080**	**2,880,393**	**100.0**
SOUTHWESTERN DISTRICT							
Seine	180	115,976	3,846	1,773,684	144,701	2,038,387	78.2
Drift gillnet	266	163,831	18,730	81,423	53,352	317,602	12.2
Set gillnet	99	114,532	10,512	104,548	19,445	249,136	9.6
Total	**545**	**394,339**	**33,088**	**1,959,655**	**217,498**	**2,605,125**	**100.0**
UNIMAK DISTRICT							
Seine	192	26,383	13	42,054	5,375	74,017	6.8
Drift gillnet	590	728,003	11,756	124,883	144,937	1,010,169	92.8
Set gillnet	4	3,122	1	16	689	3,832	0.4
Total	**786**	**757,508**	**11,770**	**166,953**	**151,001**	**1,088,018**	**100.0**
SOUTH PENINSULA TOTAL							
Seine	3,223	607,213	83,301	7,259,182	399,934	8,352,853	75.4
Drift gillnet	856	891,834	30,486	206,306	198,289	1,327,771	12.0
Set gillnet	717	671,756	40,383	575,193	113,303	1,401,352	12.6
Total	**4,796**	**2,170,803**	**154,170**	**8,040,681**	**711,526**	**11,081,976**	**100.0**

Appendix A.24. South Peninsula post June commercial salmon harvest, all gear combined, by species and year, July 1-October 31, 1970-98.

			Number of Salmon					
Year	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
1970	127	1,612	777	63,569	32,519	1,630,404	550,698	2,277,967
1971	175	2,325	1,305	225,162	16,906	1,423,528	855,916	2,522,817
1972	140	940	673	45,174	7,999	60,270	212,505	326,621
1973	115	710	159	58,207	6,571	38,500	91,810	195,247
1974	95	744	557	171,700	9,362	100,179	71,430	353,228
1975	46	90	0	3,449	66	55,395	29,928	88,838
1976	125	1,181	14	20,707	213	2,342,600	121,282	2,484,816
1977	103	1,315	35	60,669	2,108	1,443,245	126,762	1,632,819
1978	123	2,187	222	74,839	60,771	5,500,177	423,532	6,059,541
1979	165	2,699	1,049	283,352	356,562	6,409,584	378,712	7,429,259
1980	152	2,948	1,569	371,638	273,328	6,335,159	843,988	7,825,682
1981	168	2,940	4,415	316,945	161,899	4,581,643	1,201,454	6,266,356
1982	183	3,361	2,566	177,160	254,798	5,016,065	1,171,508	6,622,097
1983	210	3,210	12,833	522,913	127,157	2,771,744	917,198	4,351,845
1984	217	4,251	4,913	525,275	310,910	10,668,889	1,312,347	12,822,334
1985	213	2,970	724	294,782	170,046	4,323,885	912,580	5,702,017
1986	202	3,444	3,586	687,525	235,852	3,739,423	1,394,332	6,060,718
1987	233	2,926	3,935	463,090	224,740	1,191,512	929,782	2,813,059
1988	243	4,701	7,011	716,964	505,278	6,864,600	1,381,796	9,475,649
1989	274	4,185	4,225	909,393	441,397	7,089,895	538,177	8,983,087
1990	261	3,663	6,164	1,039,265	305,509	2,346,043	715,940	4,412,921
1991	234	3,889	2,807	570,688	313,210	9,977,423	797,890	11,662,018
1992	233	4,317	4,040	870,687	414,933	9,117,479	880,066	11,287,205
1993	221	3,683	4,301	639,412	214,020	9,843,962	513,579	11,215,274
1994	213	3,738	1,726	541,108	250,079	6,648,470	1,593,590	9,034,973
1995	207	4,228	2,079	824,679	254,581	16,123,733	1,172,964	18,378,036
1996	180	2,825	2,124	392,038	267,494	1,810,624	411,581	2,883,861
1997	168	2,594	1,352	630,008	111,872	1,697,989	283,929	2,725,150
1998	209	4,340	2,100	882,078	153,694	7,566,341	465,907	9,070,120
Average 1978-97	205	3,438	3,582	542,588	262,722	6,102,915	888,747	7,800,554
Average 1988-97	223	3,782	3,583	713,424	307,837	7,152,022	828,951	9,005,817
Average 1978-92	207	3,446	4,004	521,634	277,093	5,728,901	919,953	7,451,586
Average 1993-97	198	3,414	2,316	605,449	219,609	7,224,956	795,129	8,847,459

Appendix A.25. South Peninsula post June commercial purse seine salmon harvest by species and year, July 1-October 31, 1970-98.

			Number of Salmon					
Year	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
1970	103	1,265	750	28,397	31,789	1,551,475	497,990	2,110,401
1971	111	1,622	1,219	82,826	16,346	1,414,696	715,354	2,230,441
1972	83	571	647	18,957	7,795	55,667	144,992	228,058
1973	53	332	155	15,796	6,286	34,463	73,249	129,949
1974	46	257	509	63,511	8,091	88,832	51,538	212,481
1975	39	76	0	1,642	37	54,435	29,336	85,450
1976	85	1,089	5	9,630	53	2,337,109	118,482	2,465,279
1977	82	1,117	18	32,051	1,034	1,427,176	114,058	1,574,337
1978	99	1,916	204	57,448	57,842	5,470,855	403,352	5,989,701
1979	120	2,144	981	193,629	346,021	6,306,410	346,006	7,193,047
1980	110	2,178	1,495	260,433	249,602	6,236,027	758,344	7,505,901
1981	113	2,004	4,280	171,658	155,653	4,461,879	1,104,569	5,898,039
1982	105	2,037	2,294	92,784	219,462	4,852,553	1,060,812	6,227,905
1983	114	1,852	12,552	258,763	109,822	2,688,187	829,281	3,898,605
1984	116	2,307	4,338	240,959	247,342	10,324,380	1,186,753	12,003,772
1985	119	1,646	625	178,953	128,931	4,096,285	828,645	5,233,439
1986	114	1,820	3,395	412,251	203,505	3,602,769	1,300,638	5,522,558
1987	111	1,289	3,700	238,678	169,763	1,135,252	811,464	2,358,857
1988	111	2,175	6,586	423,852	389,723	6,427,823	1,228,987	8,476,971
1989	117	1,644	3,584	470,465	305,558	6,641,815	417,978	7,839,400
1990	117	1,459	5,605	524,630	224,354	2,256,837	600,040	3,611,466
1991	118	1,705	2,085	232,338	199,104	9,614,533	635,031	10,683,091
1992	115	1,861	3,724	443,201	294,100	8,616,933	776,939	10,134,897
1993	101	1,594	3,666	288,648	148,565	9,494,663	448,204	10,383,746
1994	114	1,519	1,321	147,337	161,903	6,317,708	1,458,898	8,087,167
1995	112	2,010	1,556	368,688	185,974	15,404,768	1,039,506	17,000,492
1996	85	707	1,839	80,819	197,800	1,523,636	315,357	2,119,451
1997	71	402	1,161	123,940	47,254	1,627,495	239,619	2,039,469
1998	78	1,298	1,768	381,734	83,205	6,803,002	333,693	7,603,402
Average 1978-97	109	1,713	3,250	260,474	202,114	5,855,040	789,521	7,110,399
Average 1988-97	107	1,515	3,185	312,904	210,634	6,055,353	772,722	7,354,797
Average 1978-92	113	1,869	3,697	280,003	220,052	5,515,503	819,256	6,838,510
Average 1993-97	97	1,246	1,909	201,886	148,299	6,873,654	700,317	7,926,065

Appendix A.26. South Peninsula post June commercial drift gillnet salmon harvest, by species and year, July 1- October 31, 1970-98.

			Number of Salmon					
Year	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
1970	56	152	19	15,364	56	62,666	31,764	109,869
1971	107	475	47	105,274	356	1,983	124,539	232,199
1972	66	230	8	15,580	59	129	55,615	71,391
1973	77	168	1	16,246	43	545	10,464	27,299
1974	46	217	22	52,481	1,110	1,626	13,998	69,237
1975	0	0	0	0	0	0	0	0
1976	22	25	1	2,649	0	65	1,390	4,105
1977	0	0	0	0	0	0	0	0
1978	0	0	0	0	0	0	0	0
1979	16	27	2	1,097	33	16,635	2,834	20,601
1980	2	2	0	398	0	12	8	418
1981	7	8	0	1,388	10	7,200	4,821	13,419
1982	29	159	90	13,472	19,202	50,748	17,406	100,918
1983	30	128	78	19,005	3,658	5,586	19,913	48,240
1984	37	315	161	26,698	37,805	78,575	30,941	174,180
1985	33	185	24	18,441	18,033	21,803	18,521	76,822
1986	29	243	24	30,261	18,901	27,772	22,294	99,252
1987	54	285	64	39,360	30,445	3,025	43,115	116,009
1988	63	582	142	44,657	75,445	145,106	68,066	333,416
1989	81	590	295	86,343	88,376	85,946	44,605	305,565
1990	64	533	122	132,907	42,659	32,089	46,700	254,477
1991	43	237	62	21,721	51,215	26,740	25,465	125,203
1992	42	312	47	44,935	58,621	91,106	29,252	223,961
1993	41	215	111	23,421	26,364	12,037	17,871	79,804
1994	24	160	25	18,134	24,980	53,701	26,262	123,102
1995	18	126	34	21,505	26,020	41,868	22,517	111,944
1996	17	88	28	5,776	22,561	17,593	14,306	60,264
1997	24	121	18	24,278	19,855	14,435	13,278	71,864
1998	49	416	18	35,569	30,219	192,352	35,723	293,881
Average 1978-97	33	216	66	28,690	28,209	36,599	23,409	116,973
Average 1988-97	42	296	88	42,368	43,610	52,062	30,832	168,960
Average 1978-92	35	240	74	32,046	29,627	39,490	24,929	126,165
Average 1993-97	25	142	43	18,623	23,956	27,927	18,847	89,396

Appendix A.27. South Peninsula post June commercial set gillnet salmon harvest, by species and year, July 1- October 31, 1970-98.

			Number of Salmon					
Year	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
1970	25	195	8	19,808	674	16,263	20,944	57,697
1971	24	228	39	37,062	204	6,849	16,023	60,177
1972	22	139	18	10,637	145	4,474	11,898	27,172
1973	25	210	3	26,165	242	3,492	8,097	37,999
1974	40	270	26	55,708	161	9,721	5,894	71,510
1975	7	14	0	1,807	29	960	592	3,388
1976	20	67	8	8,428	160	5,426	1,410	15,432
1977	23	198	17	28,618	1,074	16,069	12,704	58,482
1978	26	271	18	17,391	2,929	29,322	20,180	69,840
1979	38	528	66	88,626	10,508	86,539	29,872	215,611
1980	42	768	74	110,807	23,726	99,120	85,636	319,363
1981	48	928	135	143,899	6,236	112,564	92,064	354,898
1982	51	1,165	182	70,904	16,134	112,764	93,290	293,274
1983	57	1,230	203	245,145	13,677	77,971	68,004	405,000
1984	64	1,629	414	257,618	25,763	265,934	94,653	644,382
1985	61	1,139	75	97,388	23,082	205,797	65,414	391,756
1986	59	1,381	167	245,013	13,446	108,882	71,400	438,908
1987	68	1,352	171	185,052	24,532	53,235	75,203	338,193
1988	69	1,944	283	248,455	40,110	291,671	84,743	665,262
1989	76	1,951	346	352,585	47,463	362,134	75,594	838,122
1990	80	1,671	437	381,728	38,496	57,117	69,200	546,978
1991	73	1,947	660	316,629	62,891	336,150	137,394	853,724
1992	76	2,144	269	382,551	62,212	409,440	73,875	928,347
1993	79	1,874	524	327,343	39,091	337,262	47,504	751,724
1994	75	2,059	380	375,637	63,196	277,061	108,430	824,704
1995	77	2,092	489	434,486	42,587	677,097	110,941	1,265,600
1996	78	2,030	257	305,443	47,133	269,395	81,918	704,146
1997	73	2,071	173	481,790	44,763	56,059	31,032	613,817
1998	82	2,626	314	464,775	40,270	570,987	96,491	1,172,837
Average 1978-97	64	1,509	266	253,425	32,399	211,276	75,817	573,182
Average 1988-97	76	1,978	382	360,665	48,794	307,339	82,063	799,242
Average 1978-92	59	1,337	233	209,586	27,414	173,909	75,768	486,911
Average 1993-97	76	2,025	365	384,940	47,354	323,375	75,965	831,998

Appendix A.28. South Peninsula post June commercial salmon harvest, all gear combined, by species and year, July 1 - October 31, 1909-98.

	Number of Salmon					
Year	Chinook	Sockeye	Coho[a]	Pink	Chum	Total
1909			7,200			
1910			5,500			
1911			12,400			
1912			27,000			
1913			0			
1914			0			
1915			16,200			
1916			34,100			
1917			4,600			
1918			16,300			
1919			56,100			
1920			47,700			
1921			1,500			
1922			2,200			
1923			75,300			
1924			127,300			
1925			127,100			
1926			193,800			
1927			125,300			
1928			96,600			
1929			84,500			
1930			161,100			
1931			128,700			
1932			112,300			
1933			190,000			
1934			247,100			
1935			117,200			
1936			284,600			
1937			73,900			
1938			220,700			
1939			98,900			
1940			184,200			
1941			183,000			
1942			123,000			
1943			90,600			
1944			238,700			
1945			116,100			
1946			151,400			
1947			55,800			
1948			39,200			
1949			19,500			
1950			70,700			

-Continued-

Appendix A.28. (page 2 of 3)

	Number of Salmon					
Year	Chinook	Sockeye	Coho[a]	Pink	Chum	Total
1951			55,700			
1952			39,200			
1953			47,900			
1954			49,400			
1955			44,800			
1956			61,900			
1957			49,900			
1958			70,600			
1959			8,500			
1960			1,800			
1961			10,400			
1962			12,500	1,899,400	564,800	
1963			16,500	2,324,700	358,300	
1964			13,600	2,705,300	532,100	
1965			34,200	2,806,100	372,400	
1966			6,300	288,800	257,400	
1967			2,900	57,300	123,200	
1968			31,100	1,141,100	169,000	
1969			10,900	1,128,100	138,400	
1970	777	63,569	32,519	1,630,404	550,698	2,277,967
1971	1,305	225,162	16,906	1,423,528	855,916	2,522,817
1972	673	45,174	7,999	60,270	212,505	326,621
1973	159	58,207	6,571	38,500	91,810	195,247
1974	557	171,700	9,362	100,179	71,430	353,228
1975	0	3,449	67	55,395	29,928	88,839
1976	14	20,707	213	2,342,600	121,282	2,484,816
1977	35	60,669	2,108	1,443,245	126,762	1,632,819
1978	222	74,839	60,771	5,500,177	423,532	6,059,541
1979	1,049	283,352	356,562	6,409,584	378,712	7,429,259
1980	1,569	371,638	273,328	6,335,159	843,988	7,825,682
1981	4,415	316,945	161,899	4,581,643	1,201,454	6,266,356
1982	2,566	177,160	254,798	5,016,065	1,171,508	6,622,097
1983	12,833	522,913	127,157	2,771,744	917,198	4,351,845
1984	4,913	525,275	310,910	10,668,889	1,312,347	12,822,334
1985	724	294,782	170,046	4,323,885	912,580	5,702,017
1986	3,586	687,525	235,852	3,739,423	1,394,332	6,060,718
1987	3,935	463,090	224,740	1,191,512	929,782	2,813,059
1988	7,011	716,964	505,278	6,864,600	1,381,796	9,475,649
1989	4,225	909,393	441,397	7,089,895	538,177	8,983,087
1990	6,164	1,039,265	305,509	2,346,043	715,940	4,412,921
1991	2,807	570,688	313,210	9,977,423	797,890	11,662,018
1992	4,040	870,687	414,933	9,117,479	880,066	11,287,205
1993	4,301	639,412	214,020	9,843,962	513,579	11,215,274

-Continued-

Appendix A.28. (page 3 of 3)

	Number of Salmon					
Year	Chinook	Sockeye	Coho[a]	Pink	Chum	Total
1994	1,726	541,108	250,079	6,648,470	1,593,590	9,034,973
1995	2,079	824,679	254,581	16,123,733	1,172,964	18,378,036
1996	2,124	392,038	267,494	1,810,624	411,581	2,883,861
1997	1,352	630,008	111,872	1,697,989	283,929	2,725,150
1998	2,100	882,078	153,694	7,566,341	465,907	9,070,120
Average 1978-97	3,582	542,588	262,722	6,102,915	888,747	7,800,554
Average 1988-97	3,583	713,424	307,837	7,152,022	828,951	9,005,817
Average 1978-92	4,004	521,634	277,093	5,728,901	919,953	7,451,586
Average 1993-97	2,316	605,449	219,609	7,224,956	795,129	8,847,459

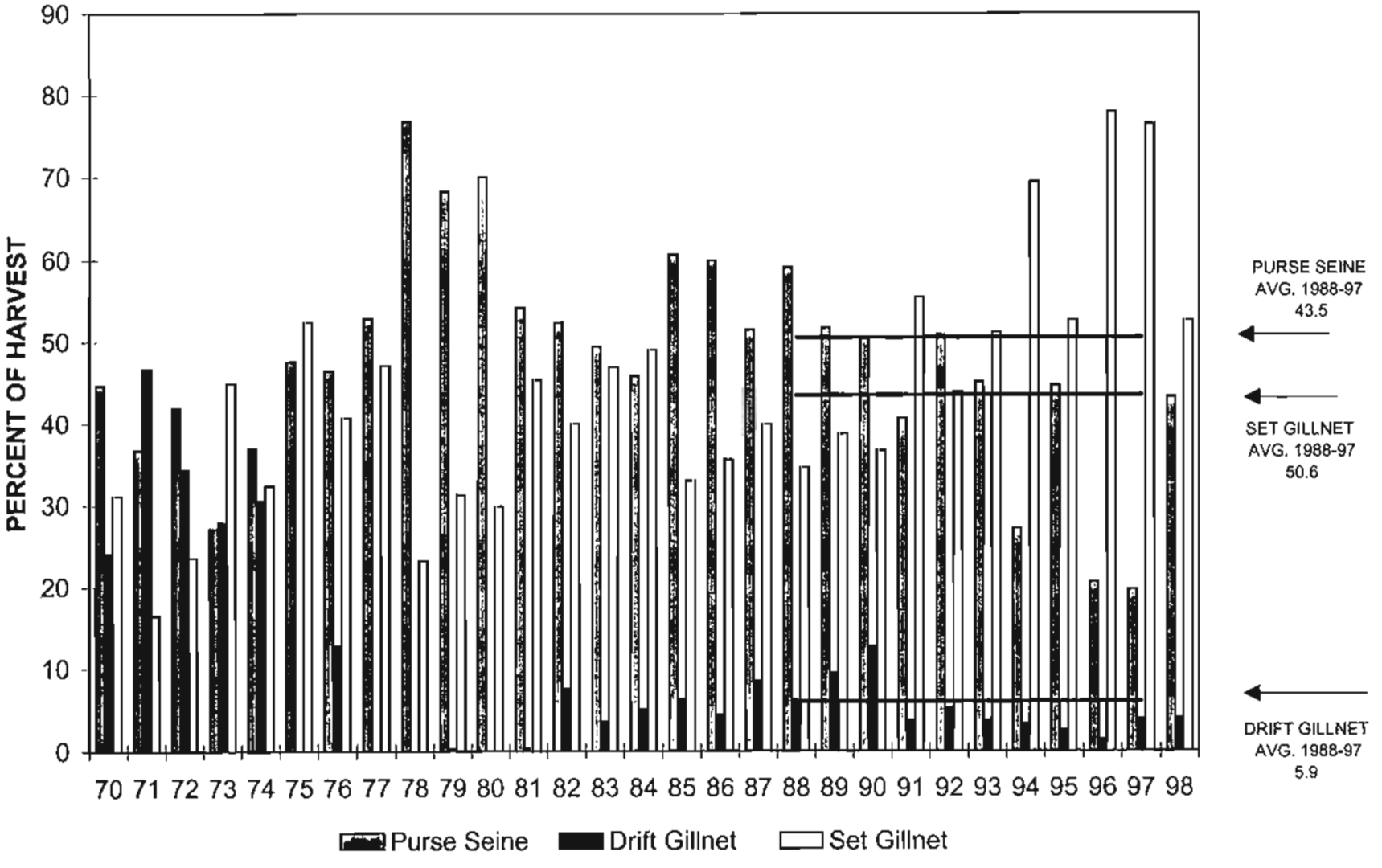
[a] Assumes all South Peninsula coho are caught during post June fisheries and that the Aleutian Islands Management Area contribution is negligible.

Appendix A.29. South Peninsula post June commercial chinook salmon harvest by gear and year, July 1- October 31, 1970-98.

	Purse Seine		Drift Gillnet		Set Gillnet		
Year	Number	Percent	Number	Percent	Number	Percent	Total
1970	750	96.5	19	2.4	8	1.0	777
1971	1,219	93.4	47	3.6	39	3.0	1,305
1972	647	96.1	8	1.2	18	2.7	673
1973	155	97.5	1	0.6	3	1.9	159
1974	509	91.4	22	3.9	26	4.7	557
1975	0	0.0	0	0.0	0	0.0	0
1976	5	35.7	1	7.1	8	57.1	14
1977	18	51.4	0	0.0	17	48.6	35
1978	204	91.9	0	0.0	18	8.1	222
1979	981	93.5	2	0.2	66	6.3	1,049
1980	1,495	95.3	0	0.0	74	4.7	1,569
1981	4,280	96.9	0	0.0	135	3.1	4,415
1982	2,294	89.4	90	3.5	182	7.1	2,566
1983	12,552	97.8	78	0.6	203	1.6	12,833
1984	4,338	88.3	161	3.3	414	8.4	4,913
1985	625	86.3	24	3.3	75	10.4	724
1986	3,395	94.7	24	0.7	167	4.7	3,586
1987	3,700	94.0	64	1.6	171	4.3	3,935
1988	6,586	93.9	142	2.0	283	4.0	7,011
1989	3,584	84.8	295	7.0	346	8.2	4,225
1990	5,605	90.9	122	2.0	437	7.1	6,164
1991	2,085	74.3	62	2.2	660	23.5	2,807
1992	3,724	92.2	47	1.2	269	6.7	4,040
1993	3,666	85.2	111	2.6	524	12.2	4,301
1994	1,321	76.5	25	1.4	380	22.0	1,726
1995	1,556	74.8	34	1.6	489	23.5	2,079
1996	1,839	86.6	28	1.3	257	12.1	2,124
1997	1,161	85.9	18	1.3	173	12.8	1,352
1998	1,768	84.2	18	0.9	314	15.0	2,100
Average 1978-97	3,250	90.7	66	1.9	266	7.4	3,582
Average 1988-97	3,113	86.9	88	2.5	382	10.7	3,583
Average 1978-92	3,697	92.3	74	1.8	233	5.8	4,004
Average 1993-97	1,909	82.4	43	1.9	365	15.7	2,316

Appendix A.30. South Peninsula post June commercial sockeye salmon harvest by gear and year, July 1- October 31, 1970-98.

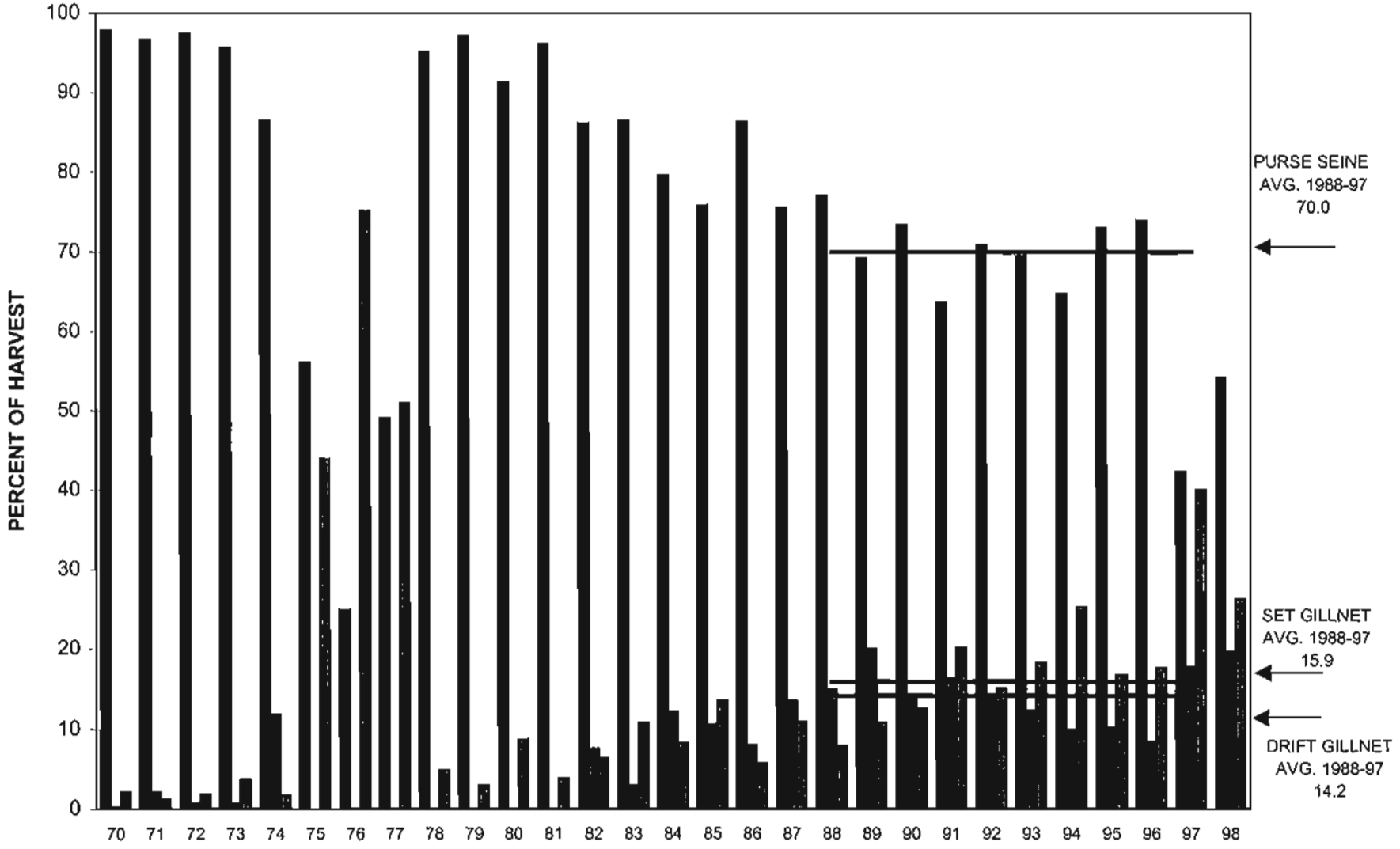
	Purse Seine		Drift Gillnet		Set Gillnet		
Year	Number	Percent	Number	Percent	Number	Percent	Total
1970	28,397	44.7	15,364	24.2	19,808	31.2	63,569
1971	82,826	36.8	105,274	46.8	37,062	16.5	225,162
1972	18,957	42.0	15,580	34.5	10,637	23.5	45,174
1973	15,796	27.1	16,246	27.9	26,165	45.0	58,207
1974	63,511	37.0	52,481	30.6	55,708	32.4	171,700
1975	1,642	47.6	0	0.0	1,807	52.4	3,449
1976	9,630	46.5	2,649	12.8	8,428	40.7	20,707
1977	32,051	52.8	0	0.0	28,618	47.2	60,669
1978	57,448	76.8	0	0.0	17,391	23.2	74,839
1979	193,629	68.3	1,097	0.4	88,626	31.3	283,352
1980	260,433	70.1	398	0.1	110,807	29.8	371,638
1981	171,658	54.2	1,388	0.4	143,899	45.4	316,945
1982	92,784	52.4	13,472	7.6	70,904	40.0	177,160
1983	258,763	49.5	19,005	3.6	245,145	46.9	522,913
1984	240,959	45.9	26,698	5.1	257,618	49.0	525,275
1985	178,953	60.7	18,441	6.3	97,388	33.0	294,782
1986	412,251	60.0	30,261	4.4	245,013	35.6	687,525
1987	238,678	51.5	39,360	8.5	185,052	40.0	463,090
1988	423,852	59.1	44,657	6.2	248,455	34.7	716,964
1989	470,465	51.7	86,343	9.5	352,585	38.8	909,393
1990	524,630	50.5	132,907	12.8	381,728	36.7	1,039,265
1991	232,338	40.7	21,721	3.8	316,629	55.5	570,688
1992	443,201	50.9	44,935	5.2	382,551	43.9	870,687
1993	288,648	45.1	23,421	3.7	327,343	51.2	639,412
1994	147,337	27.2	18,134	3.4	375,637	69.4	541,108
1995	368,688	44.7	21,505	2.6	434,486	52.7	824,679
1996	80,819	20.6	5,776	1.5	305,443	77.9	392,038
1997	123,940	19.7	24,278	3.9	481,790	76.5	630,008
1998	381,734	43.3	35,569	4.0	464,775	52.7	882,078
Average 1978-97	260,474	48.0	28,690	5.3	253,425	46.7	542,588
Average 1988-97	310,392	43.5	42,368	5.9	360,665	50.6	713,424
Average 1978-92	280,003	53.7	32,046	6.1	209,586	40.2	521,634
Average 1993-97	201,886	33.3	18,623	3.1	384,940	63.6	605,449



Appendix A.31. South Peninsula post June commercial sockeye salmon harvest by gear and year, 1970-98.

Appendix A.32 South Peninsula post June commercial coho salmon harvest by gear and year, July 1-October 31, 1970-98.

	Purse Seine		Drift Gillnet		Set Gillnet		
Year	Number	Percent	Number	Percent	Number	Percent	Total
1970	31,789	97.8	56	0.2	674	2.1	32,519
1971	16,346	96.7	356	2.1	204	1.2	16,906
1972	7,795	97.4	59	0.7	145	1.8	7,999
1973	6,286	95.7	43	0.7	242	3.7	6,571
1974	8,091	86.4	1,110	11.9	161	1.7	9,362
1975	37	56.1	0	0.0	29	43.9	66
1976	53	24.9	0	0.0	160	75.1	213
1977	1,034	49.1	0	0.0	1,074	50.9	2,108
1978	57,842	95.2	0	0.0	2,929	4.8	60,771
1979	346,021	97.0	33	0.0	10,508	2.9	356,562
1980	249,602	91.3	0	0.0	23,726	8.7	273,328
1981	155,653	96.1	10	0.0	6,236	3.9	161,899
1982	219,462	86.1	19,202	7.5	16,134	6.3	254,798
1983	109,822	86.4	3,658	2.9	13,677	10.8	127,157
1984	247,342	79.6	37,805	12.2	25,763	8.3	310,910
1985	128,931	75.8	18,033	10.6	23,082	13.6	170,046
1986	203,505	86.3	18,901	8.0	13,446	5.7	235,852
1987	169,763	75.5	30,445	13.5	24,532	10.9	224,740
1988	389,723	77.1	75,445	14.9	40,110	7.9	505,278
1989	305,558	69.2	88,376	20.0	47,463	10.8	441,397
1990	224,354	73.4	42,659	14.0	38,496	12.6	305,509
1991	199,104	63.6	51,215	16.4	62,891	20.1	313,210
1992	294,100	70.9	58,621	14.1	62,212	15.0	414,933
1993	148,565	69.4	26,364	12.3	39,091	18.3	214,020
1994	161,903	64.7	24,980	10.0	63,196	25.3	250,079
1995	185,974	73.1	26,020	10.2	42,587	16.7	254,581
1996	197,800	73.9	22,561	8.4	47,133	17.6	267,494
1997	47,254	42.2	19,855	17.7	44,763	40.0	111,872
1998	83,205	54.1	30,219	19.7	40,270	26.2	153,694
Average 1978-97	202,114	76.9	28,209	10.7	32,399	12.3	262,722
Average 1988-97	215,434	70.0	43,610	14.2	48,794	15.9	307,837
Average 1978-92	220,052	79.4	29,627	10.7	27,414	9.9	277,093
Average 1993-97	148,299	67.5	23,956	10.9	47,354	21.6	219,609



Appendix A.33. South Peninsula post June commercial coho salmon harvest by gear and year, 1970-98.

Appendix A.34. South Peninsula post June commercial pink salmon harvest by gear and year, July 1- October 31, 1970-98.

	Purse Seine		Drift Gillnet		Set Gillnet		
Year	Number	Percent	Number	Percent	Number	Percent	Total
1970	1,551,475	95.2	62,666	3.8	16,263	1.0	1,630,404
1971	1,414,696	99.4	1,983	0.1	6,849	0.5	1,423,528
1972	55,667	92.4	129	0.2	4,474	7.4	60,270
1973	34,463	89.5	545	1.4	3,492	9.1	38,500
1974	88,832	88.7	1,626	1.6	9,721	9.7	100,179
1975	54,435	98.3	0	0.0	960	1.7	55,395
1976	2,337,109	99.8	65	0.0	5,426	0.2	2,342,600
1977	1,427,176	98.9	0	0.0	16,069	1.1	1,443,245
1978	5,470,855	99.5	0	0.0	29,322	0.5	5,500,177
1979	6,306,410	98.4	16,635	0.3	86,539	1.4	6,409,584
1980	6,236,027	98.4	12	0.0	99,120	1.6	6,335,159
1981	4,461,879	97.4	7,200	0.2	112,564	2.5	4,581,643
1982	4,852,553	96.7	50,748	1.0	112,764	2.2	5,016,065
1983	2,688,187	97.0	5,586	0.2	77,971	2.8	2,771,744
1984	10,324,380	96.8	78,575	0.7	265,934	2.5	10,668,889
1985	4,096,285	94.7	21,803	0.5	205,797	4.8	4,323,885
1986	3,602,769	96.3	27,772	0.7	108,882	2.9	3,739,423
1987	1,135,252	95.3	3,025	0.3	53,235	4.5	1,191,512
1988	6,427,823	93.6	145,106	2.1	291,671	4.2	6,864,600
1989	6,641,815	93.7	85,946	1.2	362,134	5.1	7,089,895
1990	2,256,837	96.2	32,089	1.4	57,117	2.4	2,346,043
1991	9,614,533	96.4	26,740	0.3	336,150	3.4	9,977,423
1992	8,616,933	94.5	91,106	1.0	409,440	4.5	9,117,479
1993	9,494,663	96.5	12,037	0.1	337,262	3.4	9,843,962
1994	6,317,708	95.0	53,701	0.8	277,061	4.2	6,648,470
1995	15,404,768	95.5	41,868	0.3	677,097	4.2	16,123,733
1996	1,523,636	84.1	17,593	1.0	269,395	14.9	1,810,624
1997	1,627,495	95.8	14,435	0.9	56,059	3.3	1,697,989
1998	6,803,002	89.9	192,352	2.5	570,987	7.5	7,566,341
Average 1978-97	5,855,040	95.9	36,599	0.6	211,276	3.5	6,102,915
Average 1988-97	6,792,621	95.0	52,062	0.7	307,339	4.3	7,152,022
Average 1978-92	5,515,503	96.3	39,490	0.7	173,909	3.0	5,728,901
Average 1993-97	6,873,654	95.1	27,927	0.4	323,375	4.5	7,224,956

Appendix A.35. South Peninsula post June commercial chum salmon harvest by gear and year, July 1-October 31, 1970-98.

	Purse Seine		Drift Gillnet		Set Gillnet		
Year	Number	Percent	Number	Percent	Number	Percent	Total
1970	497,990	90.4	31,764	5.8	20,944	3.8	550,698
1971	715,354	83.6	124,539	14.6	16,023	1.9	855,916
1972	144,992	68.2	55,615	26.2	11,898	5.6	212,505
1973	73,249	79.8	10,464	11.4	8,097	8.8	91,810
1974	51,538	72.2	13,998	19.6	5,894	8.3	71,430
1975	29,336	98.0	0	0.0	592	2.0	29,928
1976	118,482	97.7	1,390	1.1	1,410	1.2	121,282
1977	114,058	90.0	0	0.0	12,704	10.0	126,762
1978	403,352	95.2	0	0.0	20,180	4.8	423,532
1979	346,006	91.4	2,834	0.7	29,872	7.9	378,712
1980	758,344	89.9	8	0.0	85,636	10.1	843,988
1981	1,104,569	91.9	4,821	0.4	92,064	7.7	1,201,454
1982	1,060,812	90.6	17,406	1.5	93,290	8.0	1,171,508
1983	829,281	90.4	19,913	2.2	68,004	7.4	917,198
1984	1,186,753	90.4	30,941	2.4	94,653	7.2	1,312,347
1985	828,645	90.8	18,521	2.0	65,414	7.2	912,580
1986	1,300,638	93.3	22,294	1.6	71,400	5.1	1,394,332
1987	811,464	87.3	43,115	4.6	75,203	8.1	929,782
1988	1,228,987	88.9	68,066	4.9	84,743	6.1	1,381,796
1989	417,978	77.7	44,605	8.3	75,594	14.0	538,177
1990	600,040	83.8	46,700	6.5	69,200	9.7	715,940
1991	635,031	79.6	25,465	3.2	137,394	17.2	797,890
1992	776,939	88.3	29,252	3.3	73,875	8.4	880,066
1993	448,204	87.3	17,871	3.5	47,504	9.2	513,579
1994	1,458,898	91.5	26,262	1.6	108,430	6.8	1,593,590
1995	1,039,506	88.6	22,517	1.9	110,941	9.5	1,172,964
1996	315,357	76.6	14,306	3.5	81,918	19.9	411,581
1997	239,619	84.4	13,278	4.7	31,032	10.9	283,929
1998	333,693	71.6	35,723	7.7	96,491	20.7	465,907
Average 1978-97	789,521	88.8	23,409	2.6	75,817	8.5	888,747
Average 1988-97	716,056	86.4	30,832	3.7	82,063	9.9	828,951
Average 1978-92	819,256	89.1	24,929	2.7	75,768	8.2	919,953
Average 1993-97	700,317	88.1	18,847	2.4	75,965	9.6	795,129

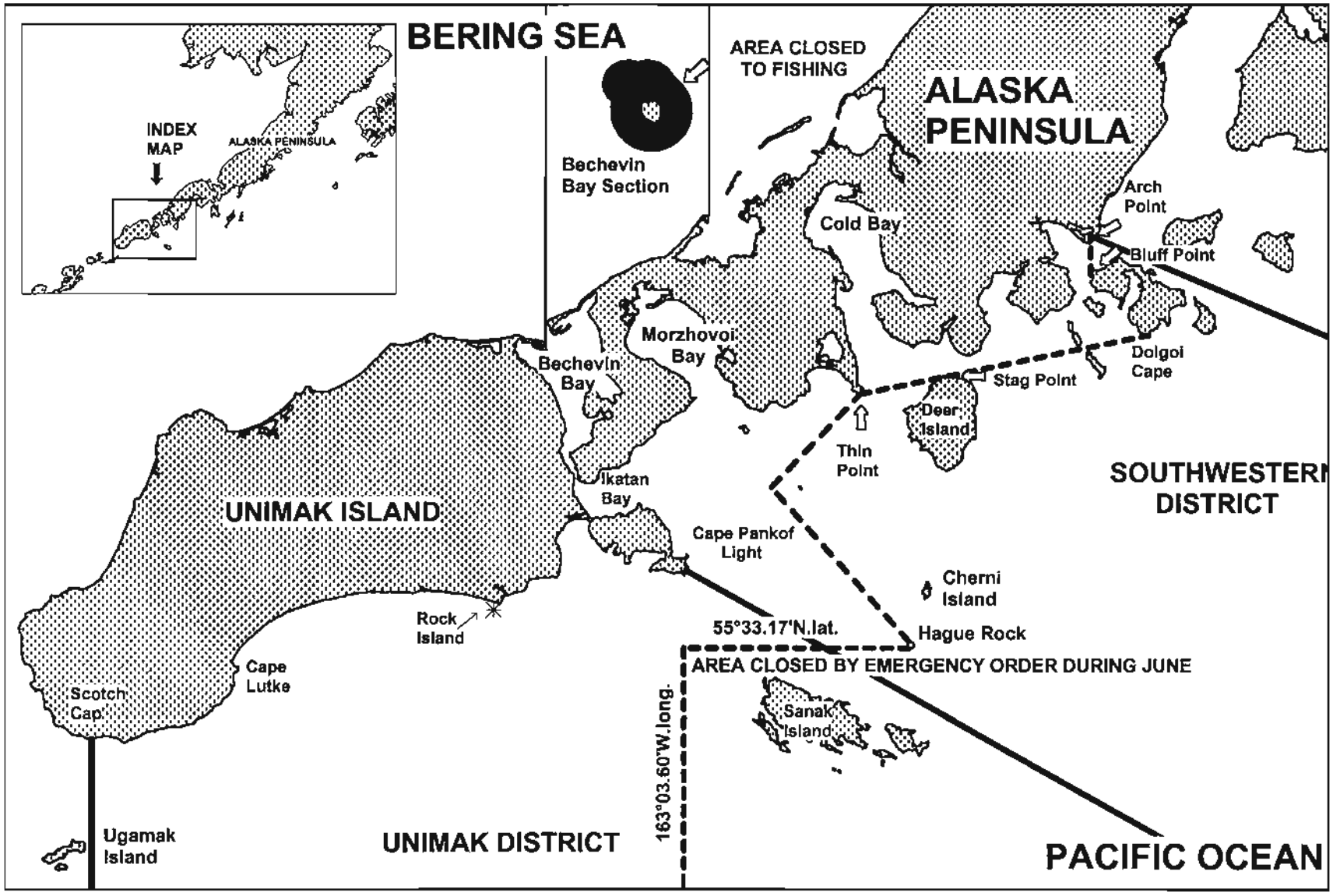
Appendix B.1. South Unimak and Shumagin Islands June commercial sockeye and chum salmon harvest, all gear combined, by year, 1911-98.

	Sockeye			Chum		
Year	South Unimak	Shumagin Islands	Total	South Unimak	Shumagin Islands	Total
1911	58,000	3,000	61,000			
1912	144,000	31,000	175,000			
1913	415,000	0	415,000			
1914	610,000	0	610,000			
1915	251,000	0	251,000			
1916	539,000	0	539,000			
1917	1,322,000	34,000	1,356,000			
1918	733,000	44,000	777,000			
1919	545,000	32,000	577,000			
1920	954,000	60,000	1,014,000			
1921	831,000	0	831,000			
1922	2,775,000	550,000	3,325,000			
1923	1,340,000	343,000	1,683,000			
1924	971,000	237,000	1,208,000			
1925	357,000	374,000	731,000			
1926	1,898,000	491,000	2,389,000			
1927	455,000	185,000	640,000			
			1928-1933 Unavailable			
1934	516,000	1,019,000	1,535,000			
1935	210,000	549,000	759,000			
1936	1,531,000	1,490,000	3,021,000			
1937	803,000	498,000	1,301,000			
1938	164,000	454,000	618,000			
1939	474,000	707,000	1,181,000			
1940	479,000	713,000	1,192,000			
1941	206,000	294,000	496,000			
1942	152,000	412,000	546,000			
1943	428,000	1,356,000	1,784,000			
1944	188,000	264,000	452,000			
1945	218,000	375,000	593,000			
1946	342,000	257,000	599,000			
1947	782,000	229,000	1,011,000			
1948	276,000	126,000	402,000			
1949	84,000	167,000	251,000			
1950	292,000	134,000	426,000			
1951	82,000	35,000	117,000			
1952	191,000	121,000	312,000			
1953	191,000	105,000	296,000			
1954	325,000	49,000	374,000			
1955	315,000	52,000	367,000			
1956	290,000	47,000	337,000			
1957	50,000	44,000	94,000			
1958	104,000	28,000	132,000			
1959	58,000	78,000	136,000			

-Continued-

Appendix B.1. (page 2 of 2)

	Sockeye			Chum		
Year	South Unimak	Shumagin Islands	Total	South Unimak	Shumagin Islands	Total
1960	137,000	19,000	156,000	84,000	11,000	95,000
1961	199,000	55,000	254,000	157,000	36,000	193,000
1962	272,000	54,000	326,000	209,000	61,000	270,000
1963	116,000	33,000	149,000	36,000	36,000	72,000
1964	159,000	85,000	244,000	161,000	67,000	228,000
1965	568,000	207,000	775,000	121,000	45,000	166,000
1966	528,000	54,000	582,000	215,000	17,000	232,000
1967	186,000	69,000	255,000	73,000	51,000	124,000
1968	342,000	233,000	575,000	115,000	51,000	166,000
1969	781,000	76,000	857,000	254,000	13,000	267,000
1970	1,510,399	139,735	1,650,134	397,003	44,909	441,912
1971	422,760	39,341	462,101	405,311	103,886	509,197
1972	426,799	74,398	501,197	411,019	107,810	518,829
1973	222,586	22,964	245,550	177,720	22,910	200,630
1974	0	0	0	0	0	0
1975	190,774	49,325	240,099	65,279	35,543	100,822
1976	233,211	72,016	305,227	336,238	74,109	410,347
1977	195,680	45,912	241,592	94,215	21,899	116,114
1978	418,959	67,876	486,835	103,429	18,479	121,908
1979	672,293	179,139	851,432	63,153	40,953	104,106
1980	2,731,148	475,127	3,206,275	458,499	50,366	508,865
1981	1,470,563	350,572	1,821,135	509,911	54,071	563,982
1982	1,668,153	450,548	2,118,701	933,728	161,316	1,095,044
1983	1,547,369	416,494	1,963,863	616,390	169,277	785,667
1984	1,131,365	256,838	1,388,203	227,913	109,207	337,120
1985	1,454,969	336,431	1,791,400	324,825	109,004	433,829
1986	315,370	156,027	471,397	252,721	99,048	351,769
1987	653,536	140,567	794,103	406,077	37,064	443,141
1988	474,457	282,230	756,687	464,765	61,946	526,711
1989	1,347,547	396,958	1,744,505	407,635	47,528	455,163
1990	1,090,710	255,585	1,346,295	455,238	63,501	518,739
1991	1,215,658	333,272	1,548,930	670,103	102,602	772,705
1992	2,046,022	411,834	2,457,856	323,891	102,312	426,203
1993	2,366,573	607,171	2,973,744	381,941	150,306	532,247
1994	1,001,250	460,013	1,461,263	374,409	207,756	582,165
1995	1,451,490	653,831	2,105,321	342,307	195,126	537,433
1996	572,495	456,475	1,028,970	129,889	229,931	359,820
1997	1,179,179	449,002	1,628,181	196,016	126,309	322,325
1998	974,628	314,097	1,288,725	195,454	50,165	245,619
1978-97 Average	1,240,455	356,800	1,597,255	382,142	106,805	488,947
1988-97 Average	1,274,538	430,637	1,705,175	374,619	128,732	503,351



Appendix B.2. Map of the South Unimak June fishery.

Appendix B.3. History of regulations for the South Unimak and Shumagin Islands June commercial fisheries, 1962-1998.

Year	South Unimak	Shumagin Islands
1962-66	5 days per week	5 days per week
1967-70	7 days per week	7 days per week
1971-72	6:00 A.M. Monday - 6:00 A.M. Saturday	7 days per week
1973	*Four 13 hour fishing periods per week	*Four 13 hour fishing periods per week.
	* Both fisheries were closed by emergency order during June 25-28 due to indications of the Bristol Bay run being below escapement requirements.	
1974	No fishery	No fishery
1975-83	**6.8% of predicted Bristol Bay catch	1.5% of predicted Bristol Bay catch
1984-89	No more than 96 hours per 7 day period and no more than 72 hours of consecutive fishing time in each fishery (windows).	
1986	**6.8% allocation minus June 26-30 segment Windows No fishing before June 11	1.5% allocation minus June 26-30 segment Windows No fishing before June 11
	A 400,000 chum salmon ceiling placed on both fisheries combined.	
1987	**Same as during 1984-85 for both fisheries.	
1988-89	**6.8% of predicted Bristol Bay catch Windows	1.5% of predicted Bristol Bay catch Windows
	A 500,000 chum salmon ceiling placed on both fisheries combined.	
	**Each sockeye allocation is broken down into time period guideline harvest levels.	

-Continued-

Dates	South Unimak	Shumagin Islands
June 1 - 11	5%	9%
June 12 - 18	29%	28%
June 19 - 25	51%	41%
June 26 - 30	15%	22%
	100%	100%

1990-91 The chum salmon ceiling was increased from 500,000 to 600,000.

The "Window Regulations" implemented in 1984 to limit the amount of fishing time that could be allowed were deleted.

The season was delayed until June 13 and the time period sockeye allocations for both fisheries were changed as follow:

June 13-18	35%
June 19-25	45%
June 26-30	20%

The gear depth for seines was limited to 375 meshes of which mesh size may not exceed 3-1/2 inches except for the first 25 meshes above the lead line which may not exceed 7 inches.

The gear depth on gillnets along the South Peninsula was limited to no more than 90 meshes.

Seine leads may not exceed 150 fathoms for the entire Alaska Peninsula.

1992-93 The chum salmon ceiling was increased from 600,000 to 700,000 fish. The other regulations were the same as in effect for 1990 and 1991.

1994 Sockeye salmon time period allocations eliminated. ADF&G given flexibility to open fishery prior to June 13 if sockeye to chum salmon ratios are favorable.

-Continued-

Appendix B.3. (page 3 of 3)

Dates	South Unimak	Shumagin Islands
1995-97	The amount fishing time allowed for seine and drift gillnet gear after June 24 is limited if the sockeye to chum salmon ratio is two to one or less. The Board of Fisheries stated it's intent that the maximum harvest or less of 700,000 chum salmon supersedes attempts to reach the sockeye guideline harvest levels. The fisheries could not be extended into July regardless of weather during late June. Fishery cannot begin prior to June 11. Removed mesh size requirements for gillnets.	
1998	The chum salmon ceiling was lowered from 700,000 to a "floating cap" that can range between 350,000 and 650,000. A commercial test fishery for all gear types may open on June 10 if sockeye to chum salmon ratios are favorable. In South Unimak District the shoreward end of set gillnet must be within one half mile of shore. All salmon caught must be retained and reported. Use of aircraft to locate salmon prohibited.	

Appendix B.4. South Unimak and Shumagin Islands June fisheries commercial salmon harvest, all gear combined, by species and year, 1970-98.

Year	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
1970	202	2,926	1,016	1,650,134	48	107,445	441,912	2,200,555
1971	166	1,986	828	462,101	1	19,240	509,197	991,367
1972	185	2,097	642	501,197	20	17,924	518,829	1,038,612
1973	142	1,043	247	245,550	28	19,430	200,630	465,885
1974	0	0	0	0	0	0	0	0
1975	108	510	117	240,099	1	5,247	100,822	346,286
1976	147	1,393	2,134	305,227	3	23,902	410,347	741,613
1977	131	821	521	241,592	0	5,398	116,114	363,625
1978	159	1,570	536	486,835	3	89,942	121,908	699,224
1979	196	1,697	1,053	851,432	290	154,813	104,106	1,111,694
1980	225	2,044	3,193	3,206,275	853	1,526,306	508,865	5,245,492
1981	243	2,401	5,672	1,821,135	320	451,252	563,982	2,842,361
1982	251	2,612	7,131	2,118,701	1,241	1,718,825	1,095,044	4,940,942
1983	282	1,729	13,463	1,963,863	496	55,875	785,667	2,819,364
1984	280	1,117	3,854	1,388,203	14	919,876	337,120	2,649,067
1985	305	2,117	5,777	1,791,400	2,468	106,615	433,829	2,340,089
1986	298	1,486	1,895	471,397	2	291,989	351,769	1,117,052
1987	290	2,027	5,163	794,103	380	16,982	443,141	1,259,769
1988	301	1,777	4,064	756,687	255	180,224	526,711	1,467,941
1989	305	1,350	2,758	1,744,505	0	199,235	455,163	2,401,661
1990	321	2,731	10,333	1,346,295	1	515,240	518,739	2,390,608
1991	334	2,025	4,473	1,548,930	12	619,137	772,705	2,945,257
1992	322	1,925	3,760	2,457,856	4	642,090	426,203	3,529,913
1993	328	2,262	9,466	2,973,744	1,233	81,136	532,247	3,597,826
1994	325	2,751	7,590	1,461,263	1,579	2,492,514	582,165	4,545,111
1995	332	3,635	14,747	2,105,321	6,042	178,635	537,433	2,842,178
1996	313	2,676	2,845	1,028,970	13,219	377,684	359,820	1,782,538
1997	292	6,335	5,811	1,628,181	560	605,937	322,325	2,562,814
1998	283	3,657	2,696	1,288,725	476	474,340	245,619	2,011,856
1978-97 Average	285	2,313	5,679	1,597,255	1,449	561,215	488,947	2,654,545
1988-97 Average	317	2,747	6,585	1,705,175	2,291	589,183	503,351	2,806,585

Appendix B.5. South Unimak June commercial salmon harvest, all gear combined, by species and year, 1970-98.

Year	Permit	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
1970	176	2,627	868	1,510,399	46	87,717	397,003	1,996,033
1971	147	1,685	549	422,760	0	11,608	405,311	840,228
1972	166	1,770	400	426,799	4	11,906	411,019	850,128
1973	133	923	145	222,586	11	11,152	177,720	411,614
1974	0	0	0	0	0	0	0	0
1975	98	445	101	190,774	1	3,205	65,279	259,360
1976	133	1,192	1,829	233,211	3	18,259	336,238	589,540
1977	120	744	393	195,680	0	3,397	94,215	293,685
1978	141	1,338	269	418,959	3	47,380	103,429	570,040
1979	158	1,305	578	672,293	38	49,000	63,153	785,062
1980	188	1,666	2,927	2,731,148	853	1,140,611	458,499	4,334,038
1981	226	2,097	4,455	1,470,563	83	325,004	509,911	2,310,016
1982	225	2,313	5,577	1,668,153	1,241	1,032,154	933,728	3,640,853
1983	258	1,418	8,186	1,547,369	493	40,441	616,390	2,212,879
1984	226	814	2,024	1,131,365	0	470,688	227,913	1,831,990
1985	255	1,593	4,101	1,454,969	2	69,811	324,825	1,853,708
1986	236	1,093	1,363	315,370	1	150,674	252,721	720,129
1987	229	1,746	4,017	653,536	380	11,342	406,077	1,075,352
1988	211	1,144	2,125	474,457	11	86,678	464,765	1,028,036
1989	266	1,035	2,263	1,347,547	0	154,168	407,635	1,911,613
1990	271	2,146	8,465	1,090,710	1	444,442	455,238	1,998,856
1991	267	1,628	3,066	1,215,658	5	500,922	670,103	2,389,754
1992	273	1,597	2,373	2,046,022	3	501,127	323,891	2,873,416
1993	245	1,681	4,587	2,366,573	506	37,735	381,941	2,791,342
1994	265	1,927	4,468	1,001,250	1,271	1,731,741	374,409	3,113,139
1995	241	2,575	7,850	1,451,490	5,102	119,094	342,307	1,925,843
1996	230	1,797	1,228	572,495	11,730	146,799	129,889	862,141
1997	225	2,299	3,041	1,179,179	501	332,262	196,016	1,710,999
1998	196	2,432	1,259	974,628	312	125,906	195,454	1,297,559
1978-97 Average	232	1,661	3,648	1,240,455	1,111	369,604	382,142	1,996,960
1988-97 Average	249	1,783	3,947	1,274,538	1,913	405,497	374,619	2,060,514

Appendix B.6 Shumagin Islands June commercial salmon harvest, all gear combined, by species and year, 1970-98.

Year	Permit	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
1970	40	299	148	139,735	2	19,728	44,909	204,522
1971	31	301	279	39,341	1	7,632	103,886	151,139
1972	32	327	242	74,398	16	6,018	107,810	188,484
1973	21	120	102	22,964	17	8,278	22,910	54,271
1974	0	0	0	0	0	0	0	0
1975	20	65	16	49,325	0	2,042	35,543	86,926
1976	30	201	305	72,016	0	5,643	74,109	152,073
1977	25	77	128	45,912	0	2,001	21,899	69,940
1978	30	232	267	67,876	0	42,562	18,479	129,184
1979	47	392	475	179,139	252	105,813	40,953	326,632
1980	54	378	266	475,127	0	385,695	50,366	911,454
1981	43	304	1,217	350,572	237	126,248	54,071	532,345
1982	48	299	1,554	450,548	0	686,671	161,316	1,300,089
1983	69	311	5,277	416,494	3	15,434	169,277	606,485
1984	99	303	1,830	256,838	14	449,188	109,207	817,077
1985	110	524	1,676	336,431	2,466	36,804	109,004	486,381
1986	72	393	532	156,027	1	141,315	99,048	396,923
1987	97	281	1,146	140,567	0	5,640	37,064	184,417
1988	97	633	1,939	282,230	244	93,546	61,946	439,905
1989	104	315	495	396,958	0	45,067	47,528	490,048
1990	95	585	1,868	255,585	0	70,798	63,501	391,752
1991	101	397	1,407	333,272	7	118,215	102,602	555,503
1992	103	328	1,387	411,834	1	140,963	102,312	656,497
1993	106	581	4,879	607,171	727	43,401	150,306	806,484
1994	106	824	3,122	460,013	308	760,773	207,756	1,431,972
1995	102	1,060	6,897	653,831	940	59,541	195,126	916,335
1996	111	879	1,617	456,475	1,489	230,885	229,931	920,397
1997	99	875	2,770	449,002	59	273,675	126,309	851,815
1998	91	1,225	1,437	314,097	164	348,434	50,165	714,297
1978-97 Average	85	495	2,031	356,800	337	191,612	106,805	657,585
1988-97 Average	102	648	2,638	430,637	378	183,686	128,732	746,071

Appendix B.7. South Unimak and Shumagin Islands June fisheries, sockeye salmon allocations vs. actual harvest and allocations if Bristol Bay runs were perfectly forecasted, 1975-98.

Year	S. Unimak-Shumagin Islands Guideline Harvest Level (GHL)	Actual S. Unimak-Shumagin Is. Harvest[a]	Actual Bristol Bay Harvest	Combined Bristol Bay & S. Unimak-Shumagin Harvest	S. Unimak-Shumagin GHL % of Combined Bristol Bay & S. Unimak-Shumagin Harvest[b]	S. Unimak Shumagin Is. Harvest % of Combined Bristol Bay-S. Unimak Harvest[b]	S. Unimak Shumagin Is. GHL if Actual Bristol Bay Harvest Was Forecasted[b]
1975	215,000	240,099	4,898,814	5,138,913	4.18	4.67	427,000
1976	425,000	305,227	5,619,292	5,924,519	7.17	5.15	492,000
1977	237,000	241,592	4,877,880	5,119,472	4.63	4.72	425,000
1978	522,000	486,835	9,928,139	10,414,974	5.01	4.67	864,000
1979	1,100,000	851,432	21,428,606	22,280,038	4.94	3.82	1,849,000
1980[c]	3,068,000	3,206,275	23,761,746	26,968,021	11.38	11.89	2,238,000
1981	1,760,000	1,821,135	25,603,081	27,424,216	6.42	6.64	2,276,000
1982	2,258,000	2,118,701	15,104,391	17,223,092	13.11	12.3	1,430,000
1983	1,793,000	1,963,863	37,372,031	39,335,894	4.56	4.99	3,265,000
1984	1,356,000	1,388,203	24,710,306	26,098,509	5.2	5.32	2,166,000
1985	1,685,000	1,791,400	23,702,883	25,494,283	6.61	7.03	2,116,000
1986[d]	1,107,000	471,397	15,776,056	16,247,453	6.81	2.9	1,349,000
1987	775,000	794,103	16,068,775	16,862,878	4.6	4.71	1,400,000
1988[d]	1,542,000	756,687	13,989,757	14,746,444	10.46	5.13	1,224,000
1989	1,463,000	1,744,505	28,735,306	30,479,811	4.8	5.72	2,530,000
1990	1,327,000	1,346,295	33,523,127	34,869,422	3.81	3.86	2,894,000
1991[d]	1,920,000	1,548,930	25,821,180	27,370,110	7.01	5.66	2,272,000
1992	2,391,000	2,457,856	31,879,676	34,337,532	6.96	7.16	2,850,000
1993	2,899,000	2,973,744	40,462,124	43,435,868	6.67	6.85	3,605,100
1994	3,586,000	1,461,263	35,224,050	36,685,313	9.78	3.98	3,045,000
1995	3,646,000	2,105,321	44,266,217	46,371,538	7.86	4.54	3,849,000
1996	3,130,000	1,028,970	29,588,297	30,679,270	10.2	3.35	2,546,000
1997	2,246,000	1,628,181	12,309,000	13,937,181	16.2	11.68	1,157,000
1998[e]	1,865,000	1,288,725	9,987,020	11,275,745	16.54	11.43	935,887

[a] Salmon numbers exclude test fish harvests.

[b] These values were calculated by adding the actual Bristol Bay sockeye salmon harvest and the South Unimak and Shumagin Islands June sockeye salmon harvests together and determining or applying the appropriate percentages. Calculations assume all sockeye salmon caught at South Unimak and the Shumagin Islands are destined for Bristol Bay.

[c] The 1980 Bristol Bay sockeye salmon catch would have been much larger had it not been for a lengthy strike.

[d] Sockeye salmon allocations were not reached largely, if not totally, due to a chum cap.

[e] Bristol Bay harvest numbers are preliminary.

Appendix B.8. South Unimak June fishery, sockeye salmon allocations vs. actual harvet and allocations if Bristol Bay runs were perfectly forecasted, 1975-98.

Year	S. Unimak Guideline Harvest Level (GHL)	Actual S. Unimak Harvest	Actual Bristol Bay Harvest	Combined Bristol Bay & S. Unimak-Shumagin Harvest	S. Unimak GHL % of Combined Bristol Bay & S. Unimak-Shumagin Harvest[a]	S. Unimak Harvest % of Combined Bristol Bay-S. Unimak Harvest[b]	S. Unimak GHL if Actual Bristol Bay Harvest Was Forecasted[b]
1975	165,000	190,774	4,898,814	5,138,913	3.21	3.71	349,000
1976	350,000	233,211	5,619,292	5,924,519	5.91	3.94	403,000
1977	195,000	195,680	4,877,880	5,119,472	3.81	3.82	348,000
1978	428,000	418,959	9,928,139	10,414,974	4.11	4.02	708,000
1979	900,000	672,293	21,428,606	22,280,038	4.04	3.02	1,515,000
1980[c]	2,513,000	2,731,148	23,761,746	26,968,021	9.32	10.13	1,834,000
1981	1,442,000	1,470,563	25,603,081	27,424,216	5.26	5.36	1,865,000
1982	1,850,000	1,668,153	15,104,391	17,223,092	10.74	9.69	1,171,000
1983	1,469,000	1,547,369	37,372,031	39,335,894	3.73	3.93	2,675,000
1984	1,111,000	1,131,365	24,710,306	26,098,509	4.26	4.33	1,775,000
1985	1,380,000	1,454,969	23,702,883	25,494,283	5.41	5.71	1,734,000
1986[d]	907,000	315,370	15,776,056	16,247,453	5.58	1.94	1,105,000
1987	635,000	653,536	16,068,775	16,862,878	3.77	3.88	1,147,000
1988[d]	1,263,000	474,457	13,989,757	14,746,444	8.56	3.22	1,003,000
1989	1,199,000	1,347,547	28,735,306	30,479,811	3.93	4.42	2,073,000
1990	1,087,000	1,090,710	33,523,127	34,869,422	3.12	3.13	2,371,000
1991[d]	1,573,000	1,215,658	25,821,180	27,370,110	5.75	4.44	1,861,000
1992	1,959,000	2,046,022	31,879,676	34,337,532	5.71	5.96	2,335,000
1993	2,375,000	2,366,573	40,462,124	43,435,868	5.47	5.45	2,954,000
1994	2,938,000	1,001,250	35,224,050	36,685,313	8.01	2.73	2,495,000
1995	2,987,000	1,451,490	44,266,217	46,371,538	6.44	3.13	3,153,000
1996	2,564,000	572,495	29,588,297	30,160,792	8.01	1.9	2,050,934
1997	1,840,000	1,179,179	12,158,777	13,786,958	13.35	8.55	937,513
1998[e]	1,529,000	974,628	9,987,020	11,275,745	13.56	8.64	766,751

[a] Salmon numbers exclude test fish harvests.

[b] These values were calculated by adding the actual Bristol Bay sockeye salmon harvest and the South Unimak-Shumagin Islands June sockeye salmon harvest together and determining or applying the appropriate percentages. Calculations assume all sockeye salmon caught at South Unimak and the Shumagin Islands are destined for Bristol Bay.

[c] The 1980 Bristol Bay sockeye salmon catch would have been much larger had it not been for a lengthy strike.

[d] Sockeye salmon allocations were not reached largely, if not totally, due to a chum cap.

[e] Bristol Bay harvest numbers are preliminary.

Appendix B.9. Shumagin Islands June fishery, sockeye salmon allocations vs. actual harvest and allocations if Bristol Bay runs were perfectly forecasted, 1975-98.

Year	Shumagin Islands Guideline Harvest Level (GHL)	Actual Shumagin Is. Harvest	Actual Bristol Bay Harvest	Combined Bristol Bay & S. Unimak-Shumagin Harvest	Shumagin GHL % of Combined Bristol Bay & S. Unimak-Shumagin Harvest[a]	Shumagin Is. Harvest % of Combined Bristol Bay-S. Unimak Harvest[b]	Shumagin Is. GHL if Actual Bristol Bay Harvest Was Forecasted[b]
1975	50,000	49,325	4,898,814	5,138,913	0.97	0.96	77,000
1976	75,000	72,016	5,619,292	5,924,519	1.27	1.22	89,000
1977	42,000	45,912	4,877,880	5,119,472	0.82	0.9	77,000
1978	94,000	67,876	9,928,139	10,414,974	0.9	0.65	156,000
1979	200,000	179,139	21,428,606	22,280,038	0.9	0.8	334,000
1980[c]	555,000	475,127	23,761,746	26,968,021	2.06	1.76	405,000
1981	318,000	350,572	25,603,081	27,424,216	1.16	1.28	411,000
1982	408,000	450,548	15,104,391	17,223,092	2.37	2.62	258,000
1983	324,000	416,494	37,372,031	39,335,894	0.82	1.06	590,000
1984	245,000	256,838	24,710,306	26,098,509	0.94	0.98	391,000
1985	305,000	336,431	23,702,883	25,494,283	1.2	1.32	382,000
1986[d]	200,000	156,027	15,776,056	16,247,453	1.23	0.96	244,000
1987	140,000	140,567	16,068,775	16,862,878	0.83	0.83	253,000
1988[d]	279,000	282,230	13,989,757	14,746,444	1.89	1.91	221,000
1989	264,000	396,958	28,735,306	30,479,811	0.87	1.3	457,000
1990	240,000	255,585	33,523,127	34,869,422	0.69	0.73	523,000
1991[d]	347,000	333,272	25,821,180	27,370,110	1.27	1.22	411,000
1992	432,000	411,834	31,879,676	34,337,532	1.26	1.2	515,000
1993	524,000	607,171	40,462,124	43,435,868	1.21	1.4	652,000
1994	648,000	460,013	35,224,050	36,685,313	1.77	1.25	550,000
1995	659,000	653,831	44,266,217	46,371,538	1.42	1.41	696,000
1996	566,000	456,475	29,588,297	30,044,772	1.88	1.52	451,000
1997	406,000	449,002	12,158,777	13,786,958	2.94	3.26	206,804
1998[e]	336,000	314,097	9,987,020	11,275,745	2.98	2.79	169,136

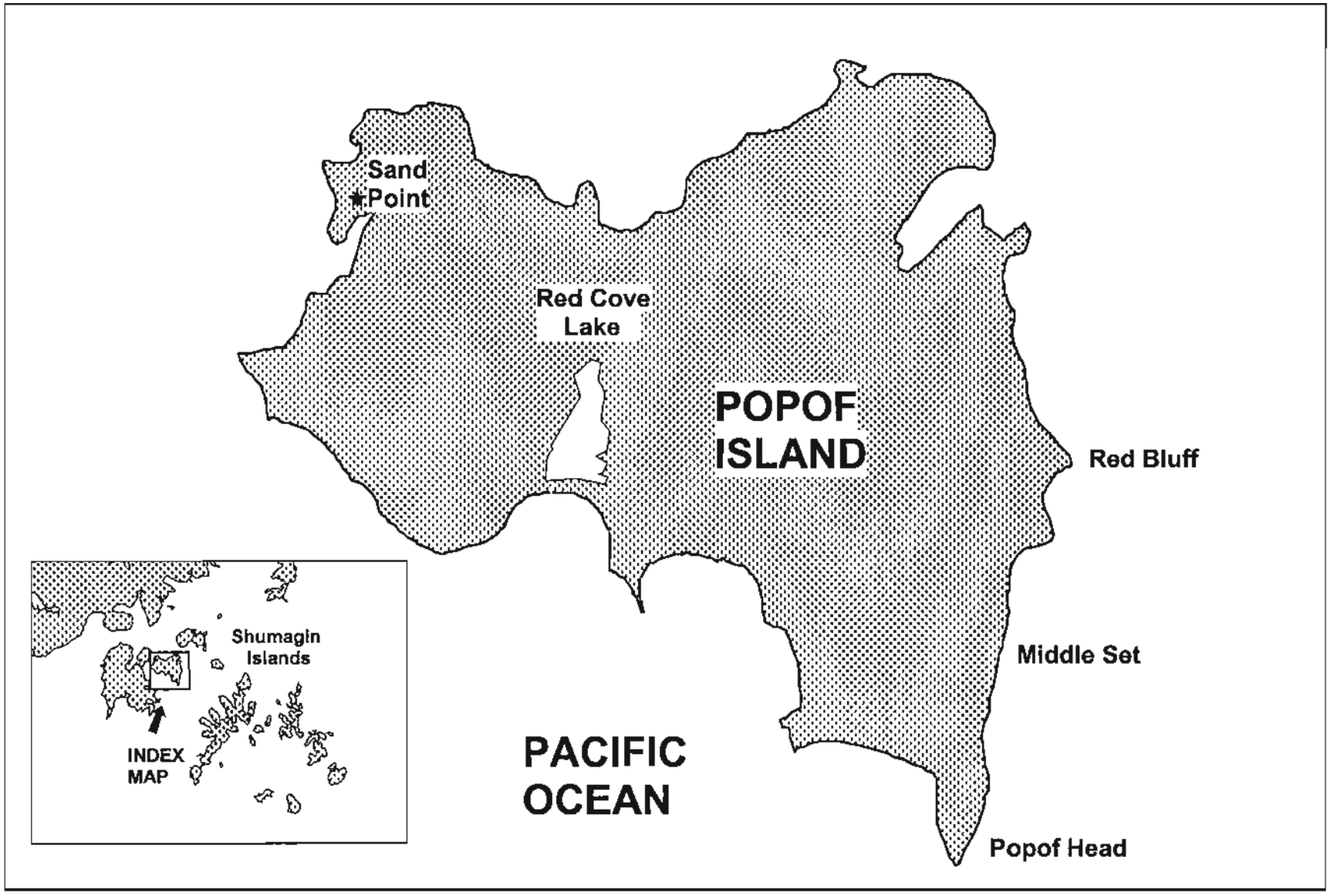
[a] Salmon numbers exclude test fish harvests.

[b] These values were calculated by adding the actual Bristol Bay sockeye salmon harvest and the South Unimak-Shumagin Islands June sockeye salmon harvest together and determining or applying the appropriate percentages. Calculations assume all sockeye salmon caught at South Unimak and the Shumagin Islands are destined for Bristol Bay.

[c] The 1980 Bristol Bay sockeye salmon catch would have been much larger had it not been for a lengthy strike.

[d] Sockeye salmon allocations were not reached largely, if not totally, due to a chum cap.

[e] Bristol Bay harvest numbers are preliminary.



Appendix B.10. Map of Popof Island with the test fishing sites defined.

Appendix B.11. South Unimak and Shumagin Islands June fisheries, number of fishing days and hours by year, 1975- 98[a].

	South Unimak		Shumagin Islands	
Year	Days	Hours	Days	Hours
1975	10	240	9	207
1976[b]	19	456	13	312
1977	17	408	11	264
1978	23	552	23	552
1979[c]	33	786	27	642
1980	30	720	30	720
1981	24	576	22	528
1982	30	720	24	576
1983	11	264	10	228
1984	5	110	6	134
1985	9	144	9	140
1986	8	148	8	160
1987	12	224	6	92
1988	8	112	9	153
1989	5	84	4	72
1990	13	281	9	200
1991	8	161	5	88
1992	8	139	5	38.5
1993	10	176	8	140
1994	14	262	13	265
1995	18	366	17	339
1996	16	372	13	276
1997	18	418	14	237
1998	18	424	16	346
Average 1988-97	11.8	237.1	9.7	180.9

[a] Figures are for fishing time allowed for seine and/or drift gillnet gear. After 1992, set gillnet gear was guaranteed 16 hours per fishing period if other gear types were restricted to less than 16 hours due to concerns for exceeding the chum salmon cap. This allows fishing time allowed but not utilized due to price disputes.

[b] In 1976, the South Unimak fishery was extended through July 1 to compensate for fishing time lost at the end of June due to adverse weather conditions.

[c] In 1979, the South Unimak fishery was extended through July 3 to compensate for lost fishing time at the end of June due to adverse weather conditions.

Appendix B.12. South Unimak June test fishery salmon catches by species and date, 1998.

Date/ Location	Number of sets	Number of Salmon					Total Salmon	Ratio Sockeye to 1 Chum
		Chinook	Sockeye	Coho	Pink	Chum		
6-Jun								
East Anchor	1	7	79	0	6	19	111	4.16
All Locations	1	7	79	0	6	19	111	4.16
	Average Per Set	7.0	79.0	0.0	6.0	19.0		
	Catch Composition by %	6.31%	71.17%	0.00%	5.41%	17.12%		
7-Jun								
Cape Lutke	3	1	45	0	16	34	96	1.32
Ikatan Bay	1	0	3	0	0	0	3	-
All Locations	4 0	1	48	0	16	34	99	1.41
	Average Per Set	0.3	12.0	0.0	4.0	8.5		
	Catch Composition by %	1.01%	48.48%	0.00%	16.16%	34.34%		
8-Jun								
Ikatan Bay	1	0	8	0	6	12	26	0.67
All Locations	1	0	8	0	6	12	26	0.67
	Average Per Set	0.0	8.0	0.0	6.0	12.0		
	Catch Composition by %	0.00%	30.77%	0.00%	23.08%	46.15%		
9-Jun								
Ikatan Bay/Cape Pankof	15	21	424	1	327	278	1,051	1.53
All Locations	15	21	424	1	327	278	1,051	1.53
	Average Per Set	1.4	28.3	0.1	21.8	18.5		
	Catch Composition by %	2.00%	40.34%	0.10%	31.11%	26.45%		
10-Jun								
E. Anchor/C Pankof	5	13	680	0	383	437	1,076	1.56
Cape Lutke	10	11	1,913	0	1,561	2,253	3,485	0.85
All locations	15	24	2,593	0	1,944	2,690	7,251	0.96
	Average Per Set	1.6	172.9	0.0	129.6	179.3		
	Catch Composition by %	0.33%	35.76%	0.00%	26.81%	37.10%		

-Continued-

Appendix B.12. (page 2 of 2)

Date/ Location	Number of sets	Number of Salmon					Total Salmon	Ratio Sockeye to 1 Chum
		Chinook	Sockeye	Coho	Pink	Chum		
11-Jun								
E. Anchor/C Pankof	5	2	139	0	138	160	279	0.87
Cape Lutke	10	21	2,474	0	1,355	1,160	3,850	2.13
All locations	15	23	2,613	0	1,493	1,320	5,449	1.98
	Average Per Set	1.5	174.2	0.0	99.5	88.0		
	Catch Composition by %	0.42%	47.95%	0.00%	27.40%	24.22%		
12-Jun								
E. Anchor/C Pankof	5	3	835	0	510	437	1,348	1.91
Cape Lutke	10	17	1,793	0	930	1,577	2,740	1.14
All locations	15	20	2,628	0	1,440	2,014	6,102	1.30
	Average Per Set	1.3	175.2	0.0	96.0	134.3		
	Catch Composition by %	0.33%	43.07%	0.00%	23.60%	33.01%		

[a]Strong southwest winds limited test fishing efforts on June 6th through June 9th

Appendix B.13. Shumagin Islands June test fishery salmon catches by species and date, 1998.

Date	Number of Sets	Number of Adult Salmon					Total	Ratio Sockeye to 1 Chum Salmon
		Chinook	Sockeye	Coho	Pink	Chum		
5-Jun	0 [a]						0	
6-Jun	4	16	401	0	44	271	732	1.5
7-Jun	0 [b]						0	
8-Jun	5	3	360	0	108	130	601	2.8
9-Jun	6	27	2,191	0	466	1,574	4,258	1.4
10-Jun	4	20	820	0	164	623	1,627	1.3
11-Jun	6	9	539	0	168	448	1,164	1.2
12-Jun	5	9	782	0	340	515	1,646	1.5
14-Jun	5	16	250	0	128	379	773	0.7
15-Jun	4	21	1,516	0	713	472	2,722	3.2
Total	39	121	6,859	0	2,131	4,412	13,523	1.6

Note: Test fishing is standardized to full purse seine gear, conducting 20 minute sets at Popof Head, Middle Set, and Red Bluff, additional sets are made if time allows.

[a] Seine and other gear damage occurred during initial set and charter was cancelled.

[b] Test fish charter cancelled due to adverse weather conditions.

Appendix B.14. South Unimak and Shumagin Islands commercial sockeye and chum salmon harvests, all gear combined, by day1998[a].

	South Unimak		Shumagin Islands		Combined	
Date	Sockeye	Chum	Sockeye	Chum	Sockeye	Chum
June 1-11	Closed to commercial salmon fishing.					
12	0	0	0	0	0	0
13	64,551	6,082	3,066	276	67,617	6,358
14	67,156	9,491	4,111	422	71,267	9,913
15	87,049	13,324	3,284	203	90,333	13,527
16	103,545	16,593	8,285	446	111,830	17,039
17	98,935	16,941	12,984	557	111,919	17,498
18	76,522	12,385	20,862	2,847	97,384	15,232
19	23,192	4,281	29,781	3,963	52,973	8,244
20	77,075	14,131	42,449	7,344	119,524	21,475
21	43,308	6,937	39,726	4,937	83,034	11,874
22	31,231	8,294	18,476	1,913	49,707	10,207
23	82,902	17,774	22,035	4,457	104,937	22,231
24	54,788	13,909	13,485	2,564	68,273	16,473
25	28,405	6,910	16,945	3,294	45,350	10,204
26	40,713	10,633	17,669	3,815	58,382	14,448
27	35,763	11,895	14,091	2,271	49,854	14,166
28	22,973	8,504	15,444	4,268	38,417	12,772
29	21,069	8,310	12,620	2,214	33,689	10,524
30	15,451	9,060	18,784	4,374	34,235	13,434
Total	974,628	195,454	314,097	50,165	1,288,725	245,619

[a] The entire purse seine fleet and approximately 80% of the set gillnet fleet were on strike from June13-17.

Appendix B.15. South Unimak June commercial salmon harvest, all gear combined, by species and day, 1998[a].

Catch Date	Permits	Landings	Number of Salmon					
			Chinook	Sockeye	Coho	Pink	Chum	Total
13-Jun	133	148	50	64,551	1	365	6,082	71,049
14-Jun	122	145	124	67,156	0	266	9,491	77,037
15-Jun	137	158	71	87,049	1	801	13,324	101,246
16-Jun	137	158	108	103,545	0	370	16,593	120,616
17-Jun	140	162	112	98,935	0	907	16,941	116,895
18-Jun	161	187	91	76,522	0	9,947	12,385	98,945
19-Jun	82	85	34	23,192	0	360	4,281	27,867
20-Jun	167	185	66	77,075	0	9,764	14,131	101,036
21-Jun	134	147	50	43,308	0	10,201	6,937	60,496
22-Jun	112	120	33	31,231	1	4,051	8,294	43,610
23-Jun	145	166	104	82,902	4	9,561	17,774	110,345
24-Jun	155	162	142	54,788	8	13,453	13,909	82,300
25-Jun	137	147	58	28,405	6	6,776	6,910	42,155
26-Jun	137	156	39	40,713	9	10,927	10,633	62,321
27-Jun	94	112	65	35,763	66	10,508	11,895	58,297
28-Jun	73	82	39	22,973	46	13,871	8,504	45,433
29-Jun	72	78	42	21,069	116	9,261	8,310	38,798
30-Jun	31	34	31	15,451	54	14,517	9,060	39,113
Total	196	2,432	1,259	974,628	312	125,906	195,454	1,297,559

[a] The entire purse seine fleet and approximately 80% of the set gillnet fleet were on strike from June13-17.

Appendix B.16. South Unimak June commercial purse seine salmon harvest by species and day,1998[a].

Catch Date	Permits	Landings	Number of Salmon					
			Chinook	Sockeye	Coho	Pink	Chum	Total
17-Jun [b]	*	*	*	*	*	*	*	*
18-Jun	17	17	39	11,297	0	9,030	1,490	21,856
20-Jun	16	16	30	11,365	0	9,411	2,255	23,061
21-Jun	15	15	31	11,251	0	10,045	2,773	24,100
22-Jun [b]	*	*	*	*	*	*	*	*
23-Jun	12	12	38	7,455	2	8,795	2,144	18,434
24-Jun	15	15	81	7,801	1	12,896	2,647	23,426
25-Jun	10	10	15	2,479	0	6,174	928	9,596
26-Jun	17	17	19	4,418	3	10,040	1,922	16,402
27-Jun	8	8	18	2,954	2	7,700	1,107	11,781
28-Jun	13	13	21	3,964	14	13,227	4,403	21,629
29-Jun	7	7	14	2,139	1	7,692	2,867	12,713
30-Jun	4	4	14	2,950	5	12,313	4,063	19,345
Total	27	138	325	70,263	28	111,159	26,777	208,552

[a] The entire purse seine fleet and approximately 80% of the set gillnet fleet were on strike from June13-17.

[b] Confidentiality requirements prohibt releasing this information.

Appendix B.17. South Unimak June commercial drift gillnet harvest by species and day, 1998.

Catch Date	Permits	Landings	Number of Salmon					
			Chinook	Sockeye	Coho	Pink	Chum	Total
13-Jun	128	143	49	61,697	1	348	5,942	68,037
14-Jun	112	132	110	63,338	0	255	9,250	72,953
15-Jun	129	150	57	83,941	0	793	13,076	97,867
16-Jun	128	145	91	97,718	0	326	14,664	112,799
17-Jun	131	153	99	94,135	0	811	16,353	111,398
18-Jun	134	159	51	62,834	0	904	10,742	74,531
19-Jun	73	75	32	20,931	0	351	4,194	25,508
20-Jun	136	152	33	62,207	0	321	11,645	74,206
21-Jun	110	122	17	30,315	0	140	4,094	34,566
22-Jun	100	108	26	28,142	1	293	7,770	36,232
23-Jun	122	140	59	71,759	2	730	15,072	87,622
24-Jun	130	137	58	44,828	7	532	11,125	56,550
25-Jun	118	128	39	24,768	6	550	5,900	31,263
26-Jun	110	125	18	33,910	6	842	8,569	43,345
27-Jun	75	93	45	31,104	63	2,745	10,396	44,353
28-Jun	48	55	13	16,913	27	519	3,767	21,239
29-Jun	55	60	27	17,235	111	1,508	5,208	24,089
30-Jun	20	23	14	10,490	43	1,986	4,799	17,332
Total	145	2,100	838	856,265	267	13,954	162,566	1,033,890

Appendix B.18. South Unimak June commercial set gillnet salmon harvest by species and day, 1998[a].

Catch Date	Permits	Landings	Number of Salmon					
			Chinook	Sockeye	Coho	Pink	Chum	Total
13-Jun	5	5	1	2,854	0	17	140	3,012
14-Jun	10	13	14	3,818	0	11	241	4,084
15-Jun	8	8	14	3,108	1	8	248	3,379
16-Jun	9	13	17	5,827	0	44	1,929	7,817
17-Jun	8	8	13	4,520	0	7	533	5,073
18-Jun	10	11	1	2,391	0	13	153	2,558
19-Jun	9	10	2	2,261	0	9	87	2,359
20-Jun	15	17	3	3,503	0	32	231	3,769
21-Jun	9	10	2	1,742	0	16	70	1,830
22-Jun	9	9	2	1,179	0	11	401	1,593
23-Jun	11	14	7	3,688	0	36	558	4,289
24-Jun	10	10	3	2,159	0	25	137	2,324
25-Jun	9	9	4	1,158	0	52	82	1,296
26-Jun	10	14	2	2,385	0	45	142	2,574
27-Jun	11	11	2	1,705	1	63	392	2,163
28-Jun	12	14	5	2,096	5	125	334	2,565
29-Jun	10	11	1	1,695	4	61	235	1,996
30-Jun	7	7	3	2,011	6	218	198	2,436
Total	24	194	96	48,100	17	793	6,111	55,117

[a] The entire purse seine fleet and approximately 80% of the set gillnet fleet were on strike from June13-17.

Appendix B.19. Shumagin Islands Section commercial salmon harvest, all gear combined, by species and day, 1998[a].

Catch Date	Permits	Landings	Number of Salmon					
			Chinook	Sockeye	Coho	Pink	Chum	Total
13-Jun	8	14	40	3,066	0	14	276	3,396
14-Jun	8	14	10	4,111	0	14	422	4,557
15-Jun	10	14	8	3,284	0	12	203	3,507
16-Jun	28	45	17	8,285	1	63	446	8,812
17-Jun	29	46	28	12,984	0	107	557	13,676
18-Jun	58	67	105	20,862	1	12,048	2,847	35,863
19-Jun	63	75	124	29,781	0	25,528	3,963	59,396
20-Jun	75	102	187	42,449	3	47,420	7,344	97,403
21-Jun	73	99	140	39,726	5	31,092	4,937	75,900
22-Jun	56	71	77	18,476	0	16,551	1,913	37,017
23-Jun	70	92	63	22,035	1	35,497	4,457	62,053
24-Jun	54	68	70	13,485	9	21,828	2,564	37,956
25-Jun	65	75	86	16,945	1	35,552	3,294	55,878
26-Jun	67	79	80	17,669	8	24,573	3,815	46,145
27-Jun	58	74	86	14,091	13	15,730	2,271	32,191
28-Jun	75	104	130	15,444	11	28,591	4,268	48,444
29-Jun	65	86	70	12,620	34	22,305	2,214	37,243
30-Jun	74	100	116	18,784	77	31,509	4,374	54,860
6-Jul	70	87	205	15,815	1,086	26,993	7,061	51,160
8-Jul [b]	*	*	*	*	*	*	*	*
9-Jul	80	124	119	27,710	2,262	27,855	9,602	67,548
11-Jul [b]	*	*	*	*	*	*	*	*
12-Jul	69	109	201	25,072	1,453	30,390	5,621	62,737
14-Jul [b]	*	*	*	*	*	*	*	*
15-Jul	60	95	172	44,454	5,587	66,545	14,565	131,323
18-Jul	69	106	159	46,876	14,957	87,760	13,201	162,953
19-Jul	4	4	0	408	12	150	73	643
20-Jul	5	5	18	2,586	1,103	14,958	657	19,322
21-Jul	40	65	121	39,742	6,737	106,759	6,545	159,904
23-Jul	53	60	21	12,085	784	37,969	3,008	53,867
24-Jul	75	119	36	30,788	2,690	146,454	7,683	185,793
26-Jul	8	8	2	2,817	139	14,399	455	17,812
27-Jul	27	53	41	25,333	6,068	179,625	9,264	220,331
28-Jul	31	33	15	8,278	2,421	76,526	3,136	90,376
30-Jul	27	37	7	2,912	1,470	72,676	1,941	79,006
31-Jul	33	47	28	5,484	2,150	82,426	3,704	93,792
1-Aug	26	34	46	5,854	1,844	92,290	3,622	103,656
2-Aug	26	34	101	11,180	4,005	130,611	6,495	152,392
3-Aug	31	44	68	11,930	7,351	154,632	7,291	181,272
6-Aug	27	40	20	3,208	3,791	96,925	3,756	107,700
7-Aug	16	25	10	1,860	1,291	42,031	1,535	46,727

-Continued-

Appendix B.19. (page 2 of 2)

Catch Date	Permits	Landings	Number of Salmon					
			Chinook	Sockeye	Coho	Pink	Chum	Total
8-Aug	20	29	6	1,224	874	45,628	1,580	49,312
9-Aug	16	24	7	2,239	890	48,898	2,685	54,719
10-Aug	24	35	73	6,256	5,642	138,784	7,475	158,230
13-Aug	31	41	6	3,473	1,886	115,195	2,872	123,432
14-Aug	28	40	3	2,882	957	28,705	2,443	34,990
15-Aug	7	8	4	2,067	1,103	24,234	2,121	29,529
16-Aug	10	25	5	1,179	423	9,704	1,655	12,966
1-Sep	11	14	0	743	441	52	313	1,549
2-Sep	20	24	2	1,307	735	161	583	2,788
3-Sep	17	19	0	1,535	608	378	546	3,067
4-Sep	19	27	2	1,744	1,125	293	583	3,747
7-Sep	12	14	1	482	338	26	201	1,048
8-Sep	13	18	0	1,692	548	115	505	2,860
9-Sep [b]	*	*	*	*	*	*	*	*
10-Sep	5	6	0	525	78	3	112	718
11-Sep	5	5	1	379	77	0	115	572
14-Sep [b]	*	*	*	*	*	*	*	*
15-Sep	5	5	0	319	38	0	48	405
28-Sep [b]	*	*	*	*	*	*	*	*
Total	110	2,700	2,942	667,747	83,196	2,248,725	183,279	3,185,889
June	91	1,225	1,437	314,097	164	348,434	50,165	714,297

[a] The entire purse seine fleet and approximately 80% of the set gillnet fleet were on strike from June13-17.

[b] Confidentiality requirements prohibt releasing this information.

Appendix B.20. Shumagin Islands Section commercial purse seine salmon harvest by species and day, 1998[a].

			Number of Salmon					
Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
18-Jun	18	19	86	11,233	1	11,927	2,249	25,496
19-Jun	25	26	112	19,403	0	25,436	3,261	48,212
20-Jun	27	28	173	26,215	0	47,179	6,307	79,874
21-Jun	22	22	123	23,784	0	30,787	4,029	58,723
22-Jun	13	13	69	8,457	0	16,365	1,310	26,201
23-Jun	22	25	57	10,892	0	35,375	3,560	49,884
24-Jun	18	19	57	7,038	1	21,730	2,209	31,035
25-Jun	23	23	78	9,443	0	35,352	2,828	47,701
26-Jun	23	23	72	9,059	1	24,380	3,205	36,717
27-Jun	15	15	76	6,979	4	15,488	1,789	24,336
28-Jun	26	26	97	7,610	3	28,314	3,616	39,640
29-Jun	18	18	50	5,219	14	21,976	1,534	28,793
30-Jun	31	31	80	9,884	44	30,712	3,567	44,287
6-Jul	32	32	168	6,753	782	23,601	5,301	36,605
9-Jul	36	36	94	11,147	1,743	21,307	6,704	40,995
12-Jul	29	29	180	6,845	928	22,581	3,889	34,423
15-Jul	20	20	156	19,987	4,854	51,880	10,691	87,568
18-Jul	26	26	149	24,042	13,850	70,390	10,846	119,277
20-Jul [b]	*	*	*	*	*	*	*	*
21-Jul	20	21	115	25,644	5,746	97,423	5,431	134,359
23-Jul	12	12	16	5,235	483	28,685	1,812	36,231
24-Jul	25	27	26	17,077	1,671	116,812	4,773	140,359
26-Jul	5	5	2	2,647	138	14,086	414	17,287
27-Jul	15	18	39	18,921	5,863	164,897	7,753	197,473
28-Jul	22	23	15	7,106	2,384	72,667	2,885	85,057
30-Jul	14	15	7	1,379	1,350	68,302	1,319	72,357
31-Jul	18	18	27	2,710	1,893	74,428	2,640	81,698
1-Aug	16	17	45	3,132	1,689	82,214	2,479	89,559
2-Aug	15	15	101	8,059	3,827	119,883	5,086	136,956
3-Aug	19	20	68	9,632	7,068	145,946	6,176	168,890
6-Aug	17	20	19	2,303	3,667	91,270	3,078	100,337
7-Aug	9	9	8	1,141	1,198	37,063	934	40,344
8-Aug	11	11	6	451	656	39,182	917	41,212
9-Aug	8	8	7	1,303	811	43,450	2,079	47,650
10-Aug	17	18	71	5,105	5,524	131,425	6,597	148,722
13-Aug	19	19	6	2,175	1,735	107,102	2,109	113,127
14-Aug	12	12	3	1,111	636	21,141	1,452	24,343
15-Aug [b]	*	*	*	*	*	*	*	*
16-Aug [b]	*	*	*	*	*	*	*	*
4-Sep [b]	*	*	*	*	*	*	*	*
Total	48	727	2,482	343,161	70,653	2,031,072	137,369	2,584,737
June Total	38	288	1,130	155,216	68	345,021	39,464	540,899

[a] The entire purse seine fleet and approximately 80% of the set gillnet fleet were on strike from June13-17.

[b] Confidentiality prohibits releasing this information.

Appendix B.21. Shumagin Islands Section commercial set gillnet salmon harvest by species and day, 1998[a].

			Number of Salmon					
Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
13-Jun	8	14	40	3,066	0	14	276	3,396
14-Jun	8	14	10	4,111	0	14	422	4,557
15-Jun	10	14	8	3,284	0	12	203	3,507
16-Jun	28	45	17	8,285	1	63	446	8,812
17-Jun	29	46	28	12,984	0	107	557	13,676
18-Jun	40	48	19	9,629	0	121	598	10,367
19-Jun	38	49	12	10,378	0	92	702	11,184
20-Jun	48	74	14	16,234	3	241	1,037	17,529
21-Jun	51	77	17	15,942	5	305	908	17,177
22-Jun	43	58	8	10,019	0	186	603	10,816
23-Jun	48	67	6	11,143	1	122	897	12,169
24-Jun	36	49	13	6,447	8	98	355	6,921
25-Jun	42	52	8	7,502	1	200	466	8,177
26-Jun	44	56	8	8,610	7	193	610	9,428
27-Jun	43	59	10	7,112	9	242	482	7,855
28-Jun	49	78	33	7,834	8	277	652	8,804
29-Jun	47	68	20	7,401	20	329	680	8,450
30-Jun	43	69	36	8,900	33	797	807	10,573
6-Jul	38	55	37	9,062	304	3,392	1,760	14,555
8-Jul [b]	*	*	*	*	*	*	*	*
9-Jul	44	88	25	16,563	519	6,548	2,898	26,553
11-Jul [b]	*	*	*	*	*	*	*	*
12-Jul	40	80	21	18,227	525	7,809	1,732	28,314
14-Jul [b]	*	*	*	*	*	*	*	*
15-Jul	40	75	16	24,467	733	14,665	3,874	43,755
18-Jul	43	80	10	22,834	1,107	17,370	2,355	43,676
19-Jul	4	4	0	408	12	150	73	643
20-Jul [b]	*	*	*	*	*	*	*	*
21-Jul	20	44	6	14,098	991	9,336	1,114	25,545
23-Jul	41	48	5	6,850	301	9,284	1,196	17,636
24-Jul	50	92	10	13,711	1,019	29,642	2,910	47,292
26-Jul [b]	*	*	*	*	*	*	*	*
27-Jul	12	35	2	6,412	205	14,728	1,511	22,858
28-Jul	9	10	0	1,172	37	3,859	251	5,319
30-Jul	13	22	0	1,533	120	4,374	622	6,649
31-Jul	15	29	1	2,774	257	7,998	1,064	12,094
1-Aug	10	17	1	2,722	155	10,076	1,143	14,097
2-Aug	11	19	0	3,121	178	10,728	1,409	15,436
3-Aug	12	24	0	2,298	283	8,686	1,115	12,382

-Continued-

Appendix B.21. (page 2 of 2)

Date	Permits	Landings	Number of Salmon					
			Chinook	Sockeye	Coho	Pink	Chum	Total
6-Aug	10	20	1	905	124	5,655	678	7,363
7-Aug	7	16	2	719	93	4,968	601	6,383
8-Aug	9	18	0	773	218	6,446	663	8,100
9-Aug	8	16	0	936	79	5,448	606	7,069
10-Aug	7	17	2	1,151	118	7,359	878	9,508
13-Aug	12	22	0	1,298	151	8,093	763	10,305
14-Aug	16	28	0	1,771	321	7,564	991	10,647
15-Aug	4	5	0	381	169	2,099	466	3,115
16-Aug	8	23	3	1,095	353	6,154	1,388	8,993
1-Sep	11	14	0	743	441	52	313	1,549
2-Sep	20	24	2	1,307	735	161	583	2,788
3-Sep	17	19	0	1,535	608	378	546	3,067
4-Sep	18	26	2	1,682	1,081	293	570	3,628
7-Sep	12	14	1	482	338	26	201	1,048
8-Sep	13	18	0	1,692	548	115	505	2,860
9-Sep [b]	*	*	*	*	*	*	*	*
10-Sep	5	6	0	525	78	3	112	718
11-Sep	5	5	1	379	77	0	115	572
14-Sep [b]	*	*	*	*	*	*	*	*
15-Sep	5	5	0	319	38	0	48	405
28-Sep [b]	*	*	*	*	*	*	*	*
Total	62	1,973	460	324,586	12,543	217,653	45,910	601,152
June Total	53	937	307	158,881	96	3,413	10,701	173,398

[a] The entire purse seine fleet and approximately 80% of the set gillnet fleet was on strike from June 13-17.

[b] Confidentiality requirements prohibit releasing this information.

Appendix B.22. South Unimak and Shumagin Islands June fisheries, composition of commercial sockeye and chum salmon harvest in percent by gear type, and year, 1970-1998[a].

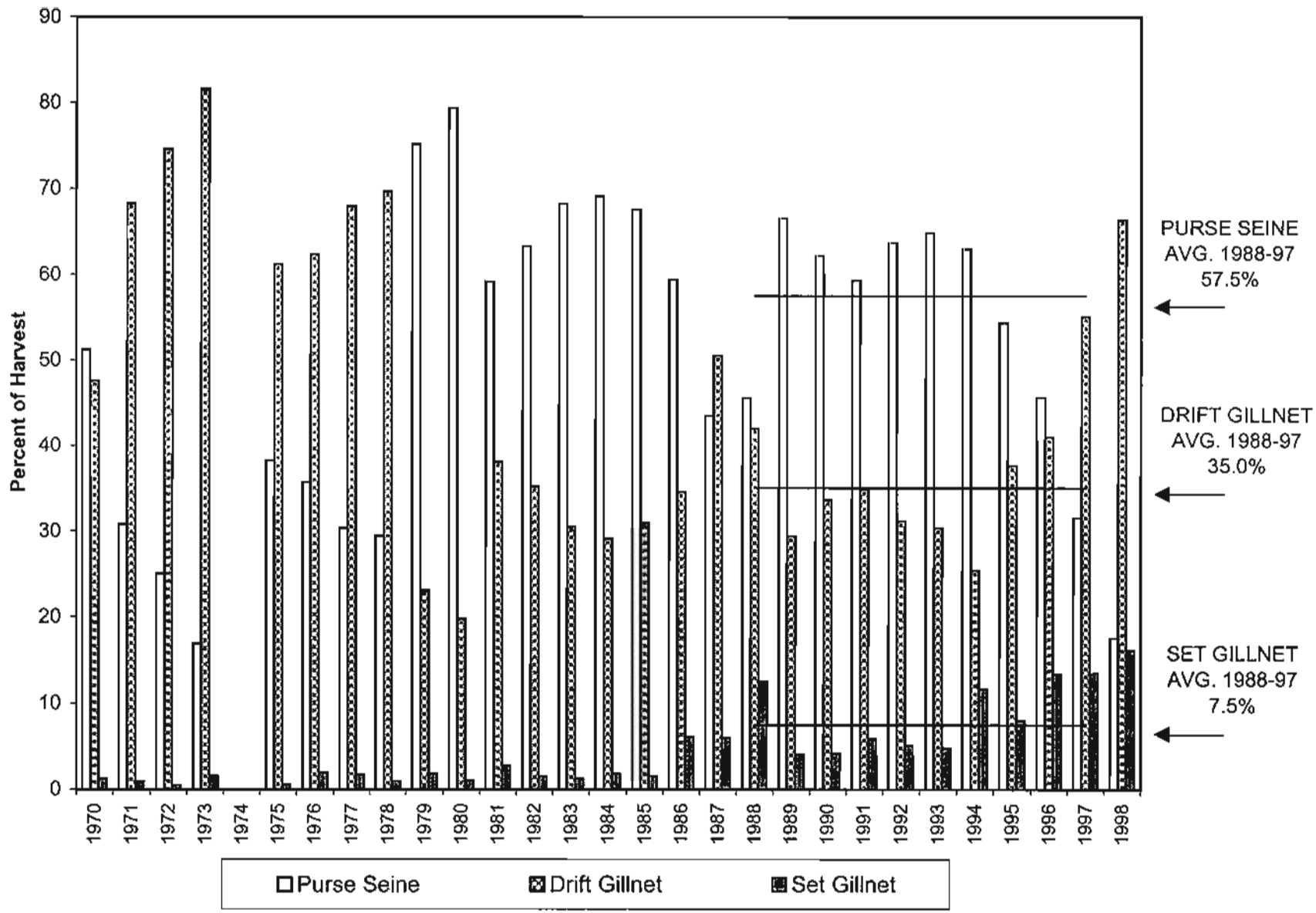
	South Unimak						Shumagin Islands			
	Sockeye			Chum			Sockeye		Chum	
Year	Purse Seine	Drift Gillnet	Set Gillnet	Purse Seine	Drift Gillnet	Set Gillnet	Purse Seine	Set Gillnet	Purse Seine	Set Gillnet
1970	47.5	52	0.5	31.8	68	0.2	92	8	94.1	5.9
1971	25.3	74.7	0	19.5	80.5	0	89.4	10.6	96.8	3.2
1972	12.5	87.5	0	9.3	90.7	0	96.9	3.1	98.5	1.5
1973	9.6	90	0.4	6.6	93.3	0.1	87.3	12.7	94.3	5.7
1974	0	0	0	0	0	0	0	0	0	0
1975	22.9	77	0.1	28.9	71.1	0	97.5	2.5	97.4	2.6
1976	17.3	81.6	1.1	14.2	85.7	0.1	95.5	4.5	97.1	2.9
1977	15.2	83.9	0.9	10.5	89.2	0.3	94.9	5.1	99	1
1978	18.4	81	0.6	9.9	90	0.1	97	3	96.3	3.7
1979	70.6	29.2	0.2	30.1	69.8	0.2	92.4	7.6	95.7	4.3
1980	76.4	23.1	0.5	79.2	20.7	0.1	96.4	3.6	97.3	2.7
1981	50.7	47.1	2.2	63.5	36.2	0.3	94.8	5.2	98.7	1.3
1982	54.1	44.7	1.2	46.1	53.7	0.2	97.3	2.7	98.9	1.1
1983	60.4	38.7	0.9	65.8	34	0.1	97.4	2.6	99.6	0.4
1984	63.3	35.7	1	60.2	39.7	0.1	94.7	5.3	99.3	0.7
1985	61.3	38	0.7	38.7	61.1	0.2	94.8	5.2	96	4
1986	46.7	51.7	1.6	43.8	55.9	0.3	85	15	95	5
1987	36.5	61.4	2.2	38.3	61.1	0.7	76	24	93.4	6.6
1988	29.8	67	3.2	33.5	65.8	0.6	72.1	27.9	82.6	17.4
1989	59.4	38	2.5	52.1	47.3	0.7	90.9	9.1	93.6	6.4
1990	56.8	41.5	1.7	57.9	41.7	0.4	85.3	14.7	93.1	6.9
1991	53.5	44.4	2.1	61.2	38.2	0.6	80.6	19.4	93.3	6.7
1992	58.3	37.4	4.3	63.2	35.6	1.2	90.9	9.1	96.3	3.7
1993	59.1	38.1	2.8	66.2	31.6	2.2	87.5	12.5	97.9	2.1
1994	57.3	37.1	5.7	63.9	34.6	1.5	75.4	24.6	96.5	3.5
1995	42.1	54.6	3.3	47.1	50.5	2.4	81.5	18.5	93.7	6.3
1996	22.2	73.7	4.1	32	66.3	1.7	75	25	95.9	4.1
1997	14.8	76.0	9.2	30.1	65.1	4.8	75.5	24.5	93.8	6.2
1998	7.2	87.9	4.9	13.7	83.2	3.1	49.4	50.6	78.7	21.3
1970-79 Average	23.9	65.7	0.4	16.1	73.8	0.1	84.3	5.7	86.9	3.1
1980-89 Average	53.9	44.5	1.6	52.1	47.6	0.3	89.9	10.1	95.4	4.6
1990-97 Average	45.5	50.4	4.2	52.7	45.5	1.9	81.5	18.5	95.1	4.9

[a] Gear depth limitations in effect beginning in 1990.

Appendix B.23. South Unimak and Shumagin Islands June fisheries commercial sockeye salmon harvests in percent by gear type and year, 1970-98[a].

	Purse Seine		Drift Gillnet		Set Gillnet		
Year	Number	Percent	Number	Percent	Number	Percent	Total
1970	845,597	51.2	785,174	47.6	19,363	1.2	1,650,134
1971	142,251	30.8	315,685	68.3	4,165	0.9	462,101
1972	125,242	25.0	373,618	74.5	2,337	0.5	501,197
1973	41,411	16.9	200,258	81.6	3,881	1.6	245,550
1974	0	0.0	0	0.0	0	0.0	0
1975	91,768	38.2	146,937	61.2	1,394	0.6	240,099
1976	109,089	35.7	190,256	62.3	5,882	1.9	305,227
1977	73,277	30.3	164,165	68.0	4,150	1.7	241,592
1978	143,047	29.4	339,295	69.7	4,493	0.9	486,835
1979	639,986	75.2	196,482	23.1	14,964	1.8	851,432
1980	2,544,107	79.3	631,975	19.7	30,193	0.9	3,206,275
1981	1,078,047	59.2	693,166	38.1	49,922	2.7	1,821,135
1982	1,341,224	63.3	745,616	35.2	31,861	1.5	2,118,701
1983	1,339,868	68.3	599,152	30.5	23,951	1.2	1,962,971
1984	959,821	69.1	403,582	29.1	24,800	1.8	1,388,203
1985	1,210,653	67.6	553,558	30.9	27,189	1.5	1,791,400
1986	279,960	59.4	162,950	34.6	28,487	6.0	471,397
1987	345,028	43.4	401,215	50.5	47,860	6.0	794,103
1988	344,801	45.6	317,818	42.0	94,068	12.4	756,687
1989	1,161,809	66.6	512,522	29.4	70,174	4.0	1,744,505
1990	837,635	62.2	452,484	33.6	56,176	4.2	1,346,295
1991	919,000	59.3	539,490	34.8	90,440	5.8	1,548,930
1992	1,566,460	63.7	765,752	31.2	125,644	5.1	2,457,856
1993	1,928,739	64.9	902,788	30.4	142,217	4.8	2,973,744
1994	920,170	63.0	371,103	25.4	169,990	11.6	1,461,263
1995	1,144,405	54.4	792,940	37.7	167,976	8.0	2,105,321
1996	469,683	45.6	421,882	41.0	137,405	13.4	1,028,970
1997	513,339	31.5	896,638	55.1	218,204	13.4	1,628,181
1998	225,479	17.5	856,265	66.4	206,981	16.1	1,288,725
1978-97 Average	984,389	61.6	535,020	33.5	77,801	4.9	1,597,210
1988-97 Average	980,604	57.5	597,342	35.0	127,229	7.5	1,705,175

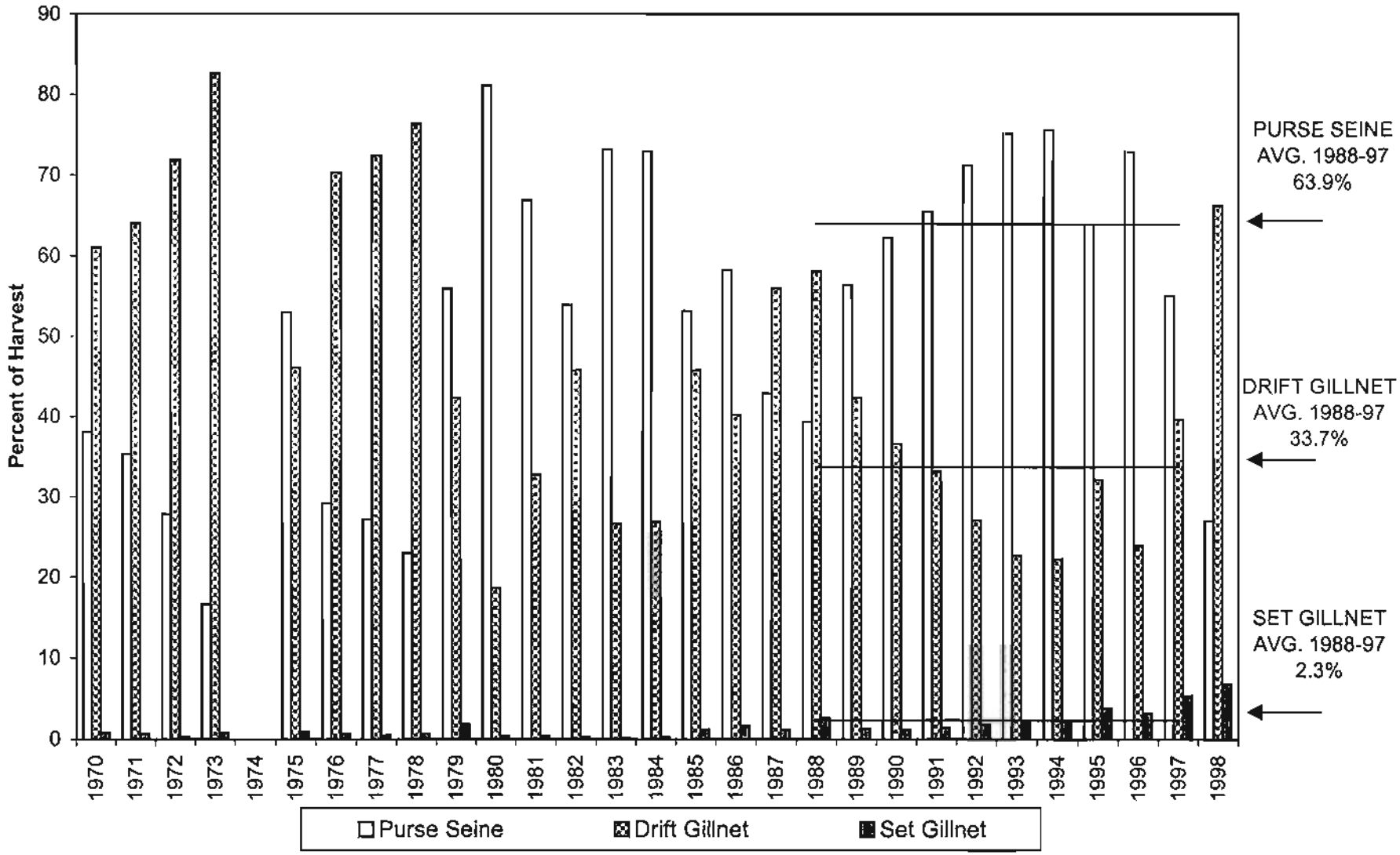
[a] Gear depth limitations in effect beginning in 1990.



Appendix B.24. South Unimak and Shumagin Islands June fisheries, composition of commercial sockeye salmon harvest in percent by gear type, and year, 1970-98.

Appendix B.25. South Unimak and Shumagin Islands June fisheries commercial chum salmon harvest in percent by gear type and year, 1970-98.

	Purse Seine		Drift Gillnet		Set Gillnet		
Year	Number	Percent	Number	Percent	Number	Percent	Total
1970	168,520	38.1	269,844	61.1	3,548	0.8	441,912
1971	179,588	35.3	326,267	64.1	3,342	0.7	509,197
1972	144,604	27.9	372,635	71.8	1,590	0.3	518,829
1973	33,351	16.6	165,753	82.6	1,526	0.8	200,630
1974	0	0.0	0	0.0	0	0.0	0
1975	53,447	53.0	46,447	46.1	928	0.9	100,822
1976	119,569	29.1	288,300	70.3	2,478	0.6	410,347
1977	31,530	27.2	84,052	72.4	532	0.5	116,114
1978	28,003	23.0	93,115	76.4	790	0.6	121,908
1979	58,203	55.9	44,051	42.3	1,852	1.8	104,106
1980	412,350	81.0	94,900	18.6	1,615	0.3	508,865
1981	377,168	66.9	184,586	32.7	2,228	0.4	563,982
1982	590,179	53.9	501,282	45.8	3,583	0.3	1,095,044
1983	574,300	73.1	209,600	26.7	1,546	0.2	785,446
1984	245,605	72.9	90,498	26.8	1,017	0.3	337,120
1985	230,432	53.1	198,361	45.7	5,036	1.2	433,829
1986	204,746	58.2	141,299	40.2	5,724	1.6	351,769
1987	190,064	42.9	247,934	55.9	5,143	1.2	443,141
1988	207,049	39.3	305,967	58.1	13,695	2.6	526,711
1989	256,808	56.4	192,650	42.3	5,705	1.3	455,163
1990	322,701	62.2	190,002	36.6	6,036	1.2	518,739
1991	505,790	65.5	256,132	33.1	10,783	1.4	772,705
1992	303,226	71.1	115,401	27.1	7,576	1.8	426,203
1993	399,958	75.1	120,820	22.7	11,469	2.2	532,247
1994	439,863	75.6	129,530	22.2	12,772	2.2	582,165
1995	344,093	64.0	172,715	32.1	20,625	3.8	537,433
1996	261,965	72.8	86,103	23.9	11,752	3.3	359,820
1997	177,417	55.0	127,646	39.6	17,262	5.4	322,325
1998	66,241	27.0	162,566	66.2	16,812	6.8	245,619
1978-97 Average	306,496	62.7	175,130	35.8	7,310	1.5	488,936
1986-95 Average	321,887	63.9	169,697	33.7	11,768	2.3	503,351



Appendix B.26. South Unimak and Shumagin Islands June fisheries, composition of commercial chum salmon harvests in percent by by gear type, and year,1970-98.

Appendix B.27. South Unimak and Shumagin Islands June fisheries, sockeye to chum salmon ratios, from commercial harvests, all gear combined, by year, 1960-98.

	South Unimak			Shumagin Islands			Total		
Year	Sockeye	Chum	Ratio	Sockeye	Chum	Ratio	Sockeye	Chum	Ratio
1960	137,000	84,000	1.63	19,000	11,000	1.73	156,000	95,000	1.64
1961	199,000	157,000	1.27	55,000	36,000	1.53	254,000	193,000	1.32
1962	272,000	209,000	1.30	54,000	61,000	0.89	326,000	270,000	1.21
1963	116,000	36,000	3.22	33,000	36,000	0.92	149,000	72,000	2.07
1964	159,000	161,000	0.99	85,000	67,000	1.27	244,000	228,000	1.07
1965	568,000	121,000	4.69	207,000	45,000	4.60	775,000	166,000	4.67
1966	528,000	215,000	2.46	54,000	17,000	3.18	582,000	232,000	2.51
1967	186,000	73,000	2.55	69,000	51,000	1.35	255,000	124,000	2.06
1968	342,000	115,000	2.97	233,000	51,000	4.57	575,000	166,000	3.46
1969	781,000	254,000	3.07	76,000	13,000	5.85	857,000	267,000	3.21
1970	1,510,399	397,003	3.80	139,543	44,896	3.11	1,649,942	441,899	3.73
1971	422,760	405,311	1.04	39,341	103,886	0.38	462,101	509,197	0.91
1972	426,799	411,019	1.04	74,398	107,810	0.69	501,197	518,829	0.97
1973	222,586	177,720	1.25	22,964	22,910	1.00	245,550	200,630	1.22
1974	0	0		0	0		0	0	
1975	190,774	65,279	2.92	49,306	35,542	1.39	240,080	100,821	2.38
1976	233,211	336,238	0.69	72,016	74,109	0.97	305,227	410,347	0.74
1977	195,680	94,215	2.08	45,912	21,899	2.10	241,592	116,114	2.08
1978	418,959	103,429	4.05	67,876	18,479	3.67	486,835	121,908	3.99
1979	672,293	63,153	10.65	179,139	40,953	4.37	851,432	104,106	8.18
1980	2,731,148	458,499	5.96	475,127	50,366	9.43	3,206,275	508,865	6.30
1981	1,470,563	509,911	2.88	350,572	54,071	6.48	1,821,135	563,982	3.23
1982	1,668,153	933,728	1.79	439,230	164,975	2.66	2,107,383	1,098,703	1.92
1983	1,547,369	616,390	2.51	416,494	169,277	2.46	1,963,863	785,667	2.50
1984	1,131,365	227,913	4.96	256,838	109,207	2.35	1,388,203	337,120	4.12
1985	1,454,969	324,825	4.48	336,431	109,004	3.09	1,791,400	433,829	4.13
1986	315,370	252,721	1.25	156,027	99,048	1.58	471,397	351,769	1.34
1987	653,536	406,077	1.61	140,567	37,064	3.79	794,103	443,141	1.79
1988	474,457	464,765	1.02	282,230	61,946	4.56	756,687	526,711	1.44
1989	1,347,547	407,635	3.31	396,958	47,528	8.35	1,744,505	455,163	3.83
1990	1,090,710	455,238	2.40	255,585	63,501	4.02	1,346,295	518,739	2.60
1991	1,216,035	670,409	1.81	333,272	102,602	3.25	1,549,307	773,011	2.00
1992	2,046,022	323,891	6.32	411,834	102,312	4.03	2,457,856	426,203	5.77
1993	2,366,573	381,941	6.20	607,171	150,306	4.04	2,973,744	532,247	5.59
1994	1,001,250	374,409	2.67	460,013	207,756	2.21	1,461,263	582,165	2.51
1995	1,451,490	342,307	4.24	653,831	195,126	3.35	2,105,321	537,433	3.92
1996	572,495	129,889	4.41	456,475	229,931	1.99	1,028,970	359,820	2.86
1997	1,179,179	196,016	6.02	449,002	126,309	3.55	1,628,181	322,325	5.05
1998	974,628	195,454	4.99	314,097	50,165	6.26	1,288,725	245,619	5.25
1978-97 Average	1,240,474	382,157	3.25	356,234	106,988	3.33	1,596,708	489,145	3.26
1988-97 Average	1,274,576	374,650	3.40	430,637	128,732	3.35	1,705,213	503,382	3.39

Appendix B.28. South Unimak and Shumagin Islands June fisheries, sockeye per chum salmon ratios, from commercial harvests, by gear type and year, 1970-98[a].

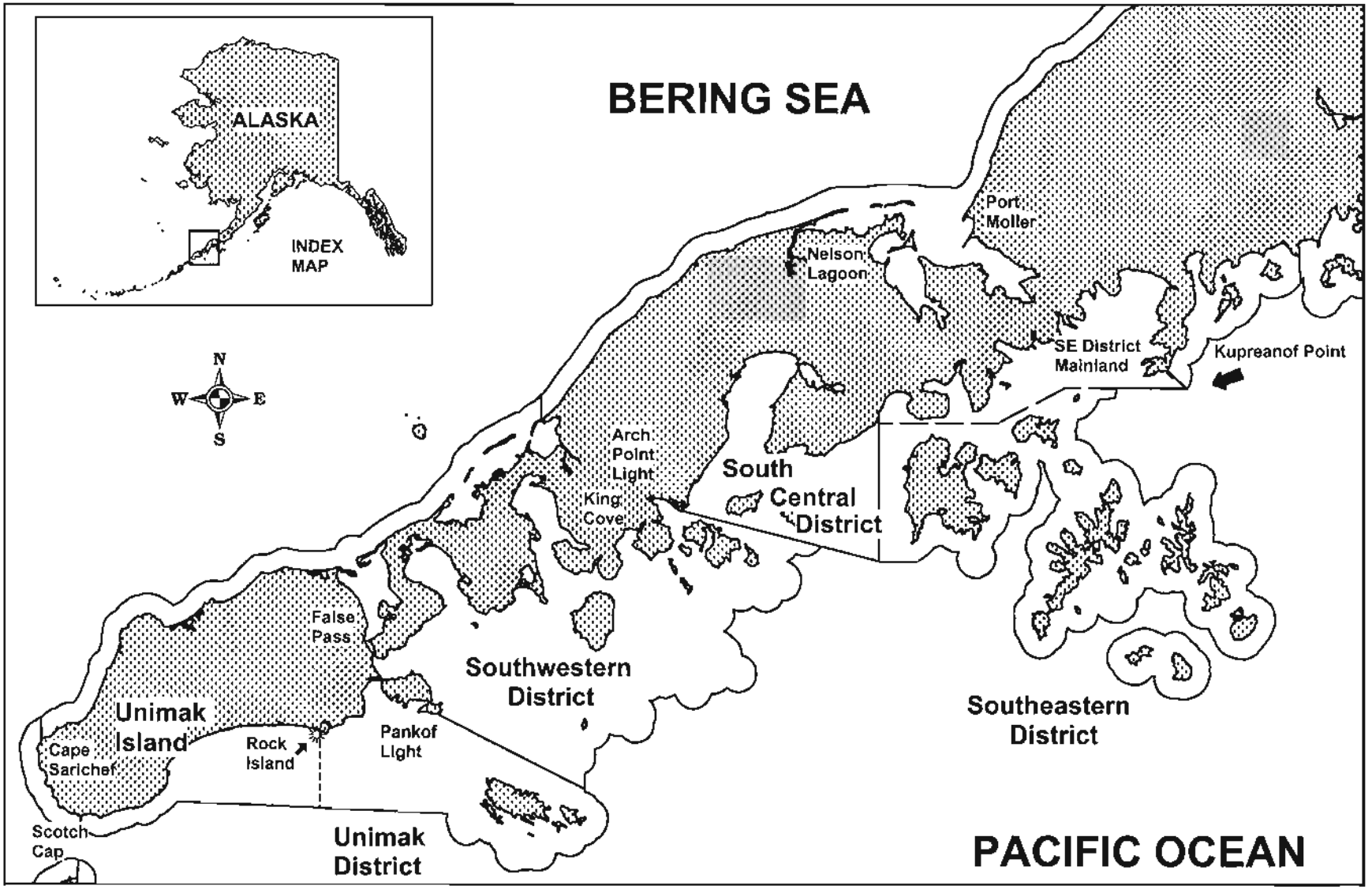
	South Unimak				Shumagin Islands		
Year	Purse Seine	Drift Gillnet	Set Gillnet	Total	Purse Seine	Set Gillnet	Total
1970	5.7	2.9	9.4	3.8	3	4.2	3.1
1971	1.4	1	0	1	0.3	0	0.4
1972	1.4	1	0.4	1	0.7	1.5	0.7
1973	1.8	1.2	4.4	1.3	0.9	2.2	1
1974	0	0	0	0	0	0	0
1975	2.3	3.2	0	2.9	1.4	0	1.4
1976	0.8	0.7	8.3	0.7	1	1.5	1
1977	3	2	5.8	2.1	2	10.6	2.1
1978	7.6	3.6	23.5	4.1	3.7	3	3.7
1979	25	4.5	15.1	10.6	4.2	7.7	4.4
1980	5.7	6.7	55	6	9.4	12.4	9.4
1981	2.3	3.8	21	2.9	6.2	25.4	6.5
1982	2.1	1.5	11.1	1.8	2.7	6.7	2.8
1983	2.3	2.9	14.9	2.5	2.4	16.3	2.5
1984	5.2	4.5	36.4	5	2.2	19.2	2.4
1985	7.1	2.8	14.8	4.5	3	4	3.1
1986	1.3	1.2	6.7	1.2	1.4	4.7	1.6
1987	1.5	1.6	5.2	1.6	3.1	13.8	3.8
1988	0.9	1	5.2	1	4	7.3	4.6
1989	3.8	2.7	12.7	3.3	8.1	11.9	8.4
1990	2.4	2.4	11.3	2.4	3.7	8.6	4
1991	1.6	2.1	6.5	1.8	2.8	9.5	3.2
1992	5.8	6.6	23.3	6.3	3.8	9.9	4
1993	5.5	7.5	8	6.2	3.6	24.1	4
1994	2.4	2.9	10.2	2.7	1.7	15.8	2.2
1995	3.8	4.6	5.6	4.2	2.9	9.9	3.4
1996	3.1	4.9	10.2	4.4	1.6	12	2
1997	3.0	7.0	11.5	6.0	2.9	14.0	3.6
1998	2.6	5.3	7.9	5.0	3.9	14.8	6.3
1978-97 Average	4.6	3.7	15.4	3.9	3.7	11.8	4.0
1988-97 Average	3.2	4.2	10.5	3.8	3.5	12.3	3.9

[a] Gear depth limitations in effect beginning in 1990.

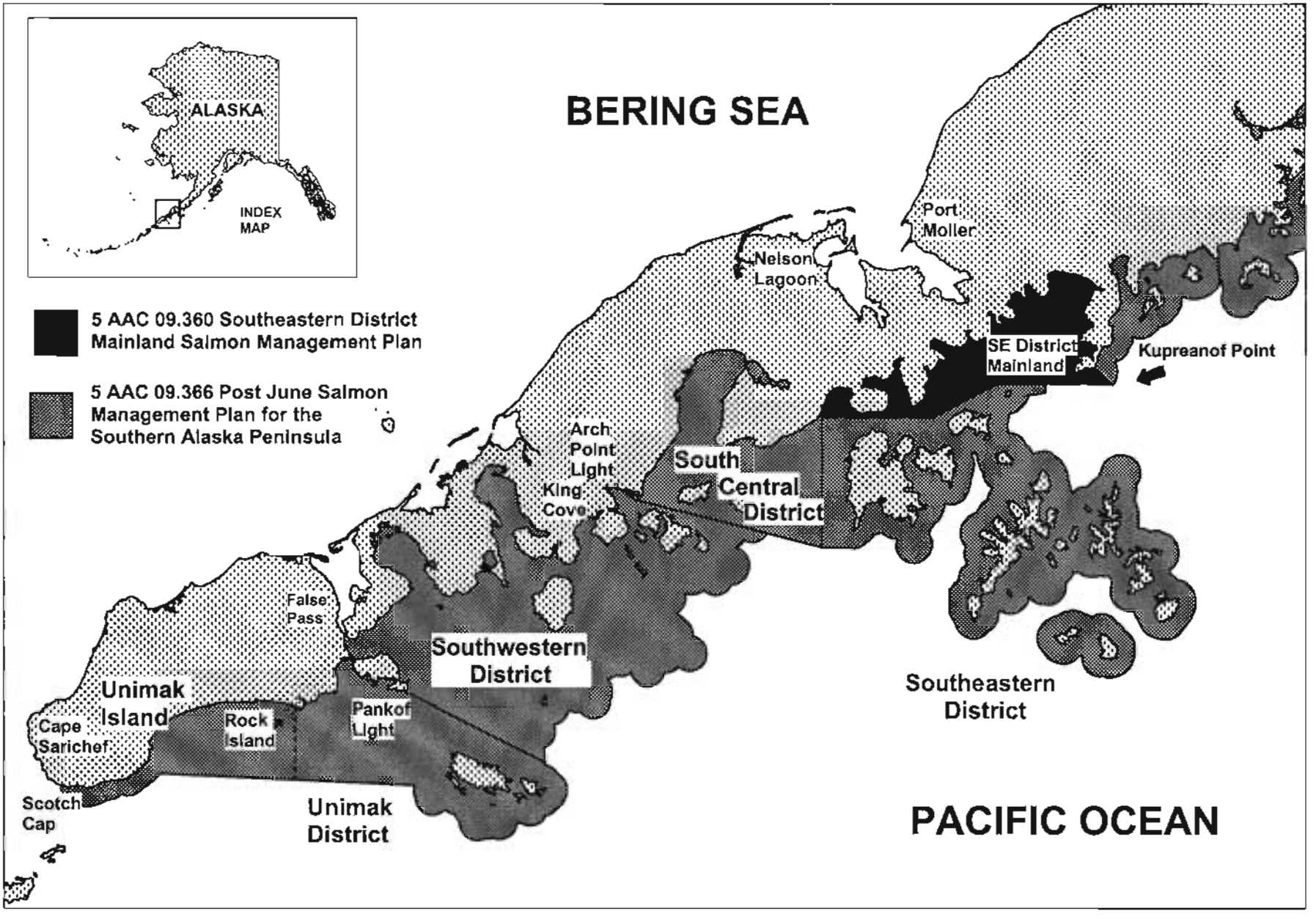
Appendix B.29. Number and types of commercial salmon gear in the South Unimak and Shumagin Islands Section waters during June, by year, 1970-98[a].

	Gear			
Year	Purse Seine	Drift Gillnet	Set Gillnet	Total
1970	39	156	16	211
1971	37	122	8	167
1972	32	150	7	189
1973	16	121	7	144
1974	0	0	0	0
1975	20	81	8	109
1976	25	108	16	149
1977	17	101	13	131
1978	23	120	16	159
1979	40	132	26	198
1980	68	129	29	226
1981	83	135	25	243
1982	90	138	23	251
1983	100	146	35	281
1984	101	147	32	280
1985	107	150	48	305
1986	99	156	43	298
1987	86	144	60	290
1988	90	148	63	301
1989	99	145	61	305
1990	109	153	59	321
1991	112	157	65	334
1992	112	141	68	321
1993	116	140	72	328
1994	114	145	65	324
1995	112	151	68	331
1996	99	147	67	313
1997	81	142	69	292
1998	64	145	74	283
1978-97 Average	92.1	143.3	49.7	285.1
1988-97 Average	104.4	146.9	65.7	317.0

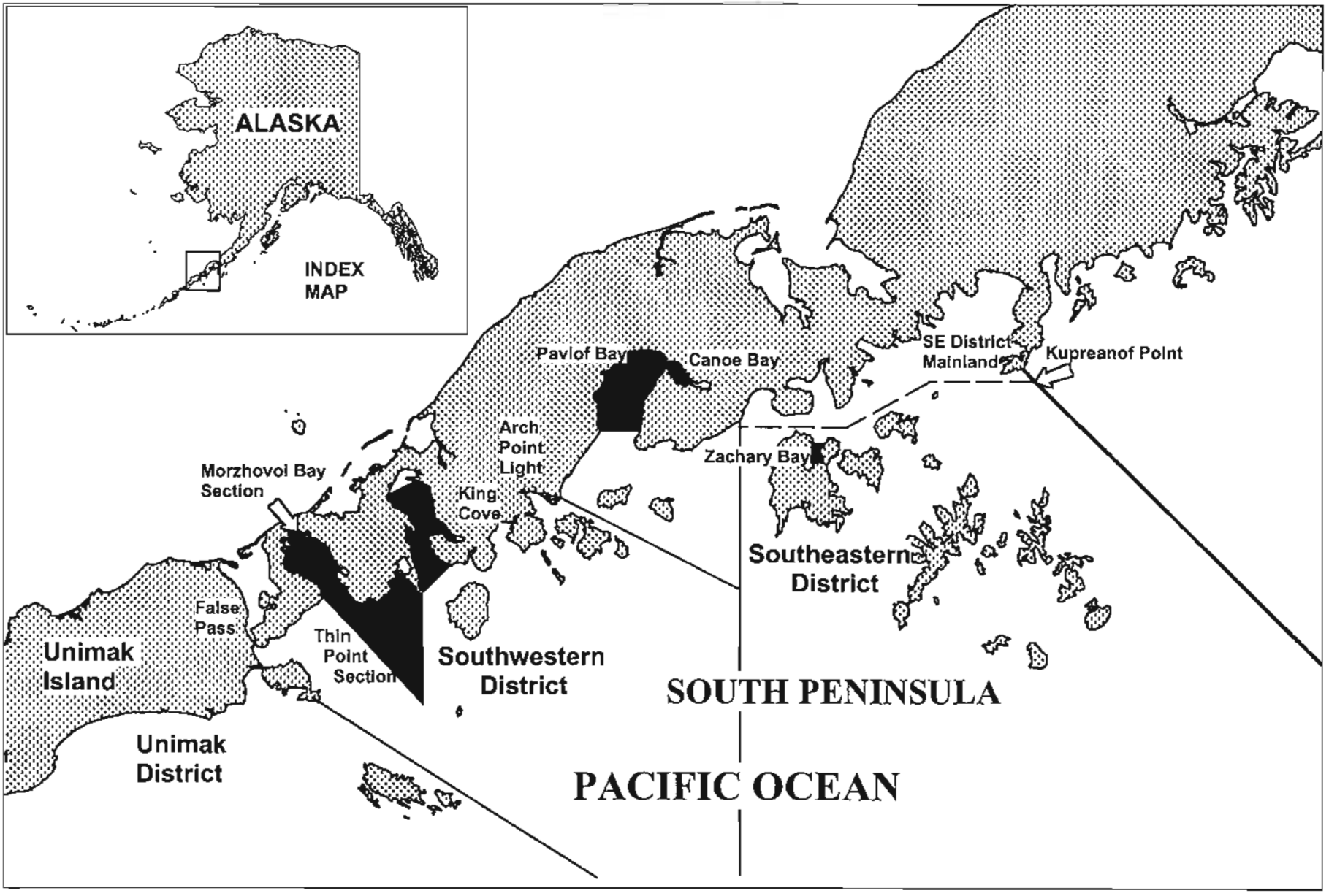
[a] During the peak of the South Peninsula June fishery, (June 12-26), approximately 50 purse seine permit holders fish the Shumagin Islands Section fishery. During the occasions when the South Unimak fishery is open and the Shumagin Islands fishery is closed, nearly the entire purse seine fleet fishes at South Unimak. Drift gillnet effort declines after June 20 as the fleet begins moving to the Port Moller fishery.



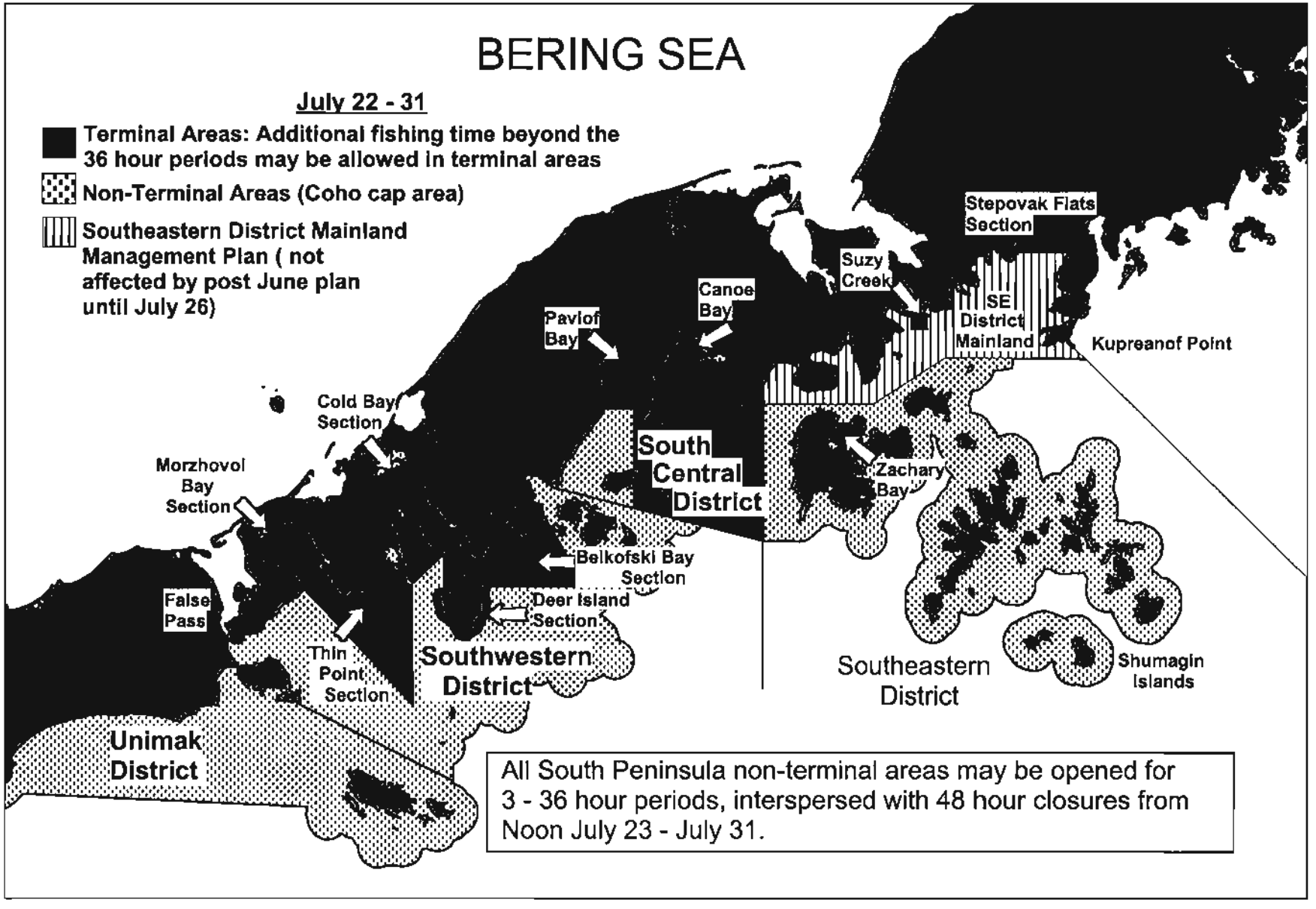
Appendix C.1. Map of the South Peninsula from Kupreanof Point to Scotch Cap with the general post June fishing area (Rock Island-Kupreanof Point) and the Southeastern District Mainland area shown.



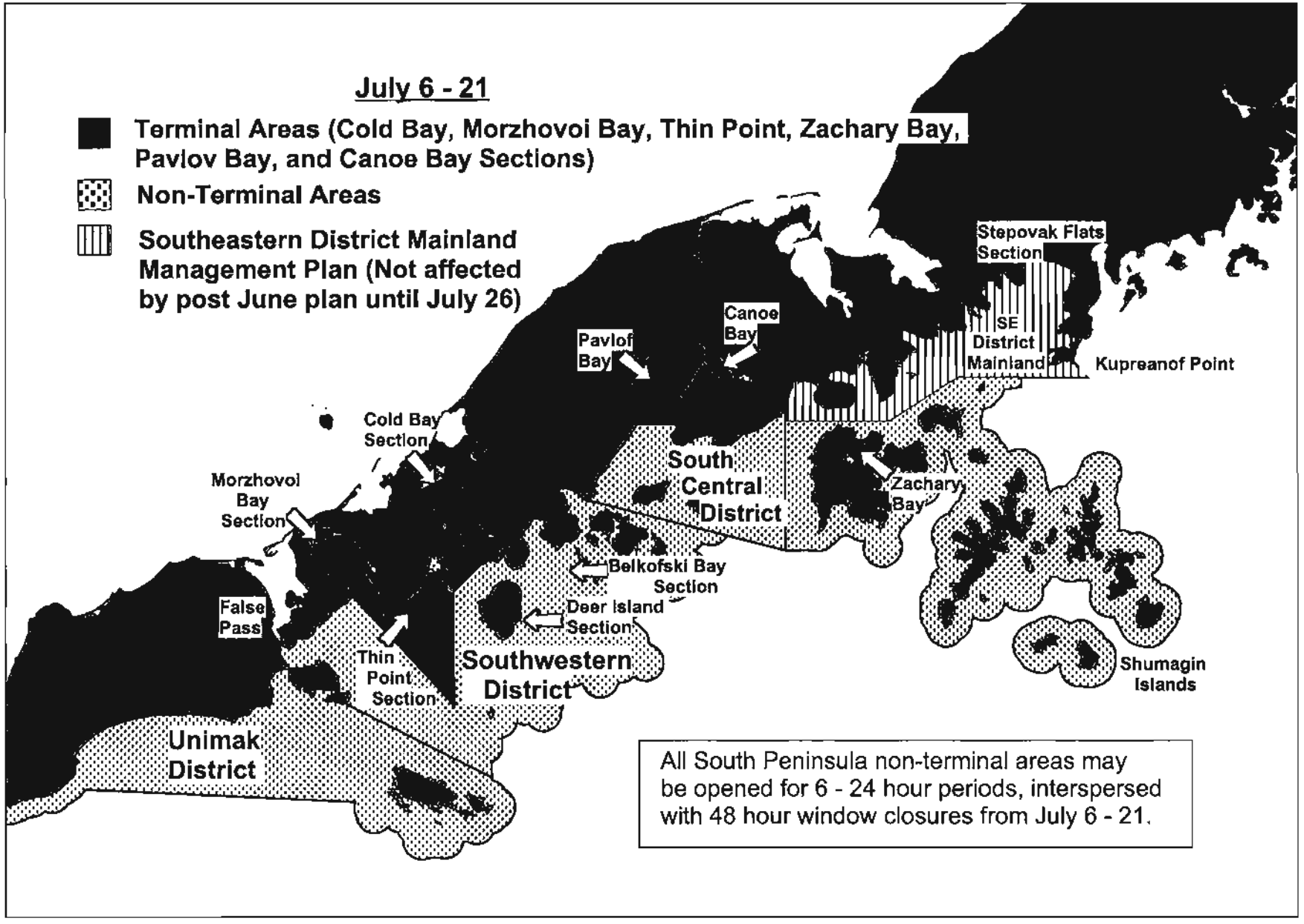
Appendix C.2. Map of the South Peninsula with the areas effected by the Southeastern District Mainland and the post June Salmon Management Plans during 1993-97 defined.



Appendix C.3. Map of the South Peninsula with those areas where fishing time was allowed during July 6-19, 1993-97 defined.



Appendix C. 4. Map of the South Peninsula Post June fishery schedule during July 6-21 defined. Fishing may only be permitted in State waters (within three miles of shore).



Appendix C. 5. Map of the South Peninsula with those areas where additional fishing time may be allowed during July 22-31. Fishing may only be permitted in State waters (within three miles of shore).

Appendix C.6 Summary of the Shumagin Islands Section July test fishery[a] results, 1998.

								Immature Salmon						
		Number of Adult Salmon						Number					Percent	
Date	Number of Sets	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Chum	Total	Sockeye	Chum
1-Jul	0[b]													
	Avg/Set													
2-Jul	5	6	262	16	563	303	1,150	2	10	0	0	12	83.3	0.0
	Avg/Set	1.2	52.4	3.2	112.6	60.6	230	0.4	2	0	0	2.4	83.3	0.0
3-Jul	5	0	449	17	637	196	1,299	3	14	0	0	17	82.4	0.0
	Avg/Set	0	89.8	3.4	127.4	39.2	259.8	0.6	2.8	0.0	0	3.4	82.4	0.0

		Number of Adult Salmon						Number of Immature Salmon				
	Number of Sets	Chinook	Sockeye	Coho	Pink	Chum	Total	Chinook	Sockeye	Coho	Chum	Total
Total	10	6	711	33	1,200	499	2,449	5	24	0	0	29

[a] Test fishing is standardized to purse seine gear, conducting 20 minute sets at Popof Head, Middle Set, and Red Bluff located on Popof Island, additional sets are made if time allows.

[b] The test fishery scheduled for July 1 was cancelled due to gusty winds and high seas.

Appendix C.7. South Peninsula post June commercial salmon harvest, all gear combined, July 6-21, 1998.

	Number of Salmon					
Catch Date	Chinook	Sockeye	Coho	Pink	Chum	Total
Non terminal areas, all gear combined, by day						
6-Jul	208	19,075	1,157	27,942	7,618	56,000
8-Jul	0	126	0	4	2	132
9-Jul	124	32,428	2,401	30,530	10,478	75,961
11-Jul	0	372	3	48	32	455
12-Jul	215	47,400	3,213	42,385	7,716	100,929
14-Jul	0	595	10	89	16	710
15-Jul	188	74,914	6,927	84,391	17,381	183,801
18-Jul	169	71,831	16,840	158,190	16,417	263,447
19-Jul	3	4,079	171	18,687	3,287	26,227
20-Jul	18	2,641	1,103	15,030	657	19,449
21-Jul	126	62,044	8,931	145,365	8,749	225,215
Total	1,051	315,505	40,756	522,661	72,353	952,326
Non terminal areas, all gear combined, by location						
Shumagin Islands	994	203,418	33,208	361,290	57,324	656,234
South Unimak	3	9,982	4,872	5,722	4,544	25,123
Balance of South Peninsula	54	102,105	2,676	155,649	10,485	270,969
Total	1,051	315,505	40,756	522,661	72,353	952,326
Terminal areas (excluding Orzinski Bay), all gear combined, by day						
6-Jul	1	439	0	367	49	856
9-Jul	0	774	3	452	91	1,320
12-Jul	2	3,312	17	1,224	59	4,614
15-Jul	0	1,331	6	1,339	42	2,718
18-Jul	1	3,026	21	2,287	110	5,445
19-Jul	0	6,696	55	15,758	10,559	33,068
20-Jul	0	332	5	14,602	6,091	21,030
21-Jul	0	140	3	70,904	12,392	83,439
Total	4	16,050	110	106,933	29,393	152,490

Appendix C.8. South Peninsula post June commercial salmon harvest, all gear combined, July 22-31, 1998.

	Number of Salmon					
Catch Date	Chinook	Sockeye	Coho	Pink	Chum	Total
Non terminal areas, all gear combined, by day						
22-Jul	0	90	0	105	14	209
23-Jul	21	20,005	3,134	51,225	4,204	78,589
24-Jul	40	49,601	4,855	193,994	10,447	258,937
25-Jul	0	446	8	1,342	62	1,858
26-Jul	2	6,424	340	45,064	813	52,643
27-Jul	83	77,240	13,203	326,664	20,860	438,050
28-Jul	65	30,532	4,977	159,249	7,512	202,335
30-Jul	25	15,244	6,299	187,849	11,906	221,323
31-Jul	60	29,005	9,640	232,979	17,042	288,726
Total	296	228,587	42,456	1,198,471	72,860	1,542,670
Non terminal areas, all gear combined, by location						
Shumagin Islands	150	87,695	15,722	599,599	29,037	732,203
South Unimak	13	11,563	15,510	51,363	10,561	89,010
SEDM July 26-31	116	79,603	6,943	287,823	20,739	395,224
Balance of South Peninsula	17	49,726	4,281	259,686	12,523	326,233
Total	296	228,587	42,456	1,198,471	72,860	1,542,670
Terminal areas (including SEDM terminal areas), all gear combined, by day						
22-Jul	1	589	13	130,137	2,875	133,615
23-Jul	0	1,599	53	125,149	4,927	131,728
24-Jul	1	8,507	172	105,282	1,856	115,818
25-Jul	1	1,622	29	211,026	6,549	219,227
26-Jul	0	1,154	52	164,735	4,735	170,676
27-Jul	1	4,694	64	202,325	2,082	209,166
28-Jul	0	1,499	54	144,916	1,184	147,653
29-Jul	0	4,222	22	135,093	1,019	140,356
30-Jul	0	5,764	10	96,024	5,937	107,735
31-Jul	2	4,728	37	247,051	3,070	254,888
Total	6	34,378	506	1,561,738	34,234	1,630,862

Appendix C.9. South Peninsula (minus the Southeastern District Mainland fishery July 1-25 salmon harvest) post June (July 1-Oct 31) commercial salmon harvest, all gear combined, by species and year, 1970-98.[a]

			Number Of Salmon					
Year	Permits[b]	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
1970	127	1,467	758	44,795	32,340	1,610,724	535,625	2,224,242
1971	175	2,166	1,252	190,632	16,814	1,411,230	838,978	2,458,906
1972	140	848	656	35,120	7,916	55,802	204,113	303,607
1973	115	582	151	37,424	6,340	34,118	87,077	165,110
1974	95	509	532	108,923	9,152	71,459	64,455	254,521
1975	46	65	0	293	3	52,375	29,158	81,829
1976	125	1,102	6	11,674	176	2,324,547	116,355	2,452,758
1977	103	1,131	7	26,545	1,168	1,425,107	119,646	1,572,473
1978	123	2,081	203	61,379	60,417	5,467,134	408,544	5,997,677
1979	165	2,446	972	209,755	350,770	6,365,911	371,358	7,298,766
1980	152	2,646	1,522	310,278	271,738	6,295,345	785,026	7,663,909
1981	168	2,502	4,190	218,667	158,846	4,564,926	1,033,055	5,979,684
1982	183	2,781	2,313	140,487	252,885	4,806,182	1,042,978	6,244,845
1983	201	2,667	11,726	292,536	124,431	2,760,452	816,567	4,005,712
1984	217	3,525	4,290	334,781	306,522	10,469,392	1,176,050	12,291,035
1985	213	2,787	688	272,059	169,137	4,249,809	827,781	5,519,474
1986	202	3,001	3,475	545,160	235,082	3,698,727	1,346,879	5,829,323
1987	233	2,692	3,881	410,755	224,543	1,189,211	911,414	2,739,804
1988	243	4,356	6,797	635,804	502,960	6,767,066	1,307,053	9,219,680
1989	274	3,993	4,106	825,372	440,171	6,879,878	531,759	8,681,286
1990	261	3,257	5,480	875,237	288,728	2,299,161	672,937	4,141,543
1991	234	3,573	2,423	465,874	311,825	9,952,671	788,955	11,521,748
1992	233	3,907	4,003	765,575	414,809	9,101,628	863,505	11,149,520
1993	221	3,086	3,524	497,933	209,816	9,765,709	504,894	10,981,876
1994	213	3,302	1,642	408,089	249,066	6,640,031	1,591,094	8,889,922
1995	207	3,824	2,010	731,651	252,358	16,071,184	1,155,825	18,213,028
1996	180	1,966	1,914	215,721	263,654	1,738,973	379,578	2,599,840
1997	168	1,399	1,206	325,261	110,488	1,681,374	277,559	2,395,888
1998	209	3,975	1,793	764,947	150,735	7,441,311	455,978	8,814,764
1978-92	Average							
	207	3,081	3,738	424,248	274,191	5,657,833	858,924	7,218,934
1993-97	Average							
	198	2,715	2,059	435,731	217,076	7,179,454	781,790	8,616,111

[a] Test fish harvests are not included.

[b] Permits used equals total South Peninsula post June permits.

Appendix C.10. South Peninsula (minus the Southeastern District Mainland fishery July 1-25 salmon harvest) post June (July 1-Oct 31) commercial purse seine salmon harvest by species and year, 1970-98.[a]

			Number Of Salmon					
Year	Permits[b]	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
1970	103	1,244	740	27,052	31,762	1,539,830	494,698	2,094,082
1971	111	1,589	1,199	80,239	16,310	1,403,359	706,117	2,207,224
1972	83	556	641	17,833	7,791	53,173	141,576	221,014
1973	53	324	148	15,384	6,149	31,810	71,951	125,442
1974	46	205	499	48,413	8,020	67,480	47,641	172,053
1975	39	65	0	293	3	52,375	29,158	81,829
1976	85	1,060	5	7,186	16	2,323,868	114,922	2,445,997
1977	82	1,041	6	19,224	94	1,414,119	110,831	1,544,274
1978	99	1,892	193	55,181	57,521	5,439,500	392,981	5,945,376
1979	120	2,123	962	182,426	343,200	6,273,432	344,326	7,144,346
1980	110	2,143	1,491	253,704	248,609	6,202,180	727,957	7,433,941
1981	113	1,892	4,163	151,775	152,928	4,448,871	954,350	5,712,087
1982	105	1,897	2,166	85,433	218,489	4,661,859	959,068	5,927,015
1983	114	1,707	11,530	171,656	107,630	2,678,732	742,126	3,711,674
1984	116	2,229	3,992	212,994	244,425	10,170,132	1,077,333	11,708,876
1985	119	1,595	605	176,343	128,206	4,029,768	751,108	5,086,030
1986	114	1,791	3,353	402,264	203,184	3,571,538	1,269,985	5,450,324
1987	111	1,280	3,681	238,196	169,668	1,134,444	803,076	2,349,065
1988	111	2,130	6,456	419,896	388,136	6,346,884	1,165,776	8,327,148
1989	117	1,590	3,526	428,218	304,437	6,442,898	412,857	7,591,936
1990	117	1,330	5,112	445,970	208,402	2,211,420	566,101	3,437,005
1991	118	1,634	1,910	218,379	198,575	9,595,873	630,651	10,645,388
1992	115	1,847	3,720	442,395	294,080	8,612,123	762,107	10,114,425
1993	101	1,512	3,130	264,377	145,022	9,431,142	442,354	10,286,025
1994	114	1,519	1,321	147,337	161,903	6,317,708	1,458,898	8,087,167
1995	112	1,980	1,503	348,822	183,870	15,365,091	1,025,881	16,925,167
1996	85	661	1,766	72,955	196,823	1,504,565	310,738	2,086,847
1997	71	379	1,117	112,825	46,763	1,623,170	239,125	2,023,000
1998	78	1,273	1,558	338,672	81,685	6,711,852	327,177	7,460,944
1978-92 Average	113	1,805	3,524	258,989	217,833	5,454,644	770,653	6,705,642
1993-97 Average	97	1,210	1,767	189,263	146,876	6,848,335	695,399	7,881,641

[a] Test fish harvests are not included.

[b] Permits used equals total South Peninsula post June permits.

Appendix C.11. South Peninsula (minus the Southeastern District Mainland fishery July 1-25 salmon harvest) post June (July 1-Oct 31) commerical drift gillnet salmon harvest by species and year, 1970-98.

			Number Of Salmon					
Year	Permits[a]	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
1970	56	152	19	15,364	56	62,666	31,764	109,869
1971	107	475	47	105,274	356	1,983	124,539	232,199
1972	66	230	8	15,580	59	129	55,615	71,391
1973	77	168	1	16,246	43	545	10,464	27,299
1974	46	217	22	52,481	1,110	1,626	13,998	69,237
1975 [b]	*	*	*	*	*	*	*	*
1976	22	25	1	2,649	0	65	1,390	4,105
1977 [b]	*	*	*	*	*	*	*	*
1978 [b]	*	*	*	*	*	*	*	*
1979	16	27	2	1,097	33	16,635	2,834	20,601
1980 [b]	*	*	*	*	*	*	*	*
1981	7	8	0	1,388	10	7,200	4,821	13,419
1982	29	159	90	13,472	19,202	50,748	17,406	100,918
1983	30	128	78	19,005	3,658	5,586	19,913	48,240
1984	37	315	161	26,698	37,805	78,575	30,941	174,180
1985	33	185	24	18,441	18,033	21,803	18,521	76,822
1986	29	243	24	30,261	18,901	27,772	22,294	99,252
1987	54	285	64	39,360	30,445	3,025	43,115	116,009
1988	63	582	142	44,657	75,445	145,106	68,066	333,416
1989	81	590	295	86,343	88,376	85,946	44,605	305,565
1990	64	533	122	132,907	42,659	32,089	46,700	254,477
1991	43	237	62	21,721	51,215	26,740	25,465	125,203
1992	42	312	47	44,935	58,621	91,106	29,252	223,961
1993	41	215	111	23,421	26,364	12,037	17,871	79,804
1994	24	160	25	18,134	24,980	53,701	26,262	123,102
1995	18	126	34	21,505	26,020	41,868	22,517	111,944
1996	17	88	28	5,776	22,561	17,593	14,306	60,264
1997	24	121	18	24,278	19,855	14,435	13,278	71,864
1998	49	416	18	35,569	30,219	192,352	35,723	293,881
1978-92	Average 35	240	74	32,046	29,627	39,490	24,929	126,166
1993-97	Average 25	142	43	18,623	23,956	27,927	18,847	89,396

[a] Permits used equals total South Peninsula post June permits.

[b] Confidentiality requirements prohibit reporting harvest.

Appendix C.12. South Peninsula (minus the Southeastern District Mainland fishery July 1-25 salmon harvest) post June (July 1-Oct 31) commercial set gillnet salmon harvest by species and year, 1970-98.

			Number Of Salmon					
Year	Permits[a]	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
1970	25	80	0	2,688	522	10,712	9,710	23,632
1971	24	104	6	5,119	148	5,888	8,322	19,483
1972	22	62	7	1,707	66	2,500	6,922	11,202
1973	25	90	2	5,794	148	1,763	4,662	12,369
1974	40	87	11	8,029	22	2,353	2,816	13,231
1975	7	0	0	0	0	0	0	0
1976	20	17	0	1,839	160	614	43	2,656
1977	23	90	1	7,321	1,074	10,988	8,815	28,199
1978	26	189	10	6,198	2,896	27,634	15,563	52,301
1979	38	299	8	26,232	7,537	75,844	24,198	133,819
1980	42	501	31	56,176	23,129	93,153	57,061	229,550
1981	48	603	27	65,504	5,908	108,855	73,884	254,178
1982	51	725	57	41,582	15,194	93,575	66,504	216,912
1983	57	832	118	101,875	13,143	76,134	54,528	245,798
1984	64	981	137	95,089	24,292	220,685	67,776	407,979
1985	61	1,007	59	77,275	22,898	198,238	58,152	356,622
1986	59	967	98	112,635	12,997	99,417	54,600	279,747
1987	68	1,127	136	133,199	24,430	51,742	65,223	274,730
1988	69	1,644	199	171,251	39,379	275,076	73,211	559,116
1989	76	1,813	285	310,811	47,358	351,034	74,297	783,785
1990	80	1,394	246	296,360	37,667	55,652	60,136	450,061
1991	73	1,702	451	225,774	62,035	330,058	132,839	751,157
1992	76	1,748	236	278,245	62,108	398,399	72,146	811,134
1993	79	1,359	283	210,135	38,430	322,530	44,669	616,047
1994	75	1,623	296	242,618	62,183	268,622	105,934	679,653
1995	77	1,718	473	361,324	42,468	664,225	107,427	1,175,917
1996	78	1,217	120	136,990	44,270	216,815	54,534	452,729
1997	73	899	71	188,158	43,870	43,769	25,156	301,024
1998	82	2,286	217	390,706	38,831	537,107	93,078	1,059,939
1978-92 Average	59	1,035	140	133,214	26,731	163,700	63,341	387,126
1993-97 Average	76	1,363	249	227,845	46,244	303,192	67,544	645,074

[a] Permits used equals total South Peninsula post June permits.

Appendix C.13. Shumagin Islands Section post June commercial salmon harvest all gear combined, by species and year, July 1-October 31, 1970-98.

			Number of Salmon					
Year	Permit	Landing	Chinook	Sockeye	Coho	Pink	Chum	Total
1970	50	512	735	22,219	30,065	486,657	116,392	656,068
1971	52	737	1,135	45,681	16,067	471,965	300,509	835,357
1972	44	431	619	18,070	7,686	34,047	97,606	158,028
1973	28	259	148	19,484	6,068	19,315	43,154	88,169
1974	37	205	507	43,484	8,031	35,706	37,323	125,051
1975 [a]	*	*	*	*	*	*	*	*
1976	42	127	0	3	3	303,422	7,968	311,396
1977 [a]	*	*	*	*	*	*	*	*
1978	69	643	189	51,261	40,433	1,213,961	164,930	1,470,774
1979	91	956	910	145,369	313,573	2,071,045	93,527	2,624,424
1980	86	1,239	1,456	235,438	233,501	1,625,784	283,432	2,379,611
1981	92	893	4,038	118,139	126,955	1,364,370	309,726	1,923,228
1982	89	964	1,969	67,269	207,273	1,638,712	295,325	2,210,548
1983	92	864	6,547	108,365	92,403	900,726	220,824	1,328,865
1984	90	858	3,222	96,149	211,648	1,786,737	259,497	2,357,253
1985	109	932	511	107,792	113,193	1,627,627	205,649	2,054,772
1986	99	1,352	3,149	341,966	201,518	1,497,905	557,407	2,601,945
1987	120	1,210	3,388	248,934	157,936	542,383	310,540	1,263,181
1988	120	2,041	5,955	416,917	351,118	3,396,332	415,308	4,585,630
1989	140	1,565	2,446	416,425	248,760	2,023,468	238,627	2,929,726
1990	138	1,439	4,916	423,253	182,128	1,102,353	344,096	2,056,746
1991	135	1,318	1,396	212,091	142,846	2,140,838	211,667	2,708,838
1992	128	1,424	2,657	250,306	230,425	2,287,338	233,954	3,004,680
1993	110	1,007	2,334	195,451	124,423	3,326,530	121,102	3,769,840
1994	115	986	949	152,702	147,602	1,126,688	249,939	1,677,880
1995	116	1,274	1,674	295,690	161,292	5,325,186	302,541	6,086,383
1996	103	852	1,578	93,161	203,004	703,409	134,780	1,135,932
1997	79	355	974	107,752	43,854	184,751	26,079	363,410
1998	107	1,475	1,505	353,650	83,032	1,900,291	133,114	2,471,592
Average 1978-97	106	1,109	2,513	204,222	176,694	1,794,307	248,948	2,426,683
Average 1988-97	118	1,226	2,488	256,375	183,545	2,161,689	227,809	2,831,907
Average 1978-92	107	1,180	2,850	215,978	190,247	1,681,305	276,301	2,366,681
Average 1993-97	105	895	1,502	168,951	136,035	2,133,313	166,888	2,606,689

[a] Confidentiality requirements prohibit reporting of harvest.

Appendix C.14. Shumagin Islands Section post June commercial purse seine salmon harvest, by species and year, July 1-October 31, 1970-98.

			Number of Salmon					
Year	Permit	Landing	Chinook	Sockeye	Coho	Pink	Chum	Total
1970	45	456	735	20,616	29,869	480,668	112,328	644,216
1971	44	649	1,129	40,997	15,946	469,438	294,326	821,836
1972	39	388	614	16,861	7,661	33,387	94,827	153,350
1973	21	189	147	14,493	5,960	18,043	40,904	79,547
1974	26	148	497	39,955	8,011	34,796	35,737	118,996
1975 [a]	*	*	*	*	*	*	*	*
1976	42	127	0	3	3	303,422	7,968	311,396
1977 [a]	*	*	*	*	*	*	*	*
1978	51	513	182	46,478	39,807	1,198,020	153,278	1,437,765
1979	69	820	906	133,849	310,338	2,037,038	88,706	2,570,837
1980	65	1,056	1,451	215,842	232,103	1,608,291	268,704	2,326,391
1981	69	739	4,031	104,618	125,838	1,330,047	298,336	1,862,870
1982	65	812	1,953	61,306	204,187	1,617,128	283,527	2,168,101
1983	69	738	6,513	96,513	90,220	891,237	215,265	1,299,748
1984	65	603	3,161	75,357	207,577	1,730,094	245,951	2,262,140
1985	66	671	490	92,645	109,746	1,564,791	193,894	1,961,566
1986	64	911	3,102	282,235	198,490	1,462,948	537,754	2,484,529
1987	72	676	3,337	183,576	152,025	521,872	285,677	1,146,487
1988	72	1,140	5,862	326,863	340,745	3,221,597	385,772	4,280,839
1989	83	641	2,315	251,880	228,086	1,872,541	211,173	2,565,995
1990	82	723	4,748	260,225	168,410	1,071,568	308,035	1,812,986
1991	76	476	1,099	87,380	125,881	2,021,704	161,630	2,397,694
1992	73	579	2,507	118,420	209,569	2,070,119	201,258	2,601,873
1993	61	486	2,263	121,014	109,888	3,186,831	108,498	3,528,494
1994	63	359	854	65,989	123,462	1,007,533	216,512	1,414,350
1995	70	675	1,289	193,711	146,752	5,024,967	275,345	5,642,064
1996	53	392	1,499	42,432	189,582	617,271	114,945	965,729
1997	40	82	948	52,970	35,359	172,939	22,571	284,787
1998	46	439	1,352	187,945	70,585	1,686,051	97,905	2,043,838
Average 1978-97	66	655	2,426	140,665	167,403	1,711,427	228,842	2,250,762
Average 1988-97	67	555	2,338	152,088	167,773	2,026,707	200,574	2,549,481
Average 1978-92	69	740	2,777	155,812	182,868	1,614,600	255,931	2,211,988
Average 1993-97	57	399	1,371	95,223	121,009	2,001,908	147,574	2,367,085

[a] Confidentiality requirements prohibit reporting harvest.

Appendix C.15. Shumagin Islands Section post June commercial set gillnet salmon harvest, by species and year, July 1-October 31, 1970-98.

			Number of Salmon					
Year	Permit	Landing	Chinook	Sockeye	Coho	Pink	Chum	Total
1970	11	48	0	1,394	188	5,183	3,224	9,989
1971	10	88	6	4,684	121	2,527	6,183	13,521
1972	6	43	5	1,209	25	660	2,779	4,678
1973	9	70	1	4,991	108	1,272	2,250	8,622
1974	18	57	10	3,529	20	910	1,586	6,055
1975 [a]	*	*	*	*	*	*	*	*
1976 [a]	*	*	*	*	*	*	*	*
1977 [a]	*	*	*	*	*	*	*	*
1978	19	130	7	4,783	626	15,941	11,652	33,009
1979	24	135	4	11,520	3,235	32,537	4,821	52,117
1980	21	183	5	19,596	1,398	17,493	14,728	53,220
1981	23	154	7	13,521	1,117	34,323	11,390	60,358
1982	23	149	16	5,951	3,086	20,566	9,979	39,598
1983	23	126	34	11,852	2,183	9,489	5,559	29,117
1984	25	255	61	20,792	4,071	56,643	13,546	95,113
1985	43	261	21	15,147	3,447	62,836	11,755	93,206
1986	35	441	47	59,731	3,028	34,957	19,653	117,416
1987	48	534	51	65,358	5,911	20,511	24,863	116,694
1988	48	901	93	90,054	10,373	174,735	29,536	304,791
1989	57	924	131	164,545	20,674	150,927	27,454	363,731
1990	56	716	168	163,028	13,718	30,785	36,061	243,760
1991	59	842	297	124,711	16,965	119,134	50,037	311,144
1992	55	845	150	131,886	20,856	217,219	32,696	402,807
1993	49	521	71	74,437	14,535	139,699	12,604	241,346
1994	52	627	95	86,713	24,140	119,155	33,427	263,530
1995	46	599	385	101,979	14,540	300,219	27,196	444,319
1996	50	460	79	50,729	13,422	86,138	19,835	170,203
1997	39	273	26	54,782	8,495	11,812	3,508	78,623
1998	61	1,036	153	165,705	12,447	214,240	35,209	427,754
Average 1978-97	40	454	87	63,556	9,291	82,756	20,015	175,705
Average 1988-97	51	671	150	104,286	15,772	134,982	27,235	282,425
Average 1978-92	37	440	73	60,165	7,379	66,540	20,249	154,405
Average 1993-97	47	496	131	73,728	15,026	131,405	19,314	239,604

[a] Confidentiality requirements prohibit reporting harvest.

Appendix C.16. Southeastern District (minus the Southeastern District Mainland fishery July 1 -25 salmon harvest) post June commercial salmon harvest, all gear combined, by species and year, July 1-October 31, 1970-98.

			Number of Salmon					
Year	Permit[a]	Landing	Chinook	Sockeye	Coho	Pink	Chum	Total
1970	62	638	736	23,040	31,195	657,415	151,122	863,508
1971	63	1,017	1,190	55,178	16,332	818,831	439,095	1,330,626
1972	58	489	650	22,875	7,859	44,190	115,152	190,726
1973	38	322	149	25,110	6,272	27,143	49,900	108,574
1974	53	339	522	71,648	8,128	67,791	50,615	198,704
1975	13	11	0	213	34	237	274	758
1976	64	295	0	3,665	201	579,646	31,103	614,615
1977	60	252	11	20,407	2,076	205,572	20,582	248,648
1978	77	916	198	58,137	47,081	1,899,575	226,733	2,231,724
1979	104	1,322	951	182,949	332,572	3,257,929	167,441	3,941,842
1980	103	1,679	1,515	292,025	253,680	2,024,405	443,529	3,015,154
1981	107	1,522	4,086	176,792	137,342	2,476,913	554,649	3,349,782
1982	109	1,588	2,116	98,555	223,931	2,371,602	549,297	3,245,501
1983	114	1,780	7,566	280,995	109,633	1,073,412	388,933	1,860,539
1984	123	1,962	3,759	263,720	240,108	3,124,821	423,861	4,056,269
1985	119	1,677	556	170,640	128,289	2,604,099	296,027	3,199,611
1986	115	1,887	3,337	403,744	205,988	1,952,743	679,646	3,245,458
1987	134	1,777	3,624	303,610	181,894	919,099	533,817	1,942,044
1988	127	2,788	6,096	500,764	390,211	4,491,452	607,241	5,995,764
1989	145	2,587	3,518	609,495	321,855	4,818,537	364,236	6,117,641
1990	149	2,133	5,305	615,501	222,923	1,323,270	468,738	2,635,737
1991	142	2,200	1,845	319,019	191,333	4,235,266	394,708	5,142,171
1992	135	2,205	3,118	362,056	285,360	3,268,497	318,082	4,237,113
1993	128	1,926	3,005	315,539	157,250	5,909,612	177,831	6,563,237
1994	134	1,716	1,277	261,324	201,433	1,451,225	367,849	2,283,108
1995	132	2,273	1,841	534,803	207,284	7,380,863	466,744	8,591,535
1996	121	1,444	1,830	170,088	218,649	903,433	180,026	1,474,026
1997	105	832	1,119	210,434	66,120	251,894	39,947	569,514
1998	117	2,484	1,675	515,309	104,035	2,724,915	192,853	3,538,787
Average 1978-97	121	1,811	2,833	306,510	206,147	2,786,932	382,467	3,684,889
Average 1988-97	132	2,010	2,895	389,902	226,242	3,403,405	338,540	4,360,985
Average 1978-92	120	1,868	3,173	309,200	218,147	2,656,108	427,796	3,614,423
Average 1993-97	124	1,638	1,814	298,438	170,147	3,179,405	246,479	3,896,284

[a] Permits used equals total Southeastern District post June permits.

Appendix C.17. Southeastern District (minus the Southeastern District Mainland fishery July 1 -25 salmon harvest) post June commercial purse seine salmon harvest by species and year, July 1-October 31, 1970-98.

			Number of Salmon					
Year	Permit[a]	Landing	Chinook	Sockeye	Coho	Pink	Chum	Total
1970	51	561	736	20,939	30,680	646,994	141,410	840,759
1971	53	876	1,181	43,119	16,176	812,733	429,103	1,302,312
1972	48	423	638	17,930	7,772	41,836	110,095	178,271
1973	26	206	148	15,002	6,139	25,154	45,689	92,132
1974	34	192	507	48,446	8,081	63,465	47,328	167,827
1975	6	9	0	91	34	218	178	521
1976	46	261	0	378	41	577,731	30,513	608,663
1977	39	152	9	9,063	1,007	203,231	16,288	229,598
1978	53	697	188	49,038	44,166	1,877,915	209,609	2,180,916
1979	71	1,057	943	159,011	325,170	3,191,433	149,140	3,825,697
1980	70	1,190	1,484	231,028	237,875	1,978,672	398,984	2,848,043
1981	69	1,041	4,066	117,562	132,809	2,377,393	506,979	3,138,809
1982	30	1,022	2,076	62,167	211,218	2,294,869	496,592	3,066,922
1983	69	910	7,451	150,376	96,740	1,037,539	341,163	1,633,269
1984	70	865	3,540	127,214	224,910	2,944,465	365,207	3,665,336
1985	69	879	523	110,278	118,282	2,420,288	259,222	2,908,593
1986	67	1,036	3,262	293,732	200,083	1,866,313	639,314	3,002,704
1987	78	828	3,523	192,586	164,446	873,606	482,187	1,716,348
1988	72	1,355	5,966	355,921	369,650	4,239,185	548,097	5,518,819
1989	84	1,025	3,334	340,182	291,212	4,497,713	301,198	5,433,639
1990	82	893	5,056	342,211	201,430	1,282,447	415,383	2,246,527
1991	78	753	1,475	133,838	162,262	3,948,627	283,653	4,529,855
1992	74	743	2,900	160,881	245,348	2,920,709	261,568	3,591,406
1993	64	767	2,782	156,008	131,366	5,607,685	141,351	6,039,192
1994	72	465	1,022	90,821	153,006	1,264,245	296,870	1,805,964
1995	72	898	1,420	256,585	173,599	6,828,115	383,814	7,643,533
1996	52	437	1,722	58,261	190,635	732,200	137,242	1,120,060
1997	43	114	1,071	69,783	40,472	230,079	28,163	369,568
1998	48	564	1,474	219,047	76,768	2,332,586	118,094	2,747,969
Average 1978-97	67	849	2,690	172,874	185,734	2,620,675	332,287	3,314,260
Average 1988-97	69	745	2,675	196,449	195,898	3,155,101	279,734	3,829,856
Average 1978-92	69	953	3,052	188,402	201,707	2,516,745	377,220	3,287,126
Average 1993-97	61	536	1,603	126,292	137,816	2,932,465	197,488	3,395,663

[a] Permits equals total Southeastern District post June permits.

Appendix C.18. Southeastern District (minus the Southeastern District Mainland fishery July 1 -25 salmon harvest) post June commercial set gillnet salmon harvest by species and year, July 1-October 31, 1970-98.

			Number of Salmon					
Year	Permit[a]	Landing	Chinook	Sockeye	Coho	Pink	Chum	Total
1970	25	77	0	2,101	515	10,421	9,712	22,749
1971	22	141	9	12,059	156	6,098	9,992	28,314
1972	16	66	12	4,945	87	2,354	5,057	12,455
1973	21	116	1	10,108	133	1,989	4,211	16,442
1974	35	147	15	23,202	47	4,326	3,287	30,877
1975	7	2	0	122	0	19	96	237
1976	20	34	0	3,287	160	1,915	590	5,952
1977	21	100	2	11,344	1,069	2,341	4,294	19,050
1978	25	219	10	9,099	2,915	21,660	17,124	50,808
1979	36	265	8	23,938	7,402	66,496	18,301	116,145
1980	35	489	31	60,997	15,805	45,733	44,545	167,111
1981	38	481	20	59,230	4,533	99,520	47,670	210,973
1982	41	566	40	36,388	12,713	76,733	52,705	178,579
1983	45	870	115	130,619	12,893	35,873	47,770	227,270
1984	53	1,097	219	136,506	15,198	180,356	58,654	390,933
1985	50	798	33	60,362	10,007	183,811	36,805	291,018
1986	48	851	75	110,012	5,905	86,430	40,332	242,754
1987	56	949	101	111,024	17,448	45,493	51,630	225,696
1988	55	1,433	130	144,843	20,561	252,267	59,144	476,945
1989	61	1,562	184	269,313	30,643	320,824	63,038	684,002
1990	67	1,240	249	273,290	21,493	40,823	53,355	389,210
1991	64	1,447	370	185,181	29,071	286,639	111,055	612,316
1992	61	1,462	218	201,175	40,012	347,788	56,514	645,707
1993	64	1,159	223	159,531	25,884	301,927	36,480	524,045
1994	62	1,251	255	170,503	48,427	186,980	70,979	477,144
1995	60	1,375	421	278,218	33,685	552,748	82,930	948,002
1996	69	1,007	108	111,827	28,014	171,233	42,784	353,966
1997	62	718	48	140,651	25,648	21,815	11,784	199,946
1998	69	1,920	201	296,262	27,267	392,329	74,759	790,818
Average 1978-97	53	962	143	133,635	20,413	166,257	50,180	370,629
Average 1988-97	63	1,265	221	193,453	30,344	248,304	58,806	531,128
Average 1978-92	49	915	120	120,798	16,440	139,363	50,576	327,298
Average 1993-97	63	1,102	211	172,146	32,332	246,941	48,991	500,621

[a] Permits used equals total Southeastern District post June permits.

Appendix C.19. South Central District post June commercial salmon harvest all gear combined, by species and year, July 1-October 31, 1970-98.

			Number of Salmon					
Year	Permit	Landing	Chinook	Sockeye	Coho	Pink	Chum	Total
1970	63	545	1	897	145	703,145	319,249	1,023,437
1971	57	511	12	1,110	72	505,920	201,193	708,307
1972	31	106	8	155	2	7,893	30,340	38,398
1973	28	115	0	90	103	6,473	26,151	32,817
1974	16	46	1	4,461	2	11,348	2,262	18,074
1975	32	45	0	53	3	27,032	28,649	55,737
1976	66	719	3	4,419	12	1,457,025	73,604	1,535,063
1977	86	885	7	9,022	15	992,852	87,468	1,089,364
1978	80	909	11	2,604	1,717	2,261,341	107,569	2,373,242
1979	85	623	6	4,639	4,213	1,597,090	105,647	1,711,595
1980	55	298	11	3,507	1,374	490,186	191,080	686,158
1981	95	625	15	12,001	1,714	1,921,088	240,596	2,175,414
1982	68	534	26	3,130	3,486	1,560,109	240,172	1,806,923
1983	92	562	212	10,776	3,365	1,166,003	128,871	1,309,227
1984	94	694	312	22,687	3,471	3,447,090	311,193	3,784,753
1985	59	302	46	11,701	987	678,418	165,893	857,045
1986	61	372	33	49,266	1,164	1,078,410	254,835	1,383,708
1987	84	346	104	39,209	1,237	222,080	198,350	460,980
1988	43	216	282	48,968	3,696	123,343	155,378	331,667
1989	75	227	95	58,209	3,642	550,192	49,861	661,999
1990	72	214	126	62,040	3,767	382,065	60,370	508,368
1991	92	433	202	44,277	9,259	3,270,646	156,552	3,480,936
1992	99	431	483	160,039	22,071	1,566,809	253,811	2,003,213
1993	79	286	115	35,999	3,829	1,502,663	143,660	1,686,266
1994	85	377	130	34,188	2,844	1,681,569	317,664	2,036,395
1995	93	506	41	67,878	3,111	3,925,189	176,827	4,173,046
1996	39	146	14	19,945	1,620	537,391	70,607	629,577
1997	55	153	45	42,992	4,440	559,879	55,050	662,406
1998	68	452	46	72,419	2,154	2,715,694	90,080	2,880,393
Average 1978-97	75	413	115	36,703	4,050	1,426,078	169,199	1,636,146
Average 1988-97	73	299	153	57,454	5,828	1,409,975	143,978	1,617,387
Average 1978-92	77	452	131	35,537	4,344	1,354,325	174,679	1,569,015
Average 1993-97	70	294	69	40,200	3,169	1,641,338	152,762	1,837,538

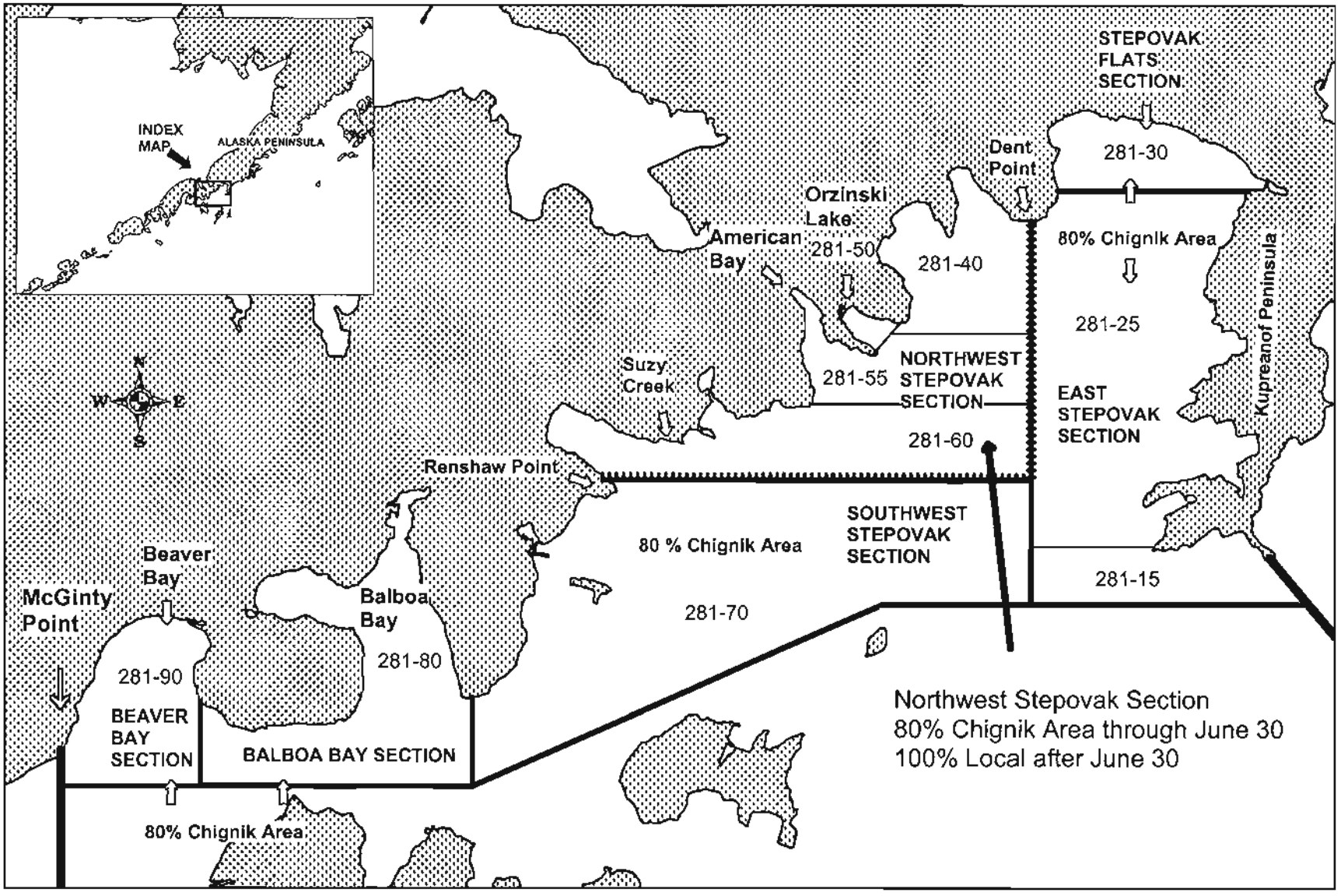
Appendix C.20. Southwestern District post June commercial salmon harvest all gear combined, by species and year, July 1-October 31, 1970-98.

			Number of Salmon					
Year	Permit	Landing	Chinook	Sockeye	Coho	Pink	Chum	Total
1970	66	273	17	18,242	1,000	248,158	62,708	330,125
1971	102	473	31	44,138	428	209,313	103,874	357,784
1972	53	144	4	4,605	59	6,815	16,177	27,660
1973	68	161	2	14,631	54	1,984	8,965	25,636
1974	48	240	24	59,789	1,119	4,650	15,317	80,899
1975	18	20	0	240	0	25,343	509	26,092
1976	57	125	3	5,463	0	306,786	14,914	327,166
1977	45	131	0	12,548	18	279,745	17,630	309,941
1978	49	307	0	4,020	11,848	1,332,325	83,213	1,431,406
1979	68	512	15	22,354	13,996	1,570,553	98,426	1,705,344
1980	103	785	18	37,483	17,949	3,815,588	169,141	4,040,179
1981	66	397	6	20,582	19,197	376,948	217,615	634,348
1982	94	658	170	38,183	27,161	909,969	253,923	1,229,406
1983	97	449	347	42,663	3,256	513,215	139,111	698,592
1984	128	1,190	308	113,518	51,719	4,023,402	383,676	4,572,623
1985	120	860	90	95,459	40,160	997,847	375,413	1,508,969
1986	103	837	120	111,763	28,027	671,600	414,277	1,225,787
1987	109	549	130	59,089	41,218	46,398	170,711	317,546
1988	138	1,229	310	67,397	84,991	2,103,097	474,764	2,730,559
1989	142	1,124	430	141,669	102,890	1,477,724	67,046	1,789,759
1990	154	959	242	226,480	52,020	591,592	102,462	972,796
1991	118	907	345	97,518	100,413	2,439,676	229,170	2,867,122
1992	145	1,200	393	230,902	90,810	4,238,473	279,675	4,840,253
1993	107	853	397	144,246	45,720	2,351,295	181,364	2,723,022
1994	130	1,206	233	110,398	43,911	3,497,528	904,977	4,557,047
1995	108	1,042	118	127,817	41,634	4,760,969	511,124	5,441,662
1996	60	364	56	24,442	38,237	294,118	126,893	483,746
1997	65	408	40	70,581	36,812	869,070	182,102	1,158,605
1998	102	866	67	162,876	33,035	1,888,165	154,498	2,238,641
Average 1978-97	105	792	188	89,328	44,598	1,844,069	268,254	2,246,439
Average 1988-97	117	929	256	124,145	63,744	2,262,354	305,958	2,756,457
Average 1978-92	109	798	195	87,272	45,710	1,673,894	230,575	2,037,646
Average 1993-97	94	775	169	95,497	41,263	2,354,596	381,292	2,872,816

Appendix C.21. Unimak District post June commercial salmon harvest all gear combined, by species and year, July 1-October 31, 1970-98.

			Number of Salmon					
Year	Permit	Landing	Chinook	Sockeye	Coho	Pink	Chum	Total
1970	9	12	4	2,616	0	3,872	2,546	9,038
1971	112	252	35	98,879	35	4,496	105,794	209,239
1972	47	136	5	11,205	27	143	45,544	56,924
1973	16	28	0	2,404	0	89	3,476	5,969
1974 [a]	*	*	*	*	*	*	*	*
1975 [a]	*	*	*	*	*	*	*	*
1976 [a]	*	*	*	*	*	*	*	*
1977 [a]	*	*	*	*	*	*	*	*
1978 [a]	*	*	*	*	*	*	*	*
1979 [a]	*	*	*	*	*	*	*	*
1980 [a]	*	*	*	*	*	*	*	*
1981	8	11	84	10,117	625	8,411	22,383	41,620
1982 [a]	*	*	*	*	*	*	*	*
1983	36	118	4,351	36,666	9,736	13,100	182,034	245,887
1984	23	56	313	16,826	14,854	112,833	100,954	245,780
1985 [a]	*	*	*	*	*	*	*	*
1986	7	8	6	3,186	200	1,267	2,420	7,079
1987	11	22	25	8,955	249	1,740	8,789	19,758
1988	63	177	115	25,308	24,852	61,017	77,514	188,806
1989	33	55	63	15,999	11,784	33,425	50,616	111,887
1990	56	140	58	50,032	12,029	20,224	52,967	135,310
1991	17	33	31	5,060	10,820	7,083	8,525	31,519
1992	17	71	9	12,578	16,568	27,849	11,937	68,941
1993	13	21	7	2,149	3,017	2,139	2,039	9,351
1994 [a]	*	*	*	*	*	*	*	*
1995 [a]	*	*	*	*	*	*	*	*
1996	7	11	1	1,066	2,620	2,757	1,233	7,677
1997 [a]	*	*	*	*	*	*	*	*
1998	39	173	5	14,343	11,511	112,537	18,547	156,943
Average 1978-97	15	37	253	9,613	5,604	15,291	26,240	57,002
Average 1988-97	21	52	29	11,568	8,574	16,481	20,606	57,257
Average 1978-92	18	47	337	12,371	6,826	19,374	34,686	73,595
Average 1993-97	5	8	2	1,340	1,938	3,041	900	7,221

[a] Confidentiality requirements prohibit reporting harvest.



Appendix D.1. Map of the Southeastern District Mainland fishery from Kupreanof Point to McGinty Point with the salmon sections defined.

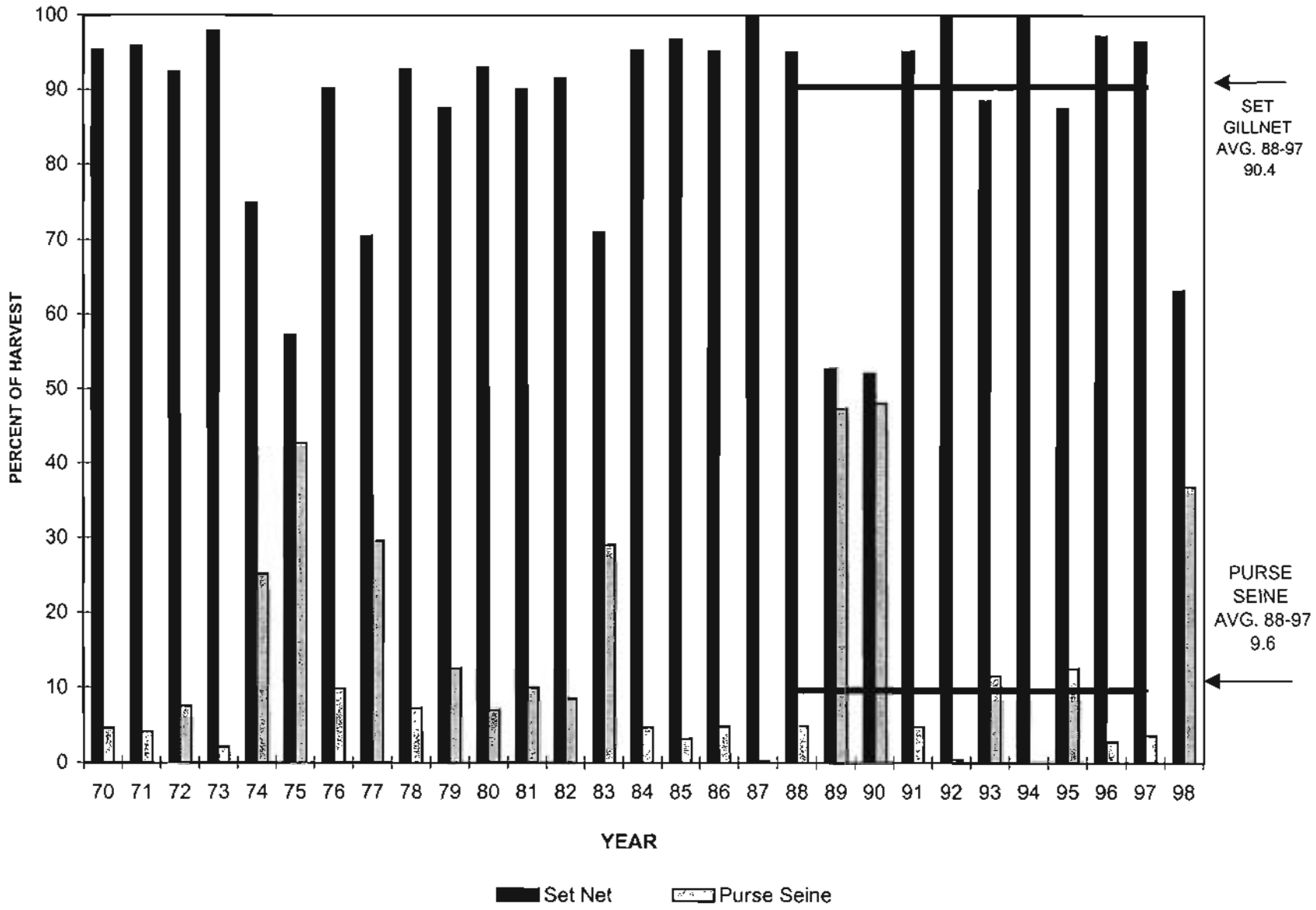
Appendix D.2. History of regulations for the Southeastern District Mainland commercial fishery, 1970-98.

Year	Management Plan
Pre-1974	Set weekly fishing periods, usually 5 days per week
1974-77	Day for day fishing with Chignik
1978	3 days per week, seine gear prohibited before July 10
1979-84	5 days per week, 60,000 catch ceiling (until Chignik catches 1 million)
1985-91	Assures minimum harvest in Chignik of 600,000, restricts fishing in SEDM during overlap period (6/26-7/9), allows 6% (6.2%-1985-88) allocation of total Chignik sockeye harvest through 7/25, permits openings in Stepovak Flats and Northwest Stepovak Sections based on local runs
1992-95	Area managed on local sockeye runs reduced to include only Orzinski Bay (Stepovak Flats Section not effected), increased allocation of Chignik sockeye harvest from 6% to 7%
1996-97	Area managed on local sockeye runs increased to include the Northwest Stepovak Section beginning July 1, reduced allocation of Chignik sockeye harvest from 7% to 6%
1998-Present	Beginning July 1, only Orzinski Bay will be managed entirely on local sockeye salmon run. However, all sockeye salmon caught in the Northwest Stepovak Section beginning July 1 will 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.

Appendix D.3. Southeastern District Mainland commercial sockeye salmon harvest by gear, through July 25, 1970-98.[a]

	Catch by Gear				
	Set Net		Purse Seine		Total
Year	Number	Percent	Number	Percent	Catch
1970	80,692	95.4	3,904	4.6	84,596
1971	60,767	95.9	2,587	4.1	63,354
1972	19,491	92.4	1,614	7.6	21,105
1973	46,141	97.9	976	2.1	47,117
1974	66,101	74.9	22,129	25.1	88,230
1975	1,807	57.3	1,349	42.7	3,156
1976	52,414	90.2	5,712	9.8	58,126
1977	30,658	70.5	12,827	29.5	43,485
1978	28,930	92.7	2,267	7.3	31,197
1979	77,604	87.5	11,136	12.5	88,740
1980	89,743	93.0	6,729	7.0	96,472
1981	181,698	90.1	20,013	9.9	201,711
1982	79,442	91.5	7,351	8.5	86,793
1983	213,051	71.0	87,107	29.0	300,158
1984	567,043	95.3	28,000	4.7	595,043
1985	78,347	96.8	2,610	3.2	80,957
1986	196,545	95.2	9,987	4.8	206,532
1987	244,413	99.8	482	0.2	244,895
1988	77,204	95.1	3,956	4.9	81,160
1989	46,977	52.7	42,247	47.3	89,224
1990	85,368	52.0	78,660	48.0	164,028
1991	275,768	95.2	13,959	4.8	289,727
1992	214,638	99.6	806	0.4	215,444
1993	186,656	88.5	24,271	11.5	210,927
1994	221,657	100.0	0	0.0	221,657
1995	139,515	87.5	19,866	12.5	159,381
1996	276,212	97.2	7,864	2.8	284,076
1997	293,750	96.4	11,115	3.6	304,865
1998	74,069	63.2	43,062	36.8	117,131
Average 1978-97	178,728	90.4	18,921	9.6	197,649
Average 1988-97	181,775	90.0	20,274	10.0	202,049

[a] Only set gillnet gear is allowed prior to July 11 since 1978 season.



Appendix D.4. Southeastern District Mainland fishery commercial sockeye salmon harvest, in percent of harvest, by gear, through July 25, 1970-98.

Appendix D.5. Chignik sockeye salmon contribution to the Southeastern District Mainland harvest, by gear, through July 25, 1970-98.[abcd]

	Catch by Gear				
	Set Net		Purse Seine		Total
Year	Number	Percent	Number	Percent	Catch
1970	63,688	94.2	3,894	5.8	67,582
1971	48,575	95.9	2,066	4.1	50,641
1972	15,593	92.4	1,291	7.6	16,884
1973	37,240	98.0	743	2.0	37,983
1974	56,263	82.7	11,766	17.3	68,029
1975	1,126	51.1	1,079	48.9	2,205
1976	41,764	93.4	2,966	6.6	44,730
1977	26,473	74.6	9,029	25.4	35,502
1978	20,286	91.9	1,778	8.1	22,064
1979	52,065	91.5	4,813 [e]	8.5	56,878
1980	58,210	91.3	5,514	8.7	63,724
1981	107,474	87.7	15,059	12.3	122,533
1982	57,646	91.8	5,121	8.2	62,767
1983	157,831	69.4	69,561	30.6	227,392
1984	404,738	95.7	18,330	4.3	423,068
1985	49,523	96.3	1,898	3.7	51,421
1986	110,572	93.7	7,434	6.3	118,006
1987	146,636	99.8	250	0.2	146,886
1988	16,465	85.2	2,855	14.8	19,320
1989	4,371	97.5	114	2.5	4,485
1990	65,671	51.1	62,928	48.9	128,599
1991	152,454	99.8	260	0.2	152,714
1992	93,564	99.7	281	0.3	93,845
1993	109,119	84.9	19,417	15.1	128,536
1994	142,350	100.0	0	0.0	142,350
1995	73,864	83.6	14,438	16.4	88,302
1996	123,625	97.2	3,576	2.8	127,201
1997	0	0.0	0	0.0	0
1998	32,455	48.5	34,438	51.5	66,893
Average 1978-97	97,323	89.3	11,681	10.7	109,005
Average 1988-97	78,148	88.3	10,387	11.7	88,535

[a] From 1970-91, the Chignik contribution is 80% of the sockeye salmon harvested in Beaver Bay, Balboa Bay, Southwest Stepovak, Stepovak Flats, and East Stepovak Sections.

[b] From 1992-95, the Chignik contribution is 80% of the sockeye salmon harvested in the Southeastern District Mainland fishery except Orzinski Bay where 100% of the sockeye salmon are considered local production.

-Continued-

---

[c] 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 in the SEDM fishery.

[d] During their January 1998, 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.

[e] Includes 54 sockeye salmon initially reported as a drift gillnet landing and reassigned as a purse seine landing.

Appendix D.6. Southeastern District Mainland CFEC permits fished by gear through July 25, 1970-98.

Appendix D.7. Harvest of Chignik bound sockeye salmon in the Chignik, Cape Igvak, and Southeastern District Mainland Areas from 1964-98[a].

	Chignik Area		Cape Igvak		Southeastern District Mainland Area		
Year	Catch	Percent	Catch	Percent	Catch	Percent	Total
1964[b]	556,890	90.6	14,980	2.4	43,021	7.0	614,891
1965	599,553	89.9	11,021	1.7	56,020	8.4	666,594
1966	219,794	88.0	18,003	7.2	12,011	4.8	249,808
1967	462,000	91.5	23,014	4.6	20,021	4.0	505,035
1968	977,382	82.5	135,951	11.5	70,959	6.0	1,184,292
1969	394,135	79.0	97,982	19.6	7,013	1.4	499,130
1970[c]	1,325,734	72.5	434,394	23.8	68,181	3.7	1,828,309
1971	1,016,136	80.3	197,614	15.6	51,272	4.1	1,265,022
1972	378,218	88.0	33,865	7.9	17,752	4.1	429,835

Chignik harvests do not include test fish catches. 1964-72 catch and percentages are for the entire season. Catch and percentages after 1972 are only through July 25.

1973[d]	769,258	89.0	57,348	6.6	37,983	4.4	864,589
1974	530,278	73.6	122,071	16.9	68,029	9.4	720,378
1975	115,984	81.8	23,635	16.7	2,205	1.6	141,824
1976	792,024	83.0	117,926	12.4	44,730	4.7	954,680
1977	1,547,285	90.4	128,852	7.5	35,502	2.1	1,711,639
1978[e,f]	1,454,389	85.4	227,014	13.3	22,064	1.3	1,703,467
1979[g]	794,504	91.8	13,950	1.6	56,878	6.6	865,332
1980	670,001	91.3	32	0.0	63,724	8.7	733,757
1981	1,606,300	79.9	282,727	14.1	122,533	6.1	2,011,560
1982	1,250,768	84.5	167,401	11.3	62,767	4.2	1,480,936
1983	1,450,832	72.7	318,048	15.9	227,392	11.4	1,996,272
1984	2,474,405	73.9	449,372	13.4	423,068	12.6	3,346,845
1985[h]	696,169	79.9	123,627	14.2	51,421	5.9	871,217
1986	1,456,729	82.6	188,017	10.7	118,006	6.7	1,762,752
1987	1,659,615	78.0	321,506	15.1	146,886	6.9	2,128,007
1988	675,487	95.7	11,218	1.6	19,320	2.7	706,025
1989	496,044	99.1	0	-	4,485	0.9	500,529
1990	1,205,575	83.6	107,706	7.5	128,599	8.9	1,441,880
1991[i]	1,958,954	80.4	324,329	13.3	152,714	6.3	2,435,997
1992[j]	1,054,309	81.1	152,358	11.7	93,845	7.2	1,300,512
1993	1,495,098	77.7	300,055	15.6	128,536	6.7	1,923,689
1994[k]	1,632,435	80.6	250,230	12.4	142,350	7.0	2,025,015
1995	1,024,785	79.9	169,530	13.2	88,302	6.9	1,282,617
1996[l]	1,710,249	79.7	308,327	14.4	127,201	5.9	2,145,777
1997	443,892	100.0	0	-	0	-	443,892
1998[m,n]	786,466	91.2	8,813	1.0	66,893	7.8	862,172

-Footnotes On Next Page-

[a] The Cape Igvak and Southeastern District Mainland (SEDM) figures represent 80% of the total sockeye salmon catches for those areas based on the premise that 80% of the sockeye salmon caught in the Cape Igvak Section and the SEDM (excluding sockeye salmon caught in Northwest Stepovak Section from 1964-1991 and in Orzinski Bay in 1992) are bound for the Chignik Management Area (CMA).

[b] 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. Tim modifications were implemented when poor escapements occurred at Chignik.

[c] Catches (1970-1992) were updated using historical electronic fish ticket databases.

[d] During 1974-1977 all three fisheries were managed on a day by day basis.

[e] From 1978-1991, the Cape Igvak Fishery management Plan allocated 15 percent of the total sockeye catch destined for Chignik.

[f] 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.

[g] 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.

[h] 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 catch through July 25. After July 25, the Southeastern District Mainland is 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.

[i] Includes overescapement of 278,305 sockeye counted past the weir during the Chignik Area seiners' boycott (Jun 23-Jul 4).

-Continued-

---

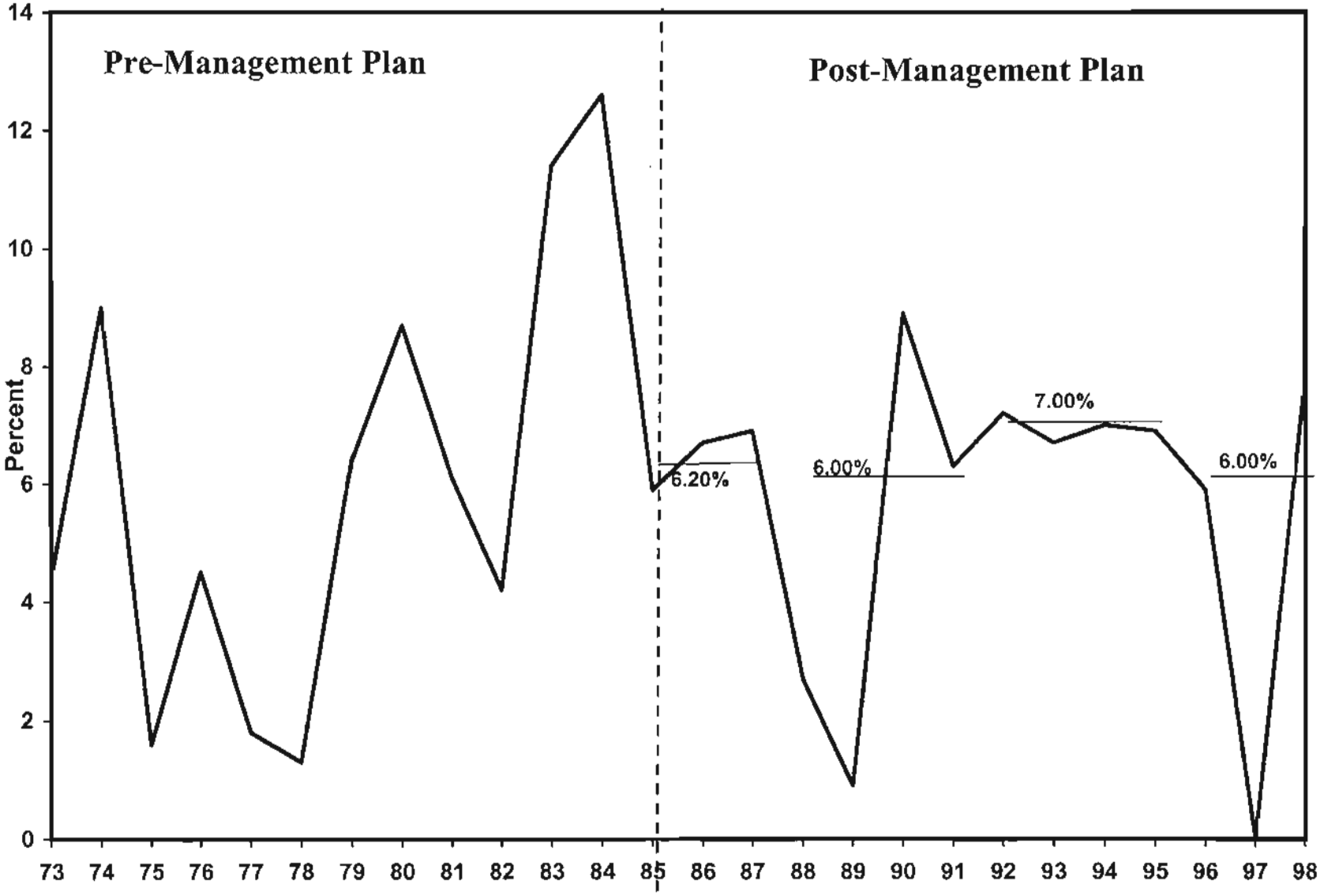
[j] Review of Orzinski Lake historical and current escapement records led the Alaska Board of Fisheries to redefine the Southeastern District Mainland Management Plan. Beginning in 1992, the Southeastern District Mainland fishery (excluding Orzinski Bay) was placed on an allocation of 7.0 percent of the total estimated Chignik sockeye catch through July 2

[k] Includes overescapement of 208,921 sockeye counted past the weir during the Chignik Area seiners' strike (June 22-June 25).

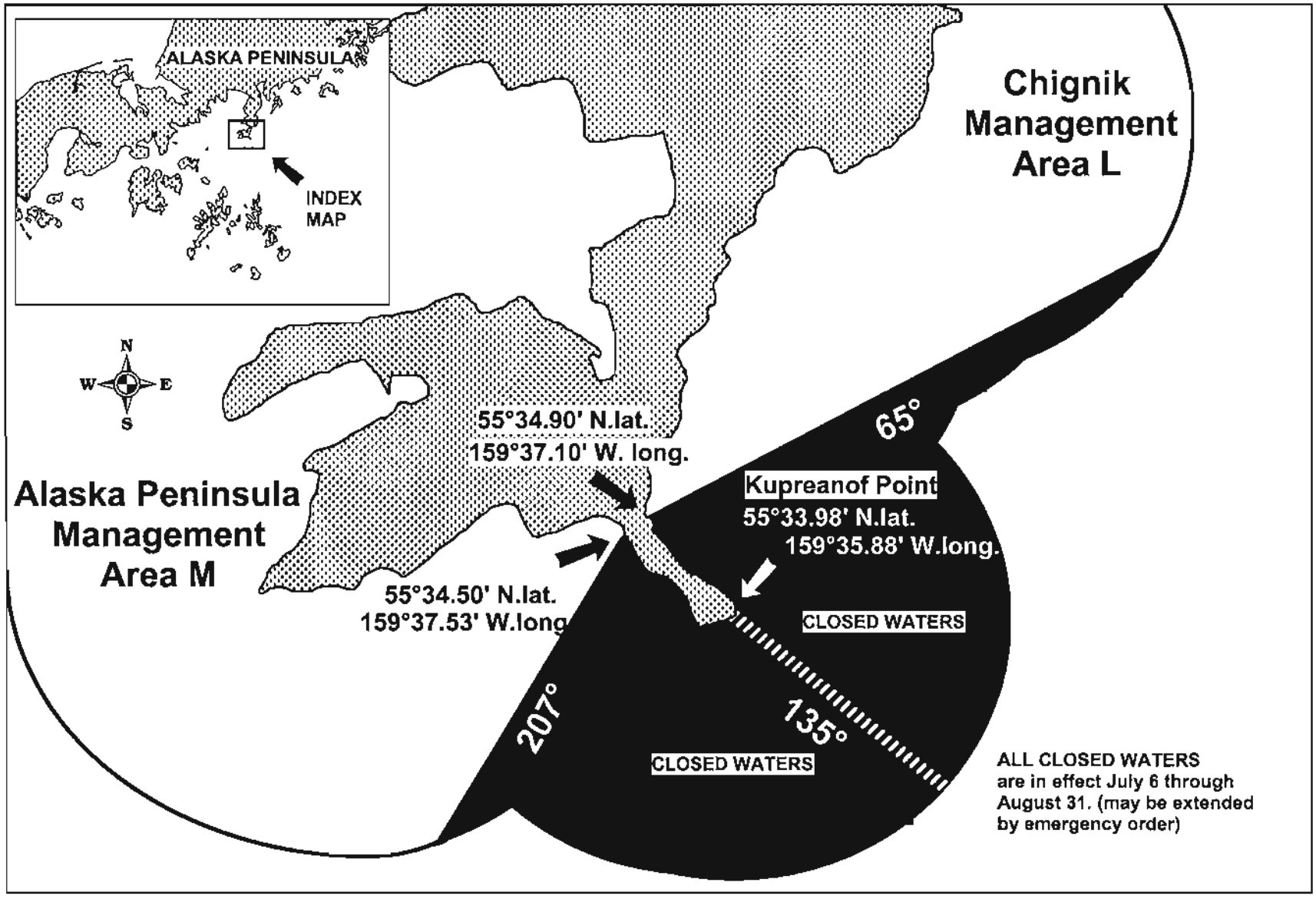
[l] During their January 1996 meeting, the BOF increased the area to be managed for local Orzinski Lake sockeye salmon from only Orzinski Bay to the entire Northwest Stepovak Section. Prior to July 1, the entire Northwest Stepovak Section will be managed on an allocation based on the strength of the 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.

[m] 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.

[n] Includes 7,714 sockeye salmon caught for the Chignik Seiners Association (CSA), and an overescapement of 52,131 sockeye salmon counted past the weir during the CSA boycott (June 16-29).



Appendix D.8. Chignik bound sockeye salmon harvest in the Southeastern District Mainland fishery, through July 25, 1970-98



Appendix D.9. Map of Kupreanof Point area with closed waters defined.

Appendix D.10. Southeastern District Mainland, effort and assignment of sockeye salmon harvests June 1 - July 25, 1985-98.

	Effort				Northwest Stepovak			SEDM minus Northwest Stepovak		SEDM		
Year	Gillnet	Landings	Seine	Landings	Total	(Local)	(Non-local)	(Local)	(Non-local)	(Local)	(Non-local)	Total Catch
1985 [a]	49	367	23	51	16,681	16,681	0	12,855	51,421	29,536	51,421	80,957
1986	42	616	18	29	59,025	59,025	0	29,501	118,006	88,526	118,006	206,532
1987	53	528	6	9	61,287	61,287	0	36,722	146,886	98,009	146,886	244,895
1988	41	300	16	45	57,010	57,010	0	4,830	19,320	61,840	19,320	81,160
1989	67	248	25	54	83,618	83,618	0	1,121	4,485	84,739	4,485	89,224
1990	46	277	69	131	3,279	3,279	0	32,609	128,599	35,888	128,599	164,487
1991	59	747	39	71	98,834	98,834	0	38,179	152,714	137,013	152,714	289,727
1992 [b]	59	650	6	14	113,428	101,198	12,232	20,403	81,613	121,599	93,845	215,444
1993	64	763	53	82	73,747	54,955	18,792	27,436	109,744	82,391	128,536	210,927
1994	56	678	0	0	89,522	52,880	36,642	26,427	105,708	79,307	142,350	221,657
1995	58	718	26	30	62,598	51,723	10,875	19,357	77,426	71,079	88,301	159,381
1996 [c]	64	1,164	25	46	137,925	127,645	10,280	29,230	116,921	156,875	127,201	284,076
1997 [c]	57	1,173	12	23	304,865	304,865	0	0	0	304,865	0	304,865
1998 [c]	45	340	18	23	33,515	33,515	0	16,723	66,893	50,238	66,893	117,131
Average:												
1985-91	51	440	28	56	54,248	54,248	0	22,260	88,776	76,507	88,776	165,283
1992-95	59	702	21	32	84,824	65,189	19,635	23,406	93,623	88,594	113,258	201,852
1996-97	61	1,169	19	35	221,395	216,255	5,140	14,615	58,461	230,870	63,601	294,471

[a] From 1970 through 1991, the Chignik contribution is 80% of the sockeye salmon harvested in the Beaver Bay, Balboa Bay, Southwest Stepovak, Stepovak Flats, and East Stepovak Sections.

[b] From 1992 through 1995, the Chignik contribution is 80% of the sockeye salmon harvested in the Southeastern District Mainland (SEDM) fishery, except Orzinski Bay where 100% of the sockeye salmon are considered local production.

[c] From 1996 through 1998, the Chignik contribution is 80% of the sockeye salmon harvested in the SEDM fishery, except beginning July 1, in the Northwest Stepovak Section where 100% of the sockeye salmon are considered local production.

Appendix D.11. Northwest Stepovak Section commercial salmon harvest, all gear combined, by species and day, 1998.

			Number of Salmon					
Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
3-Jul	16	20	24	1,685	3	83	100	1,895
4-Jul	15	19	10	1,084	0	40	28	1,162
5-Jul	7	8	3	1,389	0	25	15	1,432
6-Jul	7	12	3	2,004	0	73	41	2,121
8-Jul	7	8	5	1,755	0	102	13	1,875
9-Jul	7	14	6	1,860	0	130	46	2,042
11-Jul	12	24	6	4,222	2	995	94	5,319
12-Jul	11	26	2	3,766	1	631	44	4,444
14-Jul	11	24	7	3,305	1	972	44	4,329
15-Jul	10	29	5	4,085	7	1,777	89	5,963
17-Jul	9	12	2	982	0	644	32	1,660
18-Jul	6	11	1	632	0	223	15	871
19-Jul [a]	*	*	*	*	*	*	*	*
20-Jul	12	19	3	2,425	22	24,072	177	26,699
21-Jul	8	16	1	2,471	103	6,426	774	9,775
26-Jul	4	5	0	290	2	29,715	20	30,027
27-Jul	15	32	2	4,793	79	104,229	587	109,690
28-Jul	11	12	2	1,235	45	18,304	375	19,961
30-Jul	8	14	0	1,937	17	33,222	2,979	38,155
31-Jul	7	19	1	2,968	56	6,513	1,359	10,897
1-Aug	9	15	0	1,915	50	15,266	812	18,043
2-Aug	9	14	1	1,702	46	18,568	4,037	24,354
3-Aug	8	18	2	1,666	37	45,197	722	47,624
6-Aug	10	14	0	373	15	26,715	1,168	28,271
7-Aug	8	16	0	706	26	5,556	660	6,948
8-Aug	10	17	0	909	47	8,492	906	10,354
9-Aug	10	18	0	1,263	34	17,618	916	19,831
10-Aug	5	9	1	828	17	1,720	293	2,859
1-Sep	4	5	0	178	26	3	105	312
2-Sep	7	7	0	496	77	38	305	916
3-Sep	8	8	1	736	102	17	330	1,186
4-Sep	8	13	0	810	149	12	357	1,328
7-Sep	5	5	0	106	23	0	54	183
8-Sep	5	5	0	304	91	0	170	565
9-Sep [a]	*	*	*	*	*	*	*	*
10-Sep [a]	*	*	*	*	*	*	*	*
Total	44	494	88	56,858	1,115	368,576	17,787	444,424
Total July 1-25	28	244	78	33,515	143	37,391	1,587	72,714

[a] Confidentiality requirements prohibit releasing this information.

Appendix D.12. Southeastern District Mainland commercial salmon harvest, all gear combined, by species and day, 1998.

			Number of Salmon					
Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
3-Jul	16	20	24	1,685	3	83	100	1,895
4-Jul	15	19	10	1,084	0	40	28	1,162
5-Jul	7	8	3	1,389	0	25	15	1,432
6-Jul	7	12	3	2,004	0	73	41	2,121
8-Jul	7	8	5	1,755	0	102	13	1,875
9-Jul	7	14	6	1,860	0	130	46	2,042
11-Jul	12	24	6	4,222	2	995	94	5,319
12-Jul	11	26	2	3,766	1	631	44	4,444
14-Jul	11	24	7	3,305	1	972	44	4,329
15-Jul	10	29	5	4,085	7	1,777	89	5,963
17-Jul	9	12	2	982	0	644	32	1,660
18-Jul	6	11	1	632	0	223	15	871
19-Jul [a]	*	*	*	*	*	*	*	*
20-Jul	49	71	81	31,120	819	45,809	1,835	79,664
21-Jul	51	85	152	57,392	2,122	72,328	7,458	139,452
26-Jul	13	14	0	3,225	51	58,449	281	62,006
27-Jul	57	110	32	43,816	1,869	159,858	6,134	211,709
28-Jul	47	49	47	14,083	1,016	50,545	2,343	68,034
30-Jul	41	60	15	8,302	1,023	70,055	5,196	84,591
31-Jul	46	91	24	15,434	3,082	99,601	8,088	126,229
1-Aug	34	50	3	6,163	391	24,043	2,615	33,215
2-Aug	41	63	3	9,114	551	55,280	7,526	72,474
3-Aug	39	69	5	9,742	769	83,008	4,628	98,152
6-Aug	42	51	2	2,425	285	70,316	3,639	76,667
7-Aug	39	61	3	3,507	659	58,849	2,932	65,950
8-Aug	29	45	1	3,009	460	26,908	2,375	32,753
9-Aug	27	45	13	4,184	483	38,777	2,972	46,429
10-Aug	19	33	8	4,932	408	28,145	3,646	37,139
1-Sep	21	24	2	2,550	533	94	611	3,790
2-Sep	27	31	1	4,776	1,262	277	1,562	7,878
3-Sep	25	27	3	4,538	928	41	1,439	6,949
4-Sep	27	37	0	4,513	1,628	254	1,466	7,861
7-Sep	25	25	0	1,795	874	15	393	3,077
8-Sep	27	27	2	3,499	1,607	87	826	6,021
9-Sep	13	15	0	964	242	0	211	1,417
10-Sep	7	7	0	837	247	18	156	1,258
11-Sep	7	7	0	1,394	349	4	199	1,946
14-Sep	9	9	1	616	196	0	80	893

-Continued-

Appendix D.12. (page 2 of 2)

			Number of Salmon					
Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
15-Sep	16	16	3	1,779	664	0	123	2,569
17-Sep	11	15	0	2,183	582	0	136	2,901
21-Sep [a]	*	*	*	*	*	*	*	*
22-Sep [a]	*	*	*	*	*	*	*	*
23-Sep	6	6	0	822	185	0	68	1,075
25-Sep	5	8	0	606	96	0	22	724
28-Sep [a]	*	*	*	*	*	*	*	*
30-Sep [a]	*	*	*	*	*	*	*	*
2-Oct [a]	*	*	*	*	*	*	*	*
8-Oct [a]	*	*	*	*	*	*	*	*
Total	102	1,374	477	278,790	23,962	949,654	69,668	1,322,551
Totals through July 25	65	365	307	117,131	2,959	125,030	9,929	255,356
Totals from September 1 - October 8	40	268	14	33,723	9,956	790	7,364	51,847

[a] Confidentiality requirements prohibit reporting harvest by day.

Appendix D.13. Southeastern District Mainland commercial purse seine salmon harvest by species and day, 1998.

			Number of Salmon					
Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
20-Jul	13	13	70	10,655	452	35,471	1,035	47,683
21-Jul	12	12	140	32,407	1,068	55,679	5,481	94,775
26-Jul	4	5	0	225	9	56,687	51	56,972
27-Jul	16	22	24	13,973	1,025	124,796	2,707	142,525
1-Aug [a]	*	*	*	*	*	*	*	*
2-Aug	6	6	0	1,789	119	42,715	4,205	48,828
3-Aug	6	7	1	805	165	66,973	832	68,776
8-Aug	4	4	0	388	22	14,252	442	15,104
9-Aug	8	8	11	386	142	30,426	760	31,725
10-Aug [a]	*	*	*	*	*	*	*	*
1-Sep [a]	*	*	*	*	*	*	*	*
2-Sep [a]	*	*	*	*	*	*	*	*
4-Sep [a]	*	*	*	*	*	*	*	*
7-Sep [a]	*	*	*	*	*	*	*	*
8-Sep [a]	*	*	*	*	*	*	*	*
10-Sep [a]	*	*	*	*	*	*	*	*
11-Sep [a]	*	*	*	*	*	*	*	*
14-Sep [a]	*	*	*	*	*	*	*	*
15-Sep [a]	*	*	*	*	*	*	*	*
21-Sep [a]	*	*	*	*	*	*	*	*
Total	39	150	332	74,164	7,703	737,685	26,705	846,589
Total July 1-25	20	25	210	43,062	1,520	91,150	6,516	142,458

[a] Confidentiality requirements prohibit reporting harvest by day.

Appendix D.14. Southeastern District Mainland commercial set gillnet salmon harvest by species and day, 1998.

			Number of Salmon					
Date	Permits	Landings	Chinook	Sockeye	Coho	Pink	Chum	Total
3-Jul	16	20	24	1,685	3	83	100	1,895
4-Jul	15	19	10	1,084	0	40	28	1,162
5-Jul	7	8	3	1,389	0	25	15	1,432
6-Jul	7	12	3	2,004	0	73	41	2,121
8-Jul	7	8	5	1,755	0	102	13	1,875
9-Jul	7	14	6	1,860	0	130	46	2,042
11-Jul	12	24	6	4,222	2	995	94	5,319
12-Jul	11	26	2	3,766	1	631	44	4,444
14-Jul	11	24	7	3,305	1	972	44	4,329
15-Jul	10	29	5	4,085	7	1,777	89	5,963
17-Jul	9	12	2	982	0	644	32	1,660
18-Jul	6	11	1	632	0	223	15	871
19-Jul [a]	*	*	*	*	*	*	*	*
20-Jul	36	58	11	20,465	367	10,338	800	31,981
21-Jul	39	73	12	24,985	1,054	16,649	1,977	44,677
26-Jul	9	9	0	3,000	42	1,762	230	5,034
27-Jul	41	88	8	29,843	844	35,062	3,427	69,184
28-Jul	36	37	4	9,152	403	9,947	1,222	20,728
30-Jul	32	51	0	7,700	512	15,466	2,640	26,318
31-Jul	33	77	6	12,004	1,669	23,983	5,009	42,671
1-Aug	32	48	3	6,132	391	12,651	2,605	21,782
2-Aug	35	57	3	7,325	432	12,565	3,321	23,646
3-Aug	33	62	4	8,937	604	16,035	3,796	29,376
6-Aug	31	39	2	2,195	242	7,249	1,767	11,455
7-Aug	32	53	1	3,431	473	15,334	2,807	22,046
8-Aug	25	41	1	2,621	438	12,656	1,933	17,649
9-Aug	19	37	2	3,798	341	8,351	2,212	14,704
10-Aug	16	30	3	3,875	299	6,808	1,790	12,775
1-Sep	20	23	1	2,516	509	28	585	3,639
2-Sep	25	29	1	4,425	898	83	1,456	6,863
3-Sep	25	27	3	4,538	928	41	1,439	6,949
4-Sep	25	35	0	3,754	1,113	68	1,256	6,191
7-Sep	24	24	0	1,602	756	0	364	2,722
8-Sep	25	25	0	2,443	1,086	0	701	4,230
9-Sep	13	15	0	964	242	0	211	1,417
10-Sep	6	6	0	547	109	0	132	788
11-Sep	6	6	0	1,152	304	0	183	1,639
14-Sep	8	8	1	501	159	0	64	725
15-Sep	15	15	3	1,707	610	0	109	2,429
17-Sep	11	15	0	2,183	582	0	136	2,901
22-Sep [a]	*	*	*	*	*	*	*	*

-Continued-

Appendix D.14. (page 2 of 2)

Date	Permits	Landings	Number of Salmon					
			Chinook	Sockeye	Coho	Pink	Chum	Total
23-Sep	6	6	0	822	185	0	68	1,075
25-Sep	5	8	0	606	96	0	22	724
28-Sep [a]	*	*	*	*	*	*	*	*
30-Sep [a]	*	*	*	*	*	*	*	*
2-Oct [a]	*	*	*	*	*	*	*	*
8-Oct [a]	*	*	*	*	*	*	*	*
Total	63	1,224	145	204,626	16,259	211,969	42,963	475,962
Total July 1-25	45	340	97	74,069	1,439	33,880	3,413	112,898

[a] Confidentiality requirements prohibit reporting harvest by day.

Appendix D.15. Southeastern District Mainland commercial sockeye salmon harvest, by gear, for the entire season, 1970-98[a].

	Catch by Gear				
	Set Net		Purse Seine		
Year	Number	Percent	Number	Percent	Total Catch
1970	81,259	95.1	4,158	4.9	85,417
1971	61,037	95.1	3,141	4.9	64,178
1972	19,957	89.9	2,233	10.1	22,190
1973	46,586	97.2	1,346	2.8	47,932
1974	66,200	74.0	23,219	26.0	89,419
1975	1,807	57.3	1,349	42.7	3,156
1976	54,190	90.4	5,725	9.6	59,915
1977	35,410	73.1	13,053	26.9	48,463
1978	30,229	87.1	4,462	12.9	34,691
1979	89,863	71.2	36,270	28.8	126,133
1980	115,978	89.0	14,344	11.0	130,322
1981	226,820	87.4	32,719	12.6	259,539
1982	109,867	93.1	8,165	6.9	118,032
1983	284,735	72.2	109,489	27.8	394,224
1984	617,011	90.7	63,634	9.3	680,645
1985	119,672	86.8	18,219	13.2	137,891
1986	224,333	91.4	21,178	8.6	245,511
1987	290,042	96.9	9,421	3.1	299,463
1988	125,509	79.2	32,865	20.8	158,374
1989	151,745	53.8	130,549	46.2	282,294
1990	158,065	57.0	119,395	43.0	277,460
1991	336,238	84.8	60,417	15.2	396,655
1992	283,927	86.8	43,267	13.2	327,194
1993	271,750	82.1	59,265	17.9	331,015
1994	305,447	92.5	24,832	7.5	330,279
1995	315,754	79.0	83,721	21.0	399,475
1996	337,310	93.4	23,873	6.6	361,183
1997	379,619	93.1	27,928	6.9	407,547
1998	204,626	73.4	74,164	26.6	278,790
Average 1978-97	238,696	83.8	46,201	16.2	284,896
Average 1988-97	266,536	81.5	60,611	18.5	327,148

[a] Set gillnet gear only prior to July 11 since 1978 season.

Appendix E.1. South Peninsula emergency order summary, 1998.

EMERGENCY ORDER N0. 4-FS-M-CB-01-98

Issued at Cold Bay, AK.
May 26,1998

EFFECTIVE DATE: June 1, 1998

EXPIRATION DATE:
July 1, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order:

(1) Delays the commercial salmon season until June 22 in the Urilia Bay Section.

(2) Closes all Sanak Island waters to commercial salmon fishing through June 30. This includes all waters south of the latitude of Hague Rock and east of the longitude of Cape Pankof south of the latitude of Hague Rock.

JUSTIFICATION:

The early portion of the Urilia Bay sockeye salmon run has been weakened by intense early fishing pressure in the past. Delaying the fishery until June 22, or until the escapement justifies an earlier fishery, is necessary to rebuild the early portion of the run.

The area around Sanak Island has produced high chum to sockeye salmon ratios in the past. There is a limit to the number of chum salmon that can be taken in the South Unimak and Shumagin Island June Fisheries. This means that the Fishery will close before the sockeye allocation is reached if the chum limit is reached first.

Historically commercial salmon fishing records indicate a very limited to non-existent fishing effort around Sanak Island, although in 1990 and 1991, fishing interest increased. Even though the fishing effort was light (i.e. less than four boats) the corresponding catch per unit of effort combined with the high chum per sockeye ratio could result in substantial numbers of chum salmon being harvested, if effort were to increase.

EMERGENCY ORDER NO. 4-FS-M-SP-01-98

Issued at Sand Point, AK
Friday June 12, 1998

EFFECTIVE DATE: 6:00 a.m.
Saturday June 13, 1998

Expiration Date: 10:00 p.m.
Saturday June 13, 1998
unless superseded by a
subsequent emergency order

EXPLANATION:

This emergency order allows a 6 hour commercial salmon purse seine fishing period from 6:00 a.m. until 12:00 p.m.(noon) during Saturday, June 13 in the Shumagin Islands Section. This emergency order also allows a 16 hour commercial salmon set gillnet fishing period from 6:00 a.m. until 10:00 p.m. during Saturday, June 13 in the Shumagin Islands Section.

-Continued-

JUSTIFICATION:

The Shumagin Islands Section is managed on the basis of 1.5% of the total Bristol Bay projected inshore sockeye salmon harvest through June 30 as described under 5 AAC 09.365. The 1998 Shumagin Islands June fishery's sockeye salmon guideline harvest level(GHL) is 337,000 fish. The South Unimak and Shumagin Islands June fisheries are restricted by a "floating" chum salmon harvest ceiling based on the harvest projection of the Arctic-Yukon-Kuskokwim summer chum salmon index group as established by the Alaska Board of Fisheries. The department shall manage the 1998 June fishery inseason for a GHL of 350,000 to 400,000 chum salmon.

EMERGENCY ORDER N0. 4-FS-M-CB-02-98

Issued at Cold Bay, AK.
7:30 p.m. June 12, 1998

EFFECTIVE DATE: 8:00 a.m. June 13, 1998

EXPIRATION DATE:
June 14, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

A 8:00 a.m. until 2:00 p. m. commercial salmon fishing period is established for seine and drift gillnet gear in the South Unimak Fishery during Saturday June 13. A 8:00 a.m. until 12:00 midnight fishing period is established for set gillnet gear in the South Unimak Fishery during Saturday, June 13.

JUSTIFICATION:

The South Unimak fishery guideline harvest level is 1,529,000 sockeye salmon as specified by the Alaska Board of Fisheries approved management plan. The South Unimak and Shumagin Islands June fisheries are restricted by a 350,000-400,000 chum salmon harvest ceiling as established by the Alaska Board of Fisheries.

June 13 is at the point where sockeye abundance has traditionally started to peak. A six-hour commercial test opening will give the fleet a chance to harvest part of their sockeye salmon guideline harvest level and to test the sockeye to chum salmon ratios without harvesting an unacceptably high number of chum salmon.

Set net gear is guaranteed a 16 hour fishing period if the fishing period for other gear types is less than 16 hours as specified under (g) in the Board of Fisheries adopted management plan.

EMERGENCY ORDER N0. 4-FS-M-CB-03-98

Issued at Cold Bay, AK.
12:45 p.m. June 13, 1998

EFFECTIVE DATE: :2:00 p.m.. June 13, 1998

EXPIRATION DATE
10:00 p.m. June 13, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time an additional 8 hours until 10:00 p.m. Saturday June 13 for drift gillnet and seine gear in the South Unimak fishery.

-Continued-

JUSTIFICATION:

The South Unimak Fishery is presently open six hours to enable the fleet to test the sockeye to chum ratio. Reports from the grounds indicate that the sockeye to chum catch ratios are good, ranging from 2.5 sockeye per chum to almost pure sockeye. Additional fishing time can be allowed at this time without harvesting a large number of chum salmon. The fishing period for set gillnet gear was established from 8:00 a.m. until 12:00 midnight during June 13 by previous emergency order.

EMERGENCY ORDER N0. 4-FS-M-CB-04-98

Issued at Cold Bay, AK.
7:30 p.m. June 13, 1998

EFFECTIVE DATE:
10:00 p.m. June 13, 1998

EXPIRATION DATE:
2:00 p.m. June 14, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 16 hours for seine and drift gillnet gear and 14 hours for set gillnet gear until 2:00 p.m. Sunday June 14 in the South Unimak Fishery.

JUSTIFICATION:

The South Unimak fishery has a sockeye salmon allocation of 1,529,000 fish. There is a 350,000 to 400,000 chum salmon harvest cap placed on the South Unimak and Shumagin Islands fisheries combined. Due to a price dispute, only gillnet gear is fishing at South Unimak. Sockeye to chum ratios reported by the fishermen are high and early deliveries confirm this. More fishing time can be allowed at this time to harvest sockeye salmon without catching an unacceptable number of chum salmon.

EMERGENCY ORDER NO. 4-FS-M-SP-02-98

Issued at Sand Point, AK
Saturday June 13, 1998

EFFECTIVE DATE: 10:00 p.m. Saturday June 13, 1998

Expiration Date: 2:00 p.m.
Sunday June 14, 1998
unless superseded by a
subsequent emergency order

EXPLANATION:

This emergency order allows a 16 hour extension of the current salmon set gillnet fishing period from 10:00 p.m. Saturday June 13 until 2:00 p.m. Sunday June 14 in the Shumagin Islands Section.

JUSTIFICATION:

The Shumagin Islands Section is managed on the basis of 1.5% of the total Bristol Bay projected inshore sockeye salmon harvest through June 30 as described under 5 AAC 09.365. The 1998 Shumagin Islands June fishery's sockeye salmon guideline harvest level(GHL) is 337,000 fish. The South Unimak and

---

-Continued-

Shumagin Islands June fisheries are restricted by a "floating" chum salmon harvest ceiling based on the harvest projection of the Arctic-Yukon-Kuskokwim summer chum salmon index group as established by the Alaska Board of Fisheries. The department shall manage the 1998 June fishery inseason for a GHL of 350,000 to 400,000 chum salmon.

Harvest reports from the Shumagin Islands Section will not be available until tomorrow morning. No reports of purse seine fishing effort were received from the grounds this morning and set gillnet effort was limited. However, most set gillnet fishermen reported favorable sockeye to chum salmon ratios, greater than 12 to 1. Set gillnet fishermen continue to report catch ratios to the department. The department plans to have a purse seine test fish vessel on the grounds tomorrow to provide additional information to help determine how to best achieve the conditions of the management plan and allow fishermen the opportunity to catch sockeye salmon while minimizing chum salmon harvest.

Based upon subsection (g) of the June salmon management plan, if the ratio of sockeye salmon to chum salmon in a commercial fishing period for set gillnet gear is equal to or greater than the recent 10-year average, as determined by the department, the commissioner may establish additional or extended fishing periods by emergency order.

EMERGENCY ORDER NO. 4-FS-M-SP-03-98

Issued at Sand Point, AK
Sunday June 14, 1998

EFFECTIVE DATE: 2:00 p.m.
Sunday June 14, 1998

Expiration Date: 10:00
p.m. Sunday June 14, 1998
unless superseded by a
subsequent emergency a order

EXPLANATION:

This emergency order allows an 8 hour extension of the current salmon set gillnet fishing period from 2:00 p.m. until 10:00 p.m. Sunday June 14 in the Shumagin Islands Section.

JUSTIFICATION:

The Shumagin Islands Section is managed on the basis of 1.5% of the total Bristol Bay projected inshore sockeye salmon harvest through June 30 as described under 5 AAC 09.365. The 1998 Shumagin Islands June fishery's sockeye salmon guideline harvest level(GHL) is 337,000 fish. The South Unimak and Shumagin Islands June fisheries are restricted by a "floating" chum salmon harvest ceiling based on the harvest projection of the Arctic-Yukon-Kuskokwim summer chum salmon index group as established by the Alaska Board of Fisheries. The department shall manage the 1998 June fishery inseason for a GHL of 350,000 to 400,000 chum salmon.

The preliminary harvest for June 13 in the Shumagin Islands Section is 3,464 salmon, composed of 3 chinook, 3,171 sockeye, 14 pink, and 276 chum salmon. The set gillnet sockeye to chum salmon catch ratio was 11.5 to 1. No reports of purse seine fishing effort were received from the grounds and set gillnet effort was limited to 14 deliveries. About 333,829 sockeye salmon remain to be harvested on the Shumagin Islands GHL. Set gillnet fishermen continue to report from the grounds that sockeye to chum salmon ratios are favorable but volume is low.

-Continued-

The department has a purse seine test fish vessel on the grounds today to provide additional information to help determine how to best achieve the conditions of the management plan and allow fishermen the opportunity to catch sockeye salmon while minimizing chum salmon harvest.

Based upon subsection (g) of the June salmon management plan, if the ratio of sockeye salmon to chum salmon in a commercial fishing period for set gillnet gear is equal to or greater than the recent 10-year average, as determined by the department, the commissioner may establish additional or extended fishing periods by emergency order.

EMERGENCY ORDER N0. 4-FS-M-CB-05-98

Issued at Cold Bay, AK.
11:00 a.m. June 14, 1998

EFFECTIVE DATE:
2:00 p.m. June 14, 1998

EXPIRATION DATE:
10:00 p.m. June 14, 1998
unless superseded by
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 8 hours for all legal gear types until 10:00 p.m. Sunday June 14 in the South Unimak Fishery.

JUSTIFICATION:

The South Unimak fishery has a sockeye salmon allocation of 1,529,000 fish. There is a 350,000 to 400,000 chum salmon harvest cap placed on the South Unimak and Shumagin Islands fisheries combined. Due to a price dispute, only gillnet gear is fishing at South Unimak. The June 13 South Unimak sockeye harvest was 65,000 sockeye, which is the total harvest to date. The combined South Unimak chum salmon harvest to date is only 4,000 fish. More fishing time is needed for fishermen to harvest their sockeye allocation and at present there is no danger of reaching the chum salmon cap.

EMERGENCY ORDER NO. 4-FS-M-SP-04-98

Issued at Sand Point, AK
Sunday June 14, 1998

EFFECTIVE DATE: 10:00 p.m.
Sunday June 14, 1998

Expiration Date: 2:00
p.m. Monday June 15, 1998
unless superseded by a
subsequent emergency order

EXPLANATION: This emergency order allows a 16 hour extension of the current salmon set gillnet fishing period from 10:00 p.m. Sunday June 14 until 2:00 p.m. Monday June 15 in the Shumagin Islands Section.

JUSTIFICATION:

The Shumagin Islands Section is managed on the basis of 1.5% of the total Bristol Bay projected inshore sockeye salmon harvest through June 30 as described under 5 AAC 09.365. The 1998 Shumagin Islands

-Continued-

June fishery's sockeye salmon guideline harvest level(GHL) is 337,000 fish. The South Unimak and Shumagin Islands June fisheries are restricted by a "floating" chum salmon harvest ceiling based on the harvest projection of the Arctic-Yukon-Kuskokwim summer chum salmon index group as established by the Alaska Board of Fisheries. The department shall manage the 1998 June fishery inseason for a GHL of 350,000 to 400,000 chum salmon.

Set gillnet fishermen continue to report from the grounds that sockeye to chum salmon ratios are favorable but volume is low. The department's June 14 test fishery resulted in a 0.7 to 1. The department plans to have a test fish vessel on the grounds tomorrow to provide additional information to help determine how to best achieve the conditions of the management plan and allow fishermen the opportunity to catch sockeye salmon while minimizing chum salmon harvest.

Based upon subsection (g) of the June salmon management plan, if the ratio of sockeye salmon to chum salmon in a commercial fishing period for set gillnet gear is equal to or greater than the recent 10-year average, as determined by the department, the commissioner may establish additional or extended fishing periods by emergency order.

EMERGENCY ORDER N0. 4-FS-M-CB-06-98

Issued at Cold Bay, AK
7:30 p.m. June 14, 1998

EFFECTIVE DATE:
10:00 p.m. June 14, 1998

EXPIRATION DATE:
2:00 p.m. June 15, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 16 hours until 2:00 p.m. Monday June 15 in the South Unimak Fishery.

JUSTIFICATION:

The South Unimak fishery guideline harvest level is 1,529,000 sockeye salmon as specified by the Alaska Board of Fisheries approved management plan. The South Unimak and Shumagin Islands June fisheries are restricted by a 350,000-400,000 chum salmon harvest ceiling as established by the Alaska Board of Fisheries.

The South Unimak harvest to date is 65,000 sockeye while the combined South Unimak - Shumagin Island chum salmon harvest is only 4,000 fish. Fishing effort consists of the gillnet fleet; the seine fleet is not yet participating in the fishery due to price dispute. The sockeye to chum ratios reported from the grounds are high. At this rate the total chum catch will be quite low and more fishing time is needed to the harvest sockeye guideline harvest level.

EMERGENCY ORDER N0. 4-FS-M-CB-07-98

Issued at Cold Bay, AK.
11:00 a.m. June 15, 1998

EFFECTIVE DATE:
2:00 p.m. June 15, 1998

EXPIRATION DATE:
10:00 p.m. June 15, 1998
unless superseded by a
subsequent emergency order.

-Continued-

EXPLANATION:

This emergency order extends commercial salmon fishing time 8 hours for all legal gear types until 10:00 p.m. Monday June 15 in the South Unimak Fishery.

JUSTIFICATION:

The South Unimak fishery has a sockeye salmon allocation of 1,529,000 fish. There is a 350,000 to 400,000 chum salmon harvest cap placed on the South Unimak and Shumagin Islands fisheries combined. Due to a price dispute, only gillnet gear is fishing at South Unimak. The June 14 South Unimak sockeye harvest was 64,600 sockeye, bringing the total harvest to 129,600. The combined South Unimak chum salmon harvest to date is only 14,000 fish. More fishing time is needed for fishermen to harvest their sockeye allocation and at present there is no danger of reaching the chum salmon cap.

EMERGENCY ORDER NO. 4-FS-M-SP-05-98

Issued at Sand Point, AK
Monday June 15, 1998

EFFECTIVE DATE: 10:00 p.m.
Monday June 15, 1998

Expiration Date: 2:00
p.m. Tuesday June 16, 1998
unless superseded by a
subsequent emergency order

EXPLANATION:

This emergency order allows a 16 hour commercial salmon set gillnet fishing period from 10:00 p.m. Monday June 15 until 2:00 p.m. Tuesday June 16 in the Shumagin Islands Section. This emergency order also allows an 8 hour commercial salmon seine fishing period from 6:00 a.m. Tuesday June 16 until 2:00 p.m. Tuesday June 16 in the Shumagin Islands Section.

JUSTIFICATION:

The Shumagin Islands Section is managed on the basis of 1.5% of the total Bristol Bay projected inshore sockeye salmon harvest through June 30 as described under 5 AAC 09.365. The 1998 Shumagin Islands June fishery's sockeye salmon guideline harvest level(GHL) is 337,000 fish. The South Unimak and Shumagin Islands June fisheries are restricted by a "floating" chum salmon harvest ceiling based on the harvest projection of the Arctic-Yukon-Kuskokwim summer chum salmon index group as established by the Alaska Board of Fisheries. The department shall manage the 1998 June fishery inseason for a GHL of 350,000 to 400,000 chum salmon.

The department's June 15 test fishery resulted in a sockeye to chum salmon ratio of 3.2:1. Based on the favorable results from today's test fishing in the Shumagin Islands, a short commercial test fishery for seine gear will provide the department with information to help determine how to best achieve the conditions of the management plan. This fishing period will also allow fishermen the opportunity to harvest sockeye salmon toward the GHL while minimizing chum salmon harvests.

Based on set gillnet landings from today, June 15, the sockeye to chum salmon ratio is 15.5:1 which exceeds the recent 10-year average of 11.5:1. Therefore, the department reopened the Shumagin Islands Section to commercial salmon fishing with set gillnet gear after the June 15 harvest figures were verified.

-Continued-

Based upon subsection (g) of the June salmon management plan, if the ratio of sockeye salmon to chum salmon in a commercial fishing period for set gillnet gear is equal to or greater than the recent 10-year average, as determined by the department, the commissioner may establish additional or extended fishing periods by emergency order.

EMERGENCY ORDER N0. 4-FS-M-CB-08-98

Issued at Cold Bay, AK.
7:30 p.m. June 15, 1998

EFFECTIVE DATE:
10:00 p.m. June 15, 1998

EXPIRATION DATE:
2:00 p.m. June 16, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 16 hours until 2:00 p.m. Tuesday June 16 in the South Unimak Fishery.

JUSTIFICATION:

The South Unimak fishery guideline harvest level is 1,529,000 sockeye salmon as specified by the Alaska Board of Fisheries approved management plan. The South Unimak and Shumagin Islands June fisheries are restricted by a 350,000-400,000 chum salmon harvest ceiling as established by the Alaska Board of Fisheries.

The South Unimak harvest to date is 129,600 sockeye while the combined South Unimak - Shumagin Island chum salmon harvest is only 14,300 fish. Fishing effort consists of the gillnet fleet; the seine fleet is not yet participating in the fishery due to price dispute. The sockeye to chum ratios reported from the grounds are high. At this rate the total chum catch will be quite low and more fishing time is needed to the harvest sockeye guideline harvest level.

EMERGENCY ORDER NO. 4-FS-M-SP-06-98

Issued at Sand Point, AK
Tuesday June 16, 1998

EFFECTIVE DATE:
2:00 p.m. Tuesday June 16, 1998

Expiration Date: 10:00
p.m. Tuesday June 16, 1998
unless superseded by a
subsequent emergency order

EXPLANATION:

This emergency order allows an 8 hour extension of the current commercial salmon set gillnet fishing period from 2:00 p.m. until 10:00 p.m. during Tuesday June 16 in the Shumagin Islands Section.

JUSTIFICATION:

The Shumagin Islands Section is managed on the basis of 1.5% of the total Bristol Bay projected inshore sockeye salmon harvest through June 30 as described under 5 AAC 09.365. The 1998 Shumagin Islands June fishery's sockeye salmon guideline harvest level(GHL) is 337,000 fish. The South Unimak and Shumagin Islands June fisheries are restricted by a "floating" chum salmon harvest ceiling based on the harvest projection of the Arctic-Yukon-Kuskokwim summer chum

-Continued-

salmon index group as established by the Alaska Board of Fisheries. The department shall manage the 1998 June fishery inseason for a GHL of 350,000 to 400,000 chum salmon.

Set gillnet fishermen continue to report from the grounds that sockeye to chum salmon ratios are favorable but volume is low. No reports of seine fishing effort were received from the grounds this morning due to ongoing price discussions between fishermen and processors.

Based on historical harvest records the peak of the sockeye salmon run in the Shumagin Islands occurs between June 14 and June 23, and the chum salmon abundance tends to increase toward the end of June. Commercial fishing by the set gillnet fleet will allow for the directed sockeye salmon harvest toward the GHL while minimizing the chum salmon harvest.

Based upon subsection (g) of the June salmon management plan, if the ratio of sockeye salmon to chum salmon in a commercial fishing period for set gillnet gear is equal to or greater than the recent 10-year average, as determined by the department, the commissioner may establish additional or extended fishing periods by emergency order.

EMERGENCY ORDER N0. 4-FS-M-CB-09-98

Issued at Cold Bay, AK.
11:00 a.m. June 16, 1998

EFFECTIVE DATE:
2:00 p.m. June 16, 1998

EXPIRATION DATE:
10:00 p.m. June 16, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 8 hours for all legal gear types until 10:00 p.m. Tuesday June 16 in the South Unimak Fishery.

JUSTIFICATION:

The South Unimak fishery has a sockeye salmon allocation of 1,529,000 fish. There is a 350,000 to 400,000 chum salmon harvest cap placed on the South Unimak and Shumagin Islands fisheries combined. Due to a price dispute, only gillnet gear is fishing at South Unimak. The June 15 South Unimak sockeye harvest was 89,900 sockeye, bringing the total harvest to 215,500. The combined South Unimak chum salmon harvest to date is only 27,600 fish. More fishing time is needed for fishermen to harvest their sockeye allocation and at present there is no danger of reaching the chum salmon cap.

EMERGENCY ORDER NO. 4-FS-M-SP-07-98

Issued at Sand Point, AK
Tuesday June 16, 1998

EFFECTIVE DATE:
10:00 p.m. Tuesday June 16, 1998

Expiration Date: 2:00 p.m.
Wednesday June 17, 1998
unless superseded by a
subsequent emergency a order

-Continued-

EXPLANATION:

This emergency order allows a 16 hour extension of the current commercial salmon set gillnet fishing period from 10:00 p.m. Tuesday June 16 until 2:00 p.m. Wednesday June 17 in the Shumagin Islands Section. This emergency order also allows an 8 hour commercial salmon seine fishing period from 6:00 a.m. Wednesday June 17 until 2:00 p.m. Wednesday June 17 in the Shumagin Islands Section.

JUSTIFICATION:

The Shumagin Islands Section is managed on the basis of 1.5% of the total Bristol Bay projected inshore sockeye salmon harvest through June 30 as described under 5 AAC 09.365. The 1998 Shumagin Islands June fishery's sockeye salmon guideline harvest level(GHL) is 337,000 fish. The South Unimak and Shumagin Islands June fisheries are restricted by a "floating" chum salmon harvest ceiling of 350,000 to 400,000 fish based on the harvest projection of the Arctic-Yukon-Kuskokwim summer chum salmon index group as established by the Alaska Board of Fisheries

The preliminary Shumagin Islands harvest for June 15 included 3,136 sockeye and 202 chum salmon, which brings the Shumagin Islands sockeye salmon harvest to 10,172 fish. About 326,828 sockeye salmon remain to be harvested on the Shumagin Islands GHL. The combined South Unimak-Shumagin Islands June chum salmon harvest is approximately 28,000 fish. Set gillnet fishermen continue to report from the grounds that sockeye to chum salmon ratios are favorable but volume is low. No reports of seine fishing effort were received from the grounds today due to ongoing price discussions between fishermen and processors.

Based on historical harvest records the peak of the sockeye salmon run in the Shumagin Islands occurs between June 14 and June 23, and chum salmon abundance tends to increase toward the end of June. Commercial fishing by the fleet will provide the department information to help determine how to best achieve the conditions of the management plan and allow for the directed sockeye salmon harvest toward the GHL, while minimizing the chum salmon harvest. If favorable ratios are realized the fishery may be extended.

EMERGENCY ORDER NO. 4-FS-M-CB-10-98

Issued at Cold Bay, AK.
7:30 p.m. June 16, 1998

EFFECTIVE DATE:
10:00 p.m. June 16, 1998

EXPIRATION DATE:
2:00 p.m. June 17, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 16 hours until 2:00 p.m. Wednesday June 17 in the South Unimak Fishery.

JUSTIFICATION:

The South Unimak fishery guideline harvest level is 1,529,000 sockeye salmon as specified by the Alaska Board of Fisheries approved management plan. The South Unimak and Shumagin Islands June fisheries are restricted by a 350,000-400,000 chum salmon harvest ceiling as established by the Alaska Board of Fisheries.

The South Unimak harvest to date is 215,500 sockeye while the combined South Unimak - Shumagin Island chum salmon harvest is only 27,600 fish. Fishing effort consists of the gillnet fleet;

-Continued-

the seine fleet is not yet participating in the fishery due to price dispute. The sockeye to chum ratios reported from the grounds are generally above 4 to 1.. At this rate there is no danger of reaching the chum cap and more fishing time is needed to the harvest sockeye guideline harvest level.

EMERGENCY ORDER NO. 4-FS-M-SP-08-98

Issued at Sand Point, AK
Wednesday June 17, 1998

EFFECTIVE DATE: 2:00 p.m.
Wednesday June 17, 1998

Expiration Date: 2:00 p.m.
Wednesday June 17, 1998
unless superseded by a
subsequent emergency a order

EXPLANATION:

This emergency order allows an 8 hour extension of the current commercial salmon fishing period from 2:00 p.m. Wednesday June 17 until 10:00 p.m. Wednesday June 17 in the Shumagin Islands Section.

JUSTIFICATION:

The Shumagin Islands Section is managed on the basis of 1.5% of the total Bristol Bay projected inshore sockeye salmon harvest through June 30 as described under 5 AAC 09.365. The 1998 Shumagin Islands June fishery's sockeye salmon guideline harvest level(GHL) is 337,000 fish. The South Unimak and Shumagin Islands June fisheries are restricted by a "floating" chum salmon harvest ceiling of 350,000 to 400,000 fish based on the harvest projection of the Arctic-Yukon-Kuskokwim summer chum salmon index group as established by the Alaska Board of Fisheries

Set gillnet fishermen continue to report from the grounds that sockeye to chum salmon ratios are favorable but volume is low. No reports of seine fishing effort were received from the grounds today due to ongoing price discussions between fishermen and processors.

Based on historical harvest records the peak of the sockeye salmon run in the Shumagin Islands occurs between June 14 and June 23, and chum salmon abundance tends to increase toward the end of June. Commercial fishing by the fleet will provide the department information to help determine how to best achieve the conditions of the management plan and allow for the directed sockeye salmon harvest toward the GHL, while minimizing the chum salmon harvest. If favorable ratios are realized the fishery may be extended.

EMERGENCY ORDER N0. 4-FS-M-CB-11-98

Issued at Cold Bay, AK.
11:30 a.m. June 17, 1998

EFFECTIVE DATE:
2:00 p.m. June 17, 1998

EXPIRATION DATE:
10:00 p.m. June 17, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 8 hours for all legal gear types until 10:00 p.m. Wednesday June 17 in the South Unimak Fishery.

-Continued-

JUSTIFICATION:

The South Unimak fishery has a sockeye salmon allocation of 1,529,000 fish. There is a 350,000 to 400,000 chum salmon harvest cap placed on the South Unimak and Shumagin Islands fisheries combined. Due to a price dispute, only gillnet gear is fishing at South Unimak. The June 16 South Unimak sockeye harvest was 101,500 sockeye, bringing the total harvest to 316,900. The combined South Unimak chum salmon harvest to date is only 43,900 fish. More fishing time is needed for fishermen to harvest their sockeye allocation and at present there is no danger of reaching the chum salmon cap.

EMERGENCY ORDER NO. 4-FS-M-SP-09-98

Issued at Sand Point, AK
Wednesday June 17, 1998

EFFECTIVE DATE: 10:00 p.m.
Wednesday June 17, 1998

Expiration Date: 2:00
p.m. Thursday June 18, 1998
unless superseded by a
subsequent emergency order

EXPLANATION:

This emergency order allows a 16 hour extension of the current commercial salmon fishing period from 10:00 p.m. Wednesday June 17 until 2:00 p.m. Thursday June 18 in the Shumagin Islands Section

JUSTIFICATION:

The Shumagin Islands Section is managed on the basis of 1.5% of the total Bristol Bay projected inshore sockeye salmon harvest through June 30 as described under 5 AAC 09.365. The 1998 Shumagin Islands June fishery's sockeye salmon guideline harvest level(GHL) is 337,000 fish. The South Unimak and Shumagin Islands June fisheries are restricted by a "floating" chum salmon harvest ceiling of 350,000 to 400,000 fish based on the harvest projection of the Arctic-Yukon-Kuskokwim summer chum salmon index group as established by the Alaska Board of Fisheries

The preliminary Shumagin Islands harvest for June 16 included 8,177 sockeye and 415 chum salmon, which brings the Shumagin Islands sockeye salmon harvest to 18,349 fish. About 318,651 sockeye salmon remain to be harvested on the Shumagin Islands GHL. The combined South Unimak-Shumagin Islands June chum salmon harvest is approximately 44,000 fish. Set gillnet fishermen continue to report from the grounds that sockeye to chum salmon ratios are favorable but volume is low. No reports of seine fishing effort were received from the grounds today due to ongoing price discussions between fishermen and processors.

Based on historical harvest records the peak of the sockeye salmon run in the Shumagin Islands occurs between June 14 and June 23, and chum salmon abundance tends to increase toward the end of June. Commercial fishing by the fleet will provide the department information to help determine how to best achieve the conditions of the management plan and allow for the directed sockeye salmon harvest toward the GHL, while minimizing the chum salmon harvest. If favorable ratios are realized the fishery may be extended.

-Continued-

EMERGENCY ORDER N0. 4-FS-M-CB-13-98

Issued at Cold Bay, AK.
7:30 p.m. June 17, 1998

EFFECTIVE DATE:
10:00 p.m. June 17, 1998

EXPIRATION DATE:
2:00 p.m. June 18, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 16 hours until 2:00 p.m. Thursday June 18 in the South Unimak Fishery.

JUSTIFICATION:

The South Unimak fishery guideline harvest level is 1,529,000 sockeye salmon as specified by the Alaska Board of Fisheries approved management plan. The South Unimak and Shumagin Islands June fisheries are restricted by a 350,000-400,000 chum salmon harvest ceiling as established by the Alaska Board of Fisheries.

The South Unimak harvest to date is 316,939 sockeye while the combined South Unimak - Shumagin Island chum salmon harvest is only 42,600 fish. Fishing effort consists of the gillnet fleet; the seine fleet is not yet participating in the fishery due to price dispute. The sockeye to chum ratios reported from the grounds are generally above 5 to 1.. At this rate there is no danger of reaching the chum cap and more fishing time is needed to the harvest sockeye guideline harvest level.

EMERGENCY ORDER NO. 4-FS-M-SP-10-98

Issued at Sand Point, AK
Thursday June 18, 1998

EFFECTIVE DATE:
2:00 p.m. Thursday June 18, 1998

Expiration Date: 10:00
p.m. Thursday June 18, 1998
unless superseded by a
subsequent emergency a order

EXPLANATION:

This emergency order allows an 8 hour extension of the current commercial salmon fishing period from 2:00 p.m. Thursday June 18 until 10:00 p.m. Thursday June 18 in the Shumagin Islands Section.

JUSTIFICATION:

The Shumagin Islands Section is managed on the basis of 1.5% of the total Bristol Bay projected inshore sockeye salmon harvest through June 30 as described under 5 AAC 09.365. The 1998 Shumagin Islands June fishery's sockeye salmon guideline harvest level(GHL) is 337,000 fish. The South Unimak and Shumagin Islands June fisheries are restricted by a "floating" chum salmon harvest ceiling of 350,000 to 400,000 fish based on the harvest projection of the Arctic-Yukon-Kuskokwim summer chum salmon index group as established by the Alaska Board of Fisheries.

The preliminary Shumagin Islands harvest for June 17 included 12,912 sockeye and 547 chum salmon, which brings the Shumagin Islands sockeye salmon harvest to 31,261 fish. About 305,700 sockeye salmon remain

-Continued-

to be harvested on the Shumagin Islands GHL. The combined South Unimak-Shumagin Islands June chum salmon harvest is approximately 60,400 fish. Set gillnet fishermen continue to report from the grounds that sockeye to chum salmon ratios are favorable but volume is low. No reports of seine fishing effort were received from the grounds today due to ongoing price discussions between fishermen and processors.

Based on historical harvest records the peak of the sockeye salmon run in the Shumagin Islands occurs between June 14 and June 23, and chum salmon abundance tends to increase toward the end of June. Commercial fishing by the fleet will provide the department information to help determine how to best achieve the conditions of the management plan and allow for the directed sockeye salmon harvest toward the GHL, while minimizing the chum salmon harvest. If favorable ratios are realized the fishery may be extended.

EMERGENCY ORDER N0. 4-FS-M-CB-14-98

Issued at Cold Bay, AK.
12:30 a.m. June 18, 1998

EFFECTIVE DATE:
2:00 p.m. June 18, 1998

EXPIRATION DATE:
10:00 p.m. June 18, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 8 hours for all legal gear types until 10:00 p.m. Thursday June 18 in the South Unimak Fishery.

JUSTIFICATION:

The South Unimak fishery has a sockeye salmon allocation of 1,529,000 fish. There is a 350,000 to 400,000 chum salmon harvest cap placed on the South Unimak and Shumagin Islands fisheries combined. The June 17 South Unimak sockeye harvest was 95,600 sockeye, bringing the total harvest to 412,600. The combined South Unimak-Shumagin Islands chum salmon harvest to date is only 60,400 fish. More fishing time is needed for fishermen to harvest their sockeye allocation and at present there is no danger of reaching the chum salmon cap.

EMERGENCY ORDER NO. 4-FS-M-SP-11-98

Issued at Sand Point, AK
Thursday June 18, 1998

EFFECTIVE DATE: 10:00 p.m.
Thursday June 18, 1998

Expiration Date: 2:00 p.m.
Friday June 19, 1998
unless superseded by a
subsequent emergency order

EXPLANATION:

This emergency order allows a 16 hour extension of the current commercial salmon fishing period from 10:00 p.m. Thursday June 18 until 2:00 p.m. Friday June 19 in the Shumagin Islands Section.

-Continued-

JUSTIFICATION:

The Shumagin Islands Section is managed on the basis of 1.5% of the total Bristol Bay projected inshore sockeye salmon harvest through June 30 as described under 5 AAC 09.365. The 1998 Shumagin Islands June fishery's sockeye salmon guideline harvest level(GHL) is 337,000 fish. The South Unimak and Shumagin Islands June fisheries are restricted by a "floating" chum salmon harvest ceiling of 350,000 to 400,000 fish based on the harvest projection of the Arctic-Yukon-Kuskokwim summer chum salmon index group as established by the Alaska Board of Fisheries

The preliminary Shumagin Islands harvest for June 17 included 12,912 sockeye and 547 chum salmon, which brings the Shumagin Islands sockeye salmon harvest to 31,261 fish. About 305,700 sockeye salmon remain to be harvested on the Shumagin Islands GHL. The combined South Unimak-Shumagin Islands June chum salmon harvest is approximately 60,400 fish. Fishermen and processors reached an agreement on salmon prices and the entire fleet began fishing last night. Fishermen continue to report from the grounds that sockeye to chum salmon ratios are favorable but volume is low.

Based on historical harvest records the peak of the sockeye salmon run in the Shumagin Islands occurs between June 14 and June 23, and chum salmon abundance tends to increase toward the end of June. Commercial fishing by the fleet will provide the department information to help determine how to best achieve the conditions of the management plan and allow for the directed sockeye salmon harvest toward the GHL, while minimizing the chum salmon harvest. If favorable ratios are realized the fishery may be extended.

EMERGENCY ORDER N0. 4-FS-M-CB-15-98

Issued at Cold Bay, AK.
7:30 p.m. June 18, 1998

EFFECTIVE DATE:
10:00 p.m. June 18, 1998

EXPIRATION DATE:
2:00 p.m. June 19, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 16 hours until 2:00 p.m. Friday June 19 in the South Unimak Fishery.

JUSTIFICATION:

The South Unimak fishery guideline harvest level is 1,529,000 sockeye salmon as specified by the Alaska Board of Fisheries approved management plan. The South Unimak and Shumagin Islands June fisheries are restricted by a 350,000-400,000 chum salmon harvest ceiling as established by the Alaska Board of Fisheries.

The South Unimak harvest to date is 412,588 sockeye while the combined South Unimak - Shumagin Island chum salmon harvest is only 60,400 fish. Fishing effort consists of the gillnet fleet; the seine fleet is not yet participating in the fishery due to price dispute. The sockeye to chum ratios reported from the grounds are generally above 4 to 1.. At this rate there is no danger of reaching the chum cap and more fishing time is needed to the harvest sockeye guideline harvest level.

-Continued-

EMERGENCY ORDER NO. 4-FS-M-SP-12-98

Issued at Sand Point, AK
Friday June 19, 1998

EFFECTIVE DATE: 2:00 p.m.
Friday June 19, 1998

Expiration Date: 10:00 p.m.
Friday June 19, 1998
unless superseded by a
subsequent emergency order

EXPLANATION:

This emergency order allows an 8 hour extension of the current commercial salmon fishing period from 2:00 p.m. Friday June 19 until 10:00 p.m. Friday June 19 in the Shumagin Islands Section.

JUSTIFICATION:

The Shumagin Islands Section is managed on the basis of 1.5% of the total Bristol Bay projected inshore sockeye salmon harvest through June 30 as described under 5 AAC 09.365. The 1998 Shumagin Islands June fishery's sockeye salmon guideline harvest level(GHL) is 337,000 fish. The South Unimak and Shumagin Islands June fisheries are restricted by a "floating" chum salmon harvest ceiling of 350,000 to 400,000 fish based on the harvest projection of the Arctic-Yukon-Kuskokwim summer chum salmon index group as established by the Alaska Board of Fisheries

The preliminary Shumagin Islands harvest for June 18 included 16,131 sockeye and 2,032 chum salmon, which brings the Shumagin Islands sockeye salmon harvest to 47,392 fish. About 289,608 sockeye salmon remain to be harvested on the Shumagin Islands GHL. The combined South Unimak-Shumagin Islands June chum salmon harvest is approximately 73,977 fish. Fishermen continue to report from the grounds that sockeye to chum salmon ratios are favorable but volume is low.

Based on historical harvest records the peak of the sockeye salmon run in the Shumagin Islands occurs between June 14 and June 23, and chum salmon abundance tends to increase toward the end of June. Commercial fishing by the fleet will provide the department information to help determine how to best achieve the conditions of the management plan and allow for the directed sockeye salmon harvest toward the GHL, while minimizing the chum salmon harvest. If favorable ratios are realized the fishery may be extended.

EMERGENCY ORDER N0. 4-FS-M-CB-16-98

Issued at Cold Bay, AK.
11:00 a.m. June 19, 1998

EFFECTIVE DATE:
2:00 p.m. June 19, 1998

EXPIRATION DATE:
10:00 p.m. June 19, 1998
unless superseded by a subsequent
emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 8 hours for all legal gear types until 10:00 p.m. Friday June 19 in the South Unimak Fishery.

JUSTIFICATION:

The South Unimak fishery has a sockeye salmon allocation of 1,529,000 fish. There is a 350,000 to 400,000 chum salmon harvest cap placed on the South Unimak and Shumagin Islands fisheries

-Continued-

combined. The June 18 South Unimak sockeye harvest was 71,659 sockeye, bringing the total harvest to 484,247. The combined South Unimak-Shumagin Islands chum salmon harvest to date is only 74,000 fish. More fishing time is needed for fishermen to harvest their sockeye allocation and at present there is no danger of reaching the chum salmon cap.

EMERGENCY ORDER NO. 4-FS-M-SP-13-98

Issued at Sand Point, AK
Friday June 19, 1998

EFFECTIVE DATE:
10:00 p.m. Friday June 19, 1998

Expiration Date: 2:00 p.m.
Saturday June 20, 1998
unless superseded by a
subsequent emergency order

EXPLANATION:

This emergency order allows a 16 hour extension of the current commercial salmon fishing period from 10:00 p.m. Friday June 19 until 2:00 p.m. Saturday June 20 in the Shumagin Islands Section.

JUSTIFICATION:

The Shumagin Islands Section is managed on the basis of 1.5% of the total Bristol Bay projected inshore sockeye salmon harvest through June 30 as described under 5 AAC 09.365. The 1998 Shumagin Islands June fishery's sockeye salmon guideline harvest level(GHL) is 337,000 fish. The South Unimak and Shumagin Islands June fisheries are restricted by a "floating" chum salmon harvest ceiling of 350,000 to 400,000 fish based on the harvest projection of the Arctic-Yukon-Kuskokwim summer chum salmon index group as established by the Alaska Board of Fisheries

The preliminary Shumagin Islands harvest for June 18 included 16,131 sockeye and 2,032 chum salmon, which brings the Shumagin Islands sockeye salmon harvest to 47,392 fish. About 289,608 sockeye salmon remain to be harvested on the Shumagin Islands GHL. The combined South Unimak-Shumagin Islands June chum salmon harvest is approximately 73,977 fish. Fishermen and processors reached an agreement on salmon prices and the entire fleet began fishing last night. Fishermen continue to report from the grounds that sockeye to chum salmon ratios are favorable but volume is low.

Based on historical harvest records the peak of the sockeye salmon run in the Shumagin Islands occurs between June 14 and June 23, and chum salmon abundance tends to increase toward the end of June. Commercial fishing by the fleet will provide the department information to help determine how to best achieve the conditions of the management plan and allow for the directed sockeye salmon harvest toward the GHL, while minimizing the chum salmon harvest. If favorable ratios are realized the fishery may be extended.

EMERGENCY ORDER N0. 4-FS-M-CB-17-98

Issued at Cold Bay, AK.
7:30 p.m. June 19, 1998

EFFECTIVE DATE:
10:00 p.m. June 19, 1998

EXPIRATION DATE:
2:00 p.m. June 20, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 16 hours until 2:00 p.m. Saturday June 20 in the South Unimak Fishery.

-Continued-

JUSTIFICATION:

The South Unimak fishery guideline harvest level is 1,529,000 sockeye salmon as specified by the Alaska Board of Fisheries approved management plan. The South Unimak and Shumagin Islands June fisheries are restricted by a 350,000-400,000 chum salmon harvest ceiling as established by the Alaska Board of Fisheries.

The South Unimak harvest to date is 484,000 sockeye while the combined South Unimak - Shumagin Island chum salmon harvest is only 74,000 fish. The sockeye to chum ratios reported from the grounds are generally above 4 to 1, and weather is hampering fishing. At this rate, there is no danger of reaching the chum cap and more fishing time is needed to the harvest sockeye guideline harvest level.

EMERGENCY ORDER NO. 4-FS-M-SP-14-98

Issued at Sand Point, AK
Saturday June 20, 1998

EFFECTIVE DATE:
2:00 p.m. Saturday June 20, 1998

Expiration Date: 10:00 p.m.
Saturday June 20, 1998
unless superseded by a
subsequent emergency order

EXPLANATION:

This emergency order allows an 8 hour extension of the current commercial salmon fishing period from 2:00 p.m. Saturday June 20 until 10:00 p.m. Saturday June 20 in the Shumagin Islands Section.

JUSTIFICATION:

The Shumagin Islands Section is managed on the basis of 1.5% of the total Bristol Bay projected inshore sockeye salmon harvest through June 30 as described under 5 AAC 09.365. The 1998 Shumagin Islands June fishery's sockeye salmon guideline harvest level(GHL) is 337,000 fish. The South Unimak and Shumagin Islands June fisheries are restricted by a "floating" chum salmon harvest ceiling of 350,000 to 400,000 fish based on the harvest projection of the Arctic-Yukon-Kuskokwim summer chum salmon index group as established by the Alaska Board of Fisheries

The preliminary Shumagin Islands harvest for June 19 included 32,234 sockeye and 4,183 chum salmon, which brings the Shumagin Islands sockeye salmon harvest to 79,626 fish. About 257,374 sockeye salmon remain to be harvested on the Shumagin Islands GHL. The combined South Unimak-Shumagin Islands June chum salmon harvest is approximately 84,213 fish. Fishermen continue to report from the grounds that sockeye to chum salmon ratios are favorable but volume is low.

Based on historical harvest records the peak of the sockeye salmon run in the Shumagin Islands occurs between June 14 and June 23, and chum salmon abundance tends to increase toward the end of June. Commercial fishing by the fleet will provide the department information to help determine how to best achieve the conditions of the management plan and allow for the directed sockeye salmon harvest toward the GHL, while minimizing the chum salmon harvest. If favorable ratios are realized the fishery may be extended.

-Continued-

EMERGENCY ORDER N0. 4-FS-M-CB-18-98

Issued at Cold Bay, AK.
11:00 a.m. June 20, 1998

EFFECTIVE DATE:
2:00 p.m. June 20, 1998

EXPIRATION DATE:
10:00 p.m. June 20, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 8 hours for all legal gear types until 10:00 p.m. Saturday June 20 in the South Unimak Fishery.

JUSTIFICATION:

The South Unimak fishery has a sockeye salmon allocation of 1,529,000 fish. There is a 350,000 to 400,000 chum salmon harvest cap placed on the South Unimak and Shumagin Islands fisheries combined. The June 19 South Unimak sockeye harvest was 26,746 sockeye, bringing the total harvest to 510,993. The combined South Unimak-Shumagin Islands chum salmon harvest to date is only 84,000 fish. More fishing time is needed for fishermen to harvest their sockeye allocation and at present there is no danger of reaching the chum salmon cap.

EMERGENCY ORDER NO. 4-FS-M-SP-15-98

Issued at Sand Point, AK
Saturday June 20, 1998

EFFECTIVE DATE:
10:00 p.m. Saturday June 20, 1998

Expiration Date: 2:00 p.m.
Sunday June 21, 1998
unless superseded by a
subsequent emergency order .

EXPLANATION:

This emergency order allows a 16 hour extension of the current commercial salmon fishing period from 10:00 p.m. Saturday June 20 until 2:00 p.m. Sunday June 21 in the Shumagin Islands Section.

JUSTIFICATION:

The Shumagin Islands Section is managed on the basis of 1.5% of the total Bristol Bay projected inshore sockeye salmon harvest through June 30 as described under 5 AAC 09.365. The 1998 Shumagin Islands June fishery's sockeye salmon guideline harvest level(GHL) is 337,000 fish. The South Unimak and Shumagin Islands June fisheries are restricted by a "floating" chum salmon harvest ceiling of 350,000 to 400,000 fish based on the harvest projection of the Arctic-Yukon-Kuskokwim summer chum salmon index group as established by the Alaska Board of Fisheries

The preliminary Shumagin Islands harvest for June 19 included 32,234 sockeye and 4,183 chum salmon, which brings the Shumagin Islands sockeye salmon harvest to 79,626 fish. About 257,374 sockeye salmon remain to be harvested on the Shumagin Islands GHL. The combined South Unimak-Shumagin Islands June chum salmon harvest is approximately 84,213 fish. Fishermen continue to report from the grounds that sockeye to chum salmon ratios are favorable but volume is low. Based on historical harvest records the peak of the sockeye salmon run in the Shumagin Islands occurs between June 14 and June 23, and chum salmon abundance tends to increase toward the end of June. Commercial fishing by the fleet will provide the department information to help determine how to best achieve the conditions of the management plan and allow for the directed sockeye salmon harvest toward the GHL, while minimizing the chum salmon harvest. If favorable ratios are realized the fishery may be extended.

-Continued-

EMERGENCY ORDER N0. 4-FS-M-CB-19-98

Issued at Cold Bay, AK.
4:00 p.m. June 20, 1998

EFFECTIVE DATE:
10:00 p.m. June 20, 1998

EXPIRATION DATE:
2:00 p.m. June 21, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 16 hours until 2:00 p.m. Sunday June 21 in the South Unimak Fishery.

JUSTIFICATION:

The South Unimak fishery guideline harvest level is 1,529,000 sockeye salmon as specified by the Alaska Board of Fisheries approved management plan. The South Unimak and Shumagin Islands June fisheries are restricted by a 350,000-400,000 chum salmon harvest ceiling as established by the Alaska Board of Fisheries.

The South Unimak harvest to date is 510,993 sockeye while the combined South Unimak - Shumagin Island chum salmon harvest is only 84,000 fish. The sockeye to chum ratios reported from the grounds are generally above 4 to 1.. At this rate there is no danger of reaching the chum cap and more fishing time is needed to the harvest sockeye guideline harvest level.

EMERGENCY ORDER NO. 4-FS-M-SP-16-98

Issued at Sand Point, AK
Sunday June 21, 1998

EFFECTIVE DATE:
2:00 p.m. Sunday June 21, 1998

Expiration Date: 2:00 p.m.
Monday June 22, 1998
unless superseded by a
subsequent emergency a order

EXPLANATION:

This emergency order allows a 24 hour extension of the current commercial salmon fishing period from 2:00 p.m. Sunday June 21 until 2:00 p.m. Monday June 22 in the Shumagin Islands Section.

JUSTIFICATION:

The Shumagin Islands Section is managed on the basis of 1.5% of the total Bristol Bay projected inshore sockeye salmon harvest through June 30 as described under 5 AAC 09.365. The 1998 Shumagin Islands June fishery's sockeye salmon guideline harvest level(GHL) is 337,000 fish. The South Unimak and Shumagin Islands June fisheries are restricted by a "floating" chum salmon harvest ceiling of 350,000 to 400,000 fish based on the harvest projection of the Arctic-Yukon-Kuskokwim summer chum salmon index group as established by the Alaska Board of Fisheries

The preliminary Shumagin Islands harvest for June 20 included 42,104 sockeye and 6,977 chum salmon, which brings the Shumagin Islands sockeye salmon harvest to 121,730 fish. About 215,270 sockeye salmon remain to be harvested on the Shumagin Islands GHL. The combined South Unimak-Shumagin Islands June chum salmon harvest is approximately 104,362 fish. Fishermen continue to report from the grounds that sockeye to chum salmon ratios are favorable but volume is low.

-Continued-

Based on historical harvest records the peak of the sockeye salmon run in the Shumagin Islands occurs between June 14 and June 23, and chum salmon abundance tends to increase toward the end of June. Commercial fishing by the fleet will provide the department information to help determine how to best achieve the conditions of the management plan and allow for the directed sockeye salmon harvest toward the GHL, while minimizing the chum salmon harvest. If favorable ratios are realized the fishery may be extended.

EMERGENCY ORDER N0. 4-FS-M-CB-20-98

Issued at Cold Bay, AK.
11:00 a.m. June 21, 1998

EFFECTIVE DATE:
2:00 p.m. June 21, 1998

EXPIRATION DATE:
2:00 p.m. June 21, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 24 hours until 2:00 p.m. Monday June 22 in the South Unimak Fishery.

JUSTIFICATION:

The South Unimak fishery guideline harvest level is 1,529,000 sockeye salmon as specified by the Alaska Board of Fisheries approved management plan. The South Unimak and Shumagin Islands June fisheries are restricted by a 350,000-400,000 chum salmon harvest ceiling as established by the Alaska Board of Fisheries.

The South Unimak harvest to date is 589,339 sockeye while the combined South Unimak - Shumagin Island chum salmon harvest is only 104,000 fish. The sockeye to chum ratios reported from the grounds are generally above 4 to 1.. At this rate there is no danger of reaching the chum cap and more fishing time is needed to the harvest sockeye guideline harvest level.

EMERGENCY ORDER NO. 4-FS-M-SP-17-98

Issued at Sand Point, AK
Monday June 22, 1998

EFFECTIVE DATE:
2:00 p.m. Monday June 22, 1998

Expiration Date: 2:00 p.m.
Tuesday June 23, 1998
unless superseded by a
subsequent emergency order

EXPLANATION:

This emergency order allows a 24 hour extension of the current commercial salmon fishing period from 2:00 p.m. Monday June 22 until 2:00 p.m. Tuesday June 23 in the Shumagin Islands Section.

JUSTIFICATION:

The Shumagin Islands Section is managed on the basis of 1.5% of the total Bristol Bay projected inshore sockeye salmon harvest through June 30 as described under 5 AAC 09.365. The 1998 Shumagin Islands June fishery's sockeye salmon guideline harvest level(GHL) is 337,000 fish. The South Unimak and Shumagin Islands June fisheries are restricted by a "floating" chum salmon harvest ceiling of 350,000 to

–Continued-

400,000 fish based on the harvest projection of the Arctic-Yukon-Kuskokwim summer chum salmon index group as established by the Alaska Board of Fisheries

The preliminary Shumagin Islands harvest for June 21 included 42,010 sockeye and 5,616 chum salmon, which brings the Shumagin Islands sockeye salmon harvest to 163,740 fish. About 173,260 sockeye salmon remain to be harvested on the Shumagin Islands GHL. The combined South Unimak-Shumagin Islands June chum salmon harvest is approximately 116,338 fish. Fishermen continue to report from the grounds that sockeye to chum salmon ratios are favorable but volume is low.

Based on historical harvest records the peak of the sockeye salmon run in the Shumagin Islands occurs between June 14 and June 23, and chum salmon abundance tends to increase toward the end of June. Commercial fishing by the fleet will provide the department information to help determine how to best achieve the conditions of the management plan and allow for the directed sockeye salmon harvest toward the GHL, while minimizing the chum salmon harvest. If favorable ratios are realized the fishery may be extended.

EMERGENCY ORDER N0. 4-FS-M-CB-21-98

Issued at Cold Bay, AK.
11:00 a.m. June 22, 1998

EFFECTIVE DATE:
2:00 p.m. June 22, 1998

EXPIRATION DATE:
2:00 p.m. June 23, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 24 hours until 2:00 p.m. Tuesday June 23 in the South Unimak Fishery.

JUSTIFICATION:

The South Unimak fishery guideline harvest level is 1,529,000 sockeye salmon as specified by the Alaska Board of Fisheries approved management plan. The South Unimak and Shumagin Islands June fisheries are restricted by a 350,000-400,000 chum salmon harvest ceiling as established by the Alaska Board of Fisheries.

The South Unimak harvest to date is 632,134 sockeye while the combined South Unimak - Shumagin Island chum salmon harvest is only 116,000 fish. Almost no fishing is taking place at the present due to weather. At this rate there is no danger of reaching the chum cap and more fishing time is needed to the harvest sockeye guideline harvest level.

EMERGENCY ORDER N0. 4-FS-M-CB-22-98

Issued at Cold Bay, AK.
11:00 a.m. June 23, 1998

EFFECTIVE DATE:
2:00 p.m. June 23, 1998

EXPIRATION DATE:
2:00 p.m. June 24, 1998
unless superseded by a
subsequent emergency order.

-Continued-

EXPLANATION:

This emergency order extends commercial salmon fishing time 24 hours until 2:00 p.m. Wednesday June 24 in the South Unimak Fishery.

JUSTIFICATION:

The South Unimak fishery guideline harvest level is 1,529,000 sockeye salmon as specified by the Alaska Board of Fisheries approved management plan. The South Unimak and Shumagin Islands June fisheries are restricted by a 350,000-400,000 chum salmon harvest ceiling as established by the Alaska Board of Fisheries.

The South Unimak harvest to date is 667,223 sockeye while the combined South Unimak - Shumagin Island chum salmon harvest is only 126,500 fish. Reports from the fishing grounds indicate low volume and continued high sockeye to chum salmon ratios. At this rate there is no danger of reaching the chum cap and more fishing time is needed to the harvest sockeye guideline harvest level.

EMERGENCY ORDER NO. 4-FS-M-SP-18-98

Issued at Sand Point, AK
Tuesday June 23, 1998

EFFECTIVE DATE:
2:00 p.m. Tuesday June 23, 1998

Expiration Date: 2:00 p.m.
Wednesday June 24, 1998
unless superseded by a
subsequent emergency a order.

EXPLANATION:

This emergency order allows a 24 hour extension of the current commercial salmon fishing period from 2:00 p.m. Tuesday June 23 until 2:00 p.m. Wednesday June 24 in the Shumagin Islands Section.

JUSTIFICATION:

The Shumagin Islands Section is managed on the basis of 1.5% of the total Bristol Bay projected inshore sockeye salmon harvest through June 30 as described under 5 AAC 09.365. The 1998 Shumagin Islands June fishery's sockeye salmon guideline harvest level(GHL) is 337,000 fish. The South Unimak and Shumagin Islands June fisheries are restricted by a "floating" chum salmon harvest ceiling of 350,000 to 400,000 fish based on the harvest projection of the Arctic-Yukon-Kuskokwim summer chum salmon index group as established by the Alaska Board of Fisheries

The preliminary Shumagin Islands harvest for June 22 included 18,012 sockeye and 2,177 chum salmon, which brings the Shumagin Islands sockeye salmon harvest to 181,752 fish. About 155,248 sockeye salmon remain to be harvested on the Shumagin Islands GHL. The combined South Unimak-Shumagin Islands June chum salmon harvest is approximately 126,451 fish. Fishermen continue to report from the grounds that sockeye to chum salmon ratios are favorable but volume is low.

Based on historical harvest records the peak of the sockeye salmon run in the Shumagin Islands occurs between June 14 and June 23, and chum salmon abundance tends to increase toward the end of June. Commercial fishing by the fleet will provide the department information to help determine how to best achieve the conditions of the management plan and allow for the directed sockeye salmon harvest toward the GHL, while minimizing the chum salmon harvest. If favorable ratios are realized the fishery may be extended.

-Continued-

EMERGENCY ORDER NO. 4-FS-M-SP-19-98

Issued at Sand Point, AK
Wednesday June 24, 1998

EFFECTIVE DATE:
Wednesday June 24, 1998

Expiration Date: 2:00 p.m. 2:00 p.m.
Thursday June 25,1998
unless superseded by a
subsequent emergency order

EXPLANATION:

This emergency order allows a 24 hour extension of the current commercial salmon fishing period from 2:00 p.m. Wednesday June 24 until 2:00 p.m. Thursday June 25 in the Shumagin Islands Section.

JUSTIFICATION:

The Shumagin Islands Section is managed on the basis of 1.5% of the total Bristol Bay projected inshore sockeye salmon harvest through June 30 as described under 5 AAC 09.365. The 1998 Shumagin Islands June fishery's sockeye salmon guideline harvest level(GHL) is 337,000 fish. The South Unimak and Shumagin Islands June fisheries are restricted by a "floating" chum salmon harvest ceiling of 350,000 to 400,000 fish based on the harvest projection of the Arctic-Yukon-Kuskokwim summer chum salmon index group as established by the Alaska Board of Fisheries.

The preliminary Shumagin Islands harvest for June 23 included 17,835 sockeye and 2,399 chum salmon, which brings the Shumagin Islands sockeye salmon harvest to 199,587 fish. About 137,413 sockeye salmon remain to be harvested on the Shumagin Islands GHL. The combined South Unimak-Shumagin Islands June chum salmon harvest is approximately 145,467 fish. Fishermen continue to report from the grounds that sockeye to chum salmon ratios are favorable but volume is low.

Based on historical harvest records the peak of the sockeye salmon run in the Shumagin Islands occurs between June 14 and June 23, and chum salmon abundance tends to increase toward the end of June. Commercial fishing by the fleet will provide the department information to help determine how to best achieve the conditions of the management plan and allow for the directed sockeye salmon harvest toward the GHL, while minimizing the chum salmon harvest. If favorable ratios are realized the fishery may be extended.

EMERGENCY ORDER N0. 4-FS-M-CB-24-98

Issued at Cold Bay, AK.
11:00 a.m. June 24, 1998

EFFECTIVE DATE:
2:00 p.m. June 24, 1998

EXPIRATION DATE:
2:00 p.m. June 25, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 24 hours until 2:00 p.m. Thursday June 25 in the South Unimak Fishery.

JUSTIFICATION:

The South Unimak fishery guideline harvest level is 1,529,000 sockeye salmon as specified by the Alaska Board of Fisheries approved management plan. The South Unimak and Shumagin Islands June fisheries

-Continued-

are restricted by a 350,000-400,000 chum salmon harvest ceiling as established by the Alaska Board of Fisheries.

The South Unimak harvest to date is 751,747 sockeye while the combined South Unimak - Shumagin Island chum salmon harvest is only 145,500 fish. The June 23 harvest was 84,524 sockeye and 16,617 chum salmon. At this rate there is no danger of reaching the chum cap and more fishing time is needed to the harvest sockeye guideline harvest level.

EMERGENCY ORDER N0. 4-FS-M-CB-25-98

Issued at Cold Bay, AK.
11:00 a.m. June 25, 1998

EFFECTIVE DATE:
2:00 p.m. June 25, 1998

EXPIRATION DATE:
2:00 p.m. June 26, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 24 hours until 2:00 p.m. Friday June 26 in the South Unimak Fishery.

JUSTIFICATION:

The South Unimak fishery guideline harvest level is 1,529,000 sockeye salmon as specified by the Alaska Board of Fisheries approved management plan. The South Unimak and Shumagin Islands June fisheries are restricted by a 350,000-400,000 chum salmon harvest ceiling as established by the Alaska Board of Fisheries.

The South Unimak harvest to date is 809,300 sockeye while the combined South Unimak - Shumagin Island chum salmon harvest is only 163,700 fish. The June 24 harvest was 57,600 sockeye and 13,800 chum salmon. At this rate there is no danger of reaching the chum cap and more fishing time is needed to the harvest sockeye guideline harvest level.

EMERGENCY ORDER NO. 4-FS-M-SP-20-98

Issued at Sand Point, AK
Thursday June 25, 1998

EFFECTIVE DATE:
2:00 p.m. Thursday June 25, 1998

Expiration Date: 2:00 p.m.
Friday June 26, 1998
unless superseded by a
subsequent emergency a order

EXPLANATION:

This emergency order allows a 24 hour extension of the current commercial salmon fishing period from 2:00 p.m. Thursday June 25 until 2:00 p.m. Friday June 26 in the Shumagin Islands Section.

-Continued-

JUSTIFICATION:

The Shumagin Islands Section is managed on the basis of 1.5% of the total Bristol Bay projected inshore sockeye salmon harvest through June 30 as described under 5 AAC 09.365. The 1998 Shumagin Islands June fishery's sockeye salmon guideline harvest level(GHL) is 337,000 fish. The South Unimak and Shumagin Islands June fisheries are restricted by a "floating" chum salmon harvest ceiling of 350,000 to 400,000 fish based on the harvest projection of the Arctic-Yukon-Kuskokwim summer chum salmon index group as established by the Alaska Board of Fisheries

The preliminary Shumagin Islands harvest for June 24 included 16,177 sockeye and 4,458 chum salmon, which brings the Shumagin Islands sockeye salmon harvest to 215,764 fish. About 121,236 sockeye salmon remain to be harvested on the Shumagin Islands GHL. The combined South Unimak-Shumagin Islands June chum salmon harvest is approximately 163,684 fish. Fishermen continue to report from the grounds that sockeye to chum salmon ratios are favorable but volume is low. If favorable ratios are realized the fishery may be extended.

According to 5 AAC 09.365(h), after June 24, in either the South Unimak or Shumagin Islands fishery, if the ratio of sockeye salmon to chum salmon is two to one or less on any day, the next daily fishing period for seine and drift gillnet gear shall be of six hour duration. After June 24, the South Unimak or Shumagin Islands fishery shall close for all gear types if the ratio of sockeye to chum salmon is two to one or less for any three aggregate days.

EMERGENCY ORDER NO. 4-FS-M-SP-21-98

Issued at Sand Point, AK
Friday June 26, 1998

EFFECTIVE DATE:
2:00 p.m. Friday June 26, 1998

Expiration Date: 2:00 p.m.
Saturday June 27, 1998
unless superseded by a
subsequent emergency order

EXPLANATION:

This emergency order allows a 24 hour extension of the current commercial salmon fishing period from 2:00 p.m. Friday June 26 until 2:00 p.m. Saturday June 27 in the Shumagin Islands Section.

JUSTIFICATION:

The Shumagin Islands Section is managed on the basis of 1.5% of the total Bristol Bay projected inshore sockeye salmon harvest through June 30 as described under 5 AAC 09.365. The 1998 Shumagin Islands June fishery's sockeye salmon guideline harvest level(GHL) is 337,000 fish. The South Unimak and Shumagin Islands June fisheries are restricted by a "floating" chum salmon harvest ceiling of 350,000 to 400,000 fish based on the harvest projection of the Arctic-Yukon-Kuskokwim summer chum salmon index group as established by the Alaska Board of Fisheries

The preliminary Shumagin Islands harvest for June 25 included 13,693 sockeye and 1,848 chum salmon, which brings the Shumagin Islands sockeye salmon harvest to 229,457 fish. About 107,543 sockeye salmon remain to be harvested on the Shumagin Islands GHL. The combined South Unimak-Shumagin Islands June chum salmon harvest is approximately 171,583 fish. The Shumagin Islands sockeye to chum salmon ratio for June 25 was 7.4 to 1. Fishermen continue to report from the grounds that sockeye to chum salmon ratios are favorable but volume is low. If favorable ratios are realized the fishery may be extended.

-Continued-

According to 5 AAC 09.365(h), after June 24, in either the South Unimak or Shumagin Islands fishery, if the ratio of sockeye salmon to chum salmon is two to one or less on any day, the next daily fishing period for seine and drift gillnet gear shall be of six hour duration. After June 24, the South Unimak or Shumagin Islands fishery shall close for all gear types if the ratio of sockeye to chum salmon is two to one or less for any three aggregate days.

EMERGENCY ORDER N0. 4-FS-M-CB-27-98

Issued at Cold Bay, AK.
11:00 a.m. June 26, 1998

EFFECTIVE DATE:
2:00 p.m. June 26, 1998

EXPIRATION DATE:
2:00 p.m. June 27, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 24 hours until 2:00 p.m. Saturday June 27 in the South Unimak Fishery.

JUSTIFICATION:

The South Unimak fishery guideline harvest level is 1,529,000 sockeye salmon as specified by the Alaska Board of Fisheries approved management plan. The South Unimak and Shumagin Islands June fisheries are restricted by a 350,000-400,000 chum salmon harvest ceiling as established by the Alaska Board of Fisheries.

The South Unimak harvest to date is 822,300 sockeye while the combined South Unimak - Shumagin Island chum salmon harvest is only 171,600 fish. The June 25 harvest was 26,600 sockeye and 6,400 chum salmon. At this rate there is no danger of reaching the chum cap and more fishing time is needed to the harvest sockeye guideline harvest level.

EMERGENCY ORDER NO. 4-FS-M-SP-22-98

Issued at Sand Point, AK
Saturday June 27, 1998

EFFECTIVE DATE:
2:00 p.m. Saturday June 27, 1998

Expiration Date: 2:00 p.m.
Sunday June 28, 1998
unless superseded by a
subsequent emergency a order

EXPLANATION:

This emergency order allows a 24 hour extension of the current commercial salmon fishing period from 2:00 p.m. Saturday June 27 until 2:00 p.m. Sunday June 28 in the Shumagin Islands Section.

JUSTIFICATION:

The Shumagin Islands Section is managed on the basis of 1.5% of the total Bristol Bay projected inshore sockeye salmon harvest through June 30 as described under 5 AAC 09.365. The 1998 Shumagin Islands June fishery's sockeye salmon guideline harvest level(GHL) is 337,000 fish. The South Unimak and Shumagin Islands June fisheries are restricted by a "floating" chum salmon harvest ceiling of 350,000 to

-Continued-

400,000 fish based on the harvest projection of the Arctic-Yukon-Kuskokwim summer chum salmon index group as established by the Alaska Board of Fisheries

The preliminary Shumagin Islands harvest for June 26 included 17,682 sockeye and 4,087 chum salmon, which brings the Shumagin Islands sockeye salmon harvest to 247,139 fish. About 89,861 sockeye salmon remain to be harvested on the Shumagin Islands GHL. The combined South Unimak-Shumagin Islands June chum salmon harvest is approximately 188,086 fish. The Shumagin Islands sockeye to chum salmon ratio for June 26 was 4.3 to 1. Fishermen continue to report from the grounds that sockeye to chum salmon ratios are favorable but volume is low. If favorable ratios are realized the fishery may be extended.

According to 5 AAC 09.365(h), after June 24, in either the South Unimak or Shumagin Islands fishery, if the ratio of sockeye salmon to chum salmon is two to one or less on any day, the next daily fishing period for seine and drift gillnet gear shall be of six hour duration. After June 24, the South Unimak or Shumagin Islands fishery shall close for all gear types if the ratio of sockeye to chum salmon is two to one or less for any three aggregate days.

EMERGENCY ORDER N0. 4-FS-M-CB-28-98

Issued at Cold Bay, AK
11:00 a.m. June 27, 1998

EFFECTIVE DATE:
2:00 p.m. June 27, 1998

EXPIRATION DATE:
2:00 p.m. June 28, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 24 hours until 2:00 p.m. Sunday June 28 in the South Unimak Fishery.

JUSTIFICATION:

The South Unimak fishery guideline harvest level is 1,529,000 sockeye salmon as specified by the Alaska Board of Fisheries approved management plan. The South Unimak and Shumagin Islands June fisheries are restricted by a 350,000-400,000 chum salmon harvest ceiling as established by the Alaska Board of Fisheries.

The South Unimak harvest to date is 867,000 sockeye while the combined South Unimak - Shumagin Island chum salmon harvest is only 188,100 fish. The June 26 harvest was 44,600 sockeye and 12,400 chum salmon. At this rate there is no danger of reaching the chum cap and more fishing time is needed to the harvest sockeye guideline harvest level.

EMERGENCY ORDER NO. 4-FS-M-SP-23-98

Issued at Sand Point, AK
Sunday June 28, 1998

EFFECTIVE DATE:
2:00 p.m. Sunday June 28, 1998

Expiration Date: 2:00 p.m.
Monday June 29, 1998
unless superseded by a
subsequent emergency a order

-Continued-

EXPLANATION:

This emergency order allows a 24 hour extension of the current commercial salmon fishing period from 2:00 p.m. Sunday June 28 until 2:00 p.m. Monday June 29 in the Shumagin Islands Section.

JUSTIFICATION:

The Shumagin Islands Section is managed on the basis of 1.5% of the total Bristol Bay projected inshore sockeye salmon harvest through June 30 as described under 5 AAC 09.365. The 1998 Shumagin Islands June fishery's sockeye salmon guideline harvest level(GHL) is 337,000 fish. The South Unimak and Shumagin Islands June fisheries are restricted by a "floating" chum salmon harvest ceiling of 350,000 to 400,000 fish based on the harvest projection of the Arctic-Yukon-Kuskokwim summer chum salmon index group as established by the Alaska Board of Fisheries

The preliminary Shumagin Islands harvest for June 27 included 18,565 sockeye and 3,795 chum salmon, which brings the Shumagin Islands sockeye salmon harvest to 265,704 fish. About 71,296 sockeye salmon remain to be harvested on the Shumagin Islands GHL. The combined South

Unimak-Shumagin Islands June chum salmon harvest is approximately 202,354 fish. The Shumagin Islands sockeye to chum salmon ratio for June 27 was 5 to 1. Fishermen continue to report from the grounds that sockeye to chum salmon ratios are favorable but volume is low. If favorable ratios are realized the fishery may be extended.

According to 5 AAC 09.365(h), after June 24, in either the South Unimak or Shumagin Islands fishery, if the ratio of sockeye salmon to chum salmon is two to one or less on any day, the next daily fishing period for seine and drift gillnet gear shall be of six hour duration. After June 24, the South Unimak or Shumagin Islands fishery shall close for all gear types if the ratio of sockeye to chum salmon is two to one or less for any three aggregate days.

EMERGENCY ORDER N0. 4-FS-M-CB-29-98

Issued at Cold Bay, AK.
11:00 a.m. June 28, 1998

EFFECTIVE DATE:
2:00 p.m. June 28, 1998

EXPIRATION DATE:
2:00 p.m. June 29, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 24 hours until 2:00 p.m. Monday June 29 in the South Unimak Fishery.

JUSTIFICATION:

The South Unimak fishery guideline harvest level is 1,529,000 sockeye salmon as specified by the Alaska Board of Fisheries approved management plan. The South Unimak and Shumagin Islands June fisheries are restricted by a 350,000-400,000 chum salmon harvest ceiling as established by the Alaska Board of Fisheries.

The South Unimak harvest to date is 900,302 sockeye while the combined South Unimak - Shumagin Island chum salmon harvest is only 202,354 fish. The June 27 harvest was 33,336 sockeye and 10,473 chum salmon. At this rate there is no danger of reaching the chum cap and more fishing time is needed to the harvest sockeye guideline harvest level.

-Continued-

EMERGENCY ORDER NO. 4-FS-M-SP-24-98

Issued at Sand Point, AK
Monday June 29, 1998

EFFECTIVE DATE:
2:00 p.m. Monday June 29, 1998

Expiration Date: 2:00 p.m.
Tuesday June 30, 1998
unless superseded by a
subsequent emergency order

EXPLANATION:

This emergency order allows a 24 hour extension of the current commercial salmon fishing period from 2:00 p.m. Monday June 29 until 2:00 p.m. Tuesday June 30 in the Shumagin Islands Section.

JUSTIFICATION:

The Shumagin Islands Section is managed on the basis of 1.5% of the total Bristol Bay projected inshore sockeye salmon harvest through June 30 as described under 5 AAC 09.365. The 1998 Shumagin Islands June fishery's sockeye salmon guideline harvest level(GHL) is 337,000 fish. The South Unimak and Shumagin Islands June fisheries are restricted by a "floating" chum salmon harvest ceiling of 350,000 to 400,000 fish based on the harvest projection of the Arctic-Yukon-Kuskokwim summer chum salmon index group as established by the Alaska Board of Fisheries

The preliminary Shumagin Islands harvest for June 28 included 14,521 sockeye and 4,021 chum salmon, which brings the Shumagin Islands sockeye salmon harvest to 280,225 fish. About 56,775 sockeye salmon remain to be harvested on the Shumagin Islands GHL. The combined South Unimak-Shumagin Islands June chum salmon harvest is approximately 215,147 fish. The Shumagin Islands sockeye to chum salmon ratio for June 28 was 3.6 to 1. Fishermen continue to report from the grounds that sockeye to chum salmon ratios are favorable but volume is low. If favorable ratios are realized the fishery may be extended.

According to 5 AAC 09.365(h), after June 24, in either the South Unimak or Shumagin Islands fishery, if the ratio of sockeye salmon to chum salmon is two to one or less on any day, the next daily fishing period for seine and drift gillnet gear shall be of six hour duration. After June 24, the South Unimak or Shumagin Islands fishery shall close for all gear types if the ratio of sockeye to chum salmon is two to one or less for any three aggregate days.

EMERGENCY ORDER N0. 4-FS-M-CB-30-98

Issued at Cold Bay, AK.
11:00 a.m. June 29, 1998

EFFECTIVE DATE:
2:00 p.m. June 29, 1998

EXPIRATION DATE:
2:00 p.m. June 30, 1998
unless superseded by
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 24 hours until 2:00 p.m. Tuesday June 30 in the South Unimak Fishery.

JUSTIFICATION:

The South Unimak fishery guideline harvest level is 1,529,000 sockeye salmon as specified by the Alaska Board of Fisheries approved management plan. The South Unimak and Shumagin Islands June fisheries are restricted by a 350,000-400,000 chum salmon harvest ceiling as established by the Alaska Board of Fisheries.

-Continued-

The South Unimak harvest to date is 923,486 sockeye while the combined South Unimak - Shumagin Island chum salmon harvest is only 215,147 fish. The June 28 harvest was 23,184 sockeye and 8,772 chum salmon. At this rate there is no danger of reaching the chum cap and more fishing time is needed to the harvest sockeye guideline harvest level.

EMERGENCY ORDER NO. 4-FS-M-SP-25-98

Issued at Sand Point, AK
Tuesday June 30, 1998

EFFECTIVE DATE:
2:00 p.m. Tuesday June 30, 1998
1998

Expiration Date: 12:00 a.m.,
midnight, Tuesday June 30,

unless superseded by a subsequent emergency a order

EXPLANATION:

This emergency order allows a 10 hour extension of the current commercial salmon fishing period from 2:00 p.m. Tuesday June 30 until 12:00 a.m., midnight, Tuesday June 30 in the Shumagin Islands Section.

JUSTIFICATION:

The Shumagin Islands Section is managed on the basis of 1.5% of the total Bristol Bay projected inshore sockeye salmon harvest through June 30 as described under 5 AAC 09.365. The 1998 Shumagin Islands June fishery's sockeye salmon guideline harvest level(GHL) is 337,000 fish. The South Unimak and Shumagin Islands June fisheries are restricted by a "floating" chum salmon harvest ceiling of 350,000 to 400,000 fish based on the harvest projection of the Arctic-Yukon-Kuskokwim summer chum salmon index group as established by the Alaska Board of Fisheries

The preliminary Shumagin Islands harvest for June 29 included 11,594 sockeye and 2,057 chum salmon, which brings the Shumagin Islands sockeye salmon harvest to 291,819 fish. About 45,181 sockeye salmon remain to be harvested on the Shumagin Islands GHL. The combined South Unimak-Shumagin Islands June chum salmon harvest is approximately 225,297 fish. The Shumagin Islands sockeye to chum salmon ratio for June 29 was 5.6 to 1. Fishermen continue to report from the grounds that sockeye to chum salmon ratios are favorable but volume is low.

According to 5 AAC 09.365(h), after June 24, in either the South Unimak or Shumagin Islands fishery, if the ratio of sockeye salmon to chum salmon is two to one or less on any day, the next daily fishing period for seine and drift gillnet gear shall be of six hour duration. After June 24, the South Unimak or Shumagin Islands fishery shall close for all gear types if the ratio of sockeye to chum salmon is two to one or less for any three aggregate days. The South Unimak and Shumagin Islands June salmon fishery will close by regulation at 12:00 a.m., midnight, June 30.

EMERGENCY ORDER NO. 4-FS-M-SP-26-98

Issued at: Sand Point, AK
8:00 p.m. July 1, 1998

EFFECTIVE DATE: 9:00 p.m. Thursday July 2, 1998

Expiration Date: 9:00 p.m.
Friday July 3, 1998
unless superseded by a subsequent emergency order.

-Continued-

EXPLANATION:

This emergency order allows a 24 hour commercial salmon set gillnet fishing period from 9:00 p.m. Thursday July 2 until 9:00 p.m. Friday July 3, 1998 in all waters of Orzinski Bay north of a line from Elephant Point at 55°41.92' N. lat., 160°03.20' W. long., to Waterfall Point at 55°43.18' N. lat., 160°01.13' W. long.

JUSTIFICATION:

The Southeastern District Mainland fishery : East Stepovak, Stepovak Flats, Northwest Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections is managed on the basis of Chignik River sockeye salmon prior to July 26 as described under 5 AAC 09.360. Before July 11, only set gillnet gear may be used in these sections. For the purpose of this plan, local runs include only those salmon in the waters

(1) beginning July 1, in the Northwest Stepovak Section described in 5 AAC 09.200(f); and
(2) in the Stepovak Flats Section as described in 5 AAC 09.200(f).

Beginning July 1, all waters of Orzinski Bay north of a line from Elephant Point at 55°41.92' N. lat., 160°03.20' W. long., to Waterfall Point at 55°43.18' N. lat., 160°01.13' W. long. are managed on the basis of Orzinski Lake sockeye salmon escapements.

The sockeye daily escapement at Orzinski Lake as of 7:00 p.m. July 1, was 586 salmon for a total sockeye escapement of 2,035 salmon, composed of 2,000 adult and 35 jack salmon. The interim escapement goal of 2,000 adult sockeye salmon by July 1 has been achieved.

Commercial fishing by the fleet will allow fishermen to harvest local sockeye salmon that are excess to Orzinski Lake escapement requirements.

EMERGENCY ORDER NO. 4-FS-M-SP-27-98

Issued at: Sand Point, AK
10:00 a.m. July 3, 1998

EFFECTIVE DATE: 9:00 p.m. Friday July 3, 1998

Expiration Date: 9:00 p.m.
Saturday July 4, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order allows a 24 hour extension of the current commercial salmon set gillnet fishing period from 9:00 p.m. Friday July 3 until 9:00 p.m. Saturday July 4, 1998 in all waters of Orzinski Bay north of a line from Elephant Point at 55°41.92' N. lat., 160°03.20' W. long., to Waterfall Point at 55°43.18' N. lat., 160°01.13' W. long.

JUSTIFICATION:

The Southeastern District Mainland fishery : East Stepovak, Stepovak Flats, Northwest Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections is managed on the basis of Chignik River sockeye salmon prior to July 26 as described under 5 AAC 09.360. Before July 11, only set gillnet gear may be used in these sections. For the purpose of this plan, local runs include only those salmon in the waters

(1) beginning July 1, in the Northwest Stepovak Section described in 5 AAC 09.200(f); and
(2) in the Stepovak Flats Section as described in 5 AAC 09.200(f).

-Continued-

Beginning July 1, all waters of Orzinski Bay north of a line from Elephant Point at 55°41.92' N. lat., 160°03.20' W. long., to Waterfall Point at 55°43.18' N. lat., 160°01.13' W. long. are managed on the basis of Orzinski Lake sockeye salmon escapements.

The sockeye daily escapement at Orzinski Lake as of 12:00 midnight July 2, was 2,381 salmon for a total sockeye escapement of 4,416 salmon, composed of 4,336 adult and 80 jack salmon. The escapement is on schedule to achieve the next interim escapement goal of 5,000 adult sockeye salmon by July 9.

Commercial fishing by the fleet will allow fishermen to harvest local sockeye salmon that are excess to Orzinski Lake escapement requirements.

EMERGENCY ORDER NO. 4-FS-M-SP-28-98

Issued at: Sand Point, AK
10:00 a.m. July 4, 1998

EFFECTIVE DATE: 9:00 p.m. Saturday July 4, 1998

Expiration Date: 7:00 p.m.
Monday July 6, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order allows a 46 hour extension of the current commercial salmon set gillnet fishing period from 9:00 p.m. Saturday July 4 until 7:00 p.m. Monday July 6, 1998 in all waters of Orzinski Bay north of a line from Elephant Point at 55°41.92' N. lat., 160°03.20' W. long., to Waterfall Point at 55°43.18' N. lat., 160°01.13' W. long.

JUSTIFICATION:

The Southeastern District Mainland fishery : East Stepovak, Stepovak Flats, Northwest Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections is managed on the basis of Chignik River sockeye salmon prior to July 26 as described under 5 AAC 09.360. Before July 11, only set gillnet gear may be used in these sections. For the purpose of this plan, local runs include only those salmon in the waters

(1) beginning July 1, in the Northwest Stepovak Section described in 5 AAC 09.200(f); and
(2) in the Stepovak Flats Section as described in 5 AAC 09.200(f).

Beginning July 1, all waters of Orzinski Bay north of a line from Elephant Point at 55°41.92' N. lat., 160°03.20' W. long., to Waterfall Point at 55°43.18' N. lat., 160°01.13' W. long. are managed on the basis of Orzinski Lake sockeye salmon escapements.

The sockeye daily escapement at Orzinski Lake as of 12:00 midnight July 3, was 264 salmon for a total sockeye escapement of 4,680 salmon, composed of 4,594 adult and 86 jack salmon. The escapement is on schedule to achieve the next interim escapement goal of 5,000 adult sockeye salmon by July 9.

Commercial fishing by the fleet will allow fishermen to harvest local sockeye salmon that are excess to Orzinski Lake escapement requirements.

-Continued-

EMERGENCY ORDER N0. 4-FS-M-CB-33-98

Issued at Cold Bay, AK.
7:00 p.m. July 4, 1998

EFFECTIVE DATE: 12:01 a.m. July 6, 1998

EXPIRATION DATE:
9:00 p.m. July 6, 1998 unless superseded by a subsequent emergency order.

EXPLANATION:

This emergency order establishes a 12:01 a.m. until 9:00 p.m. commercial salmon fishing period during July 6 in the Shumagin Islands Section, South Central District, Southwestern District, Sanak Island Section, and Otter Cove Section.

The closed waters of Thin Point Cove are reduced to include only those waters within 1,000 yards of the Thin Point Lagoon terminus and waters within 500 yards of other salmon stream emptying into Thin Point Cove, from 12:01 a.m. until 9:00 p.m. during July 6.

JUSTIFICATION:

The Alaska Board of Fisheries adopted a regulation stating that six 24 hour fishing periods can be established interspersed by 48 hour closures from July 6 through July 21 in South Peninsula non-terminal locations (during July 6-21). In order to fit six periods approximately 24 hours in duration, interspersed by 48 hour closures, into the July 6-21 time frame, it is necessary to establish the first period as being only approximately 21 hours. A fishing period at this time is needed to fulfill the Alaska Board of Fisheries intent.

The number of sockeye salmon observed in Thin Point Lagoon during a recent survey was estimated to be 500 to 1,000 fish which is very good for this date. A fishery in Thin Point Cove during July 6 will allow fishermen to test the strength of the Thin Point run before there are minus tides, which may cause fish to back out of the lagoon and into the fishery.

EMERGENCY ORDER NO. 4-FS-M-SP-29-98

Issued at: Sand Point, AK
8:00 p.m. July 7, 1998

EFFECTIVE DATE: 9:00 a.m. Wednesday July 8, 1998

Expiration Date: 9:00 p.m.
Thursday July 9, 1998
unless superseded by a subsequent emergency order.

EXPLANATION:

This emergency order allows a 36 hour commercial salmon set gillnet fishing period from 9:00 a.m. Wednesday July 8 until 9:00 p.m. Thursday July 9, 1998 in all waters of Orzinski Bay north of a line from Elephant Point at 55°41.92' N. lat., 160°03.20' W. long., to Waterfall Point at 55°43.18' N. lat., 160°01.13' W. long.

-Continued-

JUSTIFICATION:

The Southeastern District Mainland fishery : East Stepovak, Stepovak Flats, Northwest Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections is managed on the basis of Chignik River sockeye salmon prior to July 26 as described under 5 AAC 09.360. Before July 11, only set gillnet gear may be used in these sections. For the purpose of this plan, local runs include only those salmon in the waters

(1) beginning July 1, in the Northwest Stepovak Section described in 5 AAC 09.200(f); and
(2) in the Stepovak Flats Section as described in 5 AAC 09.200(f).

Beginning July 1, all waters of Orzinski Bay north of a line from Elephant Point at 55°41.92' N. lat., 160°03.20' W. long., to Waterfall Point at 55°43.18' N. lat., 160°01.13' W. long. are managed on the basis of Orzinski Lake sockeye salmon escapements.

The sockeye daily escapement at Orzinski Lake as of 7:00 p.m. July 7, was 191 salmon for a total sockeye escapement of 5,070 salmon, composed of 4,951 adult and 119 jack salmon. The escapement is on schedule to achieve the next interim escapement goal of 5,000 adult sockeye salmon by July 9.

Commercial fishing by the fleet will allow fishermen to harvest local sockeye salmon that are excess to Orzinski Lake escapement requirements.

EMERGENCY ORDER N0. 4-FS-M-CB-34-98

Issued at Cold Bay, AK.
3:00 p.m. July 7, 1998

EFFECTIVE DATE:
9:00 p.m. July 8, 1998

EXPIRATION DATE:
9:00 p.m. July 9, 1998 unless superseded by a subsequent emergency order.

EXPLANATION:

This emergency order establishes a 9:00 p.m. July 8 until 9:00 p.m. July 9 commercial salmon fishing period in the Shumagin Islands Section, South Central District, Southwestern District, Sanak Island Section, and Otter Cove.

JUSTIFICATION:

The Alaska Board of Fisheries adopted a regulation stating that six 24 hour fishing periods can be established interspersed by 48 hour closures from July 6 through July 21 in South Peninsula non-terminal locations (during July 6-21). A fishing period is needed at this time to fullfill the Alaska Board of Fisheries intent.

EMERGENCY ORDER NO. 4-FS-M-SP-30-98

Issued at: Sand Point, AK
9:00 a.m. July 10, 1998

EFFECTIVE DATE: 9:00 p.m. Friday July 10, 1998

Expiration Date: 9:00 p.m. Sunday July 12, 1998 unless superseded by a subsequent emergency order.

-Continued-

EXPLANATION:

This emergency order allows a 48 hour commercial salmon set gillnet fishing period from 9:00 p.m. Friday July 10 until 9:00 p.m. Sunday July 12, 1998 in all waters of Orzinski Bay north of a line from Elephant Point at 55°41.92' N. lat., 160°03.20' W. long., to Waterfall Point at 55°43.18' N. lat., 160°01.13' W. long.

This emergency order also allows a 45 hour commercial salmon seine fishing period from 12:01 a.m. Saturday July 11 until 9:00 p.m. Sunday July 12, 1998 in all waters of Orzinski Bay north of a line from Elephant Point at 55°41.92' N. lat., 160°03.20' W. long., to Waterfall Point at 55°43.18' N. lat., 160°01.13' W. long.

JUSTIFICATION:

The Southeastern District Mainland fishery : East Stepovak, Stepovak Flats, Northwest Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections is managed on the basis of Chignik River sockeye salmon prior to July 26 as described under 5 AAC 09.360. Before July 11, only set gillnet gear may be used in these sections. For the purpose of this plan, local runs include only those salmon in the waters

(1) beginning July 1, in the Northwest Stepovak Section described in 5 AAC 09.200(f); and
(2) in the Stepovak Flats Section as described in 5 AAC 09.200(f).

Beginning July 1, all waters of Orzinski Bay north of a line from Elephant Point at 55°41.92' N. lat., 160°03.20' W. long., to Waterfall Point at 55°43.18' N. lat., 160°01.13' W. long. are managed on the basis of Orzinski Lake sockeye salmon escapements.

The sockeye daily escapement at Orzinski Lake as of 12:00 midnight July 9, was 1,135 salmon for a total sockeye escapement of 6,205 salmon, composed of 6,010 adult and 195 jack salmon. The interim escapement goal of 5,000 adult sockeye salmon by July 9 has been surpassed.

Commercial fishing by the fleet will allow fishermen to harvest local sockeye salmon that are excess to Orzinski Lake escapement requirements.

EMERGENCY ORDER N0. 4-FS-M-CB-38-98

Issued at Cold Bay, AK.
2:00 p.m. July 10, 1998

EFFECTIVE DATE:
9:00 p.m. July 11, 1998

EXPIRATION DATE:
9:00 p.m. July 12, 1998 unless superseded by a subsequent emergency order.

EXPLANATION:

This emergency order establishes a 9:00 p.m. July 11 until 9:00 p.m. July 12 commercial salmon fishing period in the Shumagin Islands Section, South Central District, Southwestern District, Sanak Island Section, and Otter Cove Section.

JUSTIFICATION:

The Alaska Board of Fisheries adopted a regulation stating that six 24 hour fishing periods can be established interspersed by 48 hour closures from July 6 through July 21 in South Peninsula non-terminal

-Continued-

locations (during July 6-21). A fishing period is needed at this time to fulfill the Alaska Board of Fisheries intent.

EMERGENCY ORDER NO. 4-FS-M-SP-31-98

Issued at: Sand Point, AK
9:00 a.m. July 13, 1998

EFFECTIVE DATE: 9:00 p.m. Monday July 13, 1998

Expiration Date: 9:00 p.m. Wednesday July 15, 1998 unless superseded by a subsequent emergency order.

EXPLANATION:

This emergency order allows a 48 hour commercial salmon fishing period from 9:00 p.m. Monday July 13 until 9:00 p.m. Wednesday July 15, 1998 in all waters of Orzinski Bay north of a line from Elephant Point at 55°41.92' N. lat., 160°03.20' W. long., to Waterfall Point at 55°43.18' N. lat., 160°01.13' W. long.

JUSTIFICATION:

The Southeastern District Mainland fishery : East Stepovak, Stepovak Flats, Northwest Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections is managed on the basis of Chignik River sockeye salmon prior to July 26 as described under 5 AAC 09.360. Before July 11, only set gillnet gear may be used in these sections. For the purpose of this plan, local runs include only those salmon in the waters

(1) beginning July 1, in the Northwest Stepovak Section described in 5 AAC 09.200(f); and
(2) in the Stepovak Flats Section as described in 5 AAC 09.200(f).

Beginning July 1, all waters of Orzinski Bay north of a line from Elephant Point at 55°41.92' N. lat., 160°03.20' W. long., to Waterfall Point at 55°43.18' N. lat., 160°01.13' W. long. are managed on the basis of Orzinski Lake sockeye salmon escapements.

The sockeye daily escapement at Orzinski Lake as of 12:00 midnight July 12, was 2,402 salmon for a total sockeye escapement of 9,706 salmon, composed of 9,371 adult and 335 jack salmon. The escapement is on schedule to achieve the interim escapement goal of 10,000 adult sockeye salmon by July 16.

Commercial fishing by the fleet will allow fishermen to harvest local sockeye salmon that are excess to Orzinski Lake escapement requirements.

EMERGENCY ORDER N0. 4-FS-M-CB-39-98

Issued at Cold Bay, AK.
1:30 p.m. July 13, 1998

EFFECTIVE DATE:
9:00 p.m. July 14, 1998

EXPIRATION DATE:
9:00 p.m. July 15, 1998 unless superseded by a subsequent emergency order.

EXPLANATION:

This emergency order establishes a 9:00 p.m. July 14 until 9:00 p.m. July 15 commercial salmon fishing period in the Shumagin Islands Section, South Central District, Southwestern District, Sanak Island Section, and Otter Cove Section.

-Continued-

JUSTIFICATION:

The Alaska Board of Fisheries adopted a regulation stating that six 24 hour fishing periods can be established interspersed by 48 hour closures from July 6 through July 21 in South Peninsula non-terminal locations (during July 6-21). A fishing period is needed at this time to fullfill the Alaska Board of Fisheries intent.

EMERGENCY ORDER NO. 4-FS-M-SP-32-98

Issued at: Sand Point, AK
9:00 a.m. July 16, 1998

EFFECTIVE DATE: 9:00 p.m. Thursday July 16, 1998

Expiration Date: 9:00 p.m. Saturday July 18, 1998 unless superseded by a subsequent emergency order.

EXPLANATION:

This emergency order allows a 48 hour commercial salmon fishing period from 9:00 p.m. Thursday July 16 until 9:00 p.m. Saturday July 18, 1998 in all waters of Orzinski Bay north of a line from Elephant Point at 55°41.92' N. lat., 160°03.20' W. long., to Waterfall Point at 55°43.18' N. lat., 160°01.13' W. long.

JUSTIFICATION:

The Southeastern District Mainland fishery : East Stepovak, Stepovak Flats, Northwest Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections is managed on the basis of Chignik River sockeye salmon prior to July 26 as described under 5 AAC 09.360. Before July 11, only set gillnet gear may be used in these sections. For the purpose of this plan, local runs include only those salmon in the waters

(1) beginning July 1, in the Northwest Stepovak Section described in 5 AAC 09.200(f); and
(2) in the Stepovak Flats Section as described in 5 AAC 09.200(f).

Beginning July 1, all waters of Orzinski Bay north of a line from Elephant Point at 55°41.92' N. lat., 160°03.20' W. long., to Waterfall Point at 55°43.18' N. lat., 160°01.13' W. long. are managed on the basis of Orzinski Lake sockeye salmon escapements.

The sockeye daily escapement at Orzinski Lake as of 12:00 midnight July 15, was 457 salmon for a total sockeye escapement of 11,844 salmon, composed of 11,435 adult and 409 jack salmon. The interim escapement goal of 10,000 adult sockeye salmon by July 16 has been surpassed.

Commercial fishing by the fleet will allow fishermen to harvest local sockeye salmon that are excess to Orzinski Lake escapement requirements.

EMERGENCY ORDER N0. 4-FS-M-CB-40-98

Issued at Cold Bay, AK
5:30 p.m. July 16, 1998

EFFECTIVE DATE:
9:00 p.m. July 17, 1998

EXPIRATION DATE:
9:00 p.m. July 19, 1998 unless superseded by a subsequent emergency order.

-Continued-

EXPLANATION:

This emergency order establishes a 9:00 p.m. July 17 until 9:00 p.m. July 19 commercial salmon fishing period in the Shumagin Islands Section, South Central District, Southwestern District, Sanak Island Section, and Otter Cove Section.

The closed waters of Thin Point Cove are reduced to include only those waters within 1,000 yards of the Thin Point Lagoon terminus and waters within 500 yards of other salmon stream emptying into Thin Point Cove, during open fishing periods from 9:00 p.m. July 17 until 9:00 p.m. July 19.

JUSTIFICATION:

The Alaska Board of Fisheries adopted a regulation stating that six 24 hour fishing periods can be established interspersed by 48 hour closures from July 6 through July 21 in South Peninsula non-terminal locations (during July 6-21). In order to fit six periods approximately 24 hours in duration, interspersed by 48 hour closures, into the July 6-21 time frame, it is necessary to establish the first period as being only approximately 21 hours. A fishing period at this time is needed to fulfill the Alaska Board of Fisheries intent.

The estimated sockeye escapement into Thin Point Lagoon is 6,200 fish which is good for this date. There are no minus tides at this time which makes this a safe time to allow a directed fishery on Thin Point Lake System sockeye. A reduction in closed waters is necessary for a directed fishery on Thin Point sockeye to occur.

EMERGENCY ORDER N0. 4-FS-M-CB-42-98

Issued at Cold Bay, AK.
10:0m. July 18, 1998

EFFECTIVE DATE:
9:00 p.m. July 18, 1998

EXPIRATION DATE:
9:00 p.m. July 19, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 24 hours until 9:00 p.m. July 19 in the following locations:

1. Morzhovoi Bay Section
2. Thin Point Section
3. Cold Bay Section
4. Canoe Bay Section
5. That portion of the East and West Pavlof Bay Sections located north of the latitude of Black Point.

JUSTIFICATION:

The effort level targeting local stocks in terminal areas has been almost non-existent in that portion of the South Peninsula outside of Orzinski Bay. Extra fishing time in these areas, with the balance of the South Peninsula closed, will enable fishermen to test run strength. Weather is also impacting fishing in some locations. The pink salmon escapement in East Pavlov is unusually strong for this date and the Thin Point Lagoon sockeye salmon escapement is ahead of schedule.

-Continued-

EMERGENCY ORDER N0. 4-FS-M-CB-43-98

Issued at Cold Bay, AK.
10:30 p.m. July 19, 1998

EFFECTIVE DATE:
9:00 p.m. July 19, 1998

EXPIRATION DATE:
9:00 p.m. July 21, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 48 hours until 9:00 p.m. July 21 in the following locations:

1. Canoe Bay Section

2. That portion of the East and West Pavlof Bay Sections located north of the latitude of Black Point.

JUSTIFICATION:

The pink salmon escapements into Pavlof Bay systems are very strong. The Canoe Bay chum salmon escapement of over 10,000 fish is very good for this date. To date, there has been no directed fishing effort on Pavlof and Canoe Bay pink and chum salmon stocks because fishermen have been working in locations where they can catch sockeye salmon.

EMERGENCY ORDER NO. 4-FS-M-SP-33-98

Issued at: Sand Point, AK
12:00 noon July 19, 1998

EFFECTIVE DATE: 1:00 p.m. Monday July 20, 1998

Expiration Date: 9:00 p.m.
Tuesday July 21, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order allows a 32 hour commercial salmon fishing period from 1:00 p.m. Monday July 20 until 9:00 p.m. Tuesday July 21, 1998 in the East Stepovak, Stepovak Flats, Northwest Stepovak, Southwest Stepovak, Balboa Bay, and Beaver Bay Sections of the Southeastern District.

JUSTIFICATION:

The Southeastern District Mainland fishery is managed on the basis of Chignik River sockeye salmon prior to July 26 as described under 5 AAC 09.360.

The Chignik sockeye daily escapement during July 18 was 7,057 salmon. The Chignik total sockeye escapement through 12:00 midnight July 18 was about 531,000 salmon, composed of an estimated 391,00 first run and 139,00 second run sockeye salmon. The second run interim escapement goal of 135,000 sockeye salmon by July 21 has been surpassed.

The preliminary sockeye salmon harvest in the Chignik Management Area (CMA), through July 17, is approximately 519,000 fish. There have been no commercial fishing periods in either the Cape Igvak Section of the Kodiak Management Area, or the Southeastern District Mainland fishery targeting Chignik bound

-Continued-

sockeye salmon. Based on Chignik escapement and harvest reports, the first run escapement requirements have been achieved and sockeye salmon harvests in the CMA should reach at least 600,000.

Commercial fishing by the fleet in the Southeastern District Mainland area will allow fishermen the opportunity to harvest fish toward their allocation of 6% of the total Chignik bound sockeye salmon catch through July 25.

EMERGENCY ORDER N0. 4-FS-M-CB-44-98

Issued at Cold Bay, AK.
3:00 p.m. July 19, 1998

EFFECTIVE DATE:
9:00 p.m. July 20, 1998

EXPIRATION DATE:
9:00 p.m. July 21, 1998 unless superseded by a subsequent emergency order.

EXPLANATION:

This emergency order establishes a 9:00 p.m. July 20 until 9:00 p.m. July 21 commercial salmon fishing period in the Shumagin Islands Section, South Central District, Southwestern District, Sanak Island Section, and Otter Cove Section.

JUSTIFICATION:

The Alaska Board of Fisheries adopted a regulation stating that six 24 hour fishing periods can be established interspersed by 48 hour closures from July 6 through July 21 in South Peninsula non-terminal locations (during July 6-21). A fishing period is needed at this time to fullfill the Alaska Board of Fisheries intent.

EMERGENCY ORDER N0. 4-FS-M-CB-45-98

Issued at Cold Bay, AK.
5:00 p.m. July 21, 1998

EFFECTIVE DATE:
9:00 p.m. July 21, 1998

EXPIRATION DATE:
September1, 1998
unless superseded by a subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 72 hours until 9:00 p.m. July 24 in the following locations:

1. Canoe Bay Section

2. That portion of the East and West Pavlof Bay Sections located north of the latitude of Black Point.

Effective 9:00 p.m. July 21 through August 31, commercial salmon fishing is allowed up to the stream terminus at the ocean shoreline of Settlement Point and Middle Creeks.

-Continued-

JUSTIFICATION:

The number of chum salmon in the closed waters of Canoe Bay are estimated to be in excess of 75,000 which satisfies the peak escapement requirements.

The number of pink salmon in Middle and Settlement Point Creeks are estimated to be 75,000 and 200,000 respectively. This is in excess of the peak escapement needs.

More fishing time and area is needed to harvest pink and chum salmon in Canoe Bay and the northern part of Pavlof Bay.

EMERGENCY ORDER N0. 4-FS-M-CB-46-98

Issued at Cold Bay, AK.
2:00 p.m. July 22, 1998

EFFECTIVE DATE:
12:00 noon July 23, 1998

EXPIRATION DATE:
9:00 p.m. July 24, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order establishes a 33 hour commercial salmon fishing period from 12:00 noon July 23, until 9:00 p.m. July 24 in the following locations:

1. That portion of the Ikatan Bay Section located north of 54°45.00'N. lat.

2. That portion of the Southwestern District located outside of the Ikatan Bay Section.

3. South Central District

4.Shumagin Islands Section.

The following locations will become waters closed to commercial salmon fishing during 12:00 noon July 23 until 9:00 p.m. July 24:

1. All waters within one nautical mile on the southeast side of Unga Island between Kelly's Rock and the southern most tip of Unga Cape.

2. All waters within one nautical mile of shore on the east side of Popof Island between Pirate Cove and the southern most tip of Popof Head.

3. All waters within one nautical mile of shore, on the east side of Korovin Island between Scotland Point and the southern most tip of Cape Devine.

JUSTIFICATION:

South Peninsula pink salmon runs are strong and fishing time is needed to harvest the resource. The Board of Fisheries has specified that fishing periods can't exceed 36 hours in length and must be interspersed by 48 hour closures during July 22-31 with the first fishing period not beginning before noon July 23, in non-terminal locations for that time period. The Board of Fisheries also imposed a 60,000

-Continued-

coho salmon harvest cap in non-terminal locations during July 22-31. To prevent having to close all non-terminal if the coho cap is exceeded, ADF&G has closed specific locations which normally produce most of the late July coho catches. These locations include three locations in the Shumagin Islands, the southern part of the Ikatan Bay Section and the Unimak District. Fishing time is needed in the non-terminal locations to harvest pink salmon while the quality is good and before the processors receive more fish than they can handle.

EMERGENCY ORDER N0. 4-FS-M-CB-48-98

Issued at Cold Bay, AK.
11:45 a.m. July 28, 1998

EFFECTIVE DATE:
9:00 p.m. July 24, 1998

EXPIRATION DATE:
9:00 a.m. July 28, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends the commercial salmon fishing time 84 hours until 9:00 a.m. July 28 in that portion of Pavlof Bay located north of the latitude of Black Point, Canoe Bay Section, Belkofski Bay Section, Deer Island Section, Cold Bay Section, Thin Point Section, and Morzhovoi Bay Section.

JUSTIFICATION:

Pink and chum salmon escapements are very strong in Canoe Bay and the northern portion of Pavlof Bay. Pink salmon runs appear strong throughout the South Peninsula and there has been no fishing by seiners from the Belkofski Bay Section west to and including the Morzhovoi Bay Section because they prefer fishing in locations where sockeye are more abundant. More fishing time is needed in the Belkofski Bay to Morzhovoi Bay area for fishermen to test pink strength and to harvest the resource while the quality is good.

EMERGENCY ORDER N0. 4-FS-M-CB-49-98

Issued at Cold Bay, AK.
2:00 p.m. July 25, 1998

EFFECTIVE DATE:
9:00 p.m. July 26, 1998

EXPIRATION DATE:
9:00 a.m. July 28, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order establishes a 36 hour commercial salmon fishing period in that portion of the South Peninsula located between the longitude of Rock Island and the eastern boundary of the area, from 9:00 a.m. July 26 until 9:00 a.m. July 28.

JUSTIFICATION:

The Board of Fisheries specified that the department could allow three 36 hour fishing periods interspersed by 48 hour closures during the last 10 days of July as long as a 60,000 non-terminal area coho salmon harvest cap is not exceeded. The coho harvest to date is 8,100 fish.

-Continued-

A fishing period is needed at this time to harvest pink salmon and to fullfill the Alaska Board of Fisheries intent.

EMERGENCY ORDER N0. 4-FS-M-CB-50-98

Issued at Cold Bay, AK.
7:30 p.m. July 26, 1998

EFFECTIVE DATE:
July 27, 1998

EXPIRATION DATE:
September1, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

Effective July 27 through August 31, commercial salmon fishing is allowed up to the stream terminus at the ocean shoreline of Eastern Creek.

JUSTIFICATION:

The escapement of pink salmon into Eastern Creek is estimated to be 22,000 fish. This escapement is at the season goal for Eastern Creek. More fishing area is needed to harvest the resource.

EMERGENCY ORDER N0. 4-FS-M-CB-51-98

Issued at Cold Bay, AK.
3:00 p.m. July 28, 1998

EFFECTIVE DATE:
9:00 a.m. July 28, 1998

EXPIRATION DATE:
9:00 p.m. July 31, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends the commercial salmon fishing time 60 hours until 9:00 p.m. July 30 in that portion of Pavlof Bay located north of the latitude of Black Point, Canoe Bay Section, Belkofski Bay Section, Deer Island Section, Cold Bay Section, Thin Point Section, and Morzhovoi Bay Section.

The closed waters of Thin Point Cove are reduced to include only those waters within 1,000 yards of the Thin Point Lagoon terminus and waters within 500 yards of the other salmon stream emptying into Thin Point Cove, during open fishing period from 6:00 p.m. July 28 through 9:00 p.m. July 31.

JUSTIFICATION:

Pink and chum salmon escapements are very strong in Canoe Bay and the northern portion of Pavlof Bay. Pink salmon runs appear strong throughout the South Peninsula and there has been no fishing by seiners from the Belkofski Bay Section west to and including the Morzhovoi Bay Section because they prefer fishing in locations where sockeye are more abundant. More fishing time is needed in the Belkofski Bay to Morzhovoi Bay area for fishermen to test pink strength and to harvest the resource while the quality is good.

-Continued-

The sockeye escapement into Thin Point Lagoon is established to be over 9,000 fish which is good for this date and there are no minus tides during the next several days, making this a safe time to harvest incoming sockeye without losing fish in the lagoon to back out.

EMERGENCY ORDER N0. 4-FS-M-CB-52-98

Issued at Cold Bay, AK.
11:00 a.m. July 29, 1998

EFFECTIVE DATE:
9:00 a.m. July 30, 1998

EXPIRATION DATE:
9:00 p.m. July 31, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order establishes a 36 hour commercial salmon fishing period in that portion of the South Peninsula located between the longitude of Rock Island and the eastern boundary of the area, from 9:00 a.m. July 30 until 9:00 p.m. July 31.

JUSTIFICATION:

The Board of Fisheries specified that the department could allow three 36 hour fishing periods interspersed by 48 hour closures during the last 10 days of July as long as a 60,000 non-terminal area coho salmon harvest cap is not exceeded. The coho harvest to date is 26,000 fish.

A fishing period is needed at this time to harvest pink salmon and to fullfill the Alaska Board of Fisheries intent.

EMERGENCY ORDER N0. 4-FS-M-CB-53-98

Issued at Cold Bay, AK.
2:00 p.m. July 30, 1998

EFFECTIVE DATE:
9:00 p.m. July 31, 1998

EXPIRATION DATE:
9:00 p.m. August 3, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends the commercial salmon fishing time 72 hours until 9:00 p.m. August 3 in that portion of Pavlof Bay located north of the latitude of Black Point, Canoe Bay Section, Belkofski Bay Section, Deer Island Section, Cold Bay Section, Thin Point Section, and Morzhovoi Bay Section.

JUSTIFICATION:

Pink and chum salmon escapements are very strong in Canoe Bay and the northern portion of Pavlof Bay. Pink salmon runs appear strong throughout the South Peninsula and there has been little fishing by seiners from the Belkofski Bay Section west to and including the Morzhovoi Bay Section because they prefer fishing in locations where sockeye are more abundant. More fishing time is needed in the Belkofski Bay to Morzhovoi Bay area for fishermen to test pink strength and to harvest the resource while the quality is good.

-Continued-

EMERGENCY ORDER N0. 4-FS-M-CB-54-98

Issued at Cold Bay, AK.
9:00 a.m. July 31, 1998

EFFECTIVE DATE:
8:00 a.m. August 1, 1998

EXPIRATION DATE:
9:00 p.m. August 3, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order establishes a 61 hour commercial salmon fishing period in all four South Peninsula districts and in the Bechevin Bay Section.

JUSTIFICATION:

South Peninsula pink salmon runs are strong and fishing time is needed to harvest the resource. Pink salmon and late chum salmon runs are anticipated to be strong in the Bechevin Bay Section.

EMERGENCY ORDER N0. 4-FS-M-CB-56-98

Issued at Cold Bay, AK.
10:00 a.m. August 3, 1998

EFFECTIVE DATE:
9:00 p.m. August 3, 1998

EXPIRATION DATE:
9:00 p.m. August 4, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 24 hours until 9:00 p.m. August 4 in the Bechevin Bay Section, East Pavlof Section, West Pavlof Section, Southwestern District, and Unimak District.

JUSTIFICATION:

Pink salmon escapement requirements have been met in East Pavlof Bay streams and catch rates are very strong west of the East Pavlof Bay Section. To date, there has been almost no effort by seiners directed at pink salmon west of Deer Island.

Weather has prevented escapement surveys during recent days. Parts of the area where there has been considerable effort and pink salmon escapements are in question should close, at least briefly, at this time. Other locations where escapements have been strong, catch levels unusually high, or have little or no effort should remain open at this time.

EMERGENCY ORDER N0. 4-FS-M-CB-57-98

Issued at Cold Bay, AK.
10:00 a.m. August 4, 1998

EFFECTIVE DATE:
9:00 p.m. August 4, 1998

EXPIRATION DATE:
9:00 p.m. August 7, 1998
unless superseded by a
subsequent emergency order.

-Continued-

EXPLANATION:

This emergency order extends commercial salmon fishing time until 9:00 p.m. August 7 in the Bechevin Bay Section, East Pavlof Section, West Pavlof Section, Southwestern District, and Unimak District. A 9:00 a.m. August 6 to 9:00 p.m. August 7 commercial salmon fishing period is established in the Southeastern District, Mino Creek-Little Coal Bay Section, and the Canoe Bay Section.

JUSTIFICATION:

Pink salmon runs are very strong along the western end of the South Peninsula and fishing effort is limited due to catches exceeding processing capacity. More fishing time is needed to harvest the resource. No effort has taken place in Bechevin Bay and pink salmon runs there are untested.

There has been extensive fishing effort in the Southeastern District, Mino Creek-Little Coal Bay Section, and Canoe Bay Section with escapements being questionable due to weather preventing surveys. A 59 hour closure should allow a substantial number of salmon to escape and a 37 hour period can be allowed to harvest salmon after the closure.

EMERGENCY ORDER N0. 4-FS-M-CB-58-98

Issued at Cold Bay, AK.
7:30 p.m. August 5, 1998

EFFECTIVE DATE:
August 6, 1998

EXPIRATION DATE:
September 1, 1998
unless superseded by a
subsequent emergency order

EXPLANATION:

Effective August 27 through August 31, commercial salmon fishing is allowed up to the stream terminus at the ocean shoreline of all streams on Deer Island and Hungry's Creek.

JUSTIFICATION:

Season escapement objectives have been reached in Hungry's Creek and all streams on Deer Island. More fishing area is needed to harvest the resource.

EMERGENCY ORDER N0. 4-FS-M-CB-59-98

Issued at Cold Bay, AK.
7:30 p.m. August 6, 1998

EFFECTIVE DATE:
August 7, 1998

EXPIRATION DATE:
September 1, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order allows commercial salmon fishing up to the terminus at the ocean shoreline of McGinty's Creek effective August 7 through August 31.

-Continued-

JUSTIFICATION:

The pink salmon escapement into Mcginty's Creek is estimated to be 16,000 fish. This is at the peak escapement goal for the season. More fishing area is needed to harvest the resource.

EMERGENCY ORDER N0. 4-FS-M-CB-60-98

Issued at Cold Bay, AK.
11:00 a.m. August 7, 1998

EFFECTIVE DATE:
9:00 p.m. August 7, 1998

EXPIRATION DATE:
9:00 p.m. August 9, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 48 hours until 9:00 p.m. August 9 in the Bechevin Bay Section, South Central District, Southwestern District, and Unimak District.

JUSTIFICATION:

Pink salmon runs are very strong in the western part of the South Peninsula and in the Bechevin Bay Section. Escapements are generally very good for this date and effort is very light over much of the area. More fishing time is needed to harvest the resource.

EMERGENCY ORDER NO. 4-FS-M-SP-34-98

Issued at: Sand Point, AK
9:00 a.m. August 7, 1998

EFFECTIVE DATE: 9:00 p.m. Friday August 7, 1998

Expiration Date: 9:00 p.m.
August 8, 1998
unless superseded
by a subsequent emergency
order.

EXPLANATION:

This emergency order allows a 24 hour extension of the current commercial salmon fishing period from 9:00 p.m. Friday August 7 until 9:00 p.m. Saturday August 8 in the Southeastern District.

JUSTIFICATION:

A 6.0 million pink salmon harvest is projected for the South Peninsula. Harvest information from the previous fishing period and recent escapement surveys indicate that pink salmon runs in the Southeastern District are good for this date compared to recent even year runs. Additional fishing time in the Southeastern District is warranted to provide fishermen the opportunity to harvest salmon that are excess to escapement requirements.

-Continued-

EMERGENCY ORDER NO. 4-FS-M-SP-35-98

Issued at: Sand Point, AK
10:00 a.m. August 8, 1998

EFFECTIVE DATE: 9:00 p.m. Saturday August 8, 1998

Expiration Date: 9:00 p.m.
August 9, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order allows a 24 hour extension of the current commercial salmon fishing period from 9:00 p.m. Saturday August 8 until 9:00 p.m. Sunday August 9 in the Southeastern District.

JUSTIFICATION:

Harvest information from the August 6-7 fishing periods indicate catches have dropped off from the previous fishing period. However, strong Northwest winds may have reduced fishing effort in some areas. Cumulative catches for this date are favorable compared to the even year catches since 1988. Escapement surveys conducted on August 6-7 indicate that pink salmon runs in the Southeastern District are good for this date compared to recent even year runs. Additional fishing time in the Southeastern District is warranted to provide fishermen the opportunity to harvest salmon that are excess to escapement requirements.

EMERGENCY ORDER N0. 4-FS-M-CB-62-98

Issued at Cold Bay, AK.
11:00 a.m. August 7, 1998

EFFECTIVE DATE:
9:00 p.m. August 9, 1998

EXPIRATION DATE:
9:00 p.m. August 10, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 24 hours until 9:00 p.m. August 10 in the Bechevin Bay Section and all four South Peninsula districts.

JUSTIFICATION:

Pink salmon runs are strong in Bechevin Bay and all the South Peninsula districts. However, fishermen have not been able to fish effectively during the past two days due to weather, in much of the area. A 24 hour extension will allow fishermen the opportunity to better harvest pink salmon while the quality is good.

EMERGENCY ORDER N0. 4-FS-M-CB-63-98

Issued at Cold Bay, AK.
11:00 a.m. August 10, 1998

EFFECTIVE DATE:
9:00 p.m. August 10, 1998

EXPIRATION DATE:
September 1, 1998
unless superseded by a
subsequent emergency order.

-Continued-

EXPLANATION:

This emergency order extends commercial salmon fishing time 24 hours until 9:00 p.m. August 11 in the Bechevin Bay Section, Southwestern District, Unimak District, Canoe Bay Section, West Pavlof Bay Section, and East Pavlof Bay Section.

The waters closed to commercial salmon fishing in Thin Point Cove are reduced to include only those waters north and east of a line from the southern tip of Thin Point to 54°59.6' N. lat., 162°42.2' W. long. and upstream from the terminus at the ocean shoreline of the Southwest Bight Creek, effective 9:00 p.m. August 10 through August 31.

JUSTIFICATION:

Pink salmon runs are strong in the western part of the South Peninsula and Bechevin Bay. However, the escapement in Canoe Bay is questionable due to survey conditions. A 24 hour extension of the fishing period will allow the fleet to continue to harvest fish while they are in good condition while allowing a survey under better conditions.

The escapement requirements in Southwest Bight Creek have been met and the west corner of Thin Point is a good place to harvest pink salmon while they still have quality.

EMERGENCY ORDER N0. 4-FS-M-CB-64-98

Issued at Cold Bay, AK.
8:00 p.m. August 10, 1998

EFFECTIVE DATE:
8:00 a.m. August 11, 1998

EXPIRATION DATE:
September 1, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order reopens the Mino Creek-Little Coal Bay Section to commercial salmon fishing from 8:00 a.m. August 11 until 9:00 p.m. August 14 and extends commercial salmon fishing time in the balance of the South Central District, Southwestern District, Unimak District, and Bechevin Bay Section until 9:00 p.m. August 14.

Effective 8:00 a.m. August 11 through August 31, commercial salmon fishing is allowed up to the stream terminus at the ocean shoreline of Mino Creek.

JUSTIFICATION:

A very recent survey has indicated that pink salmon escapements are very strong in the Mino Creek-Little Coal Bay and Canoe Bay Sections. Other surveys have revealed strong pink salmon escapements in the western part of the South Peninsula and in Bechevin Bay. More fishing time is needed to harvest the resource while quality is still acceptable. The pink salmon escapement into Mino Creek is estimated to be 160,000 fish which is at the goal for this system. More fishing area is needed to harvest the resource.

-Continued-

EMERGENCY ORDER NO. 4-FS-M-SP-36-98

Issued at: Sand Point, AK
5:00 p.m. August 11, 1998

EFFECTIVE DATE: 8:00 a.m. Thursday, August 13, 1998

Expiration Date: 9:00 p.m.
August 14, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order allows a 37 hour commercial salmon fishing period from 8:00 a.m. Thursday August 13 until 9:00 p.m. Friday August 14, 1998 in the Shumagin Islands Section of the Southeastern District.

JUSTIFICATION:

Based on aerial observations of August 9 and 11, pink salmon escapements into early producing systems in the Shumagin Islands are adequate for this date. Preliminary catch reports for August 10 in the Shumagin Islands Section showed a substantial increase in the number of pink salmon caught compared to the daily catches from the previous week. Additional fishing time in the Shumagin Islands Section is warranted to provide fishermen the opportunity to harvest salmon that are excess to escapement requirements.

Preliminary catch reports and recent aerial surveys in the Southeastern District Mainland area indicate that salmon escapements in some streams are below average for this date. To insure salmon escapement, the Southeastern District Mainland area should remain closed to commercial salmon fishing until further notice.

EMERGENCY ORDER N0. 4-FS-M-CB-65-98

Issued at Cold Bay, AK.
11:00 a.m. August 14, 1998

EFFECTIVE DATE:
9:00 p.m. August 14, 1998

EXPIRATION DATE:
9:00 p.m. August 16, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 48 hours until 9:00 p.m. August 16 in the Shumagin Islands Section, Bechevin Bay Section, South Central District, Southwestern District, and Unimak District.

JUSTIFICATION:

South Peninsula and Bechevin Bay pink salmon runs are strong with escapement goals being exceeded in some streams. Processing capacity is limited and the fish quality will soon be unacceptable to buyers. More fishing time is needed to harvest the resource while processors still desire the fish resource.

-Continued-

EMERGENCY ORDER N0. 4-FS-M-CB-66-98

Issued at Cold Bay, AK.
11:00 a.m. August 16, 1998

EFFECTIVE DATE:
9:00 p.m. August 16, 1998

EXPIRATION DATE:
9:00 p.m. August 19, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time 72 hours until 9:00 p.m. August 19 in the Bechevin Bay Section, South Central District, Southwestern District, and Unimak District.

JUSTIFICATION:

Pink salmon escapement requirements are being met or exceeded in Bechevin Bay and western South Peninsula streams. Processing capacity and interest is presently very limited. A three day extension of the fishing period will provide opportunity to harvest the resource before all of the fish are of unacceptable quality.

EMERGENCY ORDER N0. 4-FS-M-CB-69-98

Issued at Cold Bay, AK.
9:30 a.m. August 21, 1998

EFFECTIVE DATE:
12:00 noon August 21, 1998

EXPIRATION DATE:
12:00 noon August 22, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order establishes a 24 hour commercial salmon fishing period in the Belkofski Bay and Deer Island sections from 12:00 noon August 21 until 12:00 noon August 22.

JUSTIFICATION:

There is a large amount of pink salmon beyond escapement requirements in the Belkofski Bay and Deer Island sections. However, there has been no available market since August 16 and the fishing period has been closed to make it easier for people to harvest sockeye salmon for subsistence needs. A fisherman has indicated that he has a market but must transport his fish over 200 miles. A 24 hour fishing period will enable the fisherman to load his boat with pink salmon and be on his way while only briefly disrupting subsistence fishing.

-Continued-

EMERGENCY ORDER N0. 4-FS-M-CB-75-98

Issued at Cold Bay, AK.
2:00 a.m. August 26, 1998

EFFECTIVE DATE:
9:00 a.m. September 1, 1998

EXPIRATION DATE:
December 31, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order establishes a 9:00 a.m. September 1 until 8:00 p.m. September 4 commercial salmon fishing period for salmon in the Northwestern, Unimak, Southwestern, and South Central Districts.

The closed waters of Thin Point Cove are reduced to include only those waters within 1,000 yards of the Thin Point Lagoon outlet terminus.

JUSTIFICATION:
Fishing time is needed for the fleet to harvest coho salmon. Weather is normally poor this time of year. Effort and tender service are expected to be very light.

EMERGENCY ORDER NO. 4-FS-M-SP-37-98

Issued at: Sand Point, AK
10:00 a.m. August 26, 1998

EFFECTIVE DATE: 9:00 a.m. Tuesday September 1, 1998

Expiration Date: 12:00 a.m., midnight, Saturday October 31, 1998 unless superseded by a subsequent emergency order.

EXPLANATION: This emergency order allows a 59 hour commercial salmon fishing period from 9:00 a.m. Tuesday September 1 until 8:00 p.m. Thursday September 3, 1998 in the Southeastern District.

This emergency order also extends the closed waters in the East Stepovak Section, as described under 5 AAC 09.350(37), from September 1 through October 31, 1998.

JUSTIFICATION:

Based on aerial survey observations and historical run timing, coho salmon are currently entering local bays and pink salmon escapement into late run systems have improved the last two weeks. Commercial salmon fishing by the fleet will provide the department with information to assess the strength of local coho salmon runs.

Set gillnet effort should not affect pink salmon escapement and purse seine effort is expected to be light and concentrated on the capes rather than in bays. Currently there are no pink salmon markets in the area.

The closed water adjustment in the East Stepovak Section from September 1 through October 31, as described under 5 AAC 09.350(37), is warranted when the waters specified in 5 AAC 15.950 (20) are closed to conserve coho salmon.

-Continued-

EMERGENCY ORDER NO. 4-FS-M-SP-38-98

Issued at: Sand Point, AK
9:00 a.m. September 3, 1998

EFFECTIVE DATE: 8:00 p.m. Thursday September 3, 1998

Expiration Date: 8:00 p.m.
Friday September 4, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order allows a 24 hour extension of the current commercial salmon fishing period from 8:00 p.m. Thursday September 3 until 8:00 p.m. Friday September 4, 1998 in the Southeastern District.

JUSTIFICATION:

Based on aerial survey observations and historical run timing, coho salmon are currently entering local bays. The preliminary harvest reports for September 1-2 indicate coho salmon catches per delivery are adequate for this date, however strong northwest winds limited fishing effort during September 1. Additional fishing time is needed to provide the department with information to assess the strength of local coho salmon runs and to give commercial fishermen the opportunity to harvest salmon that are excess to escapement requirements.

Set gillnet effort should not affect pink salmon escapement and purse seine effort is expected to be light and concentrated on the capes rather than in bays. Currently there are no pink salmon markets in the area.

EMERGENCY ORDER N0. 4-FS-M-CB-79-98

Issued at Cold Bay, AK.
11:00 a.m. September 4, 1998

EFFECTIVE DATE: 8:00 p.m. September 4, 1998

EXPIRATION DATE:
8:00.m. September 7, 1998 unless
superseded by a subsequent
emergency order.

EXPLANATION:

This emergency order extends commercial salmon fishing time an additional 72 hours until 8:00 p.m. September 7 in the South Central and Unimak Districts and that portion of the Southwestern District located outside of the Thin Point Section.

JUSTIFICATION:

Nearly all fishing pressure in the western portion of the South Peninsula has been targeting Thin Point Section coho salmon. Many of the coho in closed waters backed out into the commercial fishery. The Thin Point Section should close as scheduled while extra fishing time is needed in the balance of the area to harvest salmon from other stocks.

-Continued-

EMERGENCY ORDER NO. 4-FS-M-SP-39-98

Issued at: Sand Point, AK
10:00 a.m. September 4, 1998

EFFECTIVE DATE: 9:00 a.m. Monday September 7, 1998

Expiration Date: 8:00 p.m. Wednesday September 9, 1998 unless superseded by a subsequent emergency order.

EXPLANATION:

This emergency order allows a 59 hour commercial salmon fishing period from 9:00 a.m. Monday September 7 until 8:00 p.m. Wednesday September 9, 1998 in the Southeastern District.

JUSTIFICATION:

Based on aerial survey observations and historical run timing, coho salmon are currently entering local bays, and pink salmon escapements into late run systems have improved the last two weeks. The preliminary harvest reports for September 1-3 indicate coho salmon catches per delivery are adequate for this date. Additional fishing time is needed to provide the department with information to assess the strength of local coho salmon runs and to give commercial fishermen the opportunity to harvest salmon that are excess to escapement requirements.

The department anticipates set gillnet effort to decrease, as fishermen end their season, and should not affect pink salmon escapement. The department expects purse seine effort to be light and concentrated on the capes rather than in bays. Currently there are no pink salmon markets in the area.

EMERGENCY ORDER NO. 4-FS-M-SP-40-98

Issued at: Sand Point, AK
10:30 a.m. September 9, 1998

EFFECTIVE DATE: 8:00 p.m. Wednesday September 9, 1998

Expiration Date: 8:00 p.m. Thursday September 10, 1998 unless superseded by a subsequent emergency order.

EXPLANATION:

This emergency order allows a 24 hour extension of the current commercial salmon fishing period from 8:00 p.m. Wednesday September 9 until 8:00 p.m. Thursday September 10, 1998 in the Southeastern District.

JUSTIFICATION:

Based on aerial survey observations and historical run timing, coho salmon are currently entering local bays. The preliminary harvest report for September 8 indicate coho salmon catches per delivery are adequate for this date. Additional fishing time is needed to provide the department with information to assess the strength of local coho salmon runs and to give commercial fishermen the opportunity to harvest salmon that are excess to escapement requirements.

-Continued-

Set gillnet effort should not affect pink salmon escapement and purse seine effort is expected to be light and concentrated on the capes rather than in bays. Currently there are no pink salmon markets in the area.

EMERGENCY ORDER NO. 4-FS-M-SP-41-98

Issued at: Sand Point, AK
9:30 a.m. September 10, 1998

EFFECTIVE DATE: 8:00 p.m. Thursday September 10, 1998

Expiration Date: 8:00 p.m.
Friday September 11, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order allows a 24 hour extension of the current commercial salmon fishing period from 8:00 p.m. Thursday September 10 until 8:00 p.m. Friday September 11, 1998 in the Southeastern District.

JUSTIFICATION:

Based on aerial survey observations and historical run timing, coho salmon are currently entering local bays. The preliminary harvest reports for September 7 and 8 indicate that coho salmon catches per delivery improved from 33 on September 7 to 46 on September 8. However, fishing effort was drastically reduced on September 9, due to gale force winds, and more fishing time is needed to provide the department with information to assess the strength of local coho salmon runs. The additional fishing time will also provide commercial fishermen the opportunity to harvest salmon that are excess to escapement requirements. Any significant fishing effort by the fleet should be limited to a maximum of four days during this week.

Set gillnet effort should not significantly affect pink salmon escapement and purse seine effort is expected to be light and concentrated on the capes rather than in bays. Currently there are no pink salmon markets in the area.

EMERGENCY ORDER NO. 4-FS-M-SP-42-98

Issued at: Sand Point, AK
9:00 a.m. September 11, 1998

EFFECTIVE DATE: 9:00 a.m. Monday September 14, 1998

Expiration Date: 8:00 p.m.
Wednesday September 16, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order allows a 59 hour commercial salmon fishing period from 9:00 a.m. Monday September 14 until 8:00 p.m. Wednesday September 16, 1998 in the Southeastern District.

JUSTIFICATION:

Based on aerial survey observations and historical run timing, coho salmon are currently entering local bays. The preliminary harvest reports for September 7-10 indicate that effort, and catches,

-Continued-

for all species, have decreased significantly from the previous week. Fishing effort was drastically reduced on September 9 and 10, partially due to strong winds and high seas, when only 16 and 12 set net landings, respectively, were reported compared to 45 landings reported for September 8.

Set gillnet effort should continue to decrease as fishermen end their season, especially in the Southeastern District Mainland where tender service will be suspended , or limited to one tender, after September 11. Purse seine effort is expected to be light (only one or two vessels) and concentrated on the capes rather than in bays.

Additional fishing time is needed to provide the department with information to assess the strength of local coho salmon runs, and provide commercial fishermen the opportunity to harvest salmon that are excess to escapement requirements. The anticipated reduced fishing effort and unpredictable fall weather, should allow adequate coho salmon escapement into Southeastern District streams.

EMERGENCY ORDER NO. 4-FS-M-SP-43-98

Issued at: Sand Point, AK
11:00 a.m. September 16, 1998

EFFECTIVE DATE: 8:00 p.m. Wednesday September 16, 1998

Expiration Date: 8:00 p.m.
Thursday September 17, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order allows a 24 hour extension of the current commercial salmon fishing period from 8:00 p.m. Wednesday September 16 until 8:00 p.m. Thursday September 17, 1998 in the Southeastern District.

JUSTIFICATION:

Aerial surveys of September 12, 13, and 14, indicate sockeye, pink and chum salmon escapements are adequate to good in most Southeastern District streams, and coho salmon are entering local bays. Based on preliminary harvest reports, the September 14 and 15 Southeastern District Mainland set gillnet coho salmon catch per unit effort (CPUE) of 33 is below the most recent ten year (1988-97) average coho salmon CPUE of 50. The coho salmon run appears to be below average but strong enough to permit four fishing days during this week, instead of the maximum of five days per week allowed for above average coho salmon runs.

Set gillnet effort should continue to decrease as fishermen end their season, especially in the Southeastern District Mainland where only one tender is in service. Purse seine effort is expected to be light (only one or two vessels) and concentrated on the capes rather than in bays.

Additional fishing time is needed to provide the department with information to assess the strength of local coho salmon runs, and provide commercial fishermen the opportunity to harvest salmon that are in excess to escapement requirements. The anticipated reduced fishing effort and unpredictable fall weather, should allow adequate coho salmon escapement into Southeastern District streams.

-Continued-

EMERGENCY ORDER NO. 4-FS-M-SP-44-98

Issued at: Sand Point, AK
11:00 a.m. September 16, 1998

EFFECTIVE DATE: 9:00 a.m. Monday September 21, 1998

Expiration Date: 8:00 p.m.
Wednesday September 23, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order allows a 59 hour commercial salmon fishing period from 9:00 a.m. Monday September 21 until 8:00 p.m. Wednesday September 23, 1998 in the Southeastern District.

JUSTIFICATION:

The final aerial surveys of the season, on September 12, 13, and 14, indicate that sockeye, pink, and chum salmon escapements are adequate to good in the Southeastern District, and coho salmon are currently entering local bays. Unfortunately, the visibility in the major coho salmon producing systems was marginal to poor and accurate coho salmon escapement counts were not possible. Based on the preliminary harvest reports for September 14 and 15, the coho salmon catch per unit effort (CPUE) remains below the most recent ten year (1988-97) average. However, some additional fishing time is needed to harvest coho salmon entering local bays at this time.

Set gillnet effort should continue to decrease as fishermen end their season, especially in the Southeastern District Mainland where tender service is usually suspended in mid September. Purse seine effort is expected to be light (only one or two vessels) and concentrated on the capes rather than in bays.

Additional fishing time is needed to provide the department with information to assess the strength of local coho salmon runs, and provide commercial fishermen the opportunity to harvest salmon that are in excess to escapement requirements. The anticipated reduced fishing effort and unpredictable fall weather, should allow adequate coho salmon escapement into Southeastern District streams.

EMERGENCY ORDER NO. 4-FS-M-SP-45-98

Issued at: Kodiak, AK
9:00 a.m. September 23, 1998

EFFECTIVE DATE: 8:00 p.m. Wednesday September 23, 1998

Expiration Date: 8:00 p.m.
Friday September 25, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order allows a 48 hour extension of the current commercial salmon fishing period from 8:00 p.m. Wednesday September 23 until 8:00 p.m. Friday September 25, 1998 in the Southeastern District.

JUSTIFICATION:

The final aerial surveys of the season, on September 12, 13, and 14, indicate that sockeye, pink, and chum salmon escapements are adequate to good in the Southeastern District, and coho salmon are currently entering local bays. Unfortunately, the visibility in the major coho salmon producing systems was marginal to poor and accurate coho salmon escapement counts were not possible. Based on the preliminary harvest reports for September 17, the coho salmon catch per unit effort (CPUE) of 41.5 is adequate but remains

-Continued-

below the most recent five (1993-97) and ten-year (1988-97) average CPUE for that date, 44 and 56 respectively.

However, set gillnet effort should continue to decrease as fishermen end their season, especially in the Southeastern District Mainland where tender service is currently limited to one vessel. Purse seine effort is expected to be light (only one or two vessels) and concentrated on the capes rather than in bays.

Additional fishing time is needed to provide the department with information to assess the strength of local coho salmon runs, and provide commercial fishermen the opportunity to harvest salmon that are in excess to escapement requirements. The anticipated reduced fishing effort and unpredictable fall weather, should allow adequate coho salmon escapement into Southeastern District streams.

EMERGENCY ORDER NO. 4-FS-M-SP-46-98

Issued at: Kodiak, AK
10:00 a.m. September 25, 1998

EFFECTIVE DATE: 9:00 a.m. Monday September 28, 1998

Expiration Date: Thursday
December 31, 1998
unless superseded by a
subsequent emergency order.

EXPLANATION:

This emergency order extends the current commercial salmon fishing season until 8:00 p.m. Saturday October 31, 1998 in the Southeastern District.

This emergency order also establishes weekly commercial salmon fishing periods in the Southeastern District during the remainder of the commercial salmon fishing season, which ends October 31.

This emergency order also extends the closed waters for all waters of Stepovak Bay, north of a line extending east from Dent Point at 55°47.25' N. lat., 159°52.00' W. long. to a point on the Kupreanof Peninsula at 55°46.93' N. lat., 159°38.70' W. long.

JUSTIFICATION:

The final aerial surveys of the season, on September 12, 13, and 14, indicate that sockeye, pink, and chum salmon escapements are adequate to good in the Southeastern District, and coho salmon are currently entering local bays. Unfortunately, the visibility in the major coho salmon producing systems was marginal to poor and accurate coho salmon escapement counts were not possible. Coho salmon catch per unit effort (CPUE) continues to be average to slightly below average when compared to the most recent five year average CPUE.

Set gillnet effort should decrease to approximately two or three permit holders as fishermen end their season. The department does not anticipate any purse seine effort. During September and October, limited markets and the usually severe weather conditions should reduce the amount of significant fishing effort by the remaining fleet to three or four days per week.

The reduced fishing effort warrants a 9:00 a.m. Monday through 8:00 p.m. Friday weekly fishing schedule for the remainder of the commercial salmon fishing season to harvest coho salmon that are surplus to escapement needs of local systems. Extending the closed waters in Stepovak Bay will protect any milling chum salmon that are needed to achieve escapement requirements. The anticipated reduced fishing effort and unpredictable fall weather, should allow adequate coho salmon escapement into Southeastern District streams.

Appendix F.1 Salmon escapement survey counts in the South Peninsula, 1998[a].

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Dorenoi Bay SW, 281-1001								
08/09/1998	Stream	G	0	0	0	10,000	0	
Rod Campbell	Mouth	G	0	0	0	1,000	0	
	Bay	G	0	0	0	2,000	0	
08/14/1998	Stream	F	0	0	0	15,000	0	LOW LIGHT PLUS 100 PINK CARCASSES.
Rod Campbell	Mouth	F	0	0	0	300	0	
	Bay	F	0	0	0	500	800	
09/08/1998	Stream	G	0	0	0	15,000	2,000	PLUS 1,500 PINK CARCASSES.
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	1,000	0	
Dorenoi Bay NE River, 281-1002								
08/09/1998	Stream	G	0	0	0	900	0	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
08/14/1998	Stream	F	0	0	0	1,700	0	LOW LIGHT.
Rod Campbell	Mouth	F	0	0	0	500	0	
	Bay	F	0	0	0	0	0	
09/08/1998	Stream	G	0	0	0	5,000	1,000	PLUS 500 PINK CARCASSES.
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
Suzy Creek, 281-1003								
07/14/1998	Stream							PARTIAL SURVEY - MOUTH AND FIRST 1/4 MILE OF
Rod Campbell	Mouth	G	0	0	0	150	0	STREAM - TOO TURBULENT TO COMPLETE SURVEY.
	Bay	G	0	0	0	0	0	
07/20/1998	Stream	P	0	0	0	800	0	PARTIAL SURVEY - MOUTH AND FIRST 1/2 MILE OF
Rod Campbell	Mouth	P	0	0	0	0	0	STREAM ONLY. VERY TURBULENT. HIGH ALTITUDE
	Bay	P	0	0	0	0	0	SURVEY.
07/21/1998	Stream	G	0	0	0	25,000	0	
Rod Campbell	Mouth	E	0	0	0	250	0	
	Bay	E	0	0	0	0	0	
07/26/1998	Stream	F	0	0	0	30,000	0	LOW LIGHT - LIGHT RAIN - UNABLE TO SURVEY UPPER
Rod Campbell	Mouth	F	0	0	0	200	0	1/3 OF STREAM. FISH SPREAD OUT - NO BUILDUP IN
	Bay	F	0	0	0	500	0	LOWER END OF STREAM OR OFF MOUTH.

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Rod Campbell	Mouth	G	0	0	0	1,000	0	
	Bay	G	0	0	0	500	0	
08/14/1998	Stream	G	0	0	0	150,000	0	
Witteveen	Mouth	G	0	0	0	2,500	0	
	Bay	G	0	0	0	0	0	
09/08/1998	Stream	G	0	0	0	30,000	0	PLUS THOUSANDS OF PINK CARCASSES.
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
West Cove, 281-1004								
07/14/1998	Stream							PARTIAL SURVEY – BAY AND STREAM MOUTH ONLY NO FISH
Rod Campbell	Mouth	G	0	0	0	0	0	OR JUMPERS OBSERVED,
	Bay	G	0	0	0	0	0	
07/20/1998	Stream							PARTIAL SURVEY – MOUTH ONLY – VERY MUDDY WATER –
Rod Campbell	Mouth	P	0	0	0	0	0	NO FISH OBSERVED.
	Bay							
08/09/1998	Stream	G	0	0	0	500	0	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
08/14/1998	Stream	G	0	0	0	0	0	
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
09/08/1998	Stream	G	0	0	0	0	0	NO BIRDS, NO CARCASSES, NO FISH.
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
Chichagof Bay W Side, 281-2001								
07/14/1998	Stream	G	0	0	0	0	0	NO FISH OBSERVED.
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
07/20/1998	Stream	F	0	0	0	0	150	PARTIAL SURVEY – MOUTH AND LOWER ½ MILE OF
Rod Campbell	Mouth							STREAM – VERY TURBULENT.
	Bay							

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/09/1998	Stream	G	0	0	0	4,500	500	
Rod Campbell	Mouth	G	0	0	0	100	0	
	Bay	G	0	0	0	150	0	
08/14/1998	Stream	G	0	0	0	14,000	0	SURVEYED FROM THE FORKS DOWN.
Witteveen	Mouth	G	0	0	0	4,000	0	
	Bay	G	0	0	0	0	0	
09/03/1998	Stream	P	0	0	0	4,300	0	TURBULENT - PLUS 500 CARCASSES.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
Chichagof Bay Stream, 281-2002								
07/14/1998	Stream	G	0	0	0	0	0	NO SALMON OBSERVED. ABOUT 200 DOLLY VARDEN IN FLATS.
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
07/20/1998	Stream							NO SURVEY TOO TURBULENT.
Rod Campbell	Mouth							
	Bay							
08/09/1998	Stream	G	0	0	0	2,500	1,500	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
08/14/1998	Stream	G	0	0	0	4,500	0	
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
09/03/1998	Stream	F	0	0	0	15,000	2,500	TURBULENT - PLUS 5,000 CHUM CARCASSES IN LAGOON.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
Chichagof Bay E Side, 281-2003								
07/14/1998	Stream	G	0	0	0	0	0	NO FISH OBSERVED IN STREAM - NO JUMPERS IN BAY OR ALONG THE BEACH.
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
07/20/1998	Stream							NO SURVEY - TOO TURBULENT.
Rod Campbell	Mouth							
	Bay							

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/09/1998	Stream	G	0	0	0	3,000	1,500	
Rod Campbell	Mouth	G	0	0	0	500	0	
	Bay	G	0	0	0	0	0	
08/14/1998	Stream	F	0	0	0	2,200	0	
Witteveen	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
09/03/1998	Stream	F	0	0	0	5,000	2,500	TURBULENT - PLUS 1,500 CHUM CARCASSES.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
Windbound Bay, 281-2004								
07/14/1998	Stream	G	0	0	0	0	0	NO FISH OBSERVED IN STREAM. NO JUMPERS IN BAY OR ALONG THE BEACH.
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
07/20/1998	Stream							PARTIAL SURVEY – MOUTH ONLY – MAINSTREAM MUDDY – NO FISH.
Rod Campbell	Mouth	P	0	0	0	0	0	
	Bay							
08/09/1998	Stream	G	0	0	0	2,800	0	
Rod Campbell	Mouth	G	0	0	0	1,500	0	
	Bay	G	0	0	0	0	0	
08/14/1998	Stream	F	0	0	0	900	0	SEVERAL CARCASSES IN THE RIVER BED.
Witteveen	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
09/04/1998	Stream	F	0	0	0	1,800	0	TURBULENT PLUS 450 PINK CARCASSES.
Rod Campbell	Mouth	F	0	0	0	2,500	0	
	Bay	F	0	0	0	200	0	
American Bay, 281-3102								
08/27/1998	Stream	F						LOW LIGHT – ALSO SAW 75 PINK CARCASSES.
Joe Dinnocenzo	Mouth	F	0	0	0	1,500	0	
	Bay	P	0	0	0	0	0	
Orzinski Bay, 281-3103								
07/21/1998	Stream	G	0	0	0	0	0	
Arnie Shaul	Mouth	G	0	0	0	0	0	
	Bay							

-Continued-

Stream Date Observer	Location	Visibility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/09/1998	Stream	G	0	0	0	10,000	0	PARTIAL SURVEY - OUTLET BELOW LAKE ONLY.
Rod Campbell	Mouth	G	0	0	0	500	0	
	Bay	G	0	0	0	300	0	
08/27/1998	Stream	F	0	0	0	0	10,600	LOW LIGHT - ALSO SAW 500 CARCASSES.
Joe Dinnocenzo	Mouth	F	0	0	0	0	550	
	Bay	P	0	0	0	0	0	
09/08/1998	Stream	G	0	15,000	0	21,000	0	ALL SOCKEYE SPAWNING ALONG SHORE OF LAKE. PLUS
Rod Campbell	Mouth	G	0	0	200	0	0	15,000 PINK CARCASSES IN OUTLET BELOW LAKE AND
	Bay	G	0	0	0	0	0	10,000 COMBINED SOCKEYE AND PINK CARASSES IN LAKE.
Little Norway, 281-3204								
08/09/1998	Stream	G	0	0	0	4,200	800	
Rod Campbell	Mouth	G	0	0	0	800	0	
	Bay	G	0	0	0	500	0	
08/14/1998	Stream	G	0	0	0	0	4,100	
Witteveen	Mouth	G	0	0	0	0	3,000	
	Bay	G	0	0	0	0	0	
09/04/1998	Stream	F	0	0	0	7,500	2,000	TURBULENT - MIDDLE 1/3 OF STREAM DRY - ALL FISH
Rod Campbell	Mouth	F	0	0	0	1,000	0	LOWER 1/3 OF STREAM. PLUS 500 CARCASSES.
	Bay	F	0	0	0	1,500	0	
Clark Bay Sw, 281-3205								
08/06/1998	Stream							PARTIAL SURVEY - BAY AND MOUTH ONLY - TOO
Rod Campbell	Mouth	F	0	0	0	500	0	TURBULENT TO SURVEY STREAM.
	Bay	F	0	0	0	2,000	0	
08/09/1998	Stream	G	0	0	0	1,800	250	
Rod Campbell	Mouth	G	0	0	0	500	0	
	Bay	G	0	0	0	1,000	0	
08/14/1998	Stream	F	0	0	0	1,100	0	
Witteveen	Mouth	F	0	0	0	700	0	
	Bay	F	0	0	0	0	0	
09/08/1998	Stream	F	0	0	0	9,000	1,000	PLUS 500 CARCASSES - TURBULENT.
Rod Campbell	Mouth	F	0	0	0	3,000	500	
	Bay	F	0	0	0	1,500	1,000	

-Continued-

Stream Date Observer	Location	Visi-bility	Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
			Species					
Clark Bay Ne, 281-3206								
08/06/1998 Rod Campbell	Stream Mouth Bay							NO SURVEY - TOO TURBULENT.
08/09/1998 Rod Campbell	Stream	G	0	0	0	0	0	STREAM DRY 1/4 MILE ABOVE MOUTH.
	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
Grub Gulch, 281-3207								
07/14/1998 Rod Campbell	Stream	G	0	0	0	0	0	NO SALMON OBSERVED. ABOUT 2,500 DOLLY ARDEN IN LOWER PORTION OF STREAM.
	Mouth	G	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
07/20/1998 Rod Campbell	Stream	F	0	0	0	0	800	PARTIAL SURVEY CLEAR TRIBS ONLY - MAINSTREAM TOO MUDDY TO SURVEY.
	Mouth	P	0	0	0	0	0	
	Bay	P	0	0	0	0	0	
08/06/1998 Rod Campbell	Stream	F	0	0	0	10,000	3,500	PARTIAL SURVEY - CLEAR TRIBUTARY ONLY - WATER MURKY - VERY TURBULENT. SPECIES ID DIFFICULT.
	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
08/09/1998 Rod Campbell	Stream	G	0	0	0	15,000	3,000	
	Mouth	G	0	0	0	200	0	
	Bay	G	0	0	0	500	0	
08/14/1998 Witteveen	Stream	F	0	0	0	10,000	12,000	LOTS OF JUMPERS IN THE MIDDLE OF THE BAY IN DEEP WATER.
	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
09/03/1998 Rod Campbell	Stream	F	0	0	0	30,000	5,000	LOWER STREAM MURKY.
	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
1st Stm N Rock Wall, 281-3301								
07/20/1998 Rod Campbell	Stream Mouth Bay	F	0	0	0	0	0	PARTIAL SURVEY - CLEAR TRIBS - MAIN STREAM TOO MUDDY TO SURVEY. NO FISH.
08/11/1998 Rod Campbell	Stream Mouth Bay	G	0	0	0	0	200	PARTIAL SURVEY CLEAR TRIBUTARY ONLY.

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/14/1998	Stream	P	0	0	0	0	5,000	WATER VERY MURKY, LIKELY MANY MORE CHUM.
Witteveen	Mouth	P	0	0	0	0	0	
	Bay	P	0	0	0	0	0	
09/03/1998	Stream	F	0	0	0	2,300	8,000	PARTIAL SURVEY CLEAR TRIBS ONLY. MAINSTEM MURKY
Rod Campbell	Mouth	P	0	0	0	0	0	PLUS 50 CARCASSES.
	Bay	P	0	0	0	0	0	
09/12/1998	Stream	F	0	0	0	2,500	10,000	PARTIAL SURVEY - CLEAR TRIBS ONLY - MAINSTEM TOO
Rod Campbell	Mouth							MURKY TO SURVEY. PLUS 2,000 CARCASSES.
	Bay							
2nd Stm N Rock Wall, 281-3302								
07/14/1998	Stream	F	0	0	0	0	0	PARTIAL SURVEY - CLEAR TRIBS - ONLY MAINSTREAM
Rod Campbell	Mouth	P	0	0	0	0	0	MOUTH & BAY WERE MUDDY. NO FISH SEEN NO JUMPERS
	Bay	P	0	0	0	0	0	IN BAY.
07/20/1998	Stream	F	0	0	0	0	0	PARTIAL SURVEY - CLEAR TRIBS - TOO MUDDY TO SURVEY
Rod Campbell	Mouth	P	0	0	0	0	0	MAINSTREAM. BAY & MOUTH MURKY - NO FISH OBSERVED.
	Bay	P	0	0	0	0	0	
08/06/1998	Stream							NO SURVEY - TOO TURBULENT & WATER MURKY.
Rod Campbell	Mouth							
	Bay							
08/11/1998	Stream	F	0	0	0	2,200	4,000	MURKY WATER - SPECIES ID DIFFICULT.
Rod Campbell	Mouth	P	0	0	0	0	0	
	Bay	F	0	0	0	2,000	3,000	
08/14/1998	Stream	P	0	0	0	0	3,500	
Witteveen	Mouth	P	0	0	0	0	0	
	Bay	P	0	0	0	0	0	
09/03/1998	Stream	F	0	0	0	8,000	12,000	PARTIAL SURVEY CLEAR TRIBS ONLY MAINSTEM MURKY.
Rod Campbell	Mouth	P	0	0	0	0	0	
	Bay	P	0	0	0	0	0	
09/12/1998	Stream	F	0	0	0	2,500	10,000	PARTIAL SURVEY - CLEAR TRIBS ONLY - MAINSTEM TOO
Rod Campbell	Mouth							MURKY TO SURVEY. PLUS 3,000 CARCASSES.
	Bay							

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Louie's Corner, 281-3303								
07/14/1998	Stream	P	0	0	0	0	0	PARTIAL SURVEY - CLEAR TRIBS ONLY - BAY, STREAM
Rod Campbell	Mouth	P	0	0	0	0	0	MOUTH, AND MAINSTREAM MUDDY - NO FISH SEEN.
	Bay	P	0	0	0	0	0	
07/20/1998	Stream	F	0	0	0	0	800	PARTIAL SURVEY - CLEAR TRIBS ONLY - MOUTH AND
Rod Campbell	Mouth	P	0	0	0	0	0	MAINSTREAM MUDDY. NO JUMPERS IN BAY OR ALONG
	Bay	P	0	0	0	0	0	BEACH - ALL CHUM SEEN IN CLEAR TRIBUTARY.
08/06/1998	Stream	F	0	0	0	0	2,800	PARTIAL SURVEY - CLEAR TRIBUTARY ONLY - MURKY
Rod Campbell	Mouth	F	0	0	0	0	0	WATER - LOW LIGHT (OVERCAST SKY).
	Bay	F	0	0	0	0	0	
08/11/1998	Stream	F	0	0	0	2,000	2,700	PARTIAL SURVEY - CLEAR TRIBS & BAY. LOTS OF
Rod Campbell	Mouth							JUMPERS - AND LARGE BALLS OF SALMON (MOSTLY CHUM)
	Bay	F	0	0	0	30,000	40,000	IN BAY - LOTS OF PINKS ALSO ALONG BEACH BETWEEN 33.03 &33.04 (SPECIES ID DIFFICULT).
08/14/1998	Stream	P	0	0	0	3,000	8,000	
Witteveen	Mouth	P	0	0	0	0	20,000	
	Bay	P	0	0	0	0	0	
09/03/1998	Stream	F	0	0	0	10,000	15,000	PARTIAL SURVEY - CLEAR TRIBS ONLY - MAINSTEM TOO
Rod Campbell	Mouth	P	0	0	0	0	0	MURKY TO SURVEY PLUS 2,000 CARCASSES.
	Bay	P	0	0	0	0	0	
09/12/1998	Stream	F	0	0	0	13,500	10,000	PARTIAL SURVEY - CLEAR TRIBS ONLY. MAINSTEM TOO
Rod Campbell	Mouth							MURKY TO SURVEY. PLUS 4,000 CARCASSES.
	Bay							
Big River, 281-3304								
07/14/1998	Stream	G	0	0	0	0	125	PARTIAL SURVEY - BAY, MOUTH AND CLEAR TRIBS ONLY
Rod Campbell	Mouth	F	0	0	0	0	200	MAINSTREAM MUDDY - ALL CHUMS IN CLEAR TRIB NEAR
	Bay	F	0	0	0	0	0	JUNCTION OF MAINSTREAM. NO JUMPERS SEEN IN BAY.
07/20/1998	Stream	F	0	0	0	0	2,500	PARTIAL SURVEY CLEAR TRIBS ONLY - BAY, MOUTH &
Rod Campbell	Mouth	P	0	0	0	0	0	MAIN STREAM MURKY. COULD SEE FISH MOVING BUT NO
	Bay	P	0	0	0	0	0	ACCURATE COUNT POSSIBLE. GOOD NUMBERS. EIGHT BROWN BEARS IN RIVER. NO JUMPERS.
08/06/1998	Stream	F	0	0	0	6,000	5,000	PARTIAL SURVEY - CLEAR TRIBUTARIES ONLY. LOW LIGHT
Rod Campbell	Mouth	F	0	0	0	0	0	(OVERCAST SKY) AND MURKY WATER PLUS 10 CHUM SALMON

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
	Bay	F	0	0	0	0	0	CARCASSES. SPECIES ID DIFFICULT.
08/11/1998 Rod Campbell	Stream Mouth	F	0	0	0	0	0	PARTIAL SURVEY BAY & CLEAR TRIBS - SEE COMMENTS FROM 281-3305 - SMALL SCHOOL OF ABOVE 80 FISH IN BAY - MAYBE COHO. ID QUESTIONABLE. BEAR IN MOUTH OF RIVER.
	Bay	F	0	0	0	10,000	40,000	
08/14/1998 Witteveen	Stream	F	0	0	0	1,200	4,250	
	Mouth	F	0	0	0	1,500	4,000	
	Bay	F	0	0	0	0	30,000	
09/03/1998 Rod Campbell	Stream	F	0	0	0	1,600	20,000	PARTIAL SURVEY. CLEAR TRIBS ONLY - MAINSTEM TOO MURKY TO SURVEY - LOTS OF FISH.
	Mouth	P	0	0	0	0	0	
	Bay	P	0	0	0	0	0	
09/12/1998 Rod Campbell	Stream Mouth Bay	F				15,000	17,000	PARTIAL SURVEY - CLEAR TRIBS ONLY. MAINSTEM TOO MURKY TO SURVEY. PLUS 3,000 CARCASSES.
Stepovak River, 281-3305								
08/11/1998 Rod Campbell	Stream Mouth	F	0	0	0	0	350	PARTIAL SURVEY - BAY & CLEAR TRIBS - MAINSTREAM AND MOUTH VERY MUDDY. HUNDREDS OF JUMPERS BETWEEN
	Bay	F	0	0	0	10,000	40,000	33.05 & 33.04 SPECIES ID DIFFICULT - ESTIMATE 80,000 CHUM & 20,000 PINKS SPLIT 50.50 BETWEEN .04 & .05.
08/14/1998 Witteveen	Stream	P	0	0	0	0	0	WATER TOO MUDDY TO SEE ANYTHING IN RIVER. WATER IN BAY SEVERELY RESTRICTED BAY COUNT.
	Mouth	P	0	0	0	0	0	
	Bay	P	0	0	0	0	50,000	
09/03/1998 Rod Campbell	Stream	F	0	0	0	6,500	35,000	PARTIAL SURVEY - CLEAR TRIBS ONLY - MAISTEM TOO MURKY TO SURVEY. ABOUT 12 BEARS IN SYSTEM, PINKS IN LOWER END.
	Mouth	P	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
09/12/1998 Rod Campbell	Stream Mouth	F	0	0	0	15,500	24,000	PARTIAL SURVEY-CLEAR TRIBS ONLY. LOW LIGHT, DRIZZLE. SEVERAL NORMALLY CLEAR TRIBS WERE MURKY.
	Bay							PINKS IN STREAM NEAR AIR STRIP. PLUS 5,000 CARCASSES.

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Granville Portage, 281-3306								
08/06/1998	Stream	F	0	0	0	0	0	PARTIAL SURVEY - LOWER 1 MILE - TOO MUDDY TO
Rod Campbell	Mouth	F	0	0	0	0	0	SURVEY ABOVE.
	Bay	F	0	0	0	0	0	
08/11/1998	Stream	G	0	0	0	0	400	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
08/14/1998	Stream	F	0	0	0	150	0	MURKY WATER.
Witteveen	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
09/03/1998	Stream	F	0	0	0	200	400	MURKY WATERS.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
09/12/1998	Stream	F	0	0	0	2,000	1,500	LOW LIGHT, DRIZZLE.
Rod Campbell	Mouth							
	Bay							
Granville Bay, 281-3401								
08/06/1998	Stream	F	0	0	0	0	0	LOW LIGHT - OVERCAST SKY - ONE BEAR OBSERVED NEAR
Rod Campbell	Mouth	F	0	0	0	0	0	LAGOON
	Bay	F	0	0	0	0	0	
08/11/1998	Stream	G	0	0	0	300	400	LOTS OF JUMPERS IN BAY - POSSIBLY SOME CHUM MIXED
Rod Campbell	Mouth	G	0	0	0	350	0	WITH PINKS IN BAY COUNT.
	Bay	G	0	0	0	10,000	0	
08/14/1998	Stream	G	0	0	0	500	0	
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
09/03/1998	Stream	P	0	0	0	4,000	2,000	LOW LIGHT. VERY TURBULENT, HIGH ALTITUDE SURVEY -
Rod Campbell	Mouth	F	0	0	0	0	0	SPECIES ID DIFFICULT.
	Bay	F	0	0	0	0	0	
09/12/1998	Stream	F	0	0	0	15,000	2,500	LOW LIGHT, DRIZZLE, TURBULENT - PLUS 3,500
Rod Campbell	Mouth	F	0	0	0	0	0	CARCASSES. 5,000 OF PINKS WERE IN LAGOON.
	Bay	F	0	0	0	0	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Osterback's Creek, 281-3402								
08/06/1998	Stream	F	0	0	0	0	0	LOW LIGHT - OVERCAST SKY
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
08/11/1998	Stream	G	0	0	0	750	0	
Rod Campbell	Mouth	G	0	0	0	250	0	
	Bay	G	0	0	0	10,000	0	
08/14/1998	Stream	G	0	0	0	300	0	
Witteveen	Mouth	G	0	0	0	700	0	
	Bay	G	0	0	0	0	0	
08/18/1998	Stream							PARTIAL SURVEY - BAY ONLY - TOO TURBULENT TO SURVEY STREAM.
Rod Campbell	Mouth							
	Bay	F	0	0	0	5,000	0	
08/20/1998	Stream	F	0	0	0	1,500	0	POOR SURVEY - SURVEYED FROM HIGH ALTITUDE DUE TO WIND.
Witteveen	Mouth	F	0	0	0	3,000	0	
	Bay	F	0	0	0	0	0	
09/03/1998	Stream	F	0	0	0	17,000	0	LOW LIGHT - DARK STREAMBED, PLUS 2,500 PINK CARCASSES.
Rod Campbell	Mouth	F	0	0	0	1,000	0	
	Bay	F	0	0	0	0	0	
09/12/1998	Stream	F	0	0	0	13,500	0	LOW LIGHT, DRIZZLE, TURBULENT - PLUS 10,000 CARCASSES.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
Stonehouse, 281-3403								
08/06/1998	Stream	F	0	0	0	150	0	LOW LIGHT - OVERCAST SKY
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
08/11/1998	Stream	G	0	0	0	1,200	0	
Rod Campbell	Mouth	G	0	0	0	300	0	
	Bay	G	0	0	0	8,000	0	
08/14/1998	Stream	G	0	0	0	350	0	
Witteveen	Mouth	G	0	0	0	1,500	0	
	Bay	G	0	0	0	0	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/18/1998	Stream							PARTIAL SURVEY - TOO TURBULENT TO SURVEY STREAM,
Rod Campbell	Mouth	F	0	0	0	1,000	0	PLUS 50 PINK CARCASSES.
	Bay	F	0	0	0	300	0	
08/20/1998	Stream		0	0	0	300	0	ONLY SURVEYED LOWER 1/4 MILE.
Witteveen	Mouth		0	0	0	700	0	
	Bay		0	0	0	0	0	
09/03/1998	Stream	F	0	0	0	15,000	0	LOW LIGHT - PLUS 1,500 PINK CARCASSES.
Rod Campbell	Mouth	F	0	0	0	4,500	0	
	Bay	F	0	0	0	3,000	0	
09/12/1998	Stream	F	0	0	0	17,500	0	LOW LIGHT, DRIZZLE, TURBULENT - PLUS 10,000
Rod Campbell	Mouth	F	0	0	0	300	0	CARCASSES.
	Bay	F	0	0	0	1,000	0	
Island Bay 3404, 281-3404								
08/06/1998	Stream	F	0	0	0	0	0	LOW LIGHT - OVERCAST SKY
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
08/11/1998	Stream	G	0	0	0	0	0	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
08/14/1998	Stream	G	0	0	0	0	0	
Witteveen	Mouth	G	0	0	0	300	0	
	Bay	G	0	0	0	0	0	
08/20/1998	Stream	F	0	0	0	0	0	DIFFICULT TO SEE DUE TO BRUSH.
Witteveen	Mouth	F	0	0	0	300	0	
	Bay	F	0	0	0	0	0	
09/03/1998	Stream	F	0	0	0	900	0	LOW LIGHT - SET NET LOOKS CLOSER THAN 500 YARDS
Rod Campbell	Mouth	F	0	0	0	0	0	FROM STREAM TERMINUS.
	Bay	F	0	0	0	0	0	
09/12/1998	Stream	F	0	0	0	1,100	0	LOW LIGHT, DRIZZLE, TURBULENT, PLUS 150 CARCASSES.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Island Bay 3405, 281-3405								
08/06/1998	Stream	F	0	0	0	0	0	LOW LIGHT - OVERCAST SKY
Rod Campbell	Mouth	F	0	0	0	100	0	
	Bay	F	0	0	0	0	0	
08/11/1998	Stream	G	0	0	0	0	0	7,500 PINKS IN BAY SPLIT 3,750 EACH BETWEEN 34.06
Rod Campbell	Mouth	G	0	0	0	0	0	& 34.05.
	Bay	G	0	0	0	3,750	0	
08/14/1998	Stream	G	0	0	0	150	0	
Witteveen	Mouth	G	0	0	0	3,000	0	
	Bay	G	0	0	0	0	0	
09/03/1998	Stream	F	0	0	0	10,600	0	LOW LIGHT PLUS 2,000 PINK CARCASSES AND 3,000
Rod Campbell	Mouth	F	0	0	0	0	0	PINKS IN BAY. SPLIT - 1,500 EACH BETWEEN 34.05 &
	Bay	F	0	0	0	1,500	0	34.05.
09/12/1998	Stream	F	0	0	0	7,000	0	LOW LIGHT, DRIZZLE, TURBULENT - PLUS 5,000
Rod Campbell	Mouth	F	0	0	0	0	0	CARCASSES. COUNT MAY BE LOW.
	Bay	F	0	0	0	0	0	
Island Bay 3406, 281-3406								
08/06/1998	Stream	F	0	0	0	0	0	LOW LIGHT - OVERCAST SKY
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
08/11/1998	Stream	G	0	0	0	300	0	7,500 PINKS IN BAY - SPLIT 3,750 EACH BETWEEN
Rod Campbell	Mouth	G	0	0	0	0	0	34.06 & 34.05.
	Bay	G	0	0	0	3,750	0	
08/14/1998	Stream	G	0	0	0	450	0	
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
08/18/1998	Stream	P	0	0	0	1,000	0	PARTIAL SURVEY, BAY, MOUTH & APPROXIMATELY FIRST
Rod Campbell	Mouth	F	0	0	0	200	0	MILE OF STREAM. TOO TURBULENT TO COMPLETE SURVEY
	Bay	P	0	0	0	0	0	- BAY MURKY.
09/03/1998	Stream	F	0	0	0	5,500	0	LOW LIGHT PLUS 2,000 PINK CARCASSES. 3,000 PINKS
Rod Campbell	Mouth	F	0	0	0	1,000	0	IN BAY SPLIT - 1,500 EACH BETWEEN 34.06 &34.05.
	Bay	F	0	0	0	1,500	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
09/12/1998	Stream	F	0	0	0	4,000	0	LOW LIGHT, DRIZZLE, TURBULENT, PLUS 2,500
Rod Campbell	Mouth	F	0	0	0	50	0	CARCASSES.
	Bay	F	0	0	0	0	0	
Island Bay 3407, 281-3407								
08/06/1998	Stream	F	0	0	0	0	0	LOW LIGHT - OVERCAST SKY
Rod Campbell	Mouth	F	0	0	0	100	0	
	Bay	F	0	0	0	0	0	
08/11/1998	Stream	G	0	0	0	0	0	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	50	0	
08/14/1998	Stream	G	0	0	0	0	0	
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
08/18/1998	Stream							PARTIAL SURVEY - TOO TURBULENT TO SURVEY STREAM -
Rod Campbell	Mouth	F	0	0	0	150	0	PLUS 10 PINK CARCASSES AT MOUTH.
	Bay	F	0	0	0	0	0	
08/20/1998	Stream		0	0	0	50	0	
Witteveen	Mouth		0	0	0	200	0	
	Bay		0	0	0	0	0	
09/03/1998	Stream	F	0	0	0	300	0	LOW LIGHT PLUS 50 PINK CARCASSES.
Rod Campbell	Mouth	F	0	0	0	200	0	
	Bay	F	0	0	0	0	0	
09/12/1998	Stream	F	0	0	0	500	0	LOW LIGHT, DRIZZLE, TURBULENT - PLUS 800
Rod Campbell	Mouth	F	0	0	0	0	0	CARCASSES.
	Bay	F	0	0	0	0	0	
Island Bay 3408, 281-3408								
08/06/1998	Stream	F	0	0	0	0	0	LOW LIGHT - OVERCAST SKY - FISHING VESSEL BURNED
Rod Campbell	Mouth	F	0	0	0	0	0	(STILL SMOKING) ON BEACH BETWEEN 281-3501 &
	Bay	F	0	0	0	0	0	281-3408
08/11/1998	Stream	G	0	0	0	0	0	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	800	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/14/1998	Stream	G	0	0	0	0	0	
Witteveen	Mouth	G	0	0	0	1,500	0	
	Bay	G	0	0	0	0	0	
08/20/1998	Stream	G	0	0	0	800	0	
Witteveen	Mouth	G	0	0	0	1,200	0	
	Bay	G	0	0	0	0	0	
09/03/1998	Stream	F	0	0	0	1,500	0	LOW LIGHT PLUS 300 PINK CARCASSES.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
09/12/1998	Stream	F	0	0	0	1,100	0	LOW LIGHT, DRIZZLE, TURBULENT, PLUS 500 CARCASSES.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
Fox Bay 3501, 281-3501								
08/06/1998	Stream	F	0	0	0	0	0	LOW LIGHT - OVERCAST SKY
Rod Campbell	Mouth	F	0	0	0	50	0	
	Bay	F	0	0	0	0	0	
08/11/1998	Stream	G	0	0	0	0	0	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	175	0	
08/14/1998	Stream	G	0	0	0	0	0	
Witteveen	Mouth	G	0	0	0	200	0	
	Bay	G	0	0	0	0	0	
08/20/1998	Stream	P	0	0	0	0	0	POOR SURVEY - FROM 1000' DUE TO WIND.
Witteveen	Mouth	P	0	0	0	0	0	
	Bay	P	0	0	0	0	0	
09/03/1998	Stream	P	0	0	0	0	0	LOW LIGHT.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
09/12/1998	Stream	F	0	0	0	0	0	LOW LIGHT, DRIZZLE, TURBULENT.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Fox Bay 3502, 281-3502								
08/06/1998	Stream	F	0	0	0	0	0	LOW LIGHT - OVERCAST SKY
Rod Campbell	Mouth	F	0	0	0	100	0	
	Bay	F	0	0	0	0	0	
08/11/1998	Stream	G	0	0	0	800	0	
Rod Campbell	Mouth	G	0	0	0	600	0	
	Bay	G	0	0	0	2,000	0	
08/14/1998	Stream	G	0	0	0	1,100	0	
Witteveen	Mouth	G	0	0	0	700	0	
	Bay	G	0	0	0	0	0	
08/18/1998	Stream							PARTIAL SURVEY - BAY & MOUTH ONLY. TOO TURBULENT
Rod Campbell	Mouth	F	0	0	0	500	0	TO SURVEY STREAM.
	Bay	F	0	0	0	4,000	0	
09/03/1998	Stream	F	0	0	0	10,200	0	LOW LIGHT PLUS 1,000 PINK CARCASSES.
Rod Campbell	Mouth	F	0	0	0	200	0	
	Bay	F	0	0	0	0	0	
09/12/1998	Stream	F	0	0	0	12,000	0	LOW LIGHT, DRIZZLE, TURBULENT, PLUS 3,500
Rod Campbell	Mouth	F	0	0	0	0	0	CARCASSES.
	Bay	F	0	0	0	0	0	
Fox Bay 3504, 281-3504								
08/06/1998	Stream	F	0	0	0	0	0	LOW LIGHT - OVERCAST SKY
Rod Campbell	Mouth	F	0	0	0	300	0	
	Bay	F	0	0	0	0	0	
08/11/1998	Stream	G	0	0	0	0	0	
Rod Campbell	Mouth	G	0	0	0	500	0	
	Bay	G	0	0	0	900	0	
08/14/1998	Stream	G	0	0	0	750	0	
Witteveen	Mouth	G	0	0	0	550	0	
	Bay	G	0	0	0	0	0	
08/20/1998	Stream	F	0	0	0	900	0	POOR SURVEY - SURVEYED FROM 1,000' DUE TO WIND.
Witteveen	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
09/03/1998	Stream	F	0	0	0	1,500	0	LOW LIGHT PLUS 500 PINK CARCASSES.
Rod Campbell	Mouth	F	0	0	0	200	0	
	Bay	F	0	0	0	7,500	0	
09/12/1998	Stream	F	0	0	0	3,500	0	LOW LIGHT, DRIZZLE, TURBULENT, PLUS 500 CARCASSES.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
Fox Bay 3505, 281-3505								
08/05/1998	Stream	F	0	0	0	0	0	LOW LIGHT - OVERCAST SKY
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
08/11/1998	Stream	G	0	0	0	0	0	
Rod Campbell	Mouth	G	0	0	0	1,000	0	
	Bay	G	0	0	0	200	0	
08/14/1998	Stream	G	0	0	0	0	0	
Witteveen	Mouth	G	0	0	0	700	0	
	Bay	G	0	0	0	0	0	
09/03/1998	Stream	F	0	0	0	1,100	0	LOW LIGHT PLUS 100 PINK CARCASSES.
Rod Campbell	Mouth	F	0	0	0	200	0	
	Bay	F	0	0	0	250	0	
09/12/1998	Stream	F	0	0	0	2,000	0	LOW LIGHT, DRIZZLE, TURBULENT, PLUS 200 CARCASSES.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
Boulder Bay, 281-3506								
08/05/1998	Stream	F	0	0	0	0	0	LOW LIGHT OVERCAST SKY
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	150	0	
08/11/1998	Stream	G	0	0	0	0	0	ONE JUMPER IN BAY IN DEEP WATER.
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	200	0	
08/14/1998	Stream	F	0	0	0	0	0	LOW LIGHT CONDITIONS.
Witteveen	Mouth	F	0	0	0	300	0	
	Bay	F	0	0	0	0	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/20/1998	Stream	G	0	0	0	50	0	
Witteveen	Mouth	G	0	0	0	150	0	
	Bay	G	0	0	0	0	0	
09/03/1998	Stream	F	0	0	0	1,000	500	LOW LIGHT PLUS 500 CARCASSES.
Rod Campbell	Mouth	F	0	0	0	1,000	0	
	Bay	F	0	0	0	500	0	
09/12/1998	Stream	F	0	0	0	1,000	1,000	LOW LIGHT, DRIZZLE, TURBULENT, PLUS 200 CARCASSES.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
Near Bluff Point, 281-3507								
08/05/1998	Stream	F	0	0	0	0	0	LOW LIGHT - OVERCAST SKY
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
08/11/1998	Stream	G	0	0	0	0	0	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
08/14/1998	Stream	F	0	0	0	0	0	
Witteveen	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
08/18/1998	Stream	P	0	0	0	0	0	LOWLIGHT (OVERCAST) TURBULENT, HIGH ALTITUDE
Rod Campbell	Mouth	P	0	0	0	0	0	SURVEY. COMMENT - DID NOT ENTER - VERY
	Bay	P	0	0	0	0	0	TURBULENT UNABLE TO SURVEY 35.06, 35.05, 35.04, 35.02, 34.05, 34.04, 34.01.
08/20/1998	Stream	E	0	0	0	0	0	
Witteveen	Mouth	E	0	0	0	200	0	
	Bay	G	0	0	0	0	0	
09/03/1998	Stream	F	0	0	0	100	0	LOW LIGHT.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
09/12/1998	Stream	F	0	0	0	0	0	LOW LIGHT, DRIZZLE, TURBULENT.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Not Smiley's Creek, 281-7004								
07/14/1998	Stream	F	0	0	0	0	0	BAY AND MOUTH MURKY - LOW LIGHT CONDITIONS - NO
Rod Campbell	Mouth	P	0	0	0	0	0	FISH OR JUMPERS OBSERVED.
	Bay	P	0	0	0	0	0	
07/20/1998	Stream	P	0	0	0	0	0	PARTIAL SURVEY MOUTH AND LOWER 1/4 MILE OF STREAM
Rod Campbell	Mouth	P	0	0	0	0	0	ONLY - MURKY WATER, VERY TURBULENT. HIGH ALTITUDE
	Bay	P	0	0	0	0	0	SURVEY - NO FISH OBSERVED.
07/26/1998	Stream	F	0	0	0	400	0	
Arnie Shaul	Mouth							
	Bay							
08/09/1998	Stream	G	0	0	0	3,000	0	
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
08/14/1998	Stream	G	0	0	0	25,000	0	BAY MURKY - OTHERWISE GOOD CONDITIONS.
Rod Campbell	Mouth	G	0	0	0	5,000	0	
	Bay	F	0	0	0	0	0	
08/21/1998	Stream	F	0	0	0	30,000	0	LOW LIGHT PLUS 500 PINK CARCASSES.
Rod Campbell	Mouth	F	0	0	0	8,000	0	
	Bay	F	0	0	0	0	0	
08/30/1998	Stream	F	0	0	0	15,000	0	DARK. 3000 CARCASSES. FISH MOSTLY IN LOWER
Witteveen	Mouth	F	0	0	0	0	0	PORTION.
	Bay	F	0	0	0	0	0	
Beaver River, 281-7005								
07/14/1998	Stream	F	0	0	0	8,000	25	PARTIAL SURVEY - BAY, MOUTH LOWER 1/4 MILE OF
Rod Campbell	Mouth	F	0	0	0	0	0	STREAM AND CLEAR TRIBS. SPECIES ID DIFFICULT FROM
	Bay	F	0	0	0	0	0	AIR - LANDED ON BEACH TO VERIFY SPECIES IN LOWER
								END OF STREAM - 2,000 DOLLY VARDENS WITH PINKS.
07/20/1998	Stream							PARTIAL SURVEY MOUTH ONLY - MUDDY WATER - NO FISH
Rod Campbell	Mouth	P	0	0	0	0	0	OR JUMPERS OBSERVED.
	Bay							
07/21/1998	Stream	F	0	0	0	0	4,000	WATER MUDDY - PARTIAL SURVEY - CLEAR TRIBS ONLY.
Rod Campbell	Mouth	P	0	0	0	0	0	
	Bay	F	0	0	0	0	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/09/1998	Stream	F	0	0	0	12,700	4,000	
Witteveen	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
08/14/1998	Stream	F	0	0	0	30,000	15,000	MAINSTEM MURKY - BUT COULD SEE THOUSANDS OF FISH
Rod Campbell	Mouth	F	0	0	0	0	0	MOVING IN THE RIVER. COUNT AND SPECIES ID
	Bay	P	0	0	0	0	0	DIFFICULT. BAY MURKY - COUNT MAY BE LOW.
08/21/1998	Stream	F	0	0	0	20,000	18,000	PARTIAL SURVEY CLEAR TRIBS ONLY. MAINSTREAM
Rod Campbell	Mouth							MURKY-COULD SEE LOTS OF FISH MOVING BUT UNABLE TO
	Bay							GET AN ACCURATE COUNT OR SPECIES ID. PLUS 3000
								CARCASSES.
09/08/1998	Stream	P	0	0	0	8,000	9,000	PARTIAL SURVEY. LOWER 1 MILE (8,000 PINKS PLUS
Rod Campbell	Mouth	P	0	0	20	0	0	3,000 CARCASSES) UPPER 3 MILES (9,000 CHUM PLUS
	Bay	P	0	0	0	0	0	11,000 CARCASSES) TURBULENT AND STREAM VERY
								MURKY, COHO 1/4 MILES ABOVE STREAM MOUTH.
09/14/1998	Stream	G	0	0	700	5,000	14,000	LOTS OF FISH (CHUM MOSTLY) IN MAIN STEM SHALLOWS,
Witteveen	Mouth	F	0	0	0	0	0	BUT MAIN STEM WAS TOO MURKY TO SEE FISH IN DEEP
	Bay	G	0	0	0	0	0	WATER. TRIBUTARIES HAD EXCELLENT VISIBILITY.
Cape Aliaksin, West, 281-8004								
07/14/1998	Stream							PARTIAL SURVEY MOUTH ONLY - NO FISH OBSERVED,
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay							
07/31/1998	Stream							PARTIAL SURVEY BAY AND MOUTH ONLY - TOO
Rod Campbell	Mouth	G	0	0	0	0	0	TURBULENT TO SURVEY STREAM.
	Bay	G	0	0	0	5,000	0	
08/06/1998	Stream	F	0	0	0	4,000	0	LOW LIGHT - OVERCAST SKY - TURBULENT.
Rod Campbell	Mouth	F	0	0	0	200	0	
	Bay	F	0	0	0	7,000	0	
08/09/1998	Stream	G	0	0	0	900	0	
Witteveen	Mouth	G	0	0	0	1,500	0	
	Bay	G	0	0	0	0	0	
08/10/1998	Stream	G	0	0	0	3,500	0	
Arnie Shaul	Mouth							
	Bay							

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/14/1998	Stream	F	0	0	0	8,000	0	LOW LIGHT CONDITIONS IN STREAM.
Rod Campbell	Mouth	G	0	0	0	500	0	
	Bay	G	0	0	0	0	0	
08/18/1998	Stream	F	0	0	0	6,000	0	LOW LIGHT (OVERCAST) TURBULENT PLUS 200 PINK
Rod Campbell	Mouth	F	0	0	0	150	0	CARCASSES - COUNT PROBABLY LOW.
	Bay	F	0	0	0	400	0	
08/30/1998	Stream	P	0	0	0	10,000	0	VERY POOR LIGHT. UNSURVEYABLE.
Witteveen	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
Cape Aliaksin, Ctr, 281-8005								
07/14/1998	Stream							PARTIAL SURVEY MOUTH ONLY - NO FISH OBSERVED.
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay							
07/31/1998	Stream							PARTIAL SURVEY BAY AND MOUTH ONLY - TOO TURBULENT
Rod Campbell	Mouth	G	0	0	0	0	0	TO SURVEY STREAM.
	Bay	G	0	0	0	200	0	
08/06/1998	Stream	F	0	0	0	1,500	0	LOW LIGHT - OVERCAST SKY - TURBULENT
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
08/09/1998	Stream	G	0	0	0	350	0	
Witteveen	Mouth	G	0	0	0	200	0	
	Bay	G	0	0	0	0	0	
08/14/1998	Stream	F	0	0	0	2,700	0	LOW LIGHT CONDITIONS IN STREAM.
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
08/18/1998	Stream	F	0	0	0	3,000	0	LOW LIGHT (OVERCAST) TURBULENT PLUS 150 PINK
Rod Campbell	Mouth	F	0	0	0	0	0	CARCASSES.
	Bay	F	0	0	0	0	0	
Cape Aliaksin, East, 281-8006								
07/14/1998	Stream							PARTIAL SURVEY MOUTH ONLY - 1 JUMPER ALONG THE
Rod Campbell	Mouth	G	0	0	0	0	0	BEACH.
	Bay							

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
07/31/1998 Rod Campbell	Stream Mouth	G	0	0	0	0	0	PARTIAL SURVEY BAY AND MOUTH ONLY - TOO TURBULENT TO SURVEY STREAM
	Bay	G	0	0	0	1,500	0	
08/06/1998 Rod Campbell	Stream	F	0	0	0	5,000	0	LOW LIGHT - OVERCAST SKY - TURBULENT
	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
08/09/1998 Witteveen	Stream	G	0	0	0	800	0	700 P'S IN BAY.
	Mouth	G	0	0	0	200	0	
	Bay	G	0	0	0	700	0	
08/10/1998 Arnie Shaul	Stream	G	0	0	0	5,000	0	
	Mouth							
	Bay							
08/14/1998 Rod Campbell	Stream	F	0	0	0	12,000	0	LOW LIGHT CONDITIONS IN STREAM.
	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
08/18/1998 Rod Campbell	Stream	F	0	0	0	18,000	0	LOW LIGHT (OVERCAST) TURBULENT - PLUS 1,000 INK CARCASSES.
	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	500	0	
08/30/1998 Witteveen	Stream	P				10,000		VERY POOR LIGHT.
	Mouth	P						
	Bay	P						
Lefthand Bay Kagayan, 281-8008								
07/14/1998 Rod Campbell	Stream	F	0	0	0	0	0	PARTIAL SURVEY, BAY MOUTH AND CLEAR TRIBUTARIES - LOW LIGHT CONDITIONS (5PM).
	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
07/20/1998 Rod Campbell	Stream	P	0	0	0	0	0	PARTIAL SURVEY - CLEAR TRIBS ONLY - WATER MURKY - VERY TURBULENT. NO FISH OBSERVED.
	Mouth	P	0	0	0	0	0	
	Bay	P	0	0	0	0	0	
07/21/1998 Rod Campbell	Stream	F	0	0	0	1,000	0	WATER MURKY - COUNT PROBABLY LOW ALL PINKS IN LOWER PORTION OF STREAM. NO FISH OBSERVED IN CLEAR TRIBS.
	Mouth	F	0	0	0	300	0	
	Bay	F	0	0	0	1,000	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
07/31/1998	Stream	P	0	0	0	300	500	PARTIAL SURVEY. LOWER 2 MILES OF STREAM PLUS
Rod Campbell	Mouth	G	0	0	0	150	0	MOUTH & BAY. POOR CONDITIONS BECAUSE OF HIGH
	Bay	G	0	0	0	3,000	0	SPEED PASSOVER (TURBULENCE) TO GET AN ACCURATE COUNT IN STREAM.
08/09/1998	Stream	F	0	0	0	11,500	0	PART OF 3,500 RIVER IN MOUTH WERE ALONG COAST NEAR
Witteveen	Mouth	F	0	0	0	3,500	0	RIVER.
	Bay	F	0	0	0	0	0	
08/14/1998	Stream	F	0	0	0	20,000	5,000	MAINSTEM MURKY - SPECIES ID DIFFICULT. PROBABLY -
Rod Campbell	Mouth	G	0	0	0	1,000	0	SOME COHO MIXED IN DIFFICULT TO TELL.
	Bay	G	0	0	0	3,500	0	
08/20/1998	Stream	P	0	0	0	5,500	0	VERY POOR LIGHT CONDITIONS, MAIN STEM OF RIVER TOO
Witteveen	Mouth	P	0	0	0	1,500	0	MURKY TO SURVEY.
	Bay	P	0	0	0	0	0	
08/21/1998	Stream	P	0	0	0	18,500	2,500	PARTIAL SURVEY-MAINSTEM ONLY-VERY MURKY, COUNT
Rod Campbell	Mouth							AND SPECIES ID VERY DIFFICULT.
	Bay							
09/08/1998	Stream	F	0	0	0	20,000	5,000	PARTIAL SURVEY BELOW FORKS ONLY - VERY TURBULENT
Rod Campbell	Mouth	F	0	0	300	0	0	PLUS STREAM MURKY. SPECIES ID DIFFICULT - PLUS
	Bay	F	0	0	0	0	0	10,000 CARCASSES.
09/13/1998	Stream	F			500	28,000		ONLY SURVEYED TO 3 MILES UPSTREAM OF FORKS DUE TO
Witteveen	Mouth	G						TURBULENCE. WATER VISIBILITY WAS POOR. COHO WERE
	Bay	G						IN LOWER RIVER WITHIN 1.5 MILES OF THE MOUTH.
09/14/1998	Stream	E	0	0	300	48,000	11,000	VERY FEW FISH IN HEADWATERS.
Witteveen	Mouth	E	0	0	0	0	0	
	Bay	E	0	0	0	0	0	
Foster Creek, 281-8009								
08/09/1998	Stream	F	0	0	0	6,000	0	
Witteveen	Mouth	F	0	0	0	2,500	0	
	Bay	F	0	0	0	0	0	
08/14/1998	Stream	F	0	0	0	24,000	0	LOW LIGHT - MAYBE SOME CHUMS - BUT SPECIES ID
Rod Campbell	Mouth	F	0	0	0	800	0	DIFFICULT.
	Bay	F	0	0	0	2,000	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/20/1998	Stream	F	0	0	0	32,000	0	2,000 CARCASSES IN UPPER RIVER.
Witteveen	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
09/08/1998	Stream	F	0	0	0	11,000	500	PARTIAL SURVEY - BELOW FORKS ONLY - TOO TURBULENT
Rod Campbell	Mouth	F	0	0	0	0	0	TO COMPLETE SURVEY - PLUS 1,000 PINK CARCASSES.
	Bay	F	0	0	0	0	0	
09/12/1998	Stream	F	0	0	0	20,000	5,000	LOW LIGHT, DRIZZLE, PLUS 20,000 CARCASSES (PINKS
Rod Campbell	Mouth	F	0	0	0	0	0	& CHUMS).
	Bay	F	0	0	0	0	0	
Monolith Pt. Creek, 281-8011								
08/09/1998	Stream	G	0	0	0	500	0	
Witteveen	Mouth	G	0	0	0	200	0	
	Bay	G	0	0	0	0	0	
08/14/1998	Stream	F	0	0	0	1,400	0	LOW LIGHT - MAY HAVE BEEN SOME CHUM - SPECIES ID
Rod Campbell	Mouth	F	0	0	0	800	0	DIFFICULT.
	Bay	F	0	0	0	1,000	0	
08/20/1998	Stream	F	0	0	0	2,500	0	
Witteveen	Mouth	F	0	0	0	2,000	0	
	Bay	F	0	0	0	0	0	
09/08/1998	Stream	F	0	0	0	1,500	0	TURBULENT, PLUS 1,500 PINK CARCASSES.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	150	0	
09/12/1998	Stream	F	0	0	0	2,700	0	LOW LIGHT, DRIZZLE, PLUS 1,600 CARCASSES.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
Foster's Camp Creek, 281-8012								
08/09/1998	Stream	G	0	0	0	100	0	
Witteveen	Mouth	G	0	0	0	150	0	
	Bay	G	0	0	0	0	0	
08/14/1998	Stream	F	0	0	0	200	0	LOW LIGHT.
Rod Campbell	Mouth	F	0	0	0	100	0	
	Bay	F	0	0	0	0	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/20/1998	Stream	P	0	0	0	0	0	BAD LOOK AT RIVER - HIGH WINDS AND FAST SURVEY
Witteveen	Mouth	G	0	0	0	0	0	SPEED.
	Bay	G	0	0	0	0	0	
09/08/1998	Stream	F	0	0	0	300	0	TURBULENT - PLUS 250 PINK CARCASSES.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
09/12/1998	Stream	F	0	0	0	500	150	LOW LIGHT, DRIZZLE, PLUS 1,000 CARCASSES. (PINKS
Rod Campbell	Mouth	F	0	0	0	0	0	AND MAYBE SOME CHUM).
	Bay	F	0	0	0	0	0	
Johnson Creek, 281-8014								
08/09/1998	Stream	G	0	0	0	5,000	0	
Witteveen	Mouth	G	0	0	0	4,000	0	
	Bay	G	0	0	0	0	0	
08/14/1998	Stream	F	0	0	0	9,000	500	LOW LIGHT - SOME OF FISH AT MOUTH COULD HAVE BEEN
Rod Campbell	Mouth	F	0	0	0	1,000	0	CHUM.
	Bay	F	0	0	0	5,000	1,000	
08/20/1998	Stream	F	0	0	0	19,000	0	FAST SURVEY SPEED. ONLY PARTIAL SURVEY DID 2/3 OF
Witteveen	Mouth	G	0	0	0	0	0	RIVER.
	Bay	G	0	0	0	0	0	
09/08/1998	Stream	G	0	0	0	15,500	2,500	PLUS 10,000 CARCASSES.
Rod Campbell	Mouth	G	0	0	0	0	500	
	Bay	G	0	0	0	0	0	
09/12/1998	Stream	F	0	0	0	8,000	1,800	LOW LIGHT, DRIZZLE, BIG DIE OFF - ABOUT 20,000
Rod Campbell	Mouth	F	0	0	0	0	0	CARCASSES IN STREAM.
	Bay	F	0	0	0	0	0	
Coleman Creek, 281-8015								
08/09/1998	Stream	G	0	0	0	700	0	
Witteveen	Mouth	G	0	0	0	6,000	0	
	Bay	G	0	0	0	0	0	
08/14/1998	Stream	F	0	0	0	6,000	1,000	LOW LIGHT - PLUS 250 PINK CARCASSES. SPECIES ID
Rod Campbell	Mouth	F	0	0	0	100	0	DIFFICULT IN UPPER STREAM.
	Bay	F	0	0	0	300	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/20/1998	Stream	F	0	0	0	14,000	2,000	DID ONLY 2/3 OF RIVER DUE TO WIND. 2,000
Witteveen	Mouth	F	0	0	0	2,000	0	CARCASSES IN LAGOON WASHED OUT DUE TO STORM.
	Bay	F	0	0	0	0	0	
09/08/1998	Stream	G	0	0	0	10,000	3,000	PLUS 3,500 CARCASSES.
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
09/12/1998	Stream	F	0	0	0	10,000	6,600	LOW LIGHT, DRIZZLE, PLUS 10,000 CARCASSES.
Rod Campbell	Mouth	F	0	0	0	0	500	
	Bay	F	0	0	0	0	10,000	
Ballast Is. Stream, 281-8016								
08/20/1998	Stream	G	0	0	0	0	0	
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
09/08/1998	Stream	G	0	0	0	0	0	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
09/12/1998	Stream	F						LOW LIGHT, DRIZZLE.
Rod Campbell	Mouth	F						
	Bay	F						
09/12/1998	Stream	F	0	0	0	0	0	LOW LIGHT, DRIZZLE.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
Swedania Pt. Stream, 281-9001								
07/20/1998	Stream	F	0	0	0	0	0	WATER MURKY - NO FISH OBSERVED.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
08/06/1998	Stream	F	0	0	0	10,000	0	LOW LIGHT - OVERCAST SKY - TURBULENT.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
08/09/1998	Stream	G	0	0	0	600	0	
Witteveen	Mouth	G	0	0	0	200	0	
	Bay	G	0	0	0	0	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/14/1998	Stream	F	0	0	0	15,000	0	LOW LIGHT.
Rod Campbell	Mouth	F	0	0	0	1,000	0	
	Bay	F	0	0	0	0	0	
08/20/1998	Stream	F	0	0	0	30,000	0	HALF OF THE FISH WERE IN BALLS IN THE LOWER RIVER
Witteveen	Mouth	G	0	0	0	0	0	- LOOKED LIKE NEW FISH.
	Bay	G	0	0	0	0	0	
08/30/1998	Stream	F	0	0	0	13,000	0	POOR LIGHT. MURKY RIVER.
Witteveen	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
Rough Beach, 281-9002								
07/14/1998	Stream							PARTIAL SURVEY - BAY, STREAM MOUTH AND LOWER 1/3
Rod Campbell	Mouth	G	0	0	0	0	0	MILE OF STREAM. TOO TURBULENT TO COMPLETE SURVEY.
	Bay	G	0	0	0	0	0	
07/20/1998	Stream	G	0	0	0	0	0	NO FISH OBSERVED.
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
08/06/1998	Stream	F	0	0	0	2,000	0	PARTIAL SURVEY - BAY & MOUTH & LOWER 1/2 MILE OF
Rod Campbell	Mouth	F	0	0	0	1,000	0	STREAM. TOO TURBULENT TO SURVEY UPPER PORTION. 1
	Bay	F	0	0	0	6,000	0	BEACH SEINER OPERATING IN AREA.
08/09/1998	Stream	G	0	0	0	20,000	0	
Rod Campbell	Mouth	G	0	0	0	1,000	0	
	Bay	G	0	0	0	3,000	0	
08/14/1998	Stream	F	0	0	0	30,000	0	LOW LIGHT. DARK STREAMBED.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
08/20/1998	Stream	G	0	0	0	31,000	0	GREAT MAJORITY OF FISH WERE IN UPPER RIVER.
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
08/30/1998	Stream	F	0	0	0	8,000	0	POOR LIGHT. BOTTOM HALF OF RIVER WAS MURKY.
Witteveen	Mouth	F	0	0	0	0	0	4,000 CARCASSES.
	Bay	F	0	0	0	0	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
09/12/1998	Stream	F	0	0	0	32,000	0	LOW LIGHT - DRIZZLE, PLUS 18,000 CARCASSES.
Rod Campbell	Mouth	F	0	0	0	200	0	
	Bay	F	0	0	0	0	0	
W Side San Diego Bay, 281-9003								
08/09/1998	Stream	G	0	0	0	1,000	400	ALL PINKS IN LAGOON - MAY HAVE BEEN SOME CHUM
Rod Campbell	Mouth	G	0	0	0	0	0	MIXED.
	Bay	G	0	0	0	0	0	
08/14/1998	Stream	F	0	0	0	0	300	LOW LIGHT.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
08/20/1998	Stream	F	0	0	0	100	0	
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
09/03/1998	Stream	F	0	0	0	200	0	TURBULENT AND LOW LIGHT.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
San Diego Lgn & Strm, 281-9004								
08/09/1998	Stream	F	0	0	0	500	800	MUCH OF STREAM OVER GROWN WITH VEGETATION COUNT
Rod Campbell	Mouth	G	0	0	0	0	0	PROBABLY LOW.
	Bay	G	0	0	0	0	0	
08/14/1998	Stream	F	0	0	0	1,000	500	LOW LIGHT & UPPER PORTION OF STREAM OVERGROWN WITH
Rod Campbell	Mouth	F	0	0	0	0	0	VEGETATION - PINK STREAM COUNT INCLUDE 200 IN
	Bay	F	0	0	0	0	0	LAGOON.
08/20/1998	Stream	G	0	0	0	400	0	
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
09/03/1998	Stream	F	0	0	0	600	2,000	LOW LIGHT AND TURBULENT - PLUS 100 CHUM
Rod Campbell	Mouth	F	0	0	0	0	0	CARCASSES. LOOKS PRETTY EMPTY.
	Bay	F	0	0	0	0	0	
Apollo Creek Minor, 282-1002								
08/06/1998	Stream	F	0	0	0	250	0	LOW LIGHT - OVERCAST SKY - VERY TURBULENT
Rod Campbell	Mouth	F	0	0	0	200	0	
	Bay	F	0	0	0	0	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/18/1998	Stream	P	0	0	0	800	0	TURBULENT - UNABLE TO GET AN ACCURATE COUNT.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
09/02/1998	Stream	G	0	0	0	800	0	ALSO SAW 100 CARCASSES.
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
Apollo Creek Major, 282-1003								
08/06/1998	Stream	F	0	0	0	400	0	LOW LIGHT - OVERCAST SKY - VERY TURBULENT
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
08/18/1998	Stream	F	0	0	0	3,500	0	TURBULENT COUNT PROBABLY LOW.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	250	0	
09/02/1998	Stream	G	0	0	0	7,500	0	NONE.
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
Acheredin Lake, 282-1004								
08/06/1998	Stream	F	0	1,200	0	0	0	LOW LIGHT OVERCAST SKY - TURBULENT - REDS IN LAKE-
Rod Campbell	Mouth	F	0	0	0	0	0	STARTING TO COLOR UP.
	Bay	F	0	0	0	0	0	
08/18/1998	Stream	F	0	1,100	0	0	0	TURBULENT - 700 REDS IN LAKE - 400 REDS NEAR MOUTH
Rod Campbell	Mouth	F	0	0	0	0	0	OF STREAM.
	Bay	F	0	0	0	0	0	
09/02/1998	Stream	G	0	600	0	0	0	MOST SOCKEYE WERE NEAR THE MOUTH OF "A" AND
Witteveen	Mouth	G	0	0	0	0	0	SEVERAL WERE SEEN UP THE STREAM AMONGST THE BRUSH.
	Bay	G	0	0	0	0	0	
Unnamed 1010, 282-1010								
08/18/1998	Stream	F	0	0	0	0	0	TURBULENT.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
09/02/1998	Stream	G	0	0	0	0	0	NONE.
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Apollo Gold Mine, 282-1011								
08/11/1998	Stream	G	0	0	0	5,300	0	
Rod Campbell	Mouth	G	0	0	0	5,000	0	
	Bay	G	0	0	0	0	0	
08/18/1998	Stream	F	0	0	0	7,500	0	TURBULENT - PLUS 100 PINK CARCASSES.
Rod Campbell	Mouth	F	0	0	0	150	0	
	Bay	F	0	0	0	0	0	
09/02/1998	Stream	G	0	0	0	4,000	0	ALSO SAW 2,000 CARCASSES.
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
Unga Cape Stream, 282-1012								
08/11/1998	Stream	G	0	0	0	150	0	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
08/18/1998	Stream							STREAM OVERGROWN WITH VEGETATION.
Rod Campbell	Mouth	G	0	0	0	50	0	
	Bay	G	0	0	0	0	0	
09/02/1998	Stream	G	0	0	0	0	0	NONE.
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
Johnny Nelson Lake, 282-1013								
08/11/1998	Stream	G	0	0	0	0	0	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
08/18/1998	Stream	F	0	0	0	0	0	TURBULENT.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
09/02/1998	Stream	G	0	0	0	50	0	NONE.
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
Squaw Hbr. Minor, 282-1014								
08/06/1998	Stream							TOO TURBULENT TO SURVEY STREAM.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	2,000	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/11/1998	Stream	P	0	0	0	0	0	STREAM OVER GROWN WITH VEGETATION.
Rod Campbell	Mouth	E	0	0	0	0	0	
	Bay	E	0	0	0	2,500	0	
08/14/1998	Stream	F	0	0	0	700	0	LOW LIGHT.
Rod Campbell	Mouth	F	0	0	0	1,500	0	
	Bay	F	0	0	0	2,000	0	
08/18/1998	Stream	P	0	0	0	600	0	TURBULENT MUCH OF STREAM OVERGROWN WITH VEGETATION
Rod Campbell	Mouth	G	0	0	0	0	0	- NOT ABLE TO GET AN ACCURAGE COUNT IN STREAM.
	Bay	G	0	0	0	0	0	
09/02/1998	Stream	F	0	0	0	8,000	0	SAW MOST FISH AMONGST BRUSH IN A VERY BRUSHY AREA.
Witteveen	Mouth	G	0	0	0	0	0	ESTIMATE A TOTAL OF 25,000.
	Bay	G	0	0	0	0	0	
Squaw Hbr. Major, 282-1015								
08/06/1998	Stream	F	0	0	0	9,500	0	TURBULENT
Rod Campbell	Mouth	F	0	0	0	1,500	0	
	Bay	F	0	0	0	3,000	0	
08/11/1998	Stream	G	0	0	0	12,500	0	
Rod Campbell	Mouth	E	0	0	0	1,000	0	
	Bay	E	0	0	0	5,000	0	
08/14/1998	Stream	F	0	0	0	15,000	0	LOW LIGHT.
Rod Campbell	Mouth	F	0	0	0	1,000	0	
	Bay	F	0	0	0	2,500	0	
08/18/1998	Stream	F	0	0	0	30,000	0	TURBULENT.
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	3,500	0	
09/02/1998	Stream	G	0	0	0	48,000	0	ALSO SAW 1,500 CARCASSES. MOST FISH WERE BALLED
Witteveen	Mouth	G	0	0	0	0	0	UP IN THE LOWER RIVER.
	Bay	G	0	0	0	0	0	
Ben Green Bight-farm, 282-1016								
07/14/1998	Stream	G	0	0	0	0	0	PINK SALMON ALONG BEACH - NO FISH OBSERVED IN THE
Rod Campbell	Mouth	G	0	0	0	0	0	STREAM.
	Bay	G	0	0	0	100	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
07/31/1998	Stream	G	0	0	0	0	0	
Rod Campbell	Mouth	G	0	0	0	150	0	
	Bay	G	0	0	0	3,500	0	
08/06/1998	Stream	G	0	0	0	4,700	0	UPPER 1/2 OF STREAM - OVER GROWN WITH VEGETATION.
Rod Campbell	Mouth	G	0	0	0	150	0	
	Bay	G	0	0	0	1,000	0	
08/11/1998	Stream	G	0	0	0	7,000	0	UPPER PORTION OF STREAM OVER GROWN WITH
Rod Campbell	Mouth	E	0	0	0	500	0	VEGETATION.
	Bay	E	0	0	0	800	0	
08/14/1998	Stream	F	0	0	0	5,500	0	LOW LIGHT - UPPER END OF STREAM OVERGROWN PLUS 200
Rod Campbell	Mouth	G	0	0	0	800	0	PINK CARCASSES - LOTS OF JUMPERS OFF STREAM MOUTH
	Bay	G	0	0	0	3,500	0	
09/02/1998	Stream	G	0	0	0	10,000	0	BRUSHY UPSTREAM. COULD BE 25% MORE UNDER BRUSH.
Witteveen	Mouth	G	0	0	0	2,000	0	
	Bay	G	0	0	0	0	0	
Humboldt Creek-Popof, 282-1018								
08/11/1998	Stream	E	0	0	0	20	0	FISH PASS WAS BLOWN OUT AND ONLY 2 OF THE 20 PINKS
Witteveen	Mouth		0	0	0	0	0	WERE BEYOND THE FALLS.
	Bay		0	0	0	0	0	
09/11/1998	Stream	E	0	0	30	850	0	ESTIMATE 500 PINKS BEYOND THE FALLS PLUS 50 PINK
Briana Lawson	Mouth							CARCASSES. SURVEYED FROM TOP OF LAGOON TO ROAD
	Bay							(1/4 MILE)
09/13/1998	Stream	G	0	0	300	900	0	SURVEYED 2 MILES UPSTREAM OF THE LAKE. NO FISH
Witteveen	Mouth	G						WERE FAR ABOVE THE LAKE. COHO WERE AT THE INLET
	Bay	G						TO THE LAKE.
Salmon Ranch-Popof, 282-1101								
08/05/1998	Stream	F	0	0	0	0	0	TURBULENT - UPPER PORTION OF STREAM OVER GROWN
Rod Campbell	Mouth	F	0	0	0	100	0	WITH VEGETATION BAY - GOOD CONDITION.
	Bay	G	0	0	0	4,000	0	
08/21/1998	Stream	P				500		LOW LIGHT-MOST OF STREAM OVERGROWN WITH
Rod Campbell	Mouth	F						VEGETATION. PLUS 200 PINK CARCASSES.
	Bay	F				500		

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
09/04/1998	Stream	F	0	0	0	1,000	0	MOST OF STREAM OVERGROWN WITH VEGETATION.
Rod Campbell	Mouth	G	0	0	0	500	0	
	Bay	G	0	0	0	2,000	0	
Fox Hole-Popof, 282-1103								
08/11/1998	Stream	G	0	0	0	1,000	0	
Rod Campbell	Mouth	G	0	0	0	500	0	
	Bay	G	0	0	0	3,000	0	
09/08/1998	Stream	F	0	0	0	800	0	TURBULENT, HIGH ALTITUDE, FAST SURVEY PLUS 1,000
Rod Campbell	Mouth	F	0	0	0	150	0	PINK CARCASSES.
	Bay	F	0	0	0	0	0	
W Side Korovin Bay, 282-1105								
08/11/1998	Stream	G	0	0	0	0	0	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
08/21/1998	Stream	P	0	0	0	0	0	LOW LIGHT.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
Korovin Lake, 282-1106								
08/11/1998	Stream	G	0	0	0	0	0	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	25	0	
08/21/1998	Stream	F	0	0	0	0	0	LOTS OF DRIFTWOOD BLOCKING STREAM MOUTH. LOW
Rod Campbell	Mouth	F	0	0	0	0	0	LIGHT.
	Bay	F	0	0	0	0	0	
Coal Harbor West, 282-1201								
07/14/1998	Stream							PARTIAL SURVEY MOUTH ONLY - NO FISH OBSERVED -
Rod Campbell	Mouth	G	0	0	0	0	0	MINUS LOW TIDE
	Bay							
07/20/1998	Stream	G	0	0	0	0	0	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
07/31/1998	Stream	G	0	0	0	0	0	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	750	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
09/02/1998	Stream	G	0	0	0	50	0	ALSO SAW 25 CARCASSES.
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
Zachary Bay 1202, 282-1202								
07/14/1998	Stream							PARTIAL SURVEY MOUTH ONLY - NO FISH OBSERVED -
Rod Campbell	Mouth	G	0	0	0	0	0	MINUS LOW TIDE
	Bay							
07/20/1998	Stream	G	0	0	0	0	0	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
07/31/1998	Stream	G	0	0	0	0	0	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	450	
09/02/1998	Stream	G	0	0	0	1,200	0	ALSO SAW 800 CARCASSES.
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
Zachary Bay 1203, 282-1203								
07/14/1998	Stream							PARTIAL SURVEY - MOUTH ONLY - NO FISH OBSERVED -
Rod Campbell	Mouth	G	0	0	0	0	0	MINUS LOW TIDE.
	Bay							
07/20/1998	Stream	G	0	0	0	0	0	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
07/31/1998	Stream	G	0	0	0	0	0	500 CHUM COUNTED IN BAY WERE ALONG BEACH BETWEEN
Rod Campbell	Mouth	G	0	0	0	0	200	12.02 & 12.03
	Bay	G	0	0	0	0	500	
08/05/1998	Stream	F	0	0	0	0	100	TURBULENT.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	500	
09/02/1998	Stream	G	0	0	0	150	0	ALSO SAW 300 CARCASSES.
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Zachary Bay 1204, 282-1204								
07/14/1998	Stream							PARTIAL SURVEY MOUTH ONLY - NO FISH OBSERVED.
Rod Campbell	Mouth	G	0	0	0	0	0	MINUS LOW TIDE.
	Bay							
07/20/1998	Stream	G	0	0	0	0	0	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
07/31/1998	Stream	G	0	0	0	0	0	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	500	
08/05/1998	Stream	F	0	0	0	0	0	TURBULENT, HIGH ALTITUDE SURVEY.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
09/02/1998	Stream	G	0	0	0	100	0	ALSO SAW 500 CARCASSES IN RIVER AND 1,000
Witteveen	Mouth	G	0	0	0	0	0	CARCASSES IN MOUTH.
	Bay	G	0	0	0	0	0	
Zachary Bay 1205, 282-1205								
07/14/1998	Stream							PARTIAL SURVEY - MOUTH ONLY - NO FISH OBSERVED -
Rod Campbell	Mouth	G	0	0	0	0	0	MINUS LOW TIDE.
	Bay							
07/20/1998	Stream	G	0	0	0	0	20	
Rod Campbell	Mouth	G	0	0	0	0	15	
	Bay	G	0	0	0	0	0	
07/31/1998	Stream	G	0	0	0	0	500	PLUS 25 CHUM CARCASSES.
Rod Campbell	Mouth	G	0	0	0	0	75	
	Bay	G	0	0	0	0	400	
08/05/1998	Stream	F	0	0	0	0	300	TURBULENT, HIGH ALTITUDE SURVEY.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	2,500	0	
09/04/1998	Stream	F	0	0	0	1,000	0	LOW LIGHT - DARK CLOUD OVERHEAD. PLUS 1,000 PINK
Rod Campbell	Mouth	F	0	0	0	0	0	CARCASSES.
	Bay	F	0	0	0	0	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
			Species					
Zachary Bay 1206, 282-1206								
07/14/1998	Stream							PARTIAL SURVEY MOUTH ONLY - NO FISH OBSERVED -
Rod Campbell	Mouth	G	0	0	0	0	0	MINUS LOW TIDE.
	Bay							
07/20/1998	Stream	G	0	0	0	0	0	NO FISH OR JUMPERS OBSERVED.
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
07/31/1998	Stream	G	0	0	0	0	0	
Rod Campbell	Mouth	G	0	0	0	0	100	
	Bay	G	0	0	0	0	300	
08/05/1998	Stream	F	0	0	0	0	0	TURBULENT.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	1,750	0	
09/04/1998	Stream	F	0	0	0	100	0	LOW LIGHT - DARK CLOUD OVERHEAD PLUS 100 PINK
Rod Campbell	Mouth	F	0	0	0	0	0	CARCASSES.
	Bay	F	0	0	0	0	0	
Zachary Bay 1207, 282-1207								
07/14/1998	Stream							PARTIAL SURVEY MOUTH ONLY - NO FISH OBSERVED -
Rod Campbell	Mouth	G	0	0	0	0	0	MINUS LOW TIDE
	Bay							
07/20/1998	Stream	G	0	0	0	0	0	NO FISH OR JUMPERS OBSERVED.
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
07/31/1998	Stream	G	0	0	0	0	0	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	150	
08/05/1998	Stream	F	0	0	0	0	200	TURBULENT.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	1,750	0	
09/04/1998	Stream	F	0	0	0	150	0	LOW LIGHT DARK CLOUD OVERHEAD. PLUS 200 PINK
Rod Campbell	Mouth	F	0	0	0	0	0	CARCASSES.
	Bay	F	0	0	0	0	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
2nd Stm S. Of Qtz Pt, 282-1208								
07/14/1998	Stream							PARTIAL SURVEY MOUTH ONLY - NO FISH OBSERVED MINUS
Rod Campbell	Mouth	G	0	0	0	0	0	LOW TIDE.
	Bay							
07/20/1998	Stream	G	0	0	0	0	0	NO FISH OR JUMPERS OBSERVED.
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
07/31/1998	Stream	G	0	0	0	0	0	
Rod Campbell	Mouth	G	0	0	0	0	25	
	Bay	G	0	0	0	0	0	
08/05/1998	Stream	F	0	0	0	0	75	TURBULENT.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	150	
09/04/1998	Stream	F	0	0	0	300	0	LOW LIGHT - DARK CLOUD OVERHEAD. PLUS 1,000 PINK
Rod Campbell	Mouth	F	0	0	0	0	0	CARCASSES.
	Bay	F	0	0	0	0	0	
1st Stm S. Of Qtz Pt, 282-1209								
07/14/1998	Stream							PARTIAL SURVEY MOUTH ONLY - NO FISH OBSERVED MINUS
Rod Campbell	Mouth	G	0	0	0	0	0	LOW TIDE.
	Bay							
07/20/1998	Stream	G	0	0	0	0	0	UPPER PORTION OF STREAM OVER GROWN WITH VEGETATION
Rod Campbell	Mouth	G	0	0	0	0	0	OTHERWISE GOOD CONDITIONS.
	Bay	G	0	0	0	0	0	
07/31/1998	Stream	G	0	0	0	0	25	
Rod Campbell	Mouth	G	0	0	0	0	50	
	Bay	G	0	0	0	0	100	
08/05/1998	Stream	F	0	0	0	0	0	TURBULENT.
Rod Campbell	Mouth	F	0	0	0	0	100	
	Bay	F	0	0	0	0	0	
09/04/1998	Stream	F	0	0	0	0	0	LOW LIGHT - DARK CLOUD OVERHEAD.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Zachary Bay 1210, 282-1210								
07/14/1998	Stream							PARTIAL SURVEY MOUTH ONLY - NO FISH OBSERVED MINUS
Rod Campbell	Mouth	G	0	0	0	0	0	LOW TIDES.
	Bay							
07/20/1998	Stream							PARTIAL SURVEY - BAY & MOUTH ONLY - NO FISH OR
Rod Campbell	Mouth	G	0	0	0	0	0	JUMPERS OBSERVED.
	Bay	G	0	0	0	0	0	
07/31/1998	Stream	G	0	0	0	0	25	
Rod Campbell	Mouth	G	0	0	0	0	50	
	Bay	G	0	0	0	0	0	
09/04/1998	Stream	F	0	0	0	500	0	LOW LIGHT - DARK CLOUD OVERHEAD.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
Unga Spit, 282-1301								
08/18/1998	Stream	F	0	0	0	0	0	MOST OF STREAM OVERGROWN WITH VEGETATION.
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
09/02/1998	Stream	G	0	0	0	15	0	SMALL AND BRUSHY.
Wittevcen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
Dry Lagoon, 282-1302								
07/14/1998	Stream	G	0	0	0	0	0	MINUS TIDE - FLATS DRY NO FISH OBSERVED.
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
07/20/1998	Stream	G	0	0	0	250	0	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
07/26/1998	Stream	F	0	0	0	1,000	0	LOW LIGHT - LIGHT RAIN - 500 OF THE 1,000 PINKS
Rod Campbell	Mouth	F	0	0	0	100	0	WERE IN THE LAGOON.
	Bay	F	0	0	0	0	0	
07/31/1998	Stream	G	0	0	0	4,500	250	CHUM IN UPPER PORTION OF STREAM
Rod Campbell	Mouth	G	0	0	0	100	0	
	Bay	G	0	0	0	800	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/05/1998	Stream	F	0	0	0	15,000	1,000	TURBULENT HIGH ALTITUDE SURVEY- BAY CHOPPY.
Rod Campbell	Mouth	F	0	0	0	500	0	
	Bay	F	0	0	0	0	0	
08/09/1998	Stream	F	0	0	0	18,000	1,500	LOW LIGHT LEVEL AND DARK STREAM BED IN UPPER
Rod Campbell	Mouth	G	0	0	0	0	0	PORTION.
	Bay	G	0	0	0	0	0	
08/14/1998	Stream	F	0	0	0	20,000	1,000	LOW LIGHT DARK STREAMBED - CHUM IN UPPER PORTION
Rod Campbell	Mouth	F	0	0	0	0	0	OF STREAM.
	Bay	F	0	0	0	0	0	
08/18/1998	Stream	F	0	0	0	20,500	0	UPPER STREAMBED VERY DARK - UNABLE TO GET A GOOD
Rod Campbell	Mouth	G	0	0	0	100	0	COUNT IN THAT SECTION - PROBABLY SOME CHUM SALMON
	Bay	G	0	0	0	0	0	BUT UNABLE TO ID.
09/02/1998	Stream	F	0	0	0	9,000	0	POOR LIGHT CONDITIONS.
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
Bay Point, 282-1303								
07/14/1998	Stream	G	0	0	0	0	80	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
07/20/1998	Stream	G	0	0	0	0	100	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
07/26/1998	Stream	F	0	0	0	2,200	0	LOW LIGHT - LIGHT RAIN
Rod Campbell	Mouth	F	0	0	0	3,000	0	
	Bay	F	0	0	0	1,000	0	
07/31/1998	Stream	G	0	0	0	2,800	700	UPPER PORTION OF STREAM - DARK STREAM BED.
Rod Campbell	Mouth	G	0	0	0	500	0	DIFFICULT TO COUNT - OTHERWISE GOOD CONDITIONS MAY
	Bay	G	0	0	0	500	0	HAVE ISSED SOME CHUM IN UPPER STREAM.
08/05/1998	Stream	F	0	0	0	22,000	3,000	TURBULENT, HIGH ALTITUDE SURVEY, BAY CHOPPY
Rod Campbell	Mouth	F	0	0	0	0	0	SPECIES ID DIFFICULT.
	Bay	F	0	0	0	0	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/09/1998	Stream	F	0	0	0	25,000	3,000	LOW LIGHT - DARK STREAM BED IN UPPER PORTION 2,000
Rod Campbell	Mouth	G	0	0	0	0	0	OF PINKS WERE IN THE LAGOON. BAY CHOPPY.
	Bay	F	0	0	0	0	0	
08/14/1998	Stream	F	0	0	0	28,000	2,000	LOW LIGHT, DARK STREAMBED, SPECIES ID DIFFICULT.
Rod Campbell	Mouth	F	0	0	0	0		
	Bay	F	0	0	0	0	0	
08/18/1998	Stream	F	0	0	0	35,000	3,000	UPPER STREAMBED DARK - SPECIES ID DIFFICULT IN
Rod Campbell	Mouth	F	0	0	0	0	0	UPPER SECTION.
	Bay	F	0	0	0	0	0	
09/02/1998	Stream	G	0	0	0	22,000	700	ALSO SAW 2,000 CARCASSES MOSTLY IN THE UPPER
Witteveen	Mouth	G	0	0	0	0	0	RIVER.
	Bay	G	0	0	0	0	0	
Pinnacle Point Strm., 282-1304								
07/14/1998	Stream	G	0	0	0	0	0	NO FISH OBSERVED.
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
07/20/1998	Stream	F	0	0	0	0	0	LOW LIGHT, HIGH WATER, DARK STREAM BED. NO FISH
Rod Campbell	Mouth	F	0	0	0	0	0	OBSERVED.
	Bay	F	0	0	0	0	0	
07/31/1998	Stream	G	0	0	0	400	0	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
08/05/1998	Stream	F	0	0	0	10,000	0	TURBULENT, HIGH ALTITUDE SURVEY. BAY CHOPPY.
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
08/09/1998	Stream	F	0	0	0	10,500	0	
Rod Campbell	Mouth	F	0	0	0	0	0	
	Bay	F	0	0	0	0	0	
08/18/1998	Stream	F	0	0	0	20,000	0	DARK STREAMBED - PORTIONS OF STREAM OVERGROWN WITH
Rod Campbell	Mouth	F	0	0	0	0	0	VEGETATION.
	Bay	F	0	0	0	0	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
09/02/1998	Stream	F	0	0	0	9,000	0	POOR LIGHT.
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
2nd Str S Of Pinn Pt, 282-1305								
09/02/1998	Stream	G	0	0	0	20	0	VERY BRUSHY.
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
3rd Str S Of Pinn Pt, 282-1306								
09/02/1998	Stream		0	0	0	0	0	VERY BRUSHY.
Witteveen	Mouth		0	0	0	0	0	
	Bay		0	0	0	0	0	
Porpoise Rocks, 282-2001								
09/04/1998	Stream	G	0	0	0	0	0	MOUTH BLOCKED. NO FISH, BIRDS OR CARCASSES.
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
09/14/1998	Stream	E	0	0	0	0	0	RIVER MOUTH CLOSED OFF.
Witteveen	Mouth	E	0	0	0	0	0	
	Bay	E	0	0	0	0	0	
Porpoise Harbor, 282-2002								
09/04/1998	Stream	G	0	0	0	0	0	NO FISH, BIRDS OR CARCASSES.
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
09/14/1998	Stream	E	0	0	0	50	0	
Witteveen	Mouth	E	0	0	0	0	0	
	Bay	E	0	0	0	0	0	
Lagoon Lk, Sanborn H, 282-2003								
09/04/1998	Stream	G	0	0	0	600	0	PLUS 100 CARCASSES.
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
09/14/1998	Stream	E	0	0	0	140	0	NONE.
Witteveen	Mouth	E	0	0	0	0	0	
	Bay	E	0	0	0	0	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Head Of Sanborn Hbr, 282-2004								
09/04/1998	Stream	G	0	0	0	10,000	0	PLUS 1,000 PINK CARCASSES.
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
09/14/1998	Stream	E	0	0	0	2,700	0	PLUS 3,000 CARCASSES.
Witteveen	Mouth	E	0	0	0	0	0	
	Bay	E	0	0	0	0	0	
Head Falmouth Hbr, 282-2005								
09/04/1998	Stream	G	0	0	0	900	100	PLUS 100 CARCASSES.
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
09/14/1998	Stream	E	0	0	0	8,500	0	PLUS 3,000 CARCASSES.
Witteveen	Mouth	E	0	0	0	0	0	
	Bay	E	0	0	0	0	0	
Larsen Bay, 282-2006								
09/04/1998	Stream	G	0	0	0	1,700	0	
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
09/14/1998	Stream	E	0	50	0	800	0	SOCKEYE IN LAGOON AT LOWER RIVER.
Witteveen	Mouth	E	0	0	0	0	0	
	Bay	E	0	0	0	0	0	
East Bight, 282-2008								
09/14/1998	Stream	E	0	0	0	0	0	RIVER MOUTH WAS CLOSED.
Witteveen	Mouth	E	0	0	0	0	0	
	Bay	E	0	0	0	0	0	
West Bay, Ne Bight, 282-2009								
09/14/1998	Stream	E	0	0	0	170	0	LOCATED IN WESTERN BAY OF NORTHEAST BIGHT ON NAGAI
Witteveen	Mouth	E	0	0	0	0	0	ISLAND. ALSO SAW 70 CARCASSES.
	Bay	E	0	0	0	0	0	
Sw. Strm, Long J.lgn, 283-6102								
08/29/1998	Stream	G	0	0	0	3,400	1,300	
Arnie Shaul	Mouth	F	0	0	0	0	2,000	
	Bay							

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
09/27/1998 Arnie Shaul	Stream Mouth Bay	G			200		1,000	
Long John Lgn, 2 S., 283-6103								
08/29/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	0	0	
Spring Fed Lakes, 283-6104								
08/09/1998 Arnie Shaul	Stream Mouth Bay	G	0	700	0	0	0	3,000 CH'S IN LGN. AND 1,000 CH'S AT NARROWS. THESE
08/29/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	800	0	
Long John Lagoon, 283-6105								
09/27/1998 Arnie Shaul	Stream Mouth Bay	G G			500			ALL IN LOWER END.
Cape Tolstoi, 283-6201								
08/09/1998 Witteveen	Stream	G	0	0	0	100	0	
	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
09/02/1998 Witteveen	Stream	G	0	0	0	2,500	0	ALSO SAW 1,000 CARCASSES.
	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
Coal Bay 6202, 283-6202								
07/23/1998 Witteveen	Stream	F	0	0	0	0	0	LOW LIGHT & FAST SURVEY SPEED.
	Mouth	F	0	0	0	0	0	
	Bay	P	0	0	0	0	0	
07/26/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	6,600	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/09/1998	Stream	G	0	0	0	50	0	
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
09/02/1998	Stream	G	0	0	0	400	0	ALSO SAW 200 CARCASSES.
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
Coal Bay 6203, 283-6203								
07/23/1998	Stream	F	0	0	0	0	0	LOW LIGHT & FAST SURVEY SPEED.
Witteveen	Mouth	F	0	0	0	0	0	
	Bay	P	0	0	0	0	0	
08/09/1998	Stream	G	0	0	0	0	0	
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
09/02/1998	Stream	G	0	0	0	1,500	0	WASN'T ABLE TO DO UPPER 1.5 MILES DUE TO
Witteveen	Mouth	G	0	0	0	0	0	TURBULENCE.
	Bay	G	0	0	0	0	0	
Coal Bay Unnamed, 283-6204								
07/23/1998	Stream	F	0	0	0	500	0	LOW LIGHT & FAST SURVEY SPEED.
Witteveen	Mouth	F	0	0	0	2,000	0	
	Bay	P	0	0	0	0	0	
08/09/1998	Stream	G	0	0	0	4,100	0	
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
08/10/1998	Stream	G	0	0	0	19,000	0	
Arnie Shaul	Mouth							
	Bay							
09/02/1998	Stream	G	0	0	0	36,000	0	NONE.
Witteveen	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
Coal Bay Main Stream, 283-6205								
07/14/1998	Stream	G	0	0	0	0	0	
Arnie Shaul	Mouth							
	Bay							

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
07/21/1998	Stream	E	0	0	0	8,000	0	
Rod Campbell	Mouth	E	0	0	0	1,000	0	
	Bay	E	0	0	0	2,500	0	
07/23/1998	Stream	F	0	0	0	4,000	0	LOW LIGHT & FAST SURVEY SPEED.
Witteveen	Mouth	F	0	0	0	1,000	0	
	Bay	P	0	0	0	0	0	
08/05/1998	Stream	P	0	0	0	25,000	0	PARTIAL SURVEY - MAIN STREAM, BAY MURKY, HIGH
Rod Campbell	Mouth	P	0	0	0	0	0	TURBULENCE, HIGH ALTITUDE SURVEY.
	Bay							
08/09/1998	Stream	G	0	0	0	25,000	0	
Witteveen	Mouth	G	0	0	0	3,000	0	
	Bay	G	0	0	0	0	0	
08/10/1998	Stream	G	0	0	0	26,000	0	SURVEYED UP TO CANYON. LIKELY ANOTHER 5,000 OR SO
Arnie Shaul	Mouth							ABOVE.
	Bay							
09/02/1998	Stream	G	0	0	0	43,000	0	DIDN'T DO UPPER 1.5 MILES OF MIDDLE NORTH TRIB.
Witteveen	Mouth	G	0	0	0	0	0	ALSO SAW 7,000 CARCASSES.
	Bay	G	0	0	0	0	0	
Strm S Of Chinaman L, 283-6304								
08/29/1998	Stream	P	0	0	0	0	0	
Arnie Shaul	Mouth	P						
	Bay							
09/04/1998	Stream	F	0	0	0	0	600	
Arnie Shaul	Mouth	G	0	0	0	0	2,000	
	Bay							
Lower Chinaman Lgn, 283-6305								
08/29/1998	Stream	P	0	0	0	0	200	
Arnie Shaul	Mouth	P	0	0	0	0	0	
	Bay							
Chinaman Lgn South, 283-6306								
09/04/1998	Stream	G	0	0	0	0	1,000	
Arnie Shaul	Mouth	F	0	0	0	0	1,000	
	Bay							

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Chinaman Lgn Main, 283-6310								
08/29/1998	Stream	P	0	0	0	0	0	JUMPERS NEAR MOUTH.
Arnie Shaul	Mouth	P	0	0	0	0	0	
	Bay							
09/04/1998	Stream	G	0	0	0	0	700	
Arnie Shaul	Mouth	F	0	0	0	0	4,000	
	Bay							
Chinaman Lgn North, 283-6311								
09/04/1998	Stream							
Arnie Shaul	Mouth	G	0	0	0	0	700	
	Bay							
Ruby's Lagoon, 283-6313								
08/29/1998	Stream	P	0	0	0	0	0	CREEK MUDDY. POOR LIGHT.
Arnie Shaul	Mouth	F	0	0	0	0	30,000	
	Bay							
09/04/1998	Stream	G	0	50	0	0	2,600	ANOTHER 15,000 CH'S IN LAGOON. MUCH BETTER CONDITIONS THEN DURING AUGUST 29TH.
Arnie Shaul	Mouth							
	Bay							
Middle Creek, 283-6315								
07/14/1998	Stream	G	0	0	0	8,200	0	SURVEYED UP TO FORKS (ABOUT 5 MILES) COULD BE MORE FISH ABOVE SURVEYED AREA. TOO MUCH TURBULENCE TO SURVEY. HIGH WIND & GLARE MADE VISIBILITY ONLY FAIR OFF MOUTH - COULD BE MORE FISH.
Joe Dinnocenzo	Mouth	P	0	0	0	4,000	0	
	Bay							
07/17/1998	Stream	G	0	0	0	17,500	0	
Arnie Shaul	Mouth							
	Bay							
07/21/1998	Stream	E	0	0	0	75,000	0	
Rod Campbell	Mouth	E	0	0	0	10,000	0	
	Bay	E	0	0	0	0	0	
08/06/1998	Stream		0	0	0	183,000	0	IMPRESSIVE!
Arnie Shaul	Mouth							
	Bay							

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
09/02/1998	Stream	G	0	0	0	60,000	0	ALSO SAW 18,000 CARCASSES.
Witteveen	Mouth	G	0	0	150	0	0	
	Bay	G	0	0	0	0	0	
Settlement Point, 283-6316								
07/14/1998	Stream	G	0	0	0	30,000	0	7,000 ABOVE FKS. DIDN'T SURVEY WEST FK.
Arnie Shaul	Mouth							
	Bay							
07/14/1998	Stream	G	0	0	0	37,000	0	SURVEYED UP TO ALMOST UP TO FORKS ABOUT 4 MILES.
Joe Dinnocenzo	Mouth	P	0	0	0	0	0	PROBABLY FISH ABOVE SURVEYED AREA BUT TOO MUCH
	Bay							TURBULENCE TO SURVEY. NO FISH SEEN NEAR MOUTH BUT
								HIGH WIND AND GLARE MADE VIEWING TOUGH.
07/17/1998	Stream	G	0	0	0	102,000	0	1,000 IN RIGHT FK., 27,000 ABOVE FK.
Arnie Shaul	Mouth	F	0	0	0	5,000	0	
	Bay	-						
07/21/1998	Stream	E	0	0	0	200,000	0	LARGE BLACK BALLS OF FISH IN BENDS TRIB A - 110,000
Rod Campbell	Mouth	E	0	0	0	20,000	0	TRIB B - 10,000
	Bay	E	0	0	0	30,000	0	
08/10/1998	Stream	G	0	0	0	151,000	0	DIDN'T SURVEY RIGHT FK., LIKELY ANOTHER 20,000
Arnie Shaul	Mouth							THERE.
	Bay							
09/02/1998	Stream	G	0	0	0	117,000	1,500	ALSO SAW 21,750 CARCASSES. MOST OF PINKS WERE IN
Witteveen	Mouth	G	0	0	0	0	0	LOWER RIVER AND STILL BALLED UP. CHUM WERE IN THE
	Bay	G	0	0	0	0	0	RIVER, BUT NEAR THE MOUTH. MISSED TOP 2 MILES OF
								E. TRIB AND TOP 3 MILES OF W. TRIB. WESTERN TRIB
								WAS SURVEYED AT HIGH ALTITUDE.
Bluff Point Creek, 283-6405								
08/05/1998	Stream	P	0	0	0	2,000	0	BAY TOO MURKY TO SURVEY BUT DID SEE A FEW JUMPERS.
Rod Campbell	Mouth	P	0	0	0	300	0	VERY TURBULENT - STREAM MURKY - ESPECIALLY THE
	Bay							LOWER PORTION.
08/06/1998	Stream	F	0	0	0	600	0	SURVEYED BELOW CANYON.
Arnie Shaul	Mouth							
	Bay							

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/10/1998	Stream	E	0	0	0	13,000	0	
Arnie Shaul	Mouth	E	0	0	0	115,000	0	
	Bay							
09/02/1998	Stream	P	0	0	0	0	3,000	POOR LIGHT CONDITIONS, MISSED UPPER 5 MILES DUE TO
Witteveen	Mouth	G	0	0	0	0	0	WEATHER SQUALL. WATER VISIBILITY WAS VERY POOR -
	Bay	G	0	0	0	0	0	COULD BE AN ORDER OF MAGNITUTDE MORE FISH IN THE RIVER. ALSO SAW 10,000 CARCASSES.
09/04/1998	Stream	G	0	0	0	12,000	2,000	BAY MURKY - PLUS 3,500 CARCASSES.
Rod Campbell	Mouth	G	0	0	0	0	0	
	Bay	P	0	0	0	0	0	
Canoe Bay River, 283-6406								
07/11/1998	Stream	G	0	0	0	0	1,000	SAW COUPLE JUMPERS NEAR BLUFF PT.
Arnie Shaul	Mouth	P	0	0	0	0	0	
	Bay	P	0	0	0	0	0	
07/14/1998	Stream	G	0	0	0	0	3,700	SOME WERE LIKELY REDS.
Arnie Shaul	Mouth	P	0	0	0	0	0	
	Bay	P	0	0	0	0	0	
07/17/1998	Stream	G	0	300	0	0	10,200	
Arnie Shaul	Mouth	F	0	0	0	0	2,000	
	Bay	F	0	0	0	0	5,000	
07/21/1998	Stream	E	0	0	0	0	27,000	JUMPERS ALL ALONG THE HEAD OF INNER CANOE BAY -
Rod Campbell	Mouth	E	0	0	0	0	10,000	50,000 PLUS.
	Bay	E	0	0	0	0	50,000	
08/05/1998	Stream	P	0	0	0	5,000	20,000	BAY-MURKY WITH WHITE CAPS - DID NOT SEE ANY LARGE
Rod Campbell	Mouth	P	0	0	0	500	0	BALLS OF FISH. JUST A FEW JUMPERS SPECIES ID
	Bay							DIFFICULT - STREAM MURKY.
08/06/1998	Stream	F	0	0	0	0	55,000	GOOD ESCAPEMENT
Arnie Shaul	Mouth							
	Bay							
08/10/1998	Stream							
Arnie Shaul	Mouth	E	0	0	0	200,000	0	
	Bay							

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
09/02/1998	Stream	F	0	0	0	8,000	91,000	LOWER HALF OF MAIN STEM WAS MUDDY AND
Witteveen	Mouth	F	0	0	0	0	0	UNSURVEYABLE. 11 TOTAL MILES OF HEADWATERS WERE
	Bay	G	0	0	0	0	0	MISSED DUE TO TURBULANCE ESTIMATED LOSS 15,000. ALSO SAW 76,000 CARCASSES.
09/04/1998	Stream	F	0	0	0	36,000	40,000	PARTIAL SURVEY - MAIL STEM ONLY. GOOD CONDITIONS
Rod Campbell	Mouth							IN UPPER SECTION OF STREAM. LOWER SECTION STILL
	Bay							MURKY - BUT COULD SEE FISH. ALL PINKS IN LOWER SECTION - SO COUNT MAY BE LOW. PLUS 50,000 CARCASSES -MOST IN UPPER SECTION OF STREAM.
Wolverine Gulch, 283-6407								
08/06/1998	Stream	G	0	0	0	0	0	
Arnie Shaul	Mouth							
	Bay							
09/04/1998	Stream	F	0	0	0	4,000	0	DARK STREAM BED - BAY MURKY PLUS 1,000 PINK
Rod Campbell	Mouth	G	0	0	0	0	0	CARCASSES.
	Bay	P	0	0	0	0	0	
Entrance Creek, 283-6408								
08/05/1998	Stream	P	0	0	0	10,500	0	LOW LIGHT DARK STREAM BED, MURKY WATER 2,700 PINKS
Rod Campbell	Mouth	P	0	0	0	500	0	IN EAST FORK, 1,300 PINKS IN WEST FORK - BALANCE
	Bay							IN MAIN STREAM BELOW FORKS.
08/06/1998	Stream	G	0	0	0	11,000	200	
Arnie Shaul	Mouth							
	Bay							
08/10/1998	Stream	G	0	0	0	12,000	0	
Arnie Shaul	Mouth	G	0	0	0	10,000	0	
	Bay							
09/02/1998	Stream	G	0	0	0	20,000	0	POOR LIGHT CONDITIONS, BUT OTHERWISE GOOD. ALSO
Witteveen	Mouth	G	0	0	0	0	0	SAW 11,000 CARCASSES.
	Bay	G	0	0	0	0	0	
Inner Canoe,s Side, 283-6409								
08/05/1998	Stream	P	0	0	0	1,000	0	LOW -LIGHT - PART OF STREAM WAS OVERGROWN WITH
Rod Campbell	Mouth	P	0	0	0	0	0	VEGETATION.
	Bay							

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
09/02/1998	Stream	G	0	0	0	0	1,500	POOR LIGHT CONDITIONS. BUT OTHERWISE GOOD. ALSO
Witteveen	Mouth	G	0	0	0	0	0	SAW 2,000 CARCASSES.
	Bay	G	0	0	0	0	0	
Ness Creek, 283-6410								
08/05/1998	Stream	P	0	0	0	3,000	0	LOW LIGHT DARK STREAM BED DIFFICULT TO COUNT.
Rod Campbell	Mouth	P	0	0	0	500	0	
	Bay							
08/06/1998	Stream	G	0	0	0	3,500	0	
Arnie Shaul	Mouth							
	Bay							
09/02/1998	Stream	F	0	0	0	8,500	0	SURVEY WAS HIGH ALTITUDE AND DARK. ALSO SAW 3,000
Witteveen	Mouth	G	0	0	0	0	0	CARCASSES.
	Bay	G	0	0	0	0	0	
Mino Creek, 283-7001								
07/14/1998	Stream	G	0	0	0	6,600	0	
Arnie Shaul	Mouth	P						
	Bay							
07/21/1998	Stream	E	0	0	0	10,000	0	
Rod Campbell	Mouth	E	0	0	0	200	0	
	Bay	E	0	0	0	500	0	
07/23/1998	Stream	G	0	0	0	24,000	0	
Witteveen	Mouth	F	0	0	0	0	0	
	Bay	P	0	0	0	0	0	
07/26/1998	Stream	G	0	0	0	41,800	0	2,800 ABOVE MAIN FORKS.
Arnie Shaul	Mouth							
	Bay							
08/05/1998	Stream	P	0	0	0	50,000	0	PATIAL SURVEY MAIN STREAM AND A FORK HIGH
Rod Campbell	Mouth							TURBULENCE, WATER MURKY-ESPECIALLY LOWER END OF
	Bay						0	STREAM.
08/09/1998	Stream	G	0	0	0	60,800	0	2,800 PINKS IN E BRANCH, 1,300 P IN C, AND GREAT
Witteveen	Mouth	G	0	0	0	0	0	MAJORITY OF REST OF FISH IN THE MAIN STREAM.
	Bay	G	0	0	0	0	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/10/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	162,000	0	125,000 BELOW BRANCH E.
09/02/1998 Witteveen	Stream	G	0	320	0	105,800	0	ALSO SAW 9,500 CARCASSES. ALL SOCKEYE WERE IN LAKES. VISIBILITY WAS GOOD IN ALL TRIBUTARIES. 46,000 PINKS WERE IN THE MAIN STREM AND THE REST WERE IN THE TRIBS.
	Mouth	G	0	0	0	0	0	
	Bay	G	0	0	0	0	0	
E. Of Mino Creek, 283-7002								
07/14/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	400		
07/23/1998 Witteveen	Stream	F	0	0	0	1,500	0	ALL FISH WERE ABOUT 500 YDS FROM MOUTH.
	Mouth	F	0	0	0	0	0	
	Bay	P	0	0	0	0	0	
07/26/1998 Arnie Shaul	Stream Mouth Bay	F	0	0	0	4,000	0	
08/05/1998 Rod Campbell	Stream Mouth Bay	P	0	0	0	700	0	PARTIAL SURVEY - LOWER 1/2 MILE; VERY TURBULENT - WATER MURKY - COULD SEE MOVEMENT IN STREAM NO ACCURATE COUNT POSSIBLE.
08/10/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	29,000	0	
08/30/1998 Witteveen	Stream	F				20,000		VERY DARK. MOST FISH IN UPPER RIVER. DID NOT DO UPPER 2 MILES. ALSO 2,000 CARCASSES.
	Mouth	F						
	Bay	F						
McGinty's Point, 283-7003								
07/23/1998 Witteveen	Stream	F	0	0	0	1,000	0	
	Mouth	F	0	0	0	100	0	
	Bay	P	0	0	0	0	0	
07/26/1998 Arnie Shaul	Stream Mouth Bay	F	0	0	0	1,500	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/05/1998 Rod Campbell	Stream Mouth Bay	P	0	0	0	2,500	0	PARTIAL SURVEY LOWER 1 1/2 MILES. VERY TURBULENT, WATER MURKY.
08/10/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	17,000	0	
08/30/1998 Witteveen	Stream Mouth Bay	F F F				14,000		VERY DARK. DID NOT DO UPPER 1 MILE. 1500 CARCASSES.
Near Egg Island, 284-1101								
08/09/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	0	0	
08/29/1998 Arnie Shaul	Stream Mouth Bay	G P	0 0	0 0	0 0	300 0	300 0	TURBULENT. LIKELY ANOTHER 500 P'S ABOVE.
Hansen's Creek, 284-1201								
08/09/1998 Arnie Shaul	Stream Mouth Bay	F	0	0	0	12,000	0	POOR LIGHT CHEROKEE.
08/29/1998 Arnie Shaul	Stream Mouth Bay	F F	0 0	1,700 0	0 0	50,000 0	0 0	GOOD VIS. IN LAKE AND UPPER HALF OF CREEK, LWR. HALF MURKY DUE TO RECENT RAIN.
09/27/1998 Arnie Shaul	Stream Mouth Bay	G			50			SURVEYED LAKE ONLY.
Middle Lagoon, 284-1205								
07/08/1998 Arnie Shaul	Stream Mouth Bay		0	0	0	0	0	SURVEYED LWR. 1/2 MILE ONLY. SAW NO FISH.
07/11/1998 Arnie Shaul	Stream Mouth Bay	F	0	0	0	0	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
07/21/1998 Arnie Shaul	Stream Mouth Bay	P		200				POOR VIS. DUE TO HIGH TIDE.
08/05/1998 Arnie Shaul	Stream Mouth Bay	F	0	1,100	0	0	0	GOOD VIS. IN UPPER END, WATER DEEP IN LWR. END. COUNT LOW.
08/08/1998 Arnie Shaul	Stream Mouth Bay	G	0	800	0	0	0	UP TO 96 WEIR SIGHT.
08/27/1998 Arnie Shaul	Stream Mouth Bay	F	0	200	0	0	0	SURVEYED LAKE, LAKE OUTLET, & OUTLET MOUTH ONLY. ALL FISH SEEN WERE IN OUTLET AND OUTLET MOUTH.
09/13/1998 Arnie Shaul	Stream Mouth Bay	F	0	5,500	0	0	0	SURVEYED MORZHOVOI LAKE AND OUTLET. 700 R'S WERE SPAWNING IN OUTLET.
09/27/1998 Arnie Shaul	Stream Mouth Bay	F		4,800				SURVEYED MORZHOVOI LAKE AND ITS OUTLET ONLY.
10/09/1998 Arnie Shaul	Stream Mouth Bay	E		10,000				SURVEYED LAKE AND ITS OUTLET ONLY. 500 WERE SPAWNING IN OUTLET.
Cannery Creek, 284-1211								
08/29/1998	Stream	G	0	0	0	100	200	
Arnie Shaul	Mouth	P	0	0	0	0	0	
	Bay							
Little John Lgn Sspt, 284-1212								
08/29/1998	Stream	G	0	0	0	0	10	
Arnie Shaul	Mouth	G	0	0	0	0	400	
	Bay							
Little John Lgn Strm, 284-1213								
08/29/1998	Stream	G	0	0	0	3,000	4,000	POOR VISIBILITY IN LAGOON, BUT NO SIGN OF FISH.
Arnie Shaul	Mouth	G	0	0	0	0	1,000	POOR ESCAPEMENT.
	Bay							

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Sandy Cove Stream, 284-2001								
08/09/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	3,000	11,000	
08/29/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	1,000	40,000	
		P	0	0	0	0	0	
McGinty's Creek, 284-2003								
08/06/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	16,000	0	GOOD ESCAPEMENT.
08/29/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	44,000	0	
		F	0	0	0	0	0	
SW Bight Creek, 284-2004								
08/05/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	2,000	0	SURVEYED BEACH PORTION ONLY. TURBULENT PARTIAL SURVEY.
08/06/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	4,000	0	
08/29/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	6,000	0	
		F	0	0	0	0	0	
Thin Pt Lgn & Entr., 284-2006								
07/03/1998 Arnie Shaul	Stream Mouth Bay	F	0	500	0	0	0	MOST IN LWR. END.
07/12/1998 Arnie Shaul	Stream Mouth Bay	F	0	1,100	0	0	0	
07/16/1998 Arnie Shaul	Stream Mouth Bay	E	0	6,200	0	0	0	SURVEYED IN N-S CHANNEL.

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
07/21/1998 Arnie Shaul	Stream Mouth Bay	F	0	4,000	0	0	0	HIGH TIDE, DIFFICULT TO SEE FISH IN LWR. HALF.
07/26/1998 Arnie Shaul	Stream Mouth Bay	G	0	9,200	0	0	0	GOOD CONDITIONS IN LAGOON. SOME FISH MAY HVE BACKED OUT OF LGN. MINUS TIDE.
08/05/1998 Arnie Shaul	Stream Mouth Bay	F	0	6,200	0	0	0	GOOD VIS. IN UPPER PORTION, POOR IN LOWER END. COUNT LOW.
08/06/1998 Arnie Shaul	Stream Mouth Bay	F	0	8,000	0	0	0	MOST WERE LARGE SCHOOLS IN MURKY LWR END. ROUGH ESTIMATE.
08/18/1998 Arnie Shaul	Stream Mouth Bay	G	0	8,000	0	10,000	0	P'S QUITE DARK AND IN LWR. END. R'S SCATTERED THROUGHOUT LAGOON.
08/21/1998 Arnie Shaul	Stream Mouth Bay	G	0	18,000	300	5,000	0	R'S THROUGHOUT LAGOON, P'S IN LWR END, CO' S IN OUTLET.
09/04/1998 Arnie Shaul	Stream Mouth Bay	G	0	10,000	1,000	0	0	SOME FISH HAD BACKED OUT INTO THE FISHERY ON SEPT 1ST.
09/08/1998 Arnie Shaul	Stream Mouth Bay	P P	0	1,000 0	3,000 0	0	0	LOW TIDE, WATER MURKY IN LOWER END. MANY FISH LIKELY BACKED OUT OF LAGOON. SOME FISH MOVING OVER FLATS TO LAKE. ESTIMATE VERY ROUGH.
09/13/1998 Arnie Shaul	Stream Mouth Bay	G		500	4,400			
Fox Island Anc. East, 284-3101								
07/21/1998 Arnie Shaul	Stream Mouth Bay	G G	0 0	0 0	0 0	100 0	0 0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
07/23/1998 Arnie Shaul	Stream Mouth Bay	F	0	0	0	1,500	0	POOR LIGHT
07/26/1998 Arnie Shaul	Stream Mouth Bay	F	0	0	0	1,800		
08/05/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	2,500	0	
08/27/1998 Joe Dinnocenzo	Stream Mouth Bay	F	0	0	0	28,300	0	LOW LIGHT - ALSO SAW 700 CARCASSES (PINK).
		F	0	0	0	500	0	
		P	0	0	0	0	0	
08/29/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	145,000	0	PACKED!
		G	0	0	0	10,000	0	
Fox Island Anc. Ctr., 284-3102								
08/05/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	6,000	0	
08/29/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	10,000	0	
		G	0	0	0	2,000	0	
Fox Island Anc. West, 284-3103								
07/26/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	3,200	0	
08/05/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	81,000	0	LOADED!
08/29/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	32,000	0	SURVEYED LWR 2/3 ONLY, DUE TO TURBULENCE. LIKELY
		G	0	0	0	2,000	0	ANTOHER 20,000 ABOVE.

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Paw Cape (Deer Isl.), 284-3105								
07/21/1998	Stream	G	0	0	0	0	0	
Arnie Shaul	Mouth Bay	G	0	0	0	0	0	
08/05/1998	Stream	G	0	0	0	7,000	0	
Arnie Shaul	Mouth Bay							
08/29/1998	Stream	G	0	0	0	20,000	0	
Arnie Shaul	Mouth Bay	G	0	0	0	0	0	
Southern Creek, 284-3106								
07/14/1998	Stream	G	0	0	0	800	0	ALL IN LOWER 1/2 MILE.
Arnie Shaul	Mouth Bay	F	0	0	0	0	0	
07/21/1998	Stream		0	0	0	8,200	0	
Arnie Shaul	Mouth Bay	F	0	0	0	0	0	
07/23/1998	Stream	F	0	0	0	14,600	0	
Arnie Shaul	Mouth Bay							
07/26/1998	Stream	G	0	0	0	21,600	0	
Arnie Shaul	Mouth Bay							
08/05/1998	Stream	G	0	0	0	95,000	0	LOWER 75% DUE TO TURBULENCE. LIKELY ANOTHER 10,000 ABOVE.
Arnie Shaul	Mouth Bay							
08/29/1998	Stream	G	0	0	0	188,000	0	TURBULENT.
Arnie Shaul	Mouth Bay	P	0	0	0	0	0	
Eastern Creek, 284-3110								
07/14/1998	Stream	G	0	0	0	0	0	
Arnie Shaul	Mouth Bay	F	0	0	0	0	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
07/21/1998 Arnie Shaul	Stream	G	0	0	0	10,700	0	
	Mouth	F	0	0	0	0	0	
	Bay							
07/23/1998 Arnie Shaul	Stream	G	0	0	0	15,000	0	THICK IN HOLE ABOVE MOUTH.
	Mouth	P	0	0	0	0	0	
	Bay							
07/26/1998 Arnie Shaul	Stream	G	0	0	0	22,000	0	LOOKS GOOD!!
	Mouth							
	Bay							
08/29/1998 Arnie Shaul	Stream	G	0	0	0	47,000	0	
	Mouth	P	0	0	0	0	0	
	Bay							
Old Man's Lagoon Str, 284-3201								
07/23/1998 Arnie Shaul	Stream	F	0	0	0	0	800	
	Mouth							
	Bay							
08/21/1998 Arnie Shaul	Stream	E	0	50	0	0	2,700	ALL SPAWNING; ADDITIONAL 1,500 CHUM CARCASSES.
	Mouth							
	Bay							
09/04/1998 Arnie Shaul	Stream	G	0	300	0	0	400	
	Mouth	G	0	0	0	0	0	
	Bay							
09/13/1998 Arnie Shaul	Stream	G	0	300	0	0	100	
	Mouth							
	Bay							
W Side King Cove Lgn, 284-3303								
08/30/1998 Arnie Shaul	Stream	G	0	0	0	0	100	
	Mouth	F	0	0	0	0	5,000	
	Bay							
09/27/1998 Arnie Shaul	Stream	G						
	Mouth	G						
	Bay							

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Head King Cove Lgn, 284-3304								
08/30/1998	Stream	G	0	0	0	0	300	
Arnie Shaul	Mouth	G	0	0	0	0	10,000	
	Bay							
09/27/1998	Stream	G					600	
Arnie Shaul	Mouth	G						
	Bay							
Ram's Creek, 284-3305								
08/09/1998	Stream	G	0	0	0	6,000	0	1,000 ABOVE CULVERT. MOST WERE IN FIRST 200 YARDS ABOVE MOUTH.
Arnie Shaul	Mouth							
	Bay							
08/29/1998	Stream	G	0	0	0	35,000	0	
Arnie Shaul	Mouth							
	Bay							
09/27/1998	Stream	G				1,000		HIGH ALTITUDE DUE TO HOUSES.
Arnie Shaul	Mouth	G						
	Bay							
Mortensen Lagoon, 284-3401								
08/21/1998	Stream	E	0	700	0	0	0	ALL RED'S IN CREEK WERE SPAWNING.
Arnie Shaul	Mouth	G	0	1,300	0	0	0	
	Bay							
09/04/1998	Stream	G	0	2,100	0	0	0	
Arnie Shaul	Mouth	G	0	1,300	0	0	0	
	Bay							
09/13/1998	Stream	G	0	1,800	0	0	0	SURVEYED CREEK & CREEK MOUTH ONLY. ADDITIONAL 700 R'S AT CREEK MOUTH.
Arnie Shaul	Mouth							
	Bay							
09/27/1998	Stream	G		500				
Arnie Shaul	Mouth	G						
	Bay							

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Russel Creek, 284-3402								
07/12/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	0	1,800	
07/21/1998 Arnie Shaul	Stream Mouth Bay	G P	0 0	0 0	0 0	6,700 0	7,000 0	
08/05/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	22,000	30,000	
08/08/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	24,000	44,000	
08/27/1998 Arnie Shaul	Stream Mouth Bay	G	0	400	0	19,000	31,000	
08/28/1998 Joe Dinnocenzo	Stream Mouth Bay	F F	0 0	0 0	0 0	18,000	26,000	ADDITIONAL 10,000 CARCASSES. HIGH TURBULENCE RESULTED IN CURSORY HIGH ALTITUDE SURVEY.
09/13/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	0	22,500	A FEW WERE PROBABLY COHO.
09/27/1998 Arnie Shaul	Stream Mouth Bay	G G			2,000			IN SMALL SCHOOLS FROM NEAR MOUTH TO ABOVE UPPER CROSSING.
Trout Creek, 284-3403								
08/08/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	10	0	IN LOWER END.
08/28/1998 Joe Dinnocenzo	Stream Mouth Bay	F F P	0 0 0	2 0 0	0 0 0	0 0 0	175 0 0	REDS IN LAKE. 25 CHUM CARCASSES ALSO SEEN.

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
09/13/1998 Arnie Shaul	Stream Mouth Bay	G	0	70	250	100	500	40 R'S WERE IN NORTH FK LAKES. COHO'S WERE ALL BELOW ROAD.
09/27/1998 Arnie Shaul	Stream Mouth Bay	G		2	850		40	<SURVEY DONE BY FOOT> CHUMS OLD AND MOLDY. REDS COLORED AND IN SCHOOLS OF COHO. ALL COHO WERE BETWEEN ABOUT 100 YARDS ABOVE THE ROAD TO SECOND BRANCH ABOVE BIG BEND NEAR END OF RUNWAY.
Barney's Creek, 284-3409								
08/06/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	6,200	0	
08/30/1998 Arnie Shaul	Stream Mouth Bay	G G	0 0	0 0	0 0	38,000 10,000	5,000 2,000	
Delta Crk. Lenard Hb, 284-3410								
08/10/1998 Arnie Shaul	Stream Mouth Bay	G G	0 0	0 0	0 0	200 0	2,000 4,000	
09/04/1998 Arnie Shaul	Stream Mouth Bay	G G	0 0	0 0	0 0	10,000 0	9,000 3,500	
Lenard Hbr. South, 284-3411								
08/06/1998 Arnie Shaul	Stream Mouth Bay	G G	0 0	0 0	0 0	100 5,000	0 0	
08/30/1998 Arnie Shaul	Stream Mouth Bay	G G	0 0	0 0	0 0	10,000 12,000	0 0	
Unnamed Lenard Hbr., 284-3412								
08/30/1998 Arnie Shaul	Stream Mouth Bay	G G	0 0	0 0	0 0	500 3,000	0 0	NEW STREAM TO BE ADDED TO QUAD. STRM. CATALOGUE.

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Belkofski Village Cr, 284-4101								
07/26/1998 Arnie Shaul	Stream Mouth Bay							
08/09/1998 Arnie Shaul	Stream Mouth Bay	G F	0 0	0 0	0 0	24,000 10,000	0 0	POOR LIGHT AT MOUTH.
08/29/1998 Arnie Shaul	Stream Mouth Bay	G F	0 0	0 0	0 0	65,000 0	0 0	
Indian Head, 284-4203								
08/29/1998 Arnie Shaul	Stream Mouth Bay	G G	0 0	0 0	0 0	13,000 10,000	0 0	ADDITIONAL 10,000 P'S ALONG BEACH ON NORTH SIDE OF POINT.
09/27/1998 Arnie Shaul	Stream Mouth Bay	G G				4,000		
Belkofski Bay, West, 284-4205								
08/09/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	800	0	
08/29/1998 Arnie Shaul	Stream Mouth Bay	G F	0 0	0 0	0 0	17,000 10,000	0 0	
Belkofski Bay Beach, 284-4206								
08/29/1998 Arnie Shaul	Stream Mouth Bay	G F	0 0	0 0	0 0	1,800 10,000	0 0	
Belkofski Bay River, 284-4207								
08/09/1998 Arnie Shaul	Stream Mouth Bay	G P	0 0	0 0	0 0	700 0	1,000 0	ADDITIONAL 8,000 CHUMS IN CAPTAIN'S HARBOR.

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/30/1998	Stream	G	0	0	0	5,000	37,000	ADDITIONAL 20,000 CH'S IN CAPTAIN'S HBR, NOT
Arnie Shaul	Mouth	F	0	0	0	0	9,000	INCLUDING THOSE OFF OF 42.09.
	Bay							
Captain's Harbor, 284-4209								
08/30/1998	Stream	G	0	0	0	23,000	0	
Arnie Shaul	Mouth	G	0	0	0	0	4,000	
	Bay							
09/27/1998	Stream	F				2,000		POOR LIGHT IN UPPER PORTION.
Arnie Shaul	Mouth	G						
	Bay							
Kitchen Anchorage, 284-4210								
08/09/1998	Stream	G	0	0	0	0	0	
Arnie Shaul	Mouth	F	0	0	0	1,000	0	
	Bay							
09/04/1998	Stream	G	0	0	0	11,000	0	
Arnie Shaul	Mouth	G	0	0	0	40,000	0	
	Bay	G	0	0	0	0	0	
Rocky River, 284-4212								
07/26/1998	Stream	G	0	0	0	0	0	BEAR FISHING OFF MOUTH.
Arnie Shaul	Mouth							
	Bay							
08/09/1998	Stream	G	0	0	0	8,000	0	
Arnie Shaul	Mouth	F	0	0	0	10,000	0	
	Bay							
08/29/1998	Stream	G	0	0	0	34,000	0	TURBULENT. SURVEYED BELOW CANYON. LIKELY
Arnie Shaul	Mouth	G	0	0	0	20,000	0	ANOTHER 20,000 ABOVE.
	Bay							
Dolgoi Hbr, Nw, 284-5103								
08/29/1998	Stream	G	0	0	0	5,000	0	
Arnie Shaul	Mouth	P	0	0	0	0	0	
	Bay							

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Dolgoi Hbr, South, 284-5105								
08/29/1998	Stream	G	0	0	0	5,000	0	
Arnie Shaul	Mouth Bay	F	0	0	0	0	0	
Dolgoi Hbr, Sw, 284-5106								
08/09/1998	Stream	G	0	0	0	3,000	0	POOR LIGHT AT MOUTH.
Arnie Shaul	Mouth Bay	F	0	0	0	5,000	0	
08/29/1998	Stream	G	0	0	0	2,000	0	
Arnie Shaul	Mouth Bay	F	0	0	0	8,000	0	
Nikolaski, 284-5201								
08/09/1998	Stream	G	0	0	0	1,200	0	
Arnie Shaul	Mouth Bay							
08/29/1998	Stream	G	0	0	0	29,000	0	
Arnie Shaul	Mouth Bay	G	0	0	0	17,000	0	
Little Bear Bay, 284-5203								
08/10/1998	Stream		0	0	0	0	0	RIGHT FORK DRY.
Arnie Shaul	Mouth Bay	G	0	0	0	20,000	0	
08/30/1998	Stream	G	0	0	0	0	200	RIGHT FK. DRY 100 YDS. ABOVE MOUTH. BAY AND
Arnie Shaul	Mouth Bay	P	0	0	0	0	0	MOUTH TOO CHOPPY.
09/27/1998	Stream					2,400	1,300	
Arnie Shaul	Mouth Bay	G						
Stub Creek, 284-5204								
08/29/1998	Stream	G	0	0	0	1,000	0	
Arnie Shaul	Mouth Bay	F	0	0	0	20,000	0	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
09/27/1998 Arnie Shaul	Stream Mouth Bay	G G				3,000		
Stream Guard Creek, 284-5205								
09/04/1998 Arnie Shaul	Stream Mouth Bay	G G	0 0	0 0	0 0	0 0	300 3,000	ONLY SURVEYED LWR HALF OF CR.
09/27/1998 Arnie Shaul	Stream Mouth Bay	G G					1,000	
West Spring Holes, 284-5206								
08/09/1998 Arnie Shaul	Stream Mouth Bay	G G	0 0	0 0	0 0	1,200 2,000	0 0	
08/10/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	20,000	0	
08/15/1998 Arnie Shaul	Stream Mouth Bay	G G	0 0	0 0	0 0	5,000 0	1,000 20,000	SOME AT MOUTH WERE PROBABLY PINKS.
09/04/1998 Arnie Shaul	Stream Mouth Bay	G G	0 0	0 0	0 0	16,000 15,000	0 0	
09/27/1998 Arnie Shaul	Stream Mouth Bay	G				3,000	3,000	
Volcano Sloughs-ctr, 284-5207								
08/09/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	0	14,000	
08/10/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	0	12,000	

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/15/1998	Stream	G	0	0	0	0	0	
Arnie Shaul	Mouth	G	0	0	0	0	14,000	
	Bay							
09/04/1998	Stream	G	0	0	0	4,000	6,000	LARGE NUMBERS OF CHUMS IN DEEP, OUTSIDE THE
Arnie Shaul	Mouth	G	0	0	0	0	55,000	MARKERS.
	Bay							
09/27/1998	Stream	G					5,000	
Arnie Shaul	Mouth	G						
	Bay							
Volcano River, 284-5208								
08/09/1998	Stream	G	0	0	0	1,200	0	
Arnie Shaul	Mouth	G	0	0	0	0	2,000	
	Bay							
08/10/1998	Stream							
Arnie Shaul	Mouth	G	0	0	0	0	1,000	
	Bay							
08/15/1998	Stream	G	0	0	0	3,000	500	
Arnie Shaul	Mouth	G	0	0	0	0	3,000	
	Bay							
09/04/1998	Stream	E	0	0	0	6,000	16,500	ADDITIONAL 17,000 CH'S IN DEEP OFF OF DUSHKINS
Arnie Shaul	Mouth	G	0	0	0	0	2,000	LAGOON.
	Bay							
09/27/1998	Stream	G					14,000	
Arnie Shaul	Mouth	G						
	Bay							
Ikatan Pt Stream, 284-6001								
08/09/1998	Stream	G	0	0	0	3,000	0	
Arnie Shaul	Mouth							
	Bay							
08/29/1998	Stream	G	0	0	0	37,000	0	
Arnie Shaul	Mouth	P	0	0	0	0	0	
	Bay							

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
Swede's Lake, 284-6003								
08/09/1998 Arnie Shaul	Stream Mouth Bay	F	0	500	0	0	0	
08/29/1998 Arnie Shaul	Stream Mouth Bay	G	0	200	0	700	0	
		F	0	0	0	300	0	
Ikatan River, 284-6004								
08/29/1998 Arnie Shaul	Stream Mouth Bay	P	0	0	0	20,000	0	SURVEYED THE NORMALLY CLEAR TRIB, WHICH WAS MURKY DUE TO RECENT RAIN.
Whirl Point, 284-6005								
08/29/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	3,500	0	
		G	0	0	0	15,000	0	
Sankin Bay Creek, 284-6006								
08/29/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	19,000	0	
		P	0	0	0	0	0	
Whalebone Bay, 284-6007								
08/09/1998 Arnie Shaul	Stream Mouth Bay		0	1,300	0	200	0	
08/29/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	1,600	0	SURVEYED OUTLET ONLY.
		P	0	0	0	0	0	
Deadman's Cove, 284-6008								
08/09/1998 Arnie Shaul	Stream Mouth Bay	G	0	400	0	32,000	0	ONLY FAIR VIS. IN LAKE COULDN'T SURVEY UPPER CANYON DUE TO TURBULENCE. LOOKS GOOD IN LOWER END.
08/11/1998 Arnie Shaul	Stream Mouth Bay	G	0	0	0	55,000	0	23,000 WERE IN CANYON.

-Continued-

Stream Date Observer	Location	Visi-bility	Species Chinook	Sockeye	Coho	Pink	Chum	Observer Remarks
08/29/1998 Arnie Shaul	Stream	G	0	900	0	104,000	0	
	Mouth	P	0	0	0	0	0	
	Bay							
Otter Cove, East, 285-4008								
08/09/1998 Arnie Shaul	Stream	G	0	0	0	5,000	100	ALL SCHOOLED IN LWR END.
	Mouth							
	Bay							
08/29/1998 Arnie Shaul	Stream	P	0	0	0	3,500	0	WATER MURKY FROM RECENT RAIN.
	Mouth	P	0	0	0	0	0	
	Bay							
Otter Cove, West, 285-4009								
08/09/1998 Arnie Shaul	Stream	P	0	0	0	500	0	POOR LIGHT. HOWEVER THERE WERE NO FISH BELOW FIRST BEND.
	Mouth							
	Bay							
08/11/1998 Arnie Shaul	Stream	G	0	0	0	7,000	0	
	Mouth							
	Bay							
08/29/1998 Arnie Shaul	Stream	G	0	0	0	17,000	0	
	Mouth	P	0	0	0	0	0	
	Bay							
Dora Harbor - Left, 285-5000								
08/09/1998 Arnie Shaul	Stream	G	0	0	0	0	0	
	Mouth							
	Bay							
08/29/1998 Arnie Shaul	Stream	G	0	0	0	7,500	0	
	Mouth	G	0	0	0	0	0	
	Bay							

[a] Key for stream visibility conditions: E=excellent, G=good, F=fair, and P=poor.

Appendix F.2. Method for calculating indexed total escapement.

The basic methods for calculating estimated indexed total escapements without the use of a weir or tower are as follows:

Sockeye, Coho: These species tend to have a much longer stream life than pink and chum salmon. Therefore, the indexed total escapement is usually the peak escapement count, including carcasses.

At Thin Point Lagoon and Lake, a weir is used to monitor the early portion of the run. In absence of the weir, estimates of sockeye in the lagoon are added together based on estimated time in lagoon, condition, and observations of when sockeye start to move from the lagoon to the lake.

In Morzhovoi (Middle Lagoon), Bluebill, Outer Marker, and Mortensen's Lagoon systems the escapement is estimated by adding estimates of spawning sockeye, about two weeks apart, together.

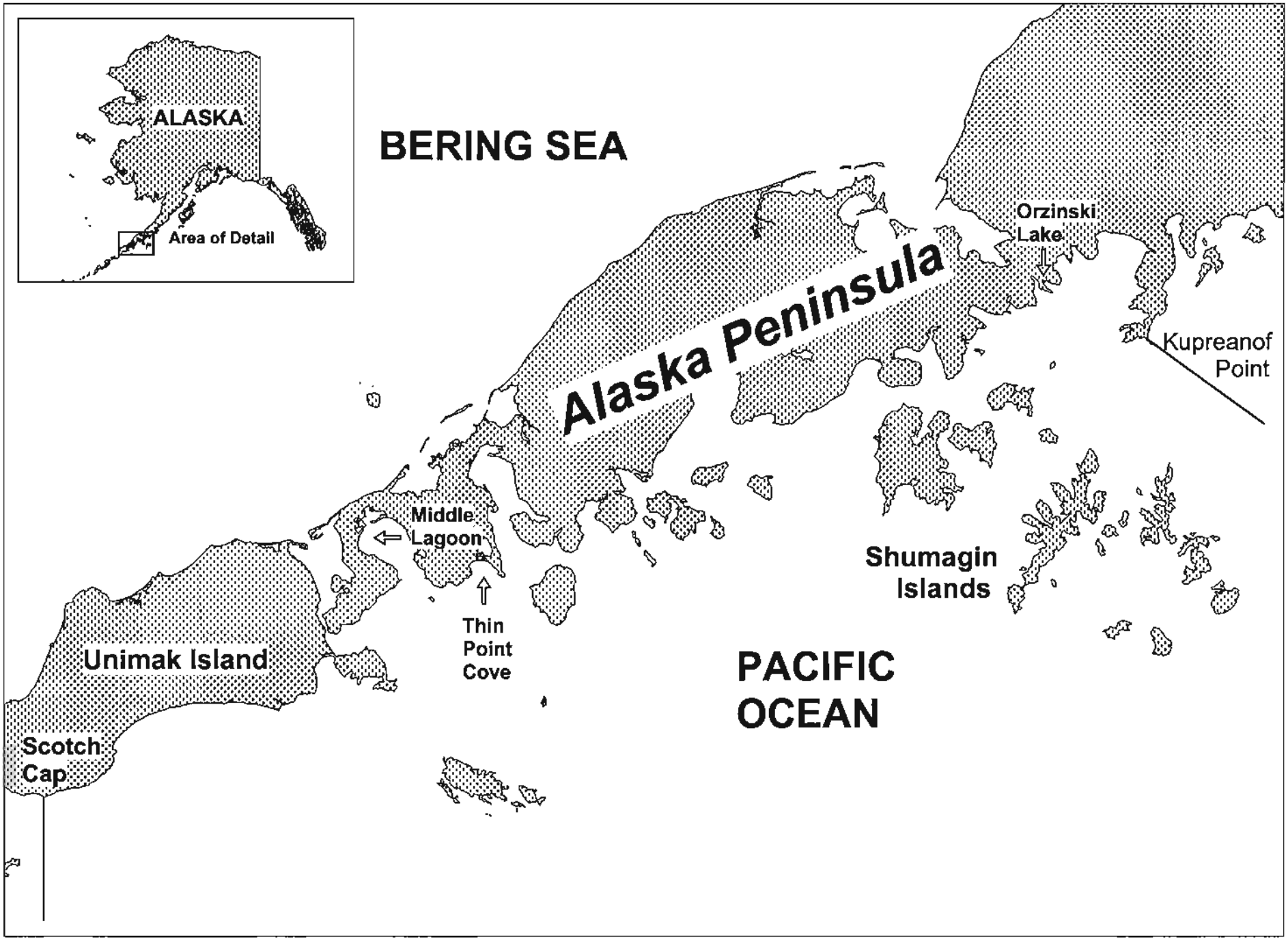
Pink and Chum Salmon: An approximate 21-day stream life is used to calculate total pink and chum escapements. Fish in saltwater during the final survey are added:

EXAMPLE

Survey Date	Pink	Chum	Fish at Mouth	
July 10	5,000	0	5,000	P
July 17	25,000	0	10,000	P
August 1	100,000	0	10,000	P
August 15	150,000	0	12,000	P
			1,000	CH
September 1	150,000	5,000	2,000	CH
Estimated Total	255,000	7,000		

The estimate of 21 days stream life was used because significant numbers of carcasses seem to appear about three weeks after adult pinks and chums first appear in Alaska Peninsula streams. It is recognized that stream life can vary, however this method is easily duplicated and is comparable from year to year. Variation in stream life is likely a much smaller factor than variation between observers.

With the exception of several small streams, there are no problems of streams being obscured by brush or trees in the Alaska Peninsula and Aleutian Islands Areas. With several exceptions, visibility of spawning grounds is outstanding during periods of normal water flow and clear weather.



Appendix F.3. Map of the Alaska Peninsula with the location of remote field camps illustrated.

Appendix F.4. South Peninsula total indexed salmon escapements by species and year, 1962-98.

Year	Sockeye	Coho	Pink	Chum	Total
1962	18,800		1,598,800	399,400	2,017,000
1963	23,000		1,317,900	446,700	1,787,600
1964	15,700		1,436,400	454,800	1,906,900
1965	12,100		1,035,400	228,000	1,275,500
1966	17,000		719,400	422,000	1,158,400
1967	16,200		445,500	182,900	644,600
1968	12,800		823,300	279,100	1,115,200
1969	29,500		2,474,900	134,600	2,639,000
1970	16,500		1,298,900	280,500	1,595,900
1971	19,400		702,700	343,200	1,065,300
1972	11,900		111,400	254,500	377,800
1973	7,300		110,800	212,500	330,600
1974	95,600		284,400	257,300	637,300
1975	51,700		552,100	193,300	797,100
1976	69,700		1,456,400	327,200	1,853,300
1977	64,900		2,677,800	774,900	3,517,600
1978	64,800		2,858,700	600,500	3,524,000
1979	53,300		2,629,500	411,100	3,093,900
1980	45,900		2,641,600	362,400	3,049,900
1981	45,700		2,307,500	381,300	2,734,500
1982	39,200		2,293,000	386,900	2,719,100
1983	59,200		851,200	446,500	1,356,900
1984	54,800		3,811,600	699,700	4,566,100
1985	49,900		1,614,100	503,500	2,167,500
1986	48,000		1,716,700	544,600	2,309,300
1987	44,600		1,540,500	620,700	2,205,800
1988	74,100		2,839,600	496,400	3,410,100
1989	78,100		1,870,900	310,500	2,259,500
1990[a]	95,300	87,500	1,598,400	354,700	2,048,400
1991	124,900		2,946,800	587,600	3,659,300
1992	97,600		2,834,400	335,500	3,267,500
1993	100,341		2,990,140	397,030	3,487,511
1994	120,255		3,071,725	579,100	3,771,080
1995	129,110		6,406,300	726,400	7,261,810
1996	72,950		3,647,550	610,300	4,330,800
1997	104,440		5,243,275	809,050	6,156,765
1998	85,440		4,668,065	742,235	5,495,740
Average 1962-76[b]	27,813		957,887	294,400	1,280,100

-Continued-

Average 1977-97[b]	74,638	87,500	2,780,538	520,890	3,376,065
Average 1988-97	99,710	87,500	3,344,909	520,658	3,965,277

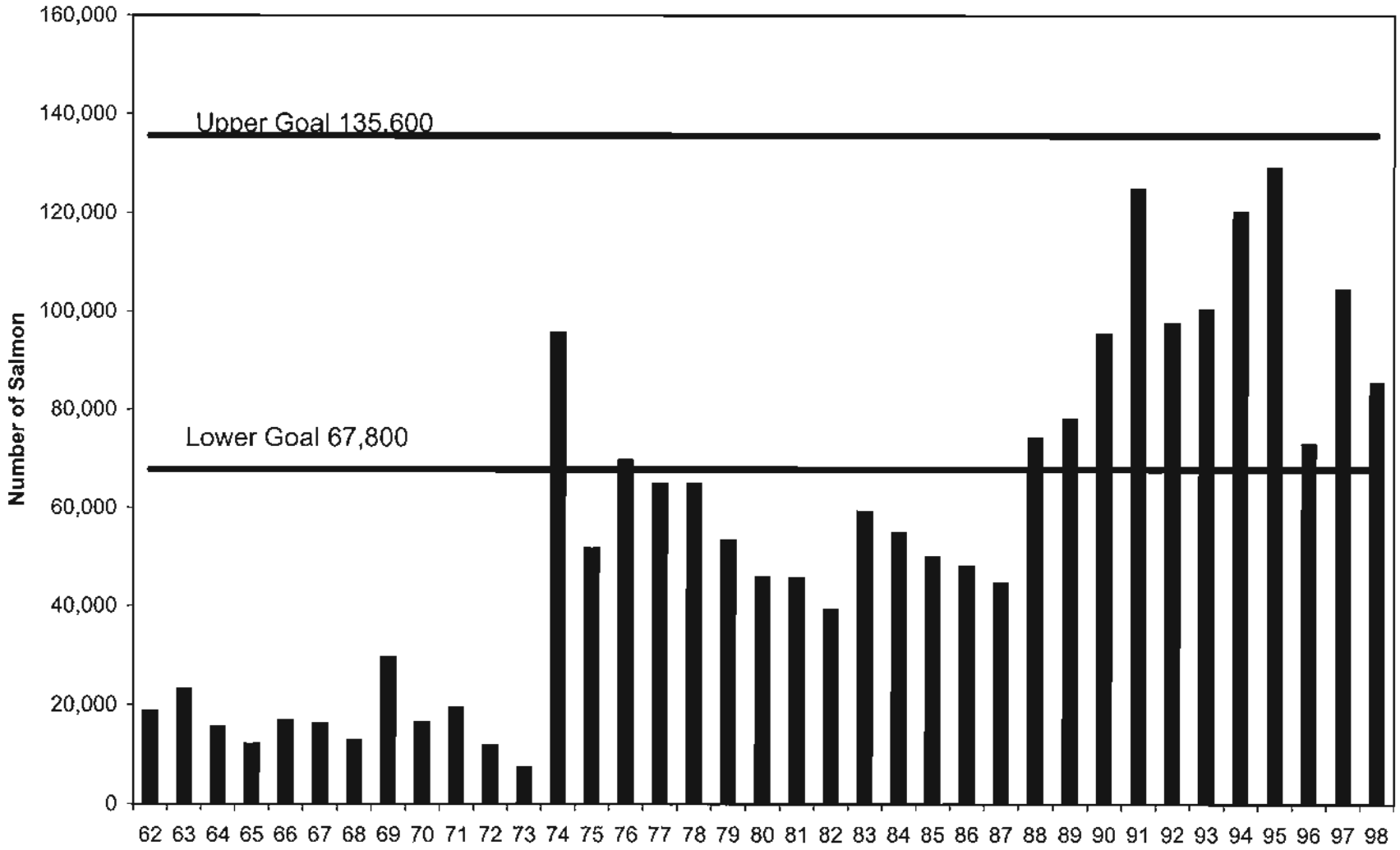
[a] In 1990, excellent survey conditions and a generous budget allowed coho surveys during mid and late September. The 1990 coho numbers are not included in the total escapement.

[b] The averages used in this table reflect the transition from years of low production (1962-76) to the most recent production trends (post 1976).

Appendix F.5. South Peninsula total indexed salmon escapements by species and districts, 1998[a].

District	Sockeye	Pink	Chum	Total
Southeastern	26,250	1,242,505	246,025	1,514,780
South Central	1,370	1,613,750	1,444,300	3,059,420
Southwestern	52,820	1,764,310	351,410	2,168,540
Unimak	5,000	47,500	500	53,000
Totals	85,440	4,668,065	2,042,235	6,795,740

[a] No escapement data is available for coho salmon.



Appendix F.6. South Peninsula total indexed sockeye salmon escapement by year, 1962-98.

Appendix F.7. Escapement summary for systems with fish weirs in the South Peninsula area, 1998.

	Dates		Salmon Species Enumerated				
Weir Locations	Installed	Removed	Sockeye	Coho	Pink	Chum	Total
1. Orzinski	14-Jun	1-Aug	21,194	0	1,529	0	22,723
2. Thin Point	15-Jul	23-Aug	1,927	1	0	0	1,928
Totals			23,121	1	1,529	0	24,651

Appendix F.8. Sockeye salmon daily and cumulative escapement counts through the Orzinski Lake weir, 1998.

	Daily			Cumulative		
Date	Adults	Jacks	Total	Adults	Jacks	Total
June 14-17	0	0	0	0	0	0
18-Jun	10	1	11	10	1	11
19-Jun	0	0	0	10	1	11
20-Jun	12	2	14	22	3	25
21-Jun	8	0	8	30	3	33
22-Jun	0	0	0	30	3	33
23-Jun	13	1	14	43	4	47
24-Jun	40	3	43	83	7	90
25-Jun	0	0	0	83	7	90
26-Jun	104	1	105	187	8	195
27-Jun	804	16	820	991	24	1,015
28-Jun	231	4	235	1,222	28	1,250
29-Jun	22	0	22	1,244	28	1,272
30-Jun	176	1	177	1,420	29	1,449
1-Jul	580	6	586	2,000	35	2,035
2-Jul	2,336	45	2,381	4,336	80	4,416
3-Jul	258	6	264	4,594	86	4,680
4-Jul	52	6	58	4,646	92	4,738
5-Jul	72	7	79	4,718	99	4,817
6-Jul	57	5	62	4,775	104	4,879
7-Jul	176	15	191	4,951	119	5,070
8-Jul	0	0	0	4,951	119	5,070
9-Jul	1,059	76	1,135	6,010	195	6,205
10-Jul	1,053	39	1,092	7,063	234	7,297
11-Jul	7	0	7	7,070	234	7,304
12-Jul	2,301	101	2,402	9,371	335	9,706
13-Jul	417	18	435	9,788	353	10,141
14-Jul	1,211	35	1,246	10,999	388	11,387
15-Jul	436	21	457	11,435	409	11,844
16-Jul	653	23	676	12,088	432	12,520
17-Jul	91	6	97	12,179	438	12,617
18-Jul	4	1	5	12,183	439	12,622
19-Jul	925	21	946	13,108	460	13,568
20-Jul	457	25	482	13,565	485	14,050

-Continued-

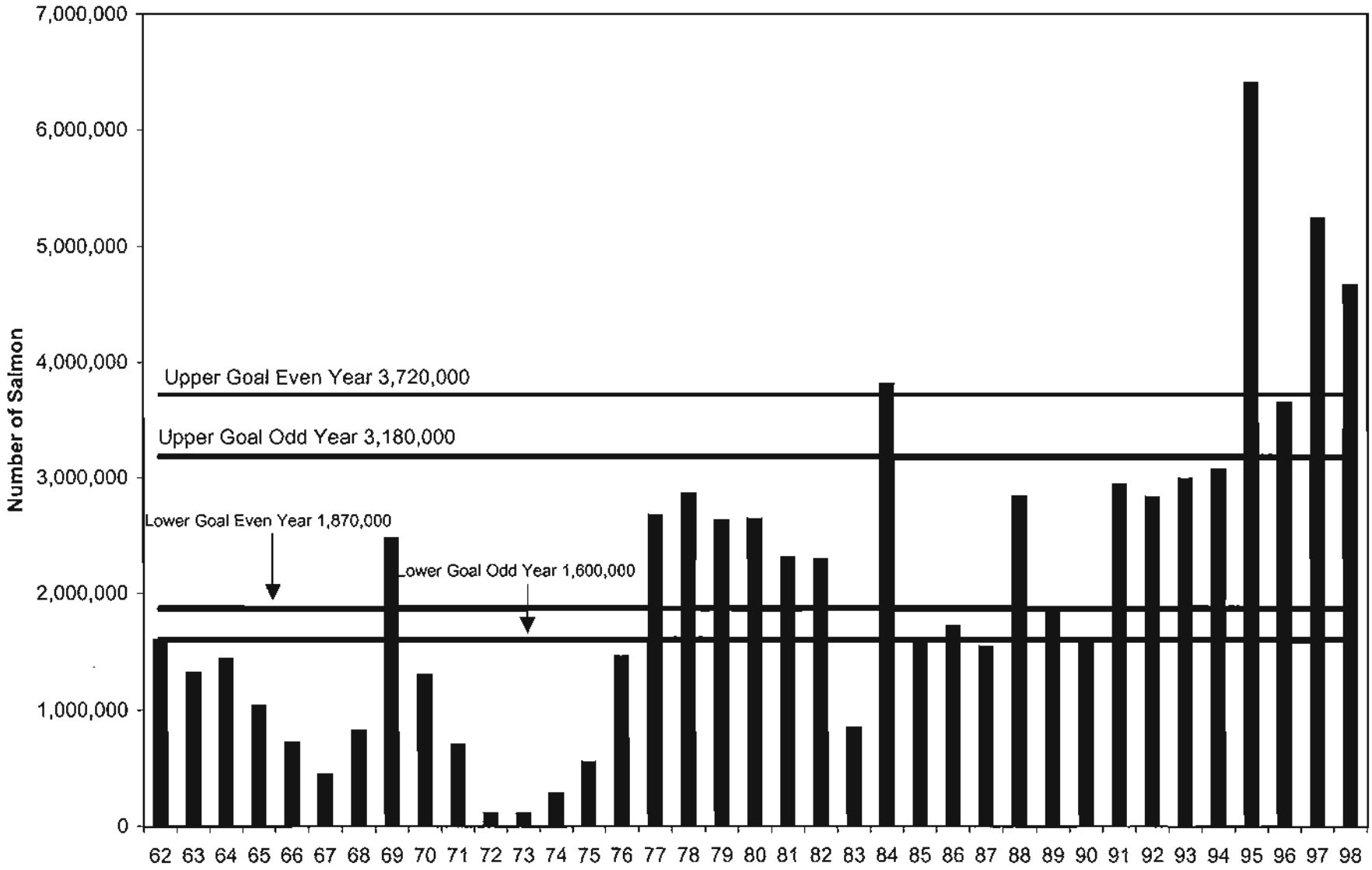
Appendix F.8. (page 2 of 2)

	Daily			Cumulative		
Date	Adults	Jacks	Total	Adults	Jacks	Total
21-Jul	216	21	237	13,781	506	14,287
22-Jul	739	20	759	14,520	526	15,046
23-Jul	867	35	902	15,387	561	15,948
24-Jul	1,143	24	1,167	16,530	585	17,115
25-Jul	704	15	719	17,234	600	17,834
26-Jul	517	27	544	17,751	627	18,378
27-Jul	478	22	500	18,229	649	18,878
28-Jul	652	18	670	18,881	667	19,548
29-Jul	1,209	23	1,232	20,090	690	20,780
30-Jul	383	9	392	20,473	699	21,172
31-Jul	22	0	22	20,495	699	21,194
Post July 31[a]	3,692	114	3,806	24,187	813	25,000
Total	24,187	813	25,000	24,187	813	25,000

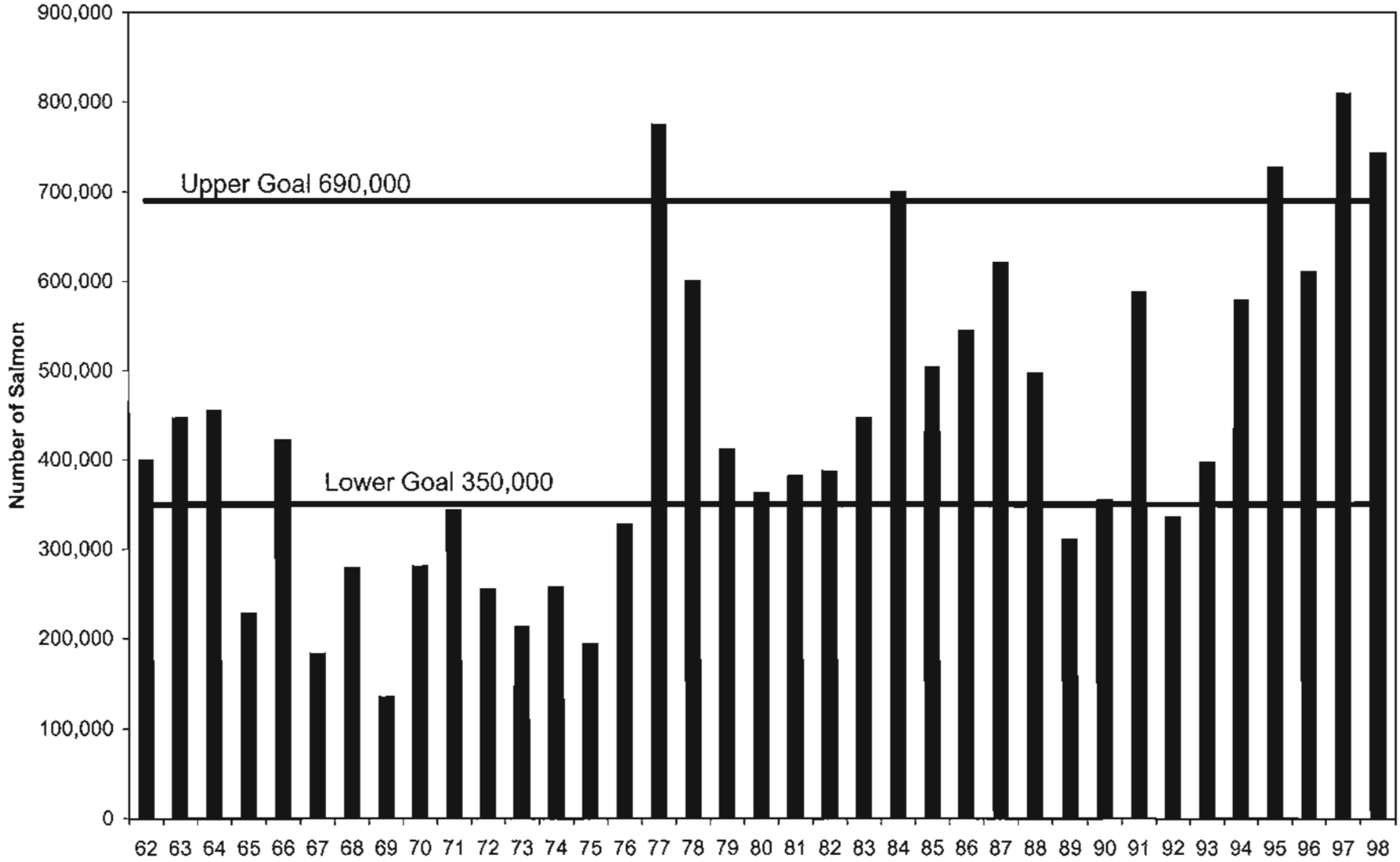
[a] July 31 was the last day salmon were counted through the weir. Post July 31 escapement was based on aerial surveys and adult to jack salmon ratios for the week of July 25-31.

Appendix F.9. Sockeye salmon daily and cumulative escapement counts through the Thin Point Lake weir, 1998.

	Daily			Cumulative			Daily Percent		Cumulative Percent		
Date	Adults	Jacks	Total	Adults	Jacks	Total	Adults	Jacks	Adults	Jacks	Total
July 15-26	0	0	0	0	0	0	0%	0%	0.0%	0.0%	0.0%
27-Jul	78	0	78	78	0	78	100%	0%	4.0%	0.0%	4.0%
28-Jul	385	2	387	463	2	465	0%	0%	24.0%	0.1%	24.1%
29-Jul	109	1	110	572	3	575	0%	0%	29.7%	0.2%	29.8%
30-Jul	34	0	34	606	3	609	0%	0%	31.4%	0.2%	31.6%
31-Jul	9	0	9	615	3	618	100%	0%	31.9%	0.2%	32.1%
1-Aug	5	0	5	620	3	623	0%	0%	32.2%	0.2%	32.3%
2-Aug	208	4	212	828	7	835	98%	2%	43.0%	0.4%	43.3%
3-Aug	77	0	77	905	7	912	100%	0%	47.0%	0.4%	47.3%
4-Aug	23	0	23	928	7	935	100%	0%	48.2%	0.4%	48.5%
5-Aug	12	0	12	940	7	947	100%	0%	48.8%	0.4%	49.1%
6-Aug	60	0	60	1,000	7	1,007	100%	0%	51.9%	0.4%	52.3%
7-Aug	9	0	9	1,009	7	1,016	100%	0%	52.4%	0.4%	52.7%
8-Aug	21	0	21	1,030	7	1,037	100%	0%	53.5%	0.4%	53.8%
9-Aug	12	0	12	1,042	7	1,049	100%	0%	54.1%	0.4%	54.4%
10-Aug	30	1	31	1,072	8	1,080	0%	0%	55.6%	0.4%	56.0%
11-Aug	59	11	70	1,131	19	1,150	84%	16%	58.7%	1.0%	59.7%
12-Aug	11	0	11	1,142	19	1,161	100%	0%	59.3%	1.0%	60.2%
13-Aug	3	0	3	1,145	19	1,164	100%	0%	59.4%	1.0%	60.4%
14-Aug	194	1	195	1,339	20	1,359	99%	1%	69.5%	1.0%	70.5%
15-Aug	93	0	93	1,432	20	1,452	100%	0%	74.3%	1.0%	75.4%
16-Aug	19	0	19	1,451	20	1,471	100%	0%	75.3%	1.0%	76.3%
17-Aug	4	0	4	1,455	20	1,475	100%	0%	75.5%	1.0%	76.5%
18-Aug	1	0	1	1,456	20	1,476	100%	0%	75.6%	1.0%	76.6%
19-Aug	14	0	14	1,470	20	1,490	100%	0%	76.3%	1.0%	77.3%
20-Aug	412	0	412	1,882	20	1,902	100%	0%	97.7%	1.0%	98.7%
21-Aug	25	0	25	1,907	20	1,927	100%	0%	99.0%	1.0%	100.0%
Total Weir Counts	1,907	20	1,927								
Estimated Post Weir Escapement						19,073					
Estimated Total Escapement						21,000					



Appendix F. 10. South Peninsula total indexed pink salmon escapement by year, 1962-98.



Appendix F. 11. South Peninsula total indexed chum escapement by year, 1962-98.

The Alaska Department of Fish and Game administers all programs and activities free from discrimination on the basis of sex, color, race, religion, national origin, age, marital status, pregnancy, parenthood, or disability. For information on alternative formats available for this and other department publications, contact the department ADA Coordinator at (voice) 907-465-4120, or (telecommunication device for the deaf) 1-800-478-3648.