

**PACIFIC SALMON COMMISSION JOINT  
TRANSBOUNDARY TECHNICAL COMMITTEE**

**ESTIMATES OF TRANSBOUNDARY RIVER SALMON  
PRODUCTION, HARVEST AND ESCAPEMENT  
AND A REVIEW OF JOINT  
ENHANCEMENT ACTIVITIES IN 2008**

**REPORT TCTR (12)-2**

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## TABLE OF CONTENTS

TABLE OF CONTENTS.....	ii
TABLES .....	iv
FIGURES .....	iv
APPENDICES .....	v
ACRONYMS .....	ix
CALENDAR OF STATISTICAL WEEKS.....	x
EXECUTIVE SUMMARY .....	1
Stikine River .....	1
Taku River.....	2
Alsek River .....	3
Enhancement .....	3
INTRODUCTION .....	5
STIKINE RIVER .....	5
Harvest Regulations and the Joint Management Model .....	7
Chinook Salmon .....	7
Sockeye Salmon .....	9
U.S. Fisheries .....	11
Canadian Fisheries .....	19
Lower Stikine River Commercial Fishery .....	20
Upper Stikine River Commercial Fishery .....	26
Aboriginal Fishery.....	26
Sport Fishery .....	26
Escapement .....	26
Sockeye Salmon .....	26
Chinook Salmon .....	28
Coho Salmon .....	29
Sockeye Salmon Run Reconstruction .....	29
TAKU RIVER .....	30
Harvest Regulations .....	31
U.S. Fisheries .....	31
Canadian Fisheries .....	36
Escapement .....	44
Sockeye Salmon .....	44
Chinook Salmon .....	45
Coho Salmon .....	45
Pink Salmon .....	45
Chum Salmon .....	46
Sockeye Salmon Run Reconstruction .....	46
ALSEK RIVER.....	47
Harvest Regulations & Management Objectives .....	47
Preseason Forecasts.....	48
U.S. Fisheries .....	49

Canadian Fisheries .....	50
Escapement .....	52
Sockeye Salmon .....	52
Chinook Salmon .....	52
Coho Salmon .....	52
ENHANCEMENT ACTIVITIES .....	53
Egg Collection.....	53
Tahltan Lake.....	53
Tatsamenie Lake .....	53
Trapper Lake .....	54
Incubation, Thermal Marking, and Fry Plants (2004 Brood Year).....	54
Tahltan Lake.....	54
Tuya Lake.....	54
Tatsamenie Lake .....	54
Outplant Evaluation Surveys.....	55
Acoustic, Trawl, Beach seine and Limnological Sampling .....	55
Thermal Mark Laboratories .....	55
ADF&G Thermal Mark Laboratory .....	55
Canadian Thermal Mark Laboratory.....	55

## TABLES

Table 1.	River large Chinook salmon run size based on a model (SCMM) and mark-recapture estimates, weekly TAC, and weekly catch estimates from the District 108 gillnet, sport, and troll fisheries and the Canadian gillnet and sport fisheries, 2008. ....	8
Table 2.	Weekly forecasts of run size and total allowable catch for Stikine River sockeye salmon as estimated inseason by the Stikine Management Model, 2008. ....	10
Table 3.	Terminal run reconstruction for Stikine River sockeye salmon, 2008. ....	12
Table 4.	Taku sockeye salmon run reconstruction, 2008. Estimates do not include spawning escapements below the U.S./Canada border. ....	33
Table 5.	U.S. inseason forecasts of terminal run size, TAC, inriver run size, and the U.S. harvest of Taku River sockeye salmon for 2008. ....	34
Table 6.	Canadian inseason forecasts of terminal run size, catches in stock assessment fishery, and Canadian commercial fishery catches of Taku Chinook salmon, 2008. ....	38
Table 7.	Canadian inseason forecasts of total run size, total allowable catch (TAC), and spawning escapement of Taku sockeye salmon, 2008. ....	42
Table 8.	Preliminary Catch and Klukshu index escapement data for Alsek River sockeye, Chinook, and coho salmon for 2008. ....	53

## FIGURES

Figure 1.	The Stikine River and principal U.S. and Canadian fishing areas.	6
Figure 2.	The Taku River and principal U.S. and Canadian fishing areas.	30
Figure 3.	The Alsek River and principal U.S. and Canadian fishing areas.	48

## APPENDICES

Appendix A. 1. Weekly salmon catch in the Alaskan District 106 commercial drift gillnet fisheries, 2008. ....	57
Appendix A. 2. Weekly stock proportions of sockeye salmon harvested in the Alaskan District 106 commercial drift gillnet fisheries, 2008.....	58
Appendix A. 3. Weekly salmon catch and effort in the Alaskan Subdistrict 106-41&42 (Sumner Strait) commercial drift gillnet fishery, 2008. ....	59
Appendix A. 4. Weekly stock proportions and catches of sockeye salmon harvested in the Alaskan Subdistrict 106-41&42 (Sumner Strait) commercial drift gillnet fishery, 2008.....	60
Appendix A. 5. Weekly salmon catch and effort in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 2008. ....	61
Appendix A. 6. Weekly stock proportions and catches of sockeye salmon harvested in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 2008. ....	62
Appendix A. 7. Weekly salmon catch and effort in the Alaskan District 108 commercial drift gillnet fishery, 2008.....	63
Appendix A. 8. Weekly stock proportions and stock-specific catch of sockeye salmon in the Alaskan District 108 commercial drift gillnet fishery, 2008. ....	64
Appendix A. 9. Weekly salmon catch and effort and sockeye salmon stock composition in the Alaskan District 108 test fishery, 2008. There was no marine test fishery in 2008. ....	65
Appendix A. 10. Inseason estimates of gillnet, troll, recreational, and subsistence catch of Stikine River bound Chinook salmon in District 108, 2008.....	65
Appendix A. 11. U.S. subsistence fishery harvest in the Stikine River, 2007.....	65
Appendix A. 12. Weekly salmon catch and effort in the Canadian commercial fishery in the lower Stikine River, 2008.....	66
Appendix A. 13. Weekly sockeye salmon stock proportions and catch by stock in the Canadian commercial fishery in the lower Stikine River, 2008.....	67
Appendix A. 14. Weekly salmon catch and effort in the Canadian commercial fishery in the upper Stikine River, 2008.....	68
Appendix A. 15. Weekly salmon catch and effort in the Canadian Aboriginal fishery located at Telegraph Creek, on the Stikine River, 2008. ....	68
Appendix A. 16. Catch by stock and week for sockeye salmon harvested in the Canadian upper river commercial and Aboriginal fisheries in the Stikine River, 2008. ....	69
Appendix A. 17. Weekly salmon catch and effort in the Canadian test fishery in the Stikine River, 2008.....	70
Appendix A. 18. Weekly catch, CPUE, and migratory timing of Tahltan, Tuya, and mainstem sockeye salmon stocks in the Stikine test fishery, 2008.....	71
Appendix A. 19. Daily test catches taken from the upper Stikine test fishery located above the Tahltan River, 21-31 July, 2008.....	72
Appendix A. 20. Daily counts of adult sockeye salmon passing through Tahltan Lake weir, 2008. ....	73
Appendix A. 21. Daily counts of sockeye salmon smolt migrating through Tahltan Lake smolt weir, 2008.....	74
Appendix A. 22. Daily counts of adult Chinook salmon passing through Little Tahltan weir, 2008. ....	75
Appendix B. 1. Salmon catch and effort in the Alaskan District 106 commercial drift gillnet fisheries, 1960-2008. ....	76
Appendix B. 2. Stock proportions and catches of sockeye salmon in the Alaskan District 106 commercial drift gillnet fisheries, 1982-2008. ....	78

Appendix B. 3. Salmon catch and effort in the Alaskan Subdistrict 106-41/42 (Sumner Strait) commercial drift gillnet fishery, 1960-2008.....	79
Appendix B. 4. Stock proportions and catches of sockeye salmon in the Alaskan Subdistrict 106-41/42 (Sumner Strait) commercial commercial drift gillnet fishery, 1985-2008.....	80
Appendix B. 5. Salmon catch and effort in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 1960-2008.....	81
Appendix B. 6. Stock proportions and catches of sockeye salmon in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 1985-2008.....	82
Appendix B. 7. Salmon catch and effort in the Alaskan District 108 commercial drift gillnet fishery, 1960-2008.....	83
Appendix B. 8. Stock proportions and catches of sockeye salmon in the Alaskan District 108 commercial drift gillnet fishery, 1985-2008.....	85
Appendix B. 9. Salmon catch in the Alaskan District 106 and 108 test fisheries, 1984-2008.....	86
Appendix B. 10. Stock proportions of sockeye salmon in the Alaskan District 106 and 108 test fisheries, 1984-2008.....	87
Appendix B. 11. Stock specific catches of sockeye salmon in the Alaskan District 106 and 108 test fisheries, 1984-2008.....	88
Appendix B. 12. Annual harvests of Stikine River Chinook salmon in District 108 gillnet, troll, recreational, and subsistence fisheries, 2005-2008.....	89
Appendix B. 13. U.S. subsistence fishery harvest in the Stikine River, 2004-2008.....	89
Appendix B. 14. Salmon catch and effort in the Canadian commercial fishery in the lower Stikine River, 1979-2008.....	90
Appendix B. 15. Sockeye salmon stock proportions and catch by stock in the Canadian commercial fishery in the lower Stikine River, 1979-2008.....	91
Appendix B. 16. Salmon catch and effort in the Canadian commercial fishery in the upper Stikine River, 1975-2008.....	92
Appendix B. 17. Salmon catch in the Canadian Aboriginal fishery located at Telegraph Creek, on the Stikine River, 1972-2008.....	93
Appendix B. 18. Stock specific sockeye salmon catches in the Canadian upper river commercial and Aboriginal fisheries in the Stikine River, 1972-2008.....	94
Appendix B. 19. Salmon catch in the combined Canadian net fisheries in the Stikine River, 1972-2008.....	95
Appendix B. 20. Salmon catches in the Stikine River harvested under Canadian ESSR licenses, 1992-2008.....	96
Appendix B. 21. Salmon catches and effort in Canadian test fisheries in the Stikine River, 1985-2008.....	97
Appendix B. 22. Sockeye salmon stock proportions and catch by stock in the test fishery in the lower Stikine River, 1985-2008.....	99
Appendix B. 23. Estimated proportion of inriver run comprised of Tahltan, Tuya, and mainstem sockeye salmon stocks, 1979-2008.....	100
Appendix B. 24. Counts of adult sockeye salmon migrating through Tahltan Lake weir, 1959-2008.....	101
Appendix B. 25. Aerial survey counts of Mainstem sockeye salmon stocks in the Stikine River drainage, 1984-2008.....	102
Appendix B. 26. Estimates of sockeye salmon smolt migrating through Tahltan Lake smolt weir, 1984-2008.....	103
Appendix B. 27. Weir counts of Chinook salmon at Little Tahltan River, 1985-2008.....	104
Appendix B. 28. Index counts of Stikine Chinook salmon escapements, 1979-2008. Counts do not include jacks (fish < 660mm mef length).....	105
Appendix B. 29. Index counts of Stikine coho salmon escapements, 1984-2008.....	106
Appendix B. 30. Stikine River sockeye salmon run size, 1979-2008.....	107

Appendix C. 1. Weekly salmon catch and effort in the Alaskan District 111 and Subdistrict 111-32 (Taku Inlet), commercial drift gillnet fishery, 2008.....	109
Appendix C. 2. Estimate of the proportion of natural and planted sockeye salmon stock groups harvested in the Alaskan District 111 commercial drift gillnet fishery by week, 2008. ....	110
Appendix C. 3. Weekly stock-specific catch of wild and planted Taku River and Port Snettisham sockeye salmon harvested in the Alaskan District 111 commercial drift gillnet fishery, 2008. .	110
Appendix C. 4. Weekly salmon catch and effort in the Canadian commercial fishery in the Taku River, 2008. ....	111
Appendix C. 5. Weekly stock proportions of sockeye salmon harvested in the Canadian commercial fishery in the Taku River, 2008. ....	111
Appendix C. 6. Weekly stock-specific catch of sockeye salmon in the Canadian commercial fishery in the Taku River, 2008. ....	112
Appendix C. 7. Weekly salmon catch and effort in the Canadian test and stock assessment fisheries in the Taku River, 2008. ....	112
Appendix C. 8. Mark-recapture estimate of above border run of Chinook, sockeye, and coho salmon in the Taku River, 2008. ....	113
Appendix C. 9. Daily counts of adult sockeye salmon passing through Tatsamenie weir, 2008. ....	114
Appendix C. 10. Daily counts of adult sockeye salmon passing through Little Trapper Lake weir, 2008. ....	115
Appendix C. 11. Daily counts of adult salmon passing through the King Salmon Lake weir, 2008. ....	116
Appendix C. 12. Daily counts of adult sockeye salmon passing through the Kuthai Lake weir, 2008. ....	117
Appendix C. 13. Daily counts of large (>659mm MEF length) Chinook salmon carcasses at the Nakina River weir, 2008. ....	118
Appendix D. 1. Salmon catches and effort in the Alaskan District 111 and Subdistrict 111-32 (Taku Inlet) commercial drift gillnet fishery, 1960-2008.....	119
Appendix D. 2. Stock proportions and catches of sockeye salmon in the Alaska District 111 commercial drift gillnet fishery, 1983-2008. ....	121
Appendix D. 3. Proportion of wild Taku River sockeye salmon in the Alaskan District 111 commercial drift gillnet catch by week, 1983-2008. ....	122
Appendix D. 4. Salmon catch in the U.S. subsistence and personal use fisheries in the Taku River, 1967-2008.....	123
Appendix D. 5. Salmon catch and effort in the Canadian commercial fishery in the Taku River, 1979-2008.....	124
Appendix D. 6. Sockeye salmon stock proportions and catch by stock in the Canadian commercial fishery on the Taku River, 1986-2008. ....	125
Appendix D. 7. Salmon catches in the Canadian Aboriginal fishery on the Taku River, 1980-2008. ....	126
Appendix D. 8. Salmon catch in the Canadian test fishery in the Taku River, 1987-2008. ....	127
Appendix D. 9. Taku River sockeye salmon run size, 1984-2008. ....	128
Appendix D. 10. Sockeye salmon escapement estimates of Taku River and Port Snettisham sockeye salmon stocks, 1979-2008. ....	129
Appendix D. 11. Taku River Chinook salmon run size, 1989-2008. ....	130
Appendix D. 12. Aerial survey index escapement counts of large (3-ocean and older) Taku River Chinook salmon, 1975-2008. ....	131
Appendix D. 13. Taku River (above border) coho salmon run size, 1987-2008.....	132
Appendix D. 14. Escapement counts of Taku River coho salmon, 1984-2008. ....	133

Appendix D. 15. Canyon Island fish wheel salmon counts and periods of operation on the Taku River, 1983-2008.....	134
Appendix E. 1. Weekly salmon catch and effort in the lower Alsek River fisheries, 2008. ....	135
Appendix E. 2. Weekly salmon catch and effort in the Canadian Aboriginal and sport fisheries in the Alsek River, 2008.....	136
Appendix E. 3. Daily counts of salmon passing through Klukshu River weir, 2008. ....	137
Appendix E. 4. Salmon catch and effort in the U.S. Commercial fishery in the Alsek River, 1960 to 2008.....	139
Appendix E. 5. Salmon catch in the U.S. subsistence and personal use fisheries in the Alsek River, 1976-2008.....	140
Appendix E. 6. Salmon catches in the Canadian Aboriginal and sport fisheries in the Alsek River, 1976 to 2008.....	141
Appendix E. 7. Annual Klukshu River weir counts of Chinook, sockeye, and coho salmon, 1976 to 2008.....	142
Appendix E. 8. Alsek River sockeye salmon escapement 2000 to 2006.....	143
Appendix E. 9. Alsek River sockeye salmon counts from U.S. and Canadian aerial surveys and from the electronic counter at Village Creek, 1985-2008. ....	143
Appendix E. 10. Aerial survey index counts of Alsek River Chinook salmon escapements, 1984 to 2008.....	144
Appendix E. 11. Alsek River run of large ( $\geq 660$ mef) Chinook salmon, 1997-2004. Estimates are based on a mark-recapture study and include the percent of Chinook salmon.....	145
Appendix E. 12. Aerial survey counts of coho salmon from U.S. lower Alsek River tributaries, 1985-2000.....	145
Appendix F. 1. Tahltan Lake egg collection, fry plants, and survivals, 1989-2008.....	146
Appendix F. 2. Tuya Lake fry plants and survivals, 1991-2008. ....	147
Appendix F. 3. Tatsamenie Lake egg collection, fry plants, and survivals, 1989-2008.....	148



## ACRONYMS

ADF&G	Alaska Department of Fish and Game
AF	Aboriginal Fishery
CAFN	Champagne Aishihik First Nation
CPUE	Catch per unit effort
CWT	Coded Wire Tag
DFO	Department of Fisheries and Oceans (Canada)
DIPAC	Douglas Island Pink and Chum (Private Hatchery)
ESSR	Excess Salmon to Spawning Requirement (surplus fishery license)
IHN	Infectious Hematopoietic Necrosis (a virus which infects sockeye salmon)
LCM	Latent Class Model
MEF	Mid-Eye-Fork (fish length measurement)
POH	Post-Orbital-Hyperal (fish length measurement)
PSC	Pacific Salmon Commission
SMM	Stikine Management Model
SPA	Scale Pattern Analysis
TAC	Total Allowable Catch
TRTFN	Taku River Tlingit First Nation
TBR	Transboundary River
TTC	Transboundary Technical Committee
YSC	Yukon Salmon Committee

## CALENDAR OF STATISTICAL WEEKS

Statistical Week	Date		Week	Date	
	Begin	End		Begin	End
1	1-Jan	5-Jan	28	6-Jul	12-Jul
2	6-Jan	12-Jan	29	13-Jul	19-Jul
3	13-Jan	19-Jan	30	20-Jul	26-Jul
4	20-Jan	26-Jan	31	27-Jul	2-Aug
5	27-Jan	2-Feb	32	3-Aug	9-Aug
6	3-Feb	9-Feb	33	10-Aug	16-Aug
7	10-Feb	16-Feb	34	17-Aug	23-Aug
8	17-Feb	23-Feb	35	24-Aug	30-Aug
9	24-Feb	1-Mar	36	31-Aug	6-Sep
10	2-Mar	8-Mar	37	7-Sep	13-Sep
11	9-Mar	15-Mar	38	14-Sep	20-Sep
12	16-Mar	22-Mar	39	21-Sep	27-Sep
13	23-Mar	29-Mar	40	28-Sep	4-Oct
14	30-Mar	5-Apr	41	5-Oct	11-Oct
15	6-Apr	12-Apr	42	12-Oct	18-Oct
16	13-Apr	19-Apr	43	19-Oct	25-Oct
17	20-Apr	26-Apr	44	26-Oct	1-Nov
18	27-Apr	3-May	45	2-Nov	8-Nov
19	4-May	10-May	46	9-Nov	15-Nov
20	11-May	17-May	47	16-Nov	22-Nov
21	18-May	24-May	48	23-Nov	29-Nov
22	25-May	31-May	49	30-Nov	6-Dec
23	1-Jun	7-Jun	50	7-Dec	13-Dec
24	8-Jun	14-Jun	51	14-Dec	20-Dec
25	15-Jun	21-Jun	52	21-Dec	27-Dec
26	22-Jun	28-Jun	53	28-Dec	31-Dec
27	29-Jun	5-Jul			

## EXECUTIVE SUMMARY

Estimates of harvests and escapements of Pacific salmon returning to the transboundary Stikine, Taku, and Alsek Rivers for 2008 are presented and compared with historical patterns. Average, unless stated differently, refers to the 1998-2007 average. Relevant information pertaining to the management of appropriate U.S. and Canadian fisheries is presented and the use of inseason management models is discussed. Results from transboundary river sockeye salmon *Oncorhynchus nerka* enhancement projects are also reviewed.

### *Stikine River*

The 2008 Stikine River sockeye salmon run was estimated to be 120,200 fish, of which approximately 82,700 fish were harvested in various fisheries including test fisheries. An estimated 36,600 Stikine River fish escaped to spawn, including 10,600 fish that migrated to the Tuya River block that were not harvested. The run and harvest were below average. The Tahltan Lake sockeye salmon escapement of 10,500 was below the goal range (18,000 to 30,000 fish). The estimated U.S. commercial catch of Stikine River sockeye salmon in Districts 106 and 108, including the Stikine River subsistence fishery, was 45,900 fish. The Canadian inriver commercial and aboriginal fishery catch was 35,600. The inriver test fishery harvested 1,100 sockeye salmon and there was no marine test fishery in 2008. Weekly inseason run projections from the Stikine Management Model (SMM) ranged from 169,000 to 236,000 sockeye salmon. Weekly inseason run projections using other methods ranged from 125,000 to 163,000 sockeye salmon. The final inseason model prediction was 170,000 fish, with a total allowable catch (TAC) of 101,000 fish. The final inseason run size based on other methods was 125,000 with a TAC of 52,000 fish. Based on the postseason run size estimates and TAC calculations of 42,400 Stikine River fish for each country, Canada harvested 193% and the U.S. harvested 240% of their respective TACs. Broodstock collection and otolith sampling removed 2,400 and 100 sockeye salmon respectively from the escapement to Tahltan Lake leaving a spawning escapement of 8,000 fish. The estimated spawning escapement of 16,400 mainstem Stikine River sockeye salmon was below the goal range of 20,000 to 40,000 fish for this stock group.

The 2008 Stikine River Chinook salmon (non large salmon) run is estimated at 36,000 fish, of which approximately 17,600 fish were harvested in various fisheries. An estimated 18,400 Stikine River fish escaped to spawn, above the escapement goal of 17,400 large Chinook salmon. The run and harvest were below the averages. The Little Tahltan River Chinook salmon escapement of 2,700 fish was below the 2008 escapement goal of 3,300 fish but bordered the goal range of 2,700 to 5,300 fish. The estimated U.S. commercial catch of Stikine River Chinook salmon in Districts 106 and 108 gillnet, troll, subsistence, and sport fisheries was 9,700 fish. The Canadian commercial, aboriginal, and sport fisheries catch was 8,000 fish. There were no inriver or marine test fisheries for Chinook salmon in 2008; however, 13 large Chinook salmon were harvested inriver sockeye salmon test fisheries. Managers used both the m-r and model estimates to generate inseason estimates after week 22. The inseason run projections were persistent

throughout the course of the fishery in predicting a total run size that was less than the preseason forecast of 46,000 fish. Weekly inseason run projections from the model ranged from 38,000 to 43,000 Chinook salmon. The final estimate was 35,700 large Chinook salmon (both U.S. and Canada), with a total allowable catch (TAC) of 17,000 fish. The US harvested approximately 117% of their TAC, while Canada harvested approximately 91% of their TAC.

The 2008 run size of Stikine River coho salmon cannot be quantified. The U.S. marine harvest of Stikine River coho salmon is also unknown since there is no stock identification program for this species. Mixed stock coho salmon harvest in Districts 106 and 108 were 116,000 and 34,000 fish, respectively. Alaskan hatchery fish comprised approximately 42% of the coho salmon harvest from the two districts. The aerial survey count of 1,100 fish from four index sites combined was below average. The cumulative CPUE observed in the coho salmon test fishery, however, was slight above average.

### *Taku River*

The estimated 2008 Taku River sockeye salmon run is 163,300 fish, including an estimated catch of 95,200 fish and an above-border spawning escapement of 68,100 sockeye salmon. Because a normal test fishery was not conducted during weeks 34-42 for second event sampling, the above border sockeye salmon contribution for this time period was estimated from Canyon Island fish wheel CPUE data. The run size was below average, but the escapement was close to the goal range of 71,000 to 80,000 fish. An estimated 74,700 Taku River sockeye salmon were harvested in the District 111 commercial fishery, below average, and an estimated 1,000 sockeye salmon were harvested in the U.S. inriver personal use fishery. The Canadian inriver commercial and aboriginal fishery harvest included 19,300 and 200 sockeye salmon, respectively, and were both below average. The U.S. harvested an estimated 86% of the total TAC and Canada harvested an estimated 22% of the TAC.

The harvest of large Chinook salmon in the Canadian commercial fishery in the Taku River was 2,300 fish, including 1,400 fish harvested in the stock assessment fishery (weeks 18-24). Preseason and then inseason estimates of Chinook salmon abundance did not allow for a directed Chinook salmon fishery this season. The Canadian aboriginal fishery in the Taku River harvested 1 large Chinook salmon which is below average. The recreational fishery harvested approximately 105 large fish. District 111 mixed stock gillnet fishery harvest of 1,700 large Chinook salmon was also below average. Approximately 42% of the harvest was estimated to be of Alaska hatchery origin. The above border spawning escapement estimated from the mark-recapture program is 27,400 fish.

The estimated above border run of Taku River coho salmon in 2008 is 99,200 fish, which is below average. The Canadian inriver commercial and test fishery harvest included 3,800 coho salmon; below average. After upriver Canadian harvest and test fishery catches are subtracted from the inriver run, the above-border-spawning escapement is estimated at 95,400 coho salmon, which exceeds the minimum escapement goal of 38,000 fish. The U.S. harvest of 37,300 coho salmon in the District 111 mixed stock

fishery was above average. Alaskan hatcheries contributed an estimated 7% of the District 111 harvest.

The harvest of 90,200 pink salmon in District 111 was below average. No pink salmon were reported retained in the Canadian commercial inriver fishery in 2008. Although spawning escapement is not know the Canyon Island fish wheel catch of 4,700 fish was below average.

The harvest of 768,700 summer run chum salmon in the District 111 fishery was a record while the harvest of 5,400 fall run fish was above average. There was non-retention of chum salmon in the Canadian inriver fishery in 2008. Although spawning escapement is not known the Canyon Island fish wheel catch of 350 chum salmon was above average.

### *Alsek River*

The Alsek River sockeye salmon harvest of 2,800 fish in the U.S. commercial fishery was the lowest on record. The Canadian inriver harvest was zero sockeye salmon for Klukshu River and catches are not reported for Village Creek. The Klukshu River weir count of 2,700 sockeye salmon was the lowest on record and below the goal range of 7,500 to 15,000 fish. The count of 43 early run sockeye salmon (count through August 15) was also a record low. The late run count of 2,700 was the second lowest on record.

The Chinook salmon run to the Alsek River was below average. The U.S. Dry Bay catch of 130 large Chinook salmon was below average. The Canadian recreational fishery catch of 7 fish is below average and the aboriginal fishery catch was 0. The 470 Chinook salmon counted through the Klukshu River weir was also the lowest on record and below the goal range of 1,100 to 2,300 Chinook salmon.

Current stock assessment programs prevent an accurate comparison of the Alsek River coho salmon run with historical runs. The U.S. Dry Bay catch of 2,700 coho salmon was below average. The operation of the Klukshu weir does not provide a complete enumeration of coho salmon into this system since it is removed before the run wais over; however, it does provide an annual index. The count of 4,300 coho salmon was above average.

### *Enhancement*

Eggs and milt were collected from the year 2008 sockeye salmon escapements at Tahltan, Tatsamenie and Little Trapper lakes. A total of 3.4 million eggs were collected at Tahltan Lake, 4.9 million at Tatsamenie Lake and 0.1 million at Trapper Lake (the Trapper eggs were planted in Tunjony Creek).

Outplants of 2007 brood-year sockeye salmon fry in May and June 2008 included, 1.4 million fry into Tahltan Lake, 0.8 million fry into Tuya Lake, 3.9 million fry into Tatsamenie Lake and 0.4 million fry into Trapper Lake. Green-egg to planted-fry survivals were 70%, 83%, 89% and 39% for the Tahltan, Tuya, Tatsamenie and Trapper outplants, respectively. Survival to emergence was below average this year primarily due

to loss of eggs and fry to the IHN virus; however there was some reduced survival due to egg shipment delays due to weather.

The egg incubation and thermal-marking program was continued at Snettisham Hatchery in 2008. Snettisham hatchery is operated by DIPAC (Douglas Island Pink and Chum, Inc.), a private aquaculture organization in Juneau. A co-operative agreement between ADFG and DIPAC provides for Snettisham hatchery to serve the needs of the joint TBR enhancement projects.

Adult sockeye salmon otoliths were processed inseason by the ADFG otolith lab to estimate the weekly contribution of fish from US/Canada TBR fry planting programs to the District 106, 108, and 111 gillnet fisheries and to Canadian commercial fisheries in the Stikine and Taku Rivers. Contribution estimates of planted fish to Alaskan harvest were 26,000 planted Stikine River fish to District 106 and 108, and 11,800 planted Taku River fish to District 111. Estimates of contributions to Canadian fisheries included 21,000 planted fish to Stikine River fisheries and 1,900 planted fish to the Taku River fisheries.

## INTRODUCTION

This report presents estimates of the 2008 catch and escapement data for Pacific salmon runs to the transboundary Stikine, Taku, and Alsek Rivers and discusses management actions taken during the season. Catch and effort data are presented by management week (U.S. statistical week), hereafter referred to as week, for each river for both U.S. and Canadian fisheries. Spawning escapement data for most species are reported from weir counts or other escapement monitoring techniques. Joint enhancement activities on the Stikine and Taku Rivers are also summarized.

The Transboundary Technical Committee (TTC) met prior to the season to update joint management, stock assessment and enhancement plans and determine preseason forecasts and outlooks for run strengths and initial total allowable catch TAC estimates for the various species and rivers.

Run reconstruction analyses are conducted on the sockeye salmon *Oncorhynchus nerka* and Chinook salmon *O. tshawytscha* runs to the three rivers for the purpose of evaluating the stocks and the fisheries managed for these stocks. No estimates of marine catch are made for Alaskan fisheries outside of District 106 and 108 for Stikine River stocks, District 111 for Taku River stocks and Sub-district 182-30 & 31 for Alsek River stocks.

## STIKINE RIVER

Stikine River salmon are harvested by U.S. commercial gillnet fisheries in Alaskan Districts 106 and 108, by Canadian commercial gillnet fisheries located in the lower and upper Stikine River, and by a Canadian aboriginal fishery in the upper portion of the river (Figure 1). In addition, Canadian terminal area fisheries are operated in the lower Tuya River and/or at Tahltan Lake when escapements are estimated to include excess salmon to spawning requirements (ESSR). A recreational fishery also exists in the Canadian sections of the Stikine River drainage. In 1995, a United States personal use fishery was established in the lower Stikine River; no catches were reported in this fishery in 1995 through 2000, approximately 30 sockeye salmon were harvested in 2001, and the personal use fishery on the Stikine River was not open in 2002 and 2003. A subsistence fishery was opened in 2004. Additional catches of unknown quantity are taken in U.S. troll and seine fisheries and in sport fisheries near Wrangell and Petersburg. In 1996, the spring experimental troll area in the District 110 portion of Frederick Sound was expanded to target hatchery Chinook salmon; four previous areas were combined into one large area that also included previously unopened waters. This area was the same in 2003. In 1993 the spring experimental troll fishery near Wrangell was expanded to include two new areas in portions of District 106 and 108 to target hatchery Chinook salmon. In 1998 an additional area was included in a portion of District 108.

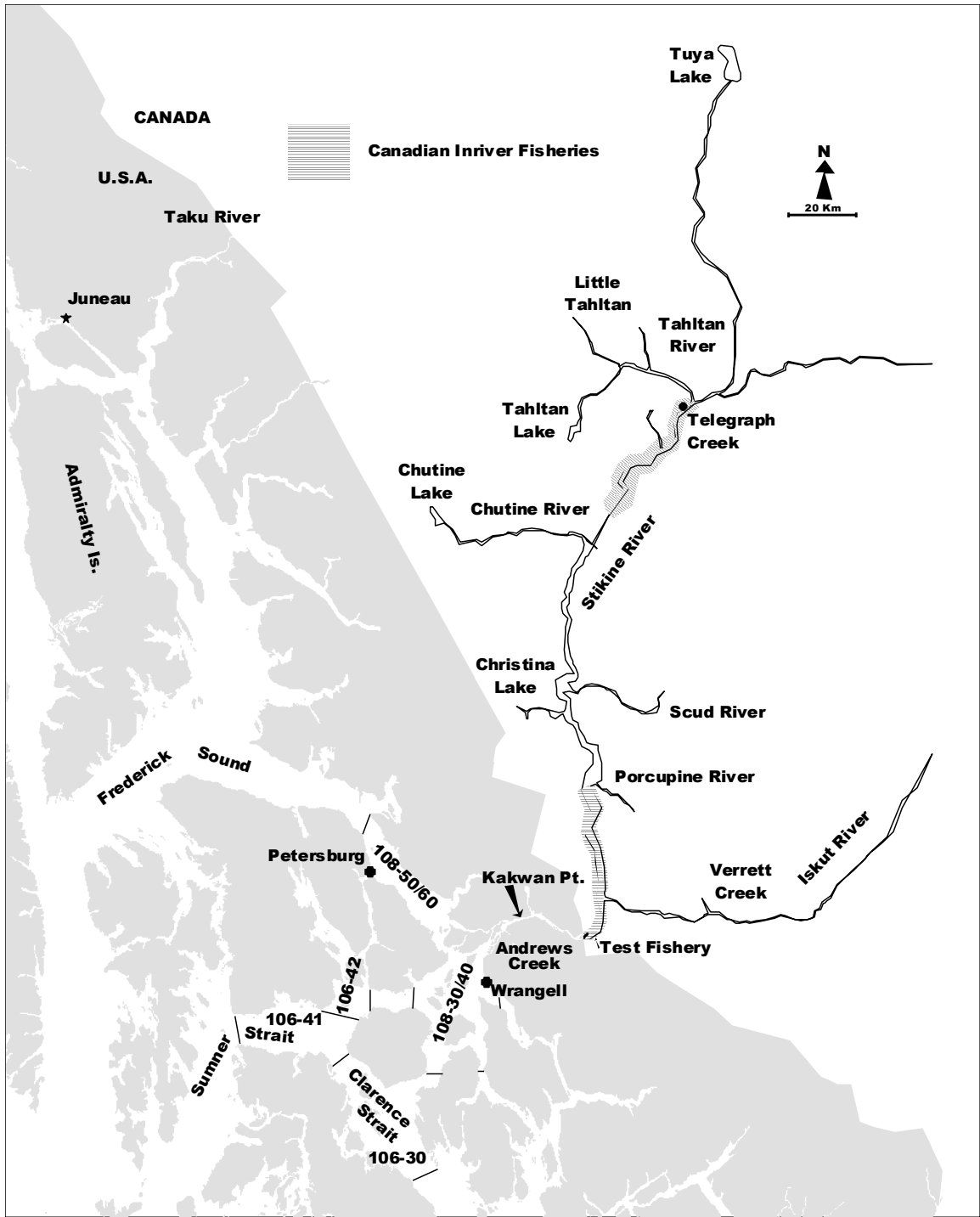


Figure 1. The Stikine River and principal U.S. and Canadian fishing areas.



## *Harvest Regulations and the Joint Management Model*

Negotiations between Canada and the United States to replace expired portions of Annex IV, Chapter 1 of the Pacific Salmon Treaty resulted in the following arrangements for Stikine River salmon which are expected to be in place through 2008. Highlights of the most recent round (germane to the 2008 season) of the PSC negotiations held in Portland, Oregon in February 2005 included: an agreement for new directed fisheries for Stikine River Chinook salmon stocks; an agreement on a US subsistence fishery on Chinook and coho salmon stocks within the US section of the Stikine River; and, an agreement to ensure the US pass 1,000 additional coho salmon to the Canadian fishery. Details of the February 2005 agreement including harvest sharing provisions have been incorporated into the Transboundary Annex (Annex IV) of the Pacific Salmon Treaty and can be found at: <http://www.psc.org/pubs/treaty.pdf>.

As in most previous years, the Transboundary Technical Committee (TTC) met prior to the season to update joint management and enhancement plans, develop run forecasts and determine new parameters for input into the inseason Chinook and sockeye salmon run projection models. The nascent Chinook salmon model is referred to as the Stikine Chinook salmon Management Model (SCMM) and served as the principal management tool governing weekly fishing regimes for the new directed Stikine River Chinook salmon, although the SCMM was complemented inseason with a concurrent mark-capture study. The sockeye salmon model is referred to as the Stikine Management Model (SMM). The SCMM was complemented inseason with a concurrent mark-capture study.

### **Chinook Salmon**

The SCMM model is based on the linear regression (correlation) between weekly cumulative CPUE of large Chinook salmon at the tagging site and total run size based on mark-recapture studies conducted in 1996-2006 (2007 correlation not used due to abnormal fishing conditions). Most of the CPUE and run size data sets are significantly correlated. Inseason model estimates were available commencing in week 23 (Table 1). Mark-recapture estimates based on the cumulative ratio of tagged-to-untagged fish observed in the inriver commercial fishery were also generated commencing in week 24. In order to honor Annex IV, Chapter 1, Paragraph 3(a)(3)(vii), which obliges the Parties to apportion their overall TAC by historical weekly run timing, weekly fishery openings were announced based on weekly guideline harvests. The Canadian guideline harvests were derived from historical run timing data from the 2005 and 2006 inriver commercial fisheries and the 2000-03 inriver test fisheries. The U.S. guidelines were derived from historical run timing in District 108 (1969-73, 2005-2007) and historical CPUE from the Kakwan Point tagging site, delayed one week (1996-04) and the 2001-2003 average CPUE from the Canadian Chinook salmon test fishery delayed one week.

The preseason Chinook salmon forecast was used during weeks 19-22. After week 22, inseason forecasts of total run size and TAC were used to assist in determining weekly fishing plans (Table 1). After week 24, mark-capture estimates were generated to complement the SCMM estimate; the average run size generated from the mark-recapture

estimates and the SCMM were used to project inseason run size in some weeks. The weekly inputs to the model included: the catch and effort data from Kakwan Point, the District 108 sport, troll, and gillnet catch. The Canadian sport and gillnet catches were also added to the model. Weekly guideline quotas were established in District 108 and Canada based on the historical run timing curves mentioned above.

Table 1. River large Chinook salmon run size based on a model (SCMM) and mark-recapture estimates, weekly TAC, and weekly catch estimates from the District 108 gillnet, sport, and troll fisheries and the Canadian gillnet and sport fisheries, 2008.

Stat Week	Start Date	Total Run		TAC		Estimated Harvest	
		Estimate	Method	Total	Weekly	Weekly	Cumulative
Canada Estimates <sup>a</sup>							
18	03-May	46,100	preseason				
19	10-May	46,100	preseason	11,900	215	99	99
20	17-May	46,100	preseason	11,900	547	393	492
21	24-May	46,100	preseason	11,900	469	531	1,023
22	31-May	46,100	preseason	11,900	1,119	470	1,493
23	7-Jun	42,000	model	10,600	1,059	1457	2,950
24	14-Jun	42,000	model	10,600	1,541	1892	4,842
25	21-Jun	38,000	avg m-r/mod	9,400	1,466	1168	6,010
26	28-Jun	38,000	avg m-r/mod	9,400	892	782	6,792
27	5-Jul	38,000	avg m-r/mod	9,400	460	430	7,222
28	12-Jul	38,000	avg m-r/mod	9,400	393	359	7,581
29	19-Jul	38,000	avg m-r/mod	9,400	73	140	7,721
30	26-Jul	38,000	avg m-r/mod	9,400	53	106	7,827
31	2-Aug	38,000	avg m-r/mod	9,400	48	16	7,843
32	9-Aug	38,000	avg m-r/mod	9,400	23	56	7,899
Postseason Final		35,999	m-r (strat.)	8,690			7,932
U.S. Estimates <sup>a</sup>							
19	10-May	46,100	preseason	12,040	708	630	689
20	17-May	46,100	preseason	12,040	871	1,104	1,802
21	24-May	46,100	preseason	12,040	1,397	1,950	3,826
22	31-May	46,100	preseason	12,040	1,813	1,503	5,430
23	7-Jun	43,000	model	9,950	1,935	1,575	7,030
24	14-Jun	42,000	model	9,250	1,706	1,275	8,502
25	21-Jun	41,000	avg m-r/mod	8,550	800	1,407	9,787
26	28-Jun	38,000	avg m-r/mod	6,450	331	844	10,294
27	5-Jul	38,000	avg m-r/mod	6,450	177	220	10,137
28	12-Jul	38,000	avg m-r/mod	6,450	67	115	9,902
29	19-Jul	39,000	avg m-r/mod	7,150	62	100	10,151
Postseason Final		35,999	m-r (strat.)	8,310			9,715

<sup>a</sup>Canadian TAC and catch estimates include baseline catch, U.S. TAC and catch estimates to not include the baseline numbers.

The preseason forecast for the terminal Stikine River large Chinook salmon run was approximately 46,100 fish (Table 1), which indicated a run size characterized as below average. Joint Canadian and U.S. inseason predictions of terminal run size ranged from 38,000 to 43,000 Chinook salmon (Table 1). Managers used the daily catch and effort data transmitted from the Kakwan Point tagging site to make daily run projections. Joint weekly run size estimates were calculated on Wednesday or Thursday in the current week and were used to set the following week's fishery openings. (Occasionally the mid week

estimates were used to govern the Canadian fishery in the current week.) Managers used the model estimates in weeks 22-23 and the average run size generated by the weekly mark-recapture and SCMM estimates after week 24 (08-14 June) in the formulation of weekly management plans. All projections generated by the joint SCMM and the M-R study indicated a run size that was less than the preseason expectation and the 2002-06 average. Based on M-R data from the inriver commercial fishery and stratified by statistical weeks, the final postseason estimate of terminal run size of Stikine Chinook salmon was 36,000 large Chinook salmon, which was below the preseason forecast of 46,100 large Chinook salmon (Table 1). The 2008 Little Tahltan escapement of 2,663 fish represents approximately 13% of the total inriver escapement of 18,352 fish, compared to the average of approximately 17%.

### **Sockeye Salmon**

The SMM was updated to provide inseason projections of the Stikine River sockeye salmon run, including: the Tahltan stock (wild and planted combined); the planted Tuya stock; and the mainstem stocks. The model for 2008 was based on CPUE data from 1985 to 2006 from the Alaska District 106 fishery and the Canadian commercial fishery in the lower river and from 1986 to 2004 from the lower Stikine River test fishery. Linear regression was used to predict run size from cumulative CPUE for each week of the fisheries beginning in week 27 for District 106 and for the inriver fisheries. As in 1999-2006, the intercept was forced to be zero in order to correct for a tendency to overestimate the run size in the early weeks during years of low abundance. Each CPUE and run size data set is significantly correlated.

Other assessment methods including inseason run reconstruction and a linear regression of CPUE of Tahltan Lake sockeye salmon against total inriver run (1998-2007) were used by Canada post week 27 during the 2008 fishing season.

Initially in 2008 the inriver test fishery CPUE data was slated to be the primary source for generating inseason projections of sockeye salmon run size; however, the CPUE from the commercial fishery was used due to the extended fishery openings and resultant limited or absent test fishing activity. Because the commercial fishing zone was limited to the Stikine River from the its confluence with the Porcupine downstream to the Canada US border, no adjustments were made to the total weekly CPUE, i.e. in past fisheries when the fishing zone extended upstream to the confluence of the Scud and Stikine rivers, the CPUE from the extended fishing zone was not included in the model. The annual weekly CPUE values were adjusted in order to make the current year data comparable with historical CPUE. For example, during 1979-1994 and 2000-2004, only one net per license was permitted, while in 1996-1999 and 2005-2008 two nets per license were allowed. It is estimated that the second net increased the catch and CPUE by approximately 25%.

In 2008, the preseason forecasts were used during weeks 24 (08-14 June) through 26 (22-28 June). After week 26, inseason forecasts of run size and TAC, produced by the SMM, Tahltan sockeye salmon regression model, and run reconstruction data in the lower river commercial fishery, were used to determine weekly fishing plans (Table 2). The weekly

inputs to the model included: the catch, effort and stock composition (proportion Tahltan/Tuya from egg diameters, proportion planted Tuya from thermal mark analyses of otoliths) in the Canadian lower river test (when in operation) and commercial fisheries; the upper river catch in the aboriginal fishery (AF) and upper river commercial fishery; the catch, effort and assumed stock composition in Subdistrict 106-41 (Sumner Strait); and, the catch and assumed stock composition in District 108 and Subdistrict 106-30 (Clarence Strait).

Table 2. Weekly forecasts of run size and total allowable catch for Stikine River sockeye salmon as estimated inseason by the Stikine Management Model, 2008.

Stat. Week	Start Date	Forecast Run Size	TAC			Cumulative Catches <sup>a</sup>	
			Total	U.S.	Canada	U.S.	Canada
Model runs generated by Canada							
25	15-Jun	228,600	160,400	80,200	80,200		517
26	22-Jun	228,600	160,400	80,200	80,200		8904
27 <sup>b</sup>	29-Jun	219,390	153,200	76,600	76,600		18,941
28 <sup>cd</sup>	6-Jul	162,600	91,000	45,500	45,500		23,738
29 <sup>cd</sup>	13-Jul	158,700	85,200	42,600	42,600		28,685
30 <sup>cd</sup>	20-Jul	150,200	73,900	37,000	37,000		30,982
31 <sup>cd</sup>	27-Jul	134,300	58,300	29,150	29,150		32,797
32 <sup>c</sup>	3-Aug	134,700	57,700	28,900	28,900		33,546
33 <sup>c</sup>	10-Aug	124,500	52,000	26,000	26,000		33,608
Model runs generated by the U.S.							
25	15-Jun	228,600	160,643	80,321	80,321	2,128	
26	22-Jun	228,600	160,643	80,321	80,321	11,242	
27	29-Jun	236,028	172,359	86,180	86,180	23,577	
28	6-Jul	209,495	140,172	70,086	70,086	26,690	
29	13-Jul	185,719	118,220	59,110	59,110	34,356	
30	20-Jul	185,819	118,040	59,020	59,020	31,266	
31	27-Jul	171,091	101,686	50,843	50,843	36,916	
32	3-Aug	173,005	104,050	52,025	52,025	36,986	
33	10-Aug	170,514	101,817	50,908	50,908	38,356	
34	17-Aug	169,743	101,030	50,515	50,515		
Final		119,360	42,420	21,210	21,210	45,942	35,606

<sup>a</sup> Does not include test fishery catches

<sup>b</sup> Model estimate

<sup>c</sup> Regression estimate

<sup>d</sup> Harvest rate estimate: harvest rate est. d: does not include test fish catches

The weekly inputs to the Tahltan sockeye salmon regression model included the cumulative weekly CPUE of Tahltan Lake sockeye salmon ( $r^2=0.65$  week 28; 0.91 week 33). The contribution of Tuya origin sockeye salmon was based on otolith marks and presented as a ratio of the total Tahltan run size. The contribution of mainstem sockeye salmon was based on egg diameter measurements and presented as a ratio of total Tahltan run size. The weekly inputs to the Tahltan run reconstruction model included to total catch to date of Tahltan, Tuya and mainstem bound sockeye salmon which was expanded by a professional estimate of harvest rate (40-50%) and further expanded by the run fraction through the fishery. Preliminary results of thermal mark analyses were available

inseason for the marine and lower river fisheries to account for Tuya production in the model and reduce the risk of over-estimating the TAC of Tahltan sockeye salmon. In 2008 the inriver commercial fishery CPUE was the primary forecast used by the US (The test fishery was not prosecuted until mid July due to prolonged commercial fishery openings.), while Canada used both the run reconstruction and the Tahltan regression model.

Initially, average stock proportions in District 106 and 108 catches, from historical scale pattern analysis (SPA), were assumed for weekly catches; averages used each week depended upon whether the run was judged to be below average, average, or above average. The Tuya and planted Tahltan stock proportions were subsequently adjusted inseason based on the analysis of otolith samples taken in Districts 106 and 108. The weekly estimate of Tuya fish in District 106-41 and 108 was added to the historical proportion of Tahltan fish in the SMM since this stock was not present in the historical database.

The preseason forecast for the Stikine River sockeye salmon run was approximately 228,600 fish (Table 2), which indicated a run size characterized as an average run. The forecast included approximately 59,500 natural Tahltan sockeye salmon, 56,700 planted Tahltan fish, 56,700 planted Tuya sockeye salmon, and 55,700 mainstem fish. Canadian inseason predictions of total run ranged from 219,400 to 124,500 sockeye salmon; U.S. forecasts ranged from 236,000 to 169,700 (Table 2). All inseason forecasts indicated a run that was below the preseason forecast. Differences in U.S. and Canadian weekly predictions are due to strikingly different approaches to assessing the inseason run size, with Canada electing to forego the model estimates and use the run reconstruction and Tahltan regression assessment methods for most of the fishing season.

The final estimates of run size and TAC are lower than those used inseason for management for all weeks. The SMM over predicted the run during the duration of the run. The estimates generated by the other two models, especially the Tahltan regression method also over predicted the total run size in all weeks but were closer to the final run size than the SMM, Table 2.

### *U.S. Fisheries*

The 2008 gillnet harvest in District 106 included 1,049 large Chinook, 30,533 sockeye, 116,074 coho, 90,217 pink and 102,156 chum salmon (Appendix A.1). All salmon harvests were below average with sockeye, pink, and chum salmon harvests far below average. The estimated contribution of Stikine River sockeye salmon to the District 106 total sockeye salmon harvest was 16,943 fish or 55% of the harvest (Table 3, Appendix A.2). An estimated 380 large Chinook salmon in the District 106 harvest (36%) were of Alaska hatchery origin (Appendix A.1). An estimated 51,807 coho salmon in the District 106 harvest were of

Table 3. Terminal run reconstruction for Stikine River sockeye salmon, 2008.

	Tahltan Mainstem		Total	Tuya	Tahltan		Total Stikine	All Planted	All Wild
					Wild	Hatchery			
Escapement <sup>a</sup>	10,516	16,183	26,699	10,858	5,396	5,120	37,558	15,978	21,580
ESSR Catch <sup>b</sup>	0		0	0			0	0	0
Biological Samples	100		100	280	51	49	380	329	51
Broodstock	2,364		2,364		1,212	1,152	2,364	1,152	1,212
Natural Spawning	8,052	16,183	24,235		4,132	3,920	24,235	3,920	20,315
Excess <sup>c</sup>				10,578			10,578	10,578	
Canadian Harvest									
Aboriginal	3,287	398	3,685	825	2,740	547	4,510	1,372	3,138
Upper Commercial	363	48	411	94	302	61	505	155	350
Lower Commercial	13,455	4,028	17,483	11,153	6,922	6,533	28,636	17,686	10,950
Tuya Test	543	455	999	956	304	239	1,955	1,195	760
Total	17,648	4,929	22,578	13,028	10,268	7,380	35,606	20,408	15,198
% Harvest	49.9%	32.1%	44.5%	42.3%					
Test Fishery Catch	428	387	815	296	225	203	1,111	499	612
Inriver Run	28,592	21,500	50,092	24,183	15,890	12,703	74,275	36,885	37,389
U.S. Harvest <sup>a</sup>									
106-41&42	3,467	3,483	6,950	6,936	1,271	2,196	13,886	9,132	4,754
106-30	1,564	1,168	2,732	325	1,520	44	3,057	369	2,688
108	12,547	5,659	18,206	10,365	6,648	5,899	28,571	16,264	12,307
Subsistence	165	124	289	139	85	80	428	219	209
Total	17,743	10,434	28,177	17,765	9,524	8,218	45,942	25,984	19,958
% Harvest	50.1%	67.9%	55.5%	57.7%					
Test Fishery Catch	0	0	0	0	0	0	0	0	0
Total Run	46,335	31,934	78,269	41,948	25,414	20,921	120,217	62,869	57,348
Escapement Goal	24,000	30,000	54,000	0					
Terminal Excess <sup>d</sup>				22,115					
Total TAC	21,907	1,547	23,454	19,833			43,287		
Total Harvest <sup>e</sup>	35,819	15,750	51,569	31,090			82,659	46,891	35,768
Canada TAC	10,954	773	11,727	9,916			21,643		
Actual Catch <sup>g</sup>	17,648	4,929	22,578	13,028			35,606	20,408	15,198
% of total TAC	161.1%	637.4%	192.5%				164.5%		
U.S. TAC	10,954	773	11,727	9,916			21,643		
Actual Catch <sup>g</sup>	17,743	10,434	28,177	17,765			45,942	25,984	19,958
% of total TAC	162.0%	1349.3%	240.3%				212.3%		

<sup>a</sup> Escapement into terminal and spawning areas from traditional fisheries.

<sup>b</sup> Catch allowed in terminal areas under the Excess Salmon to Spawning Requirement license.

<sup>c</sup> Fish returning to the Tuya system are not able to access the lake where they originated due to velocity barriers.

<sup>d</sup> The number of Tuya fish that should be passed through traditional fisheries in order to harvest the Tuya stock at the same rate as the Tahltan stock to ensure adequate spawning escapement for Tahltan fish.

<sup>e</sup> Includes traditional, ESSR, and test fishery catches.

<sup>f</sup> Does not include ESSR or test fishery catches.

<sup>g</sup> U.S. harvest estimate differs from Joint Interception Committee estimate because no estimates are made for catches other than in the listed fisheries.

Alaska hatchery origin, 45% of the total coho salmon harvest. The District 106 drift gillnet fishery was open for 46 days from June 8 through October 1 (Appendix A.1); fishing time was average. Sections 6-A, 6-B, and 6-C were open simultaneously each week throughout the season. Weekly fishing effort in number of vessels fishing in District 106 was below average for every week of the season with the exception of weeks 24 and 38. The greatest effort in vessels fishing (85 boats), and the greatest number of boat days (340) both occurred in week 38 (Appendix A.1). The total season effort was 2,196 boat days (Appendix A.1).

The Sumner Strait fishery (Subdistricts 106-41 & 42) harvested an estimated 13,886 Stikine River sockeye salmon (Appendix A.4), 67% of the total sockeye salmon harvest in that subdistrict. The Clarence Strait fishery (Subdistrict 106-30) harvested an estimated 3,057 Stikine River sockeye salmon (Appendix A.6), 31% of the total sockeye salmon harvest in that subdistrict.

In District 108, 13,049 large Chinook, 35,679 sockeye, 34,479 coho, and 18,105 pink and 81,876 chum salmon were harvested for the season (Appendix A.7). Chinook and coho salmon harvests were above average while sockeye, pink, and chum salmon harvests were below average. The District 108 fishery harvested an estimated 28,571 Stikine River sockeye salmon (Appendix A.8), 80% of the District 108 sockeye salmon harvest. The District 108 fishery started on May 5 and included five weeks of directed Chinook salmon fishing before the usual sockeye salmon opening occurred in week 24 (June 8). District 108 closed concurrently with District 106 on October 1. The 58 days the district was open is above average (Appendix A.7). Excluding the directed Chinook salmon fishery, the district was open for 50 days, which is above average (this average only includes the usual sockeye salmon fishery in the 2005, 2006, and 2007 season). The Alaska hatchery Chinook salmon contribution in District 108 was estimated at 5,627 fish, 43% of the total harvest. An estimated 28% (9,674 fish) of the District 108 coho salmon harvest was of Alaskan hatchery origin (Appendix A.7). The weekly fishing effort in number of vessels fishing in District 108 during the usual fishery (weeks 24 through 40) was above average every week with the exception of weeks 24, 28, 30, and 40. The season effort of 2,897 boat-days, during the usual fishery in District 108, was above average.

The District 108 test fishery did not take place in 2008 (Appendix A.9).

The 2008 season was the fifth season a U.S. Federal subsistence sockeye salmon fishery was conducted on the Stikine River, and was the fourth season that U.S. Federal subsistence Chinook and coho salmon fisheries were conducted. The fisheries were managed by the United States Forest Service. A permit issued by the USFS to federally qualified users was required. The fisheries took place on the Stikine River upriver from marine waters to the U.S./Canadian border. Fishing in clearwater tributaries or side channels and at stock assessment sites was prohibited. The Guideline Harvest Levels for Chinook, sockeye, and coho salmon were set at 125, 600, and 400 fish, respectively. The open dates were May 15 to June 20 for the Chinook salmon fishery, June 21 to July 31 for the sockeye salmon fishery, and August 1 to October 1 for the coho salmon fishery.

The allowable gear for the fishery included dipnets, spears, gaffs, rod and reel, beach seine, and gillnets not exceeding 15 fathoms in length with mesh size no larger than 5½ inches except during the Chinook salmon fishery when mesh up to 8 inches was allowed. A total of 50 permits were issued and the estimated harvests included 26 Chinook, 428 sockeye, and 42 coho salmon (Appendix A.11).

The fourth consecutive commercial directed Stikine River Chinook salmon drift gillnet fishery in recent years occurred in weeks 19 through 23 of the 2008 season. The preseason forecast was considerably larger than the 2007 forecast but was still well below the expected forecasts in the 2005 and 2006 seasons. The total run was expected to be approximately 46,000 large Chinook salmon for 2008. The U.S. total allowable catch based on this forecast was approximately 15,440 fish. The fishery was limited to the waters in District 108 in order to target adult Stikine Chinook salmon. The 2008 directed Stikine Chinook salmon fishery openings reflected decisions made on several issues (including area of opening, time of opening, and gear utilized) among commercial and sport groups by the Stikine King Salmon Workgroup previous to the 2006 season. In 2008, 127 gillnetters made landings of Chinook salmon over the course of the five-week fishery. A total of eight days were fished within this time period.

The gillnet fleet harvested the bulk of the adult Stikine Chinook salmon in District 108 with 7,274 fish caught through week 29. The sport fishery was open continuously from weeks 18 through 29 with liberalized bag and gear limits. The sport fishery harvested 1,352 adult Stikine Chinook salmon during this time period. The troll fishery had six five-day openings and two three-day openings throughout most of District 108 from week 19 through 26. The spring troll fishery was closed by regulation on June 30. The troll fishery accounted for 1,063 Stikine Chinook salmon in District 108. The final cumulative U.S. harvest of large Stikine Chinook salmon through week 29, including the federal Stikine subsistence fishery, was 9,715 fish. The estimated total terminal run was approximately 35,999 large Chinook salmon and was based upon mark-recapture information. Based upon that final post-season estimate of the run size, the U.S. allowable catch was 9,150 large Stikine Chinook salmon.

The District 108 directed Stikine Chinook salmon gillnet fishery began at 8:00 am on Monday, May 5 (week 19) for a 48-hour period. The two-day opening was based on a substantially larger preseason forecast compared to the 2007 season and corresponding one-day openings. The Stikine River flats remained closed throughout the directed Chinook salmon fishery. Small area closures again occurred, although to a lesser extent, to reduce conflicts between commercial and sport fishers and for steelhead conservation. Several of the 2008 season area closures were dependent on the weekly openings of the gillnet fishery, and the reduced (two-day or less) openings that occurred each week of the directed Stikine Chinook salmon fishery resulted in few area closures. Another steelhead conservation tool that was put into place in 2006 and continued in 2008 was a minimum mesh size of 7 inches for gillnetters throughout the directed Stikine Chinook salmon fishery. Thirty-one gillnetters made landings in District 108 during the initial opener and several more boats fished but had no harvest. The vast majority of boats fished in Section 8-B, and this trend would remain throughout the directed Stikine Chinook salmon gillnet fishery. A unique dynamic of the fishery was the proximity to town, and few fishermen



spent entire openings without tying to the dock. Average gillnet catch rate in the initial opening was similar to the previous three years. The first inseason run estimate was not released until week 22 due to inadequate data for the scheduled preliminary inseason estimate release during week 21; therefore the preseason forecast was used for the first four weeks of the directed Stikine Chinook salmon fishery. The estimated District 108 gillnet harvest during week 19 was 330 large Chinook salmon. The U.S. weekly AC guideline, based on historical run timing and the preseason forecast, was approximately 700 Stikine Chinook salmon. After factoring in the troll and sport fish harvests and deducting the hatchery component, the total U.S. harvest was slightly below the weekly guideline.

During weeks 20 (May 11-17) and 21 (May 18-24), District 108 was opened with the same area and time as week 19. Gillnet effort increased steadily as the season progressed with 53 boats making landings in week 20 and 96 boats in week 21. The effort in week 20 was nearly identical to that seen in the respective weeks of the 2005 and 2007 season while the week 21 effort was similar to the increased effort seen in the 2006 season. The cumulative harvest of large Stikine Chinook salmon by the U.S. fisheries was estimated to be approximately 3,800 fish during week 21. Weekly allowable catch guidelines were exceeded during weeks 20 and 21. After the base level was factored in, AC guidelines were exceeded by 5.5% and 14.5% in weeks 20 and 21, respectively. Average catch rate in week 21 showed a minimal increase from the previous week compared to the past three seasons, and this contributed to a reduced opening in week 22. The increase in effort from week 20 to 21 was surprising and became the greatest increase in effort seen from week to week during the directed Chinook salmon fishery over the past four seasons. Inadequate in-river data through week 21 resulted in using the preseason forecast for an additional week. The U.S. total allowable catch at this point was approximately 15,400 large Stikine Chinook salmon with the base level included.

During weeks 22 (May 25-31) and 23 (June 01-07), openings were reduced to 24 hours with the Stikine River flats remaining closed. The week 22 opening began on Tuesday, May 27 instead of the usual Monday opener due to the Memorial Day holiday. Gillnet effort reached its highest point during the directed Chinook salmon fishery in week 22 and 23 with 103 boats making landings each week. The estimated U.S. harvest of large Stikine Chinook salmon in week 22 was 1,500 fish and in week 23 was 1,600 fish. The actual harvests were approximately 66% and 68% of the corresponding weekly AC guidelines (with the base level factored in) in week 22 and 23, respectively. The first inseason terminal run forecast was released in week 22 and reduced the forecast to 43,000 fish. This forecast resulted in a total U.S. allowable harvest of 13,350 fish. The estimated cumulative harvest by all U.S. fisheries was approximately 7,100 large Stikine Chinook salmon by the end of week 23. The terminal run forecast dropped by another 1,000 fish in week 23 to 42,000 fish. The corresponding U.S. allowable catch at this point was approximately 12,500 fish. Average catch rate in week 23 fell well below average from the past three seasons, and this combined with a dropping forecast and high effort resulted in a substantial area closure off the mouth of the river in week 24. The week 23 opening was the last opening directed at Stikine Chinook salmon and the following week began the sockeye salmon management regime.

During week 24, a two-day opening was announced due to an above-average Tahltan sockeye salmon forecast. The vast majority of gillnetters that fished in District 108, however, kept their Chinook salmon gear on. Effort was reduced substantially mostly due to the substantial area closure which closed the waters east of a line running from Blind Slough (Mitkof Island) to the south tip of Vank Island down the eastern shoreline of Woronkofski Island, to a similar longitude on Etolin Island. Seventy boats made landings this week in District 108. The U.S. large Stikine Chinook salmon harvest during week 24 was estimated at approximately 1,300 fish. The actual harvest was 50% of the weekly AC guideline. The hatchery Chinook salmon component also began to become substantial this week representing over 30% of the gillnet harvest and this would continue to increase substantially through week 29. In week 24, the terminal run forecast again fell by another 1,000 fish to 41,000 large Stikine Chinook salmon resulting in a U.S. AC of 11,950 fish. The cumulative U.S. Stikine Chinook salmon harvest through week 24 was approximately 8,400 fish.

The District 106 gillnet season began, and the District 108 season continued into sockeye salmon management, at 12:00 noon on Sunday, June 8 (week 24) for a two-day period. In District 108, the Stikine River flats remained closed and a further closure was implemented to conserve Stikine Chinook salmon. The first sockeye salmon opening is normally two days and any decision to extend fishing is based on fishery harvest rates estimated by management biologists on site in the fishery. Additional fishing time was not warranted this week. This season was similar to last season in that the vast majority of boats in District 108 were targeting Chinook salmon so the sockeye salmon catch rates were not very informative. The sockeye salmon catch rates in District 106 were well below average for the 13 boats that made landings from the district. Three boats fished in Clarence Strait (106-30) for this initial sockeye salmon opening. Seventy boats made landings in District 108 (Appendices A.3 and A.5). The preseason SMM forecasted a total Stikine River TAC of 160,643 fish and a Tahltan TAC of 91,285 fish (Table 2). This would allow the U.S. fisheries to harvest a total of 80,321 Stikine River fish, including 45,643 Tahltan fish. The pre-season forecast was used for weeks 24-26, while the inriver commercial fishery CPUE was used for the remainder of the sockeye salmon season.

During week 25 (June 15-21), there were 17 boats fishing in Sumner Strait, 8 boats fishing in Clarence Strait and 76 boats fishing in District 108 during the two-day opening (Appendices A.3 and A.5). No additional time was warranted this week due to generally low sockeye salmon catch rates. The small number of boats actually targeting sockeye salmon in District 108 had well above average catch rates, however, the sockeye salmon catch rates in District 106 were well below average. The majority of effort in District 108 this week was focused on returning Anita Bay Chinook salmon in the southern part of the district. The inseason otolith readings for sub-district 106-41 indicated that 15.1% of the catch was comprised of thermally marked Tahltan fish while 19.0% were thermally marked Tuya fish. In District 108, 15.7% were thermally marked Tahltan fish and 40.3% were thermally marked Tuya fish.

During week 26 (June 22-28), there were 32 boats fishing in Sumner Strait, 13 boats fishing in Clarence Strait and 88 boats fishing in District 108 (Appendices A.3 and A.5). Both districts were opened for an initial three days this week due to solid sockeye salmon catch rates in District 108 and strong inriver indications. Considerably more boats in District 108 switched to sockeye salmon gear, but the majority was still targeting hatchery Chinook salmon. Both districts were extended for an additional 24-hour period due to solid sockeye salmon catch rates in District 108, a small fleet in District 106, and excellent sockeye salmon catch rates in the inriver fishery. The inseason otolith readings for sub-district 106-41 for week 26 indicated that 14.4% of the catch was comprised of thermally marked Tahltan fish while 38.6% were thermally marked Tuya fish. The District 108 reading indicated 21.6% thermally marked Tahltan fish and 37.7% thermally marked Tuya fish. The Stikine sockeye salmon model predicted a total run slightly larger than the preseason forecast this week. The model forecasted a U.S. TAC of 86,000 Stikine sockeye salmon with 50,000 Tahltan fish. The U.S. Tahltan sockeye salmon catch estimate at this point was 5,550 fish.

During week 27 (June 29-July 05), District 106 and 108 were opened for an initial four days (Appendix A.7). There were 27 boats fishing in Clarence Strait, 41 boats in Sumner Strait, and a total of 75 boats fishing in District 108 for the week (Appendices A.3, A.5, and A.7). Surveys on the fishing grounds showed that sockeye salmon catch rates were below average in both districts even when isolating the boats fishing with sockeye salmon gear in District 108. The effort dropped substantially toward the end of the opening due to the 4<sup>th</sup> of July holiday and lower catches. No additional time was warranted this week. The percentage of thermally marked Tahltan sockeye salmon in Sub-district 106-41 rose slightly to 14.9% while the marked Tuya fish contributed 31.3%. In District 108, marked Tahltan fish contributed 20.1% while marked Tuya fish contributed 33.4%. The SMM estimate decreased the total Stikine sockeye salmon U.S. TAC to 70,000 fish with a Tahltan TAC of 36,000 fish. The estimated cumulative U.S. harvest of Tahltan sockeye salmon was 11,000 fish. The mainstem total run forecast produced by this week's model projected a run slightly larger than the preseason estimate.

During week 28 (July 06-12), 13 boats fished in Clarence Strait, 35 boats fished in Sumner Strait, and 65 boats fished in District 108 (Appendices A.1 and A.7). Time was reduced to an initial three days of fishing in both districts. Fishing ground surveys showed that sockeye salmon catch rates were below average in District 108 but above average in Sumner Strait (106-41). The Clarence Strait (106-30) sockeye salmon catches were low due to poor weather and minimal fishing opportunities. The effort fell substantially this week due mainly to boats leaving for the Juneau area where chum salmon catches were rapidly growing. An additional two-day midweek opening was announced this week in District 108 due to good catch rates in Sumner Strait and a small fleet size. The inseason otolith readings for week 28 indicated that the marked Tahltan fish contributed 13.1% of the District 106 catch and 13.9% of the District 108 catch. The marked Tuya fish contributed 26.0% and 32.7% in District 106 and 108, respectively. The SMM decreased the Tahltan component to 90,000 fish, with a U.S. TAC of 33,000 fish. The estimated U.S. Tahltan harvest by the end of this week was 14,000 sockeye

salmon. The model run produced by Canada this week suggested that the total Tahltan run was likely closer to 60,000 sockeye salmon. This lower forecast was made using a correlation between historical inriver catch rate data and Tahltan sockeye salmon weir counts. Rather than abandoning the model mid-season, though, the higher Tahltan forecast was used with a verbal caveat that a 70,000 Tahltan sockeye salmon total run size may be more appropriate. Regardless, U.S. fisheries had harvested an estimated small Tahltan sockeye salmon component at this point and the thermal marked proportions were decreasing in both districts.

During week 29 (July 13-19), there were 50 boats fishing in District 106 and 61 boats fishing in District 108 (Appendices A.1 and A.7). Both districts were open for an initial two days. This week marked the beginning of conservation measures for McDonald Lake sockeye salmon and the District 106 fishery was scheduled to have two-day openings from week 29 through week 31. Any additional time over this period would be in the form of midweek openings in District 108. The majority of fishermen in District 108 had switched to larger gear to target chum salmon and were fishing in the southern reaches of the district. Fishing ground surveys showed sockeye salmon catch rates for the small amount of boats that were actually targeting sockeye salmon in District 108 were well above average. The sockeye salmon catch rates in District 106 were average to above average. Solid sockeye salmon catch rates and a small sockeye salmon fleet resulted in an additional two-day midweek opening in District 108. The inseason otolith readings for week 29 indicated that marked Tahltan fish contributed to 2.6% of the District 106 catch and 7.7% of the District 108 catch. The SMM estimated a U.S. Tahltan TAC of 31,000 sockeye salmon this week. Again, the estimated total Tahltan sockeye salmon run size was likely inflated by the model. The U.S. harvest of Tahltan sockeye salmon through week 29 was estimated at 16,000 fish. The SMM estimated a U.S. mainstem harvest of 5,000 sockeye salmon with a U.S. TAC of 13,000 fish.

During week 30 (July 20-26), there were 39 boats fishing in District 106 and 38 boats fishing in District 108. Both districts were open for an initial two days. Sockeye salmon catch rates in both districts were below average. No additional time was warranted in either district this week. The SMM estimated a total U.S. mainstem harvest of 6,500 fish with a U.S. TAC of 15,000 fish. Marked Tahltan/Tuya sockeye salmon were nearly nonexistent in District 106 this week while 3.3% and 9.1% made up the marked Tahltan and Tuya components in District 108, respectively. The SMM estimated the total Tahltan run size at 72,000 fish with a U.S. TAC of 23,000 fish.

During week 31 (July 27-August 02), there were 24 boats fishing in District 106 and 52 boats fishing in District 108. Both districts were opened for an initial two days. Sockeye salmon catch rates in both districts were below average and additional fishing time was once again not warranted. The SMM estimated a total U.S. mainstem harvest of 8,000 fish with a U.S. TAC of 17,000 fish. The Tahltan run size dropped slightly to 71,000 fish. This was the last week of sockeye salmon management in both districts. The final inseason SMM run, released in week 35, estimated a total U.S. harvest of 40,390 Stikine sockeye salmon broken into 17,242 Tahltan fish, 14,680 Tuya fish, and 8,468 mainstem

fish. The US TAC for each component was 32,490 Tahltan fish, 8,795 Tuya fish, and 12,800 mainstem fish.

During weeks 32 through 35, both Districts 106 and 108 were managed for pink salmon. Both districts were open two days a week during this period. Section D of District 106 was closed from week 32 through week 36. Poor runs of pink salmon throughout this time period resulted in below-average gillnet openings. Pink salmon harvests in both districts are not always a true reflection of abundance because low prices for pink salmon and catches of other more valuable species may affect the fishing patterns and methods. During the 2008 season, the fishing effort was less than average in District 106; however, in District 108 the effort was generally well above average for this time period. The anticipated hatchery chum salmon run in District 108 was the catalyst behind the increased effort in the district at this time. Total pink salmon harvests were far below average in both districts

Coho salmon management typically commences in late August or early September in both the District 106 and 108 gillnet fisheries. During week 36 (August 31-September 06) the management emphasis changed from pink to coho salmon. Prior to the switch to coho salmon management the District 106 fishery harvested 47,260 coho salmon, approximately 41% of the total District 106 coho salmon catch. Weekly Alaska hatchery coho salmon catch rate in the District 106 fishery was average to above-average the vast majority of the season. Total average weekly coho salmon catch rates reflected the hatchery contribution in District 106 and were above the weekly average the majority of the season. The weekly coho salmon harvests in District 106 were still generally well below average due to well below average effort. In District 108, weekly coho salmon harvests were above average most of the season due to the high effort. Coho salmon harvests in both districts tapered off the last three weeks of the season. Both districts had a three-day opening in week 36, followed by two four-day openings in weeks 37 and 38, and then two three-day openings in weeks 39 and 40. The 2008 gillnet season in both districts ended at noon on Wednesday, October 1.

### *Canadian Fisheries*

Catches from the combined Canadian commercial and aboriginal gillnet fisheries, and sport fishery in the Stikine River in 2008 included: 7,906 large Chinook, 1,067 non large Chinook, 33,651 sockeye, 2,398 coho, 90 chum, and 88 pink salmon. A large portion of the total chum and pink salmon catches were not retained. (Appendices A.12 – A.16). A new test fishery designed to target on Tuya bound fish at a site located in the mainstem Stikine River between the mouth of the Tahltan and the mouth of the Tuya River yield a catch of 1,955 sockeye and 14 Chinook salmon (Table 3). Because of the recently established targeted Chinook salmon commercial fishery, the catches of large Chinook salmon were well above average and the fourth highest on record. Catches of non large Chinook salmon were also well above average. The sockeye salmon catch was well below average. The estimated contribution of sockeye salmon from the Canada/U.S. fry-planting programme to the combined Canadian aboriginal and commercial fisheries was 19,882 fish, 54% of the catch (Table 3).

A sockeye salmon test fishery was conducted for stock assessment purposes in the lower Stikine River from 11 July to 06 September, 2008. The test fishery was located immediately upstream from the Canada/U.S. border. Test fishery catches totaled: 13 large Chinook, 10 non large Chinook, 1,110 sockeye, 338 coho, 129 pink, and 276 chum salmon (all steelhead trout, chum and pink salmon were released) (Appendices A.17, A.18). The objectives of the sockeye salmon test fishery were similar to those in previous years: to provide inseason catch, stock ID and effort data for input into the SMM to estimate the inriver run size; and, to determine migratory timing and stock composition of the sockeye salmon run for use in the postseason estimations of the inriver sockeye salmon run. Unfortunately, no sockeye salmon test fishing was conducted during the late June and early July due budget constraints. Proxy test fishery catches and CPUE for July were calculated based on the performance of the commercial fishery and the historical co-relation between commercial and test CPUE, 1996-04.

A coho salmon test fishery was conducted in the lower Stikine River from 11 July to 06 September 2008. The test fishery was located immediately upstream from the Canada/U.S. border. Test fishery catches totaled: 01 sockeye, 199 coho, and 02 chum salmon (all live fish were released) (Appendices A.17, A.18). The objectives of this test fishery was to provide an index catch expressed in cumulative weekly CPUE to complement and compare with the existing test fishery historical data set (1986-2006), which provided a general sense of relative run strength of Stikine coho salmon.

### **Lower Stikine River Commercial Fishery**

Canadian commercial fishers in the lower Stikine River harvested 7,051 large Chinook, 908 non large Chinook, 28,636 sockeye, 2,398 coho, and 88 pink and 90 chum salmon in 2008. (Appendix A.12). The majority of pink and chum salmon were released; all steelhead trout were released. The sockeye salmon catch was below average. The catch of large Chinook salmon in the fourth year of the new, targeted fishery was the lowest on record since the 2005 inception of a targeted Chinook salmon fishery. The catch of non large Chinook and coho salmon were above average. The targeted Chinook salmon fishery was opened for a total of 23 days, below the recent 3-year average of 31 days. The fleet targeted sockeye salmon for a total of 24 days, below the average of 32 days. The coho salmon fishery was opened for a total of 10 days, above the average of 7 days.

The stock composition of the lower river sockeye salmon catch was 6,533 planted Tahltan fish (23%), 6,922 wild Tahltan fish (24%), 4,028 mainstem fish (14%), and 11,153 planted Tuya fish (39%).

Stock compositions of the commercial catch taken in the targeted Chinook and coho salmon fisheries are not available. However, assuming that the Chinook salmon catch reflects the contribution of the Little Tahltan and 'other' stocks to the total inriver escapement, the commercial catch of Chinook salmon of Little Tahltan origin was 1,036 large Chinook salmon, the catch of large Chinook salmon originating from 'other' stocks was 6,015 fish.

Weekly Chinook and sockeye salmon guideline harvests, based on SCMM, SMM and other forecasts of the total allowable catch (TAC) apportioned by average run timing and domestic and international allocation agreements, were developed each week to guide management decisions during the Chinook and sockeye salmon seasons. For purposes of managing the lower river catch, 1,100 large Chinook salmon were allocated to the upper Stikine fisheries: 150, 50, and 900 large Chinook salmon in the sport, upper commercial and Aboriginal fishery, respectively. A total of 8,000 sockeye salmon was allocated to the upper Stikine commercial and aboriginal fishery. The remaining balance of the Chinook and sockeye salmon TAC was allocated to the lower Stikine commercial fishery. Particular attention was directed at weekly Chinook salmon guideline harvests and the inriver run and escapement projections of the various sockeye salmon stock groupings. Management through week 25 (June 15-21) was focused primarily on the harvest of large Chinook salmon. From week 26 through week 30 (June 22-July 26) management emphasis switched to the Tahltan and Tuya lake sockeye salmon stock after which time the sole focus was the management of mainstem sockeye salmon stocks through the end of the fishery week 33 (August 10-16). The coho salmon management regime commenced on week 35 (August 24).

The Chinook salmon fishery commenced at noon May 04 (week 19) for a scheduled opening of two days. Fishers were limited to two nets with a maximum length of 135 metres. The maximum mesh size was 203 mm. Only one of the two nets was permitted to be deployed as a drift gillnet. The upper boundary of the fishing zone extended to a point near the confluence of the Porcupine and Stikine rivers. The opening was based on a preseason Canadian guideline harvest for week 19 of 215 large Chinook salmon. Water levels were extremely low which resulted in limited drift gillnetting activity and, therefore, reduced exploitation. Further, based on the poor commercial catch and the below average catch at the Kakwan tagging site, it was assessed that the Chinook salmon were not yet present in the fishing grounds in numbers required to achieve the weekly quota. The total catch for this week was 99 large Chinook salmon. The fishery was held at two days.

The fishery was posted for two days in week 20 (May 11-17) with a weekly target of 547 large Chinook salmon. The day one catch of 240 fish and the projected catch for two days of at least 480 fish did not warrant an extension. Day two catches yield only 125 fish for a total weekly catch of 375 large Chinook salmon, 172 fish below the weekly guideline harvest. The low catch in day two was probably due to a spike in water levels. The cumulative catch per hour registered at the Kakwan tagging site, under good fishing conditions, was ~28% average. The 2006-07 Kakwan CPUE were not used in the historical data base due to atypical fishing conditions in those years.

In week 21 (May 18-24) the preseason run size estimate of 46,100 large Chinook salmon remained as the governing run size even though latitude was given to the managers to generate an inseason run size before May 25 as agreed to in the preseason management plan. Both US and Canadian managers reasoned there was no compelling inseason information that warranted an inseason estimate before the agreed to date. The water level increased this week to above the seasonal average. The fishery was posted for two

days in week 21 (May 18-24) with a weekly target of ~470 large Chinook salmon. The day one catch of 123 large Chinook salmon warranted a one day extension; the day two catch of only 95 fish warranted an additional day for a total of a four day opening. Fishing success improved in day three and four resulting in a final catch of 535 Chinook salmon was slightly above the weekly guideline harvest for this week. The catches at Kakwan Point tagging site remained below average. The U.S. cumulative CPUE in District 108 gillnet fishery was below average catch per boat day, as was the Canadian commercial CPUE. It appeared that the fishing conditions thus far were similar to the fishing conditions faced in the 2006 season. The performance of the 2006 fishery and the run size were contrasted with the 2008 season as additional tools in assessing run size.

The fishery was posted for three days in week 22 (May 25-31) with a weekly target of ~1,100 large Chinook salmon and a projected run size of 46,100 Chinook salmon (remained with the preseason estimate). The water level increased at the outset of the opening and crested mid-week. After a catch of 230 fish or 21% of the weekly quota in two days, a two day extension was announced for a total of five days this week. This resulted in a total catch of only 472 large Chinook salmon, well below the weekly guideline harvest for this week. A new run size estimate of 43,000 large Chinook salmon was generated late in the week to serve to govern next week's fishery. Kakwan catches remained below average. The U.S. cumulative CPUE in the District 108 gillnet fishery continued to be below average. The Canadian commercial CPUE followed suit and was ~30% below average.

The fishery was posted for two days in week 23 (June 01-07) with a weekly target of ~1,100 large Chinook salmon and a projected run size of 43,000 Chinook salmon. Day one catches indicated that an extension was warranted. A one day extension was granted. After two days of fishing the catches indicated that an addition two day extension was warranted for a total of five fishing days this week. The final catch of 1,350 large Chinook salmon was above the guideline harvest for this week as a result of the unexpected high catch of over 400 fish in day five. This week's CPUE was well above the recent 3-year average and it appeared that the run was building as the week progressed. A new model of 42,000 large Chinook salmon was generated during the fishery. This new run size governed the latter part of this week's fishery and next week's opening. The cumulative CPUE at the Kakwan Point tagging site was ~40% below average.

In week 24 (June 08-14) the fishery was posted for a three day initial opening. The model run size estimate was 42,000 large Chinook salmon with a weekly guideline harvest of 1,500 fish. The day one catch of over 600 fish and the projected catch over a three day opening of ~1,800 fish resulted in holding the fishery at three days in deference to the weekly guideline harvest. The final catch was 1,822 fish, caught under very good fishing conditions as a result of record low water, was 20% above the guideline catch. The CPUE, however, decreased as the week progressed which indicated that the run was probably early arriving. Average run timing showed the run to peak in week 25 (June 15-21). The model estimates were adjusted to reflect early run timing. The cumulative Kakwan Point CPUE was ~30% below average; the Canadian commercial CPUE was ~



20% below average. A new run size estimate based on the m-r of 41,000 fish was generated on Thursday of week 24. The new estimate was used to govern the initial fishing days in the week 25 fishery.

The fishery was posted for two days in week 25 (June 15-21) with a weekly target of ~1,500 large Chinook salmon and a projected run size of 41,000 Chinook salmon. A new run size estimate generated after one day of fishing and based on the m-r project showed the run dropping to 38,000 large Chinook salmon and a weekly guideline harvest of ~1,300 fish. After two days of fishing and a catch of ~780 fish, it was decided to hold the fishery to three days of fishing. The sockeye salmon catch was relatively good considering the catch was taken with large mesh (203mm/8in). The run size estimate generated at the end of the fishery remained at 38,000 large Chinook salmon. This estimate was based on the average run size generated from the model and the m-r project.

In week 26 (June 22-28) the fishery was initially opened for three days with management emphasis on sockeye salmon. Maximum gillnet mesh size was reduced to of 150 mm (5.75 in). The weekly guideline harvest for Chinook salmon was 660 fish. The catch and CPUE of sockeye salmon was well above average. This observation in concert with a guideline harvest of 6,500 sockeye salmon prompted a two day extension for a total of five days fishing this week. The total catch was 650 Chinook salmon, close to guideline, and 8,100 sockeye salmon which was above the guideline catch for this week. Daily otolith, scale, and egg diameter samples were collected commencing in week 25 which showed the Tuya and Tahltan bound sockeye salmon represented ~ 54% and ~41% of the catch, respectively. The fishing conditions were excellent due to the record seasonally low water levels. The strong sockeye salmon catches in US districts 108 in week 25 and the above average preliminary catches reported this week, however, indicated that there was a high probability that the inseason run size estimate would exceed the preseason forecast. A model estimate generated at the end on this week's fishery calculated a run size of ~ 259,000 sockeye salmon. The Chinook salmon CPUE at the Kakwan Point tagging site improved this week, but still was below the seasonal average. Catches of Chinook salmon in the First Nations fishery were above average. No counts registered at the Little Tahltan weir this week when on average 21 fish should have transited the weir.

In week 27 (June 29-July 05) the fishery was posted for an initial opening of four days. The first SMM estimate of the season, generated in week 26, projected a run size of 259,000 sockeye salmon. A second estimate of 221,400 fish was generated during after two days of fishing. This estimate showed a total TAC of 76,500 fish with a weekly guideline harvest of 14,600 fish. A catch of 3,300 fish after two days of fishing warranted a one day extension for a total of five fishing days this week. There was suspicion that the model was overestimating the run due to abnormally high exploitation of the Canadian fishery as a result of the near record low water levels. The fishery was therefore held at five days even though the weekly guideline harvest indicated that more fishing time was warranted. The US District 108 catch dropped this week which, in part, supported the assumption that the model may be overestimating the run. The otolith and egg diameter data through till week 27 continued to show a high portion of Tahltan and Tuya Lake sockeye salmon. The total catch of 9,800 sockeye salmon was comprised of 5,400

Tahltan Lake, 4,000 Tuya Lake, and 480 mainstem fish. The CPUE of Tahltan sockeye salmon caused some concern in that it was only half of average.

In week 28 (July 06-12) the fishery posted for two days. The initial SMM estimate for this week which was run late in week 27 was ~220,000 sockeye salmon. A second estimate generated after one day of fishing generated a run size of 189,000 sockeye salmon. In light of the relatively low catches and CPUE under very good fishing conditions the estimate was abandoned in favour of assessing the run based on harvest rate approach. This approach used the total catch by stock grouping (Tahltan, Tuya, and Mainstem sockeye salmon) and expanded the total catch by an estimated harvest rate in order to generate a total run size to date. This run size, in turn, was expanded by average run fraction through to date. The projected US catch was added to this expansion, thus providing a total run size estimate. This stock assessment approach resulted in a total estimated run size of 162,600 sockeye salmon and a Canadian TAC of 45,400 fish. Even with this lower run size, it was thought a one day extension was warranted. The catches and CPUE were very low during the first two days of fishing under very good fishing conditions. Of special concern was the relatively weak showing of Tahltan Lake sockeye salmon. The fishery was therefore held to three days this week. The total catch after three days of fishing was ~3,600 sockeye and ~180 Chinook salmon. Sockeye salmon run size estimates were discussed in detail with the US. It was generally agreed that the model was probably over estimating the run. The sockeye salmon catch was well below the weekly allocation of ~6,800 fish; the Chinook salmon catch was also below weekly guideline harvests. The Chinook salmon run size based on averaging the m-r and model estimate remained at 38,000 large fish. (The Kakwan tagging projected concluded on 08 July). Sockeye salmon had not yet arrived at Tahltan Lake. On average the Tahltan sockeye salmon arrive at the lake around July 11. The First Nations catches were above seasonal averages, which may be due, in general, to improved gear efficiency as a result of the relatively low water conditions.

In week 29 (July 13-19) the fishery was opened for an initial two day period. The run size estimate based on the harvest rate approach and a new regression model that generated the run size of Tahltan Lake sockeye salmon based on the cum weekly CPUE (1998-07;  $r^2$  from 0.65 in week 28 to 0.91 in week 33) indicated a run size of ~158,700 fish. The expected run of mainstem sockeye salmon was estimated at 40,000 fish, which was below the preseason expectation of 55,700 sockeye salmon. The CPUE of Tahltan sockeye salmon was less than half of average. The new regression model predicted a total inriver run of ~33,000 Tahltan sockeye salmon and a weir escapement of 15,000 fish. The fishery was thus held at two days. The total catch taken over the two day fishery was ~3000 sockeye salmon. The catch was composed of ~1,500 Tahltan Lake, ~1,000 Tuya Lake and ~500 mainstem fish. It appeared that the run size was well below the SMM estimates use by US manager. The US manager was apprised of this. The articulated that they extended their fishery two days based on the low effort, relatively good catch rates this week. The inriver CPUE of mainstem fish remained below average. The catch and CPUE of sockeye salmon in the First Nations fishery remained above seasonal averages. The Tahltan weir count remained at zero fish, while the average count for this date is 5,000 fish

In week 30 (July 20-26) the fishery was opened for an initial two day period. The run size was estimated at 150,000 fish. Fishing conditions were relatively good, but the fishery was held at two days to protect the weak run of mainstem fish. The total catch was 1,400 sockeye salmon, 200 of which were of Tahltan Lake origin and approximately 900 were mainstem origin. Tuya origin sockeye salmon constituted the balance of the catch. The CPUE of the mainstem component increased but remained below average. The cumulative catch of 3,900 sockeye salmon in the First Nations fishery remained above seasonal averages. The projected total escapement based on the new regression was 11,500 fish. The projected total weir count based on the current number of fish through the weir (6,700) and expanded to reflect run timing was 7,100 fish.

In week 31 (July 27-August 02) the fishery opened for an initial two day period. The run size estimate dropped to 134,300 fish and continued to indicate a weak run of mainstem fish. The quota of mainstem sockeye salmon was estimated at 900 fish (Tahltan and Tuya sockeye salmon had, in general, transited the fishery by this week.) The CPUE of mainstem fish remained below average. No extension was therefore given to the fleet. The total sockeye salmon catch this week was 1,500 fish, 200 of which were of Tahltan Lake origin and approximately 1,300 were mainstem fish. Tuya origin fish constituted the balance of the catch. Sockeye salmon counts at Tahltan Lake remained below average this week. The projected weir count, based on counts to date, was 14,000 fish. The projected weir counts based on the regression estimate was for an escapement of ~11,200 fish to Tahltan Lake. The First Nations catches dropped to about average. Most of the fishers concluded their fishing season this week. Five licences from the lower river commercial fishery also ceased fishing at the end of this week.

In week 32 (August 03-09) the fishery opened for an initial one day period. The total run size estimate dropped slightly to 134,700 sockeye salmon. The mainstem component increased slightly to 43,000 fish. The fishing effort was reported at the outset of day one fishing. In light of this observation the fishery was held at one day. The CPUE of the mainstem component was a seasonal high and slightly above average. The total catch was ~400 sockeye salmon, the majority of which were of mainstem origin. A total of 41 coho salmon was also harvested this week. The fleet showed no indications of targeting coho salmon this year. The cumulative sockeye salmon count at Tahltan Lake this week was ~9,900 fish, with a projected count of 11,500. The First Nations catches and CPUE were slightly below average.

In week 33 (August 10-16) the fishery opened for an initial one day period. The run size was estimated of 124,500 sockeye salmon. The mainstem sockeye salmon component remained at ~43,000 fish. There was relatively little commercial fishing activity expended. It was decided to hold the fishery at one day. The sockeye salmon test fishery continued from its start date of July 11 (fished 1-3 days per week) with the overall CPUE (sockeye salmon catch per drift) below average. The bulk of catch of 44 fish consisted of mainstem sockeye salmon. The cumulative sockeye salmon count at Tahltan Lake this week was 10,341 fish. The First Nations fishery concluded this week.

In week 34 (August 17-23) the fishery was again opened for an initial one day opening. No commercial fishing activity occurred this week; no extensions given. The sockeye salmon test fishery overall CPUE remained below average, with the bulk of catch consisting of mainstem sockeye salmon. The test fishery ended on September 05. The cumulative sockeye salmon count at Tahltan Lake this week was 10,427 fish. The projected escapement based on the regression model was ~10,400 sockeye salmon.

In week 35 (August 24-30) the fishery was opened through October 20. This action was taken in order to provide coho salmon fishing opportunities should any of the commercial fishers decided to fish. The six remaining licences on the river targeted coho salmon during weeks 36-37 (August 31-September 13) and yielded a catch of 2,337 coho salmon, well above the average catch of 240 fish. September 10 was the last day of commercial fishing activity on the Stikine River.

### **Upper Stikine River Commercial Fishery**

A small commercial fishery has existed near Telegraph Creek on the upper Stikine River since 1975. A total of 505 sockeye salmon was caught in 2008, which was above average (Appendix A. 14). Nine non large and 40 large Chinook salmon were harvested. The non large and large Chinook salmon harvest was above average. The fishing effort was slightly below average with 14 boat-days fished. Generally, fishery openings were based on the lower Stikine commercial fishery openings, lagged one week. The first opening, however, was concurrent with the lower fishery opening.

### **Aboriginal Fishery**

The Stikine River aboriginal fishery, which is located near Telegraph Creek, harvested 769 large Chinook, 150 non large Chinook, and 4,510 sockeye salmon (Appendix A. 15). The harvest of large Chinook salmon was average and the sockeye salmon harvest was below average. The harvest of non large Chinook salmon was below average. Run timing to the fishing grounds appeared to be normal, unlike 2007 and 2006 late returning runs. The fishing conditions were, in general, good.

### **Sport Fishery**

The Stikine River salmon sport fishery targets primarily Chinook salmon and its principal fishing location is located at the mouth of the Tahltan River. Minor sport fishing activities occur in upper reaches of the Tahltan River and in some tributaries of the Iskut River, including Verrett and Craig River. The 2008 the catch estimate was 46 large Chinook salmon, all of which were taken in the Telegraph Creek area.

## ***Escapement***

### **Sockeye Salmon**

A total of 10,516 sockeye salmon was counted through the Tahltan Lake weir in 2008; well below average (Appendix A.20). The 2008 count was approximately well below the

escapement goal of 24,000 and was well below the low end of the escapement goal range of 18,000 to 30,000 fish. An estimated 5,120 fish (49%) originated from the fry-planting program which is close to the 48% contribution of smolts observed in 2005, the principal cycle year contributing to the 2008 run. A total of 100 sockeye salmon was sacrificed at the weir for stock composition analysis. In addition, a total of 2,364 sockeye salmon was collected for broodstock, resulting in a spawning escapement of 8,052 sockeye salmon in Tahltan Lake. Based on the final inseason SMM estimate of 89,900 inriver Tahltan Lake sockeye salmon, minus the inriver catch of 16,975, the escapement to Tahltan Lake had been projected to be ~52,000 fish.

Based on a new regression model that generates inriver Tahltan Lake sockeye salmon run size and Tahltan escapement from historical Tahltan sockeye salmon CPUE in the lower river commercial fishery against the total run size and Tahltan Lake weir counts, the projected count based on the final running of the estimate in week 34 was 10,675 fish. Tahltan River was flown to assess for fish blockages in July. Tashoots Creek, draining Tahltan Lake, was also assessed for fish blockages. None was observed in either river; however, a chute type falls located ~6 km upstream from the mouth of the Tuya River may be a partial fish barrier at certain flow regimes. It is recommended that this site be investigated by restoration biologists to assess potential fish passage limitations. Note that DFO conducted fish passage work at this site in the mid 1960(s).

The spawning escapements for the non-Tahltan and the Tuya stock groups are calculated using stock ID, test fishery and inriver catch data. Because neither the test fishery nor the commercial fishery operated for the duration of the sockeye salmon run (test fishery operated weeks 30-34; the commercial fishery operated weeks 19-32), a decision was made to use the commercial fishery CPUE to assess inseason run size. Proxy commercial CPUE were used post week 33. The proxy figures were based on the linear relationship between the commercial CPUE and the test fishery CPUE in 1986-04. All of the weekly data sets were significantly correlated. Based on this run reconstruction approach, the escapement estimates are 16,381 non-Tahltan and 9,804 Tuya sockeye salmon (with 280 Tuya fish later removed for biological samples). The non-Tahltan spawning escapement estimate is well below the escapement goal range of 20,000 to 40,000 fish. Near record low aerial survey counts of non-Tahltan sockeye salmon followed suit. The index count of only 403 fish, observed on 12 Sept, was well below average.

The existence of planted Tuya escapement continues to be a concern because of straying of this stock to other Stikine River tributaries. Furthermore, the injury to Tuya River sockeye salmon attempting to ascend the lower reaches of the Tuya River is evident based on reports from First Nations fishers and stock assessment personnel. (A study on the behavior of Tuya river sockeye salmon strays was conducted in August and September, 2004 and April and May 2005 and concluded that in the short term the straying of Tuya River sockeye salmon does not pose a genetic risk to natural mainstem Stikine River sockeye salmon; however, over the long term, given enough straying, an interaction of Tuya strays with natural sockeye salmon may occur.) To address problems associated with fish capture in the lower Tuya River; fishway/trapping apparatus was constructed during the spring of 2006. Unfortunately the Tuya fishtrapping project was

not prosecuted because of a major rock slide at the Tuya River fishing site that occurred sometime in June 2006. The rockslide rendered the fishing site, for which the fish trap was groomed for, unusable due to changes and river hydrology as well as the unsafe working conditions at the site. More rockslide activity occurred in May and June 2007 and 2008.

A steering committee, consisting of Canadian and US engineers and others visited the site in August 2007 to assess the conditions and to consider and discuss other fish capture options. The steering committee decided to proceed with a blasting plan so designed to provide fish passage around the newly formed barrier. The project was first attempted in March 2008, but was aborted due dangerous working conditions and an abnormal amount of ice at the blasting site. In late October and early November 2008 the project proceeded and succeeded to remove approximately 120 m<sup>3</sup> of rock from the slide area. The efficacy of the project will be assessed in July 2009 upon the run of Tuya sockeye salmon.

A proposal, funded through the Northern Fund, requesting weir and trap design at a site located upstream from the blasting site will be tendered to engineering firms in the spring of 2009. The proposal will cover both design and cost of a trap as well as the routing and cost of a tote road to the fishing site.

A new, experimental test fishery designed to harvest exclusively Tuya River sockeye salmon at a site on the mainstem Stikine located between the mouths of the Tahltan and Tuya Rivers was conducted from 21 to 31 July. The test fishery harvested 1,955 sockeye and 14 Chinook salmon. The harvest rate on Tuya sockeye salmon was estimate at ~20% (1,921/9,804). The analysis from the otolith samples indicated that this fishery did not harvest exclusively Tuya bound sockeye salmon. Of the 87 samples analyzed, 30% were not thermally marked, 5% were thermal marked Tahltan fish, and the balance was thermal marked Tuya sockeye salmon. The analyses of samples collected in the Tuya River concurrent with the test fishery showed that 100% of the fish were thermal marked, n=140. These data indicate that this experimental fishery harvested both Tahltan (wild and thermally marked) and mainstem wild sockeye salmon in relatively high numbers. It should be noted that the fishing conditions are very challenging due to high river velocities. It is highly recommended that fishing at this test fish site be limited to persons with extensive experience in both net fishing and river navigation.

### **Chinook Salmon**

The 2008 Chinook salmon escapement enumerated at the Little Tahltan weir was 2,663 large fish and 139 non large Chinook salmon (Appendix A.22). The escapement of large Chinook salmon in the Little Tahltan River was 39% of average and 20% below the MSY escapement goal for this stock of 3,300 large Chinook salmon. The weir count was very close to meeting the low end of the escapement goal range of 2,700 to 5,300 large fish.

A mark-recapture study was conducted again in 2008 concurrent with the SCMM to assess the inriver Chinook salmon abundance. Inseason mark-capture estimates were calculated weekly post week 23 (week ending June 09). The final estimate of total system-wide spawning escapement, based on tag recoveries in the commercial fishery

was 18,352 large Chinook salmon, 52% of average and 5% above the escapement goal of 17,400 large Chinook salmon. The escapement to the Little Tahltan River represented approximately 14.5% of the total Stikine River escapement. The percentage is below the average Little Tahltan contribution of approximately 17%.

Stikine River Chinook salmon run timing to the Lower Stikine commercial fishing grounds was approximately one half to one week earlier than normal. Fish arriving at the Little Tahltan weir were two weeks late. The rationale for the early entry into the lower Stikine River and late entry into the Little Tahltan spawning grounds is unknown. Verrett Creek escapements counts were also weak as reported by the carcass pitch crew stationed at the creek from 04-13 August. A very weak run of Shakes Creek Chinook salmon was also reported by residents living at the creek mouth.

### **Coho Salmon**

Aerial surveys of four index sites were conducted on 15-16 November. The combined count of 1,147 coho salmon, under relatively good viewing conditions, was well below average. The remaining four index sites were not surveyed due to inclement weather and time constraints.

A coho salmon drift gillnet test fishery was conducted from 07 Sept to 14 October 2008. The total catch was 199 coho, and 2 chum salmon taken in 422 drift fishing events. Each event was approximately 10-15 minutes in length. Net dimension were constant at 33 metres , 5.5 “ (150 cm) mesh, by 30 meshes deep. The total cum weekly CPUE (catch per drift) was 5.7 fish; above average. This test fishery has been operated a various levels of vigour since 1986 through to 2006. Funding in 2007 was not granted.

### ***Sockeye Salmon Run Reconstruction***

The terminal Stikine River sockeye salmon run size is estimated to be approximately 119,360. Of this number, approximately 46,006 were of Tahltan Lake origin (wild & planted), 41,670 were of Tuya origin (fry from Tahltan broodstock planted into Tuya Lake), and 31,684 were mainstem stocks (Table 3). These estimates are based otolith recovery and analysis and scale pattern analysis in the U.S. Districts 106 and 108 catches; otolith analysis, egg-diameter stock-composition estimates for inriver catches from the Canadian commercial, aboriginal, ESSR, and test fishery catches; and escapement data. Analysis of the CPUE data from the commercial and test fisheries indicate a range in escapement estimates.

## TAKU RIVER

Taku River salmon are harvested in the U.S. gillnet fishery in the Alaskan District 111, in the northern Southeast Alaska seine and troll fisheries, in the Juneau area sport fishery, and in the inriver personal use fishery (Figure 2). Canadian fisheries for Taku River salmon include a commercial gillnet fishery located in the river near the Canada/U.S. border, an aboriginal fishery, and a sport fishery.

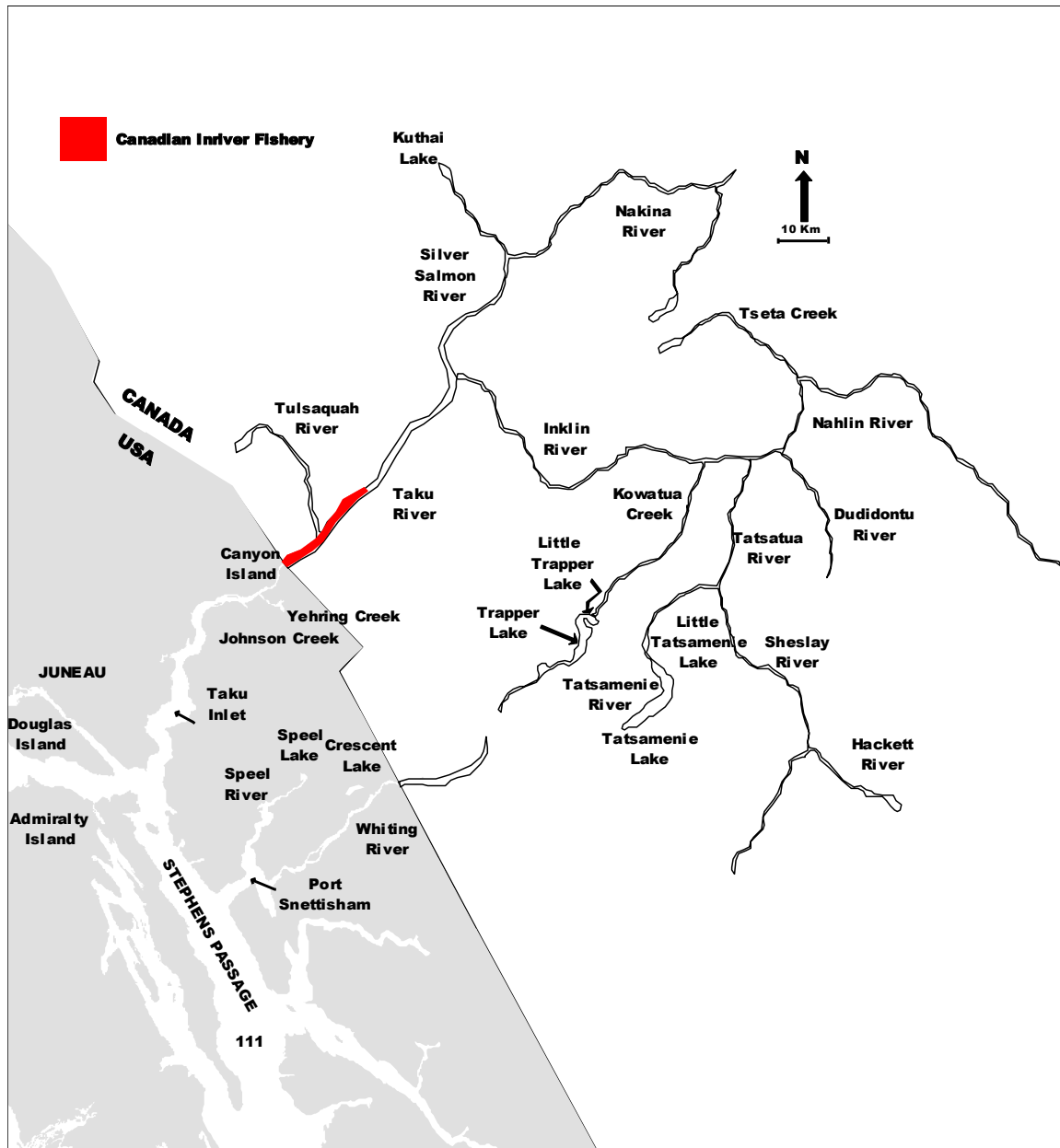


Figure 2. The Taku River and principal U.S. and Canadian fishing areas.



## ***Harvest Regulations***

New fishing arrangements were in place in 1999 as a result of negotiations between Canada and the United States of Annex IV, Chapter 1 of the Pacific Salmon Treaty. As with the fishery regimes for the Stikine River, details of the February 2005 agreement including harvest sharing provisions as well as the fishery regimes adopted in 1999 are included in the Transboundary Annex (Annex IV) of the Pacific Salmon Treaty and can be found at: <http://www.psc.org/pubs/treaty.pdf>.

## ***U.S. Fisheries***

The traditional District 111 commercial drift gillnet salmon fishery was open for a total of 49 days from June 15, through October 8, 2008 (Appendix C.1). The harvest totaled 1,721 large Chinook, 472 non large Chinook, 116,693 sockeye, 37,349 coho salmon, and 90,162 pink and 774,095 chum salmon. Harvests of coho and chum salmon were above average, while the harvest of Chinook, sockeye, and pink salmon were below average. The harvest of Chinook salmon was above average if the directed Chinook fishery weeks during 2005 and 2006 are not included in the data. Weekly commercial fishery harvests and stock composition estimates for these fisheries are provided in Appendices C.1-C.3.

Hatchery stocks contributed substantially to the numbers of both sockeye and chum salmon harvested and minor numbers to the harvest of other species. The 2008 season was the ninth year of substantial numbers of adult sockeye salmon returning to the Snettisham Hatchery inside Port Snettisham. These fish contributed substantially to the harvests primarily in Stephens Passage. The Speel Arm Special Harvest Area (SHA) inside Port Snettisham was not opened to common property fishing in 2008.

The total 2008 traditional drift gillnet Chinook salmon harvest in District 111 was 1,721 large fish and 472 non large. Due to low run size forecasts for preseason and inseason estimates, there was no directed Chinook salmon fishery in District 111 this season. CWT analysis indicates Alaskan hatchery Chinook salmon contributed 715 fish, or 42% of the total 2008 District 111 Chinook salmon harvest. The Taku River stock assessment program at Canyon Island provided data to estimate the above-border Chinook salmon run. This data with the spawning ground mark-recapture data was used to estimate the spawning escapement of 27,383 large Chinook salmon, near the current lower bound of the 30,000-55,000 fish range.

The traditional District 111 sockeye salmon harvest was 116,693 fish; below average (Appendix C.1). Weekly sockeye salmon harvests were below average during most weeks with the exception of weeks 29-31 and week 38. Weekly sockeye salmon CPUE was below average except in week 25, weeks 29-31, and week 38. Domestic hatchery sockeye salmon stocks began to contribute to the traditional fishery in week 27 and added substantial numbers to the harvests in weeks 29-32. Fishers targeting these runs of hatchery sockeye salmon and the Limestone Inlet hatchery chum salmon increased the amount and percentage of fishing effort that occurred in Stephens Passage. Of the total traditional District 111 sockeye salmon harvest, 30% occurred in Stephens Passage; average. The contributions of wild Taku River and Port Snettisham thermally marked

sockeye salmon from fry plants was estimated inseason from analysis of otoliths and postseason from scale pattern analysis. The estimated stock composition of the harvest of sockeye salmon in the traditional district was 63,022 (54%) wild Taku River, 11,680 (10%) planted Tatsamenie, 9,544 (8%) wild Port Snettisham, and 32,467 Snettisham hatchery fish (Appendices C.2 and C.3). Due to lower than anticipated runs of wild and hatchery Port Snettisham sockeye salmon, the Speel Arm SHA was not opened during the common property fishery in 2008.

Coho salmon stocks harvested in District 111 include runs to the Taku River, Port Snettisham, Stephens Passage, and local Juneau area streams as well as Alaskan hatcheries. The traditional District 111 coho salmon harvest of 37,349 fish was above average (Appendix C.1). Weekly coho salmon harvests were generally above average, the weeks with below average harvests were 26, 29, 38, 40 and 41. Coho salmon CPUE was also generally above average falling below average during weeks 26, 37, 38, 40, and 41. CWT analyses indicate Alaskan hatchery coho salmon contributed 2,443 fish or 7% of the traditional District 111 harvest. Early season estimates of Taku River coho salmon abundance indicated an above average run size, but the final estimates indicated a below average run size.

The traditional District 111 chum salmon harvest of 774,095 fish was above average (Appendix C.1). The summer chum salmon harvest of 768,712 fish comprised 99% of the season's chum salmon harvest and was a record high and twice the average. The summer chum salmon run is considered to last through mid-August (week 33) and was comprised mostly of domestic hatchery fish, with small numbers of wild fish contributing to the harvest. Chum salmon runs to DIPAC hatcheries in Gastineau Channel and to the DIPAC remote release site at Limestone Inlet contributed a major portion of the harvest but quantitative contribution estimates were not available. Approximately 65% of the total traditional District 111 chum salmon harvest was made in Taku Inlet, 35% in Stephens Passage. The harvest of 5,383 fall chum salmon, week 34 and later, was above average. Most of these chum salmon are assumed to be wild fish of Taku and Whiting Rivers origin.

The District 111 pink salmon harvest of 90,162 fish was above average. (Appendix C.1).

Table 4. Taku sockeye salmon run reconstruction, 2008. Estimates do not include spawning escapements below the U.S./Canada border.

	Taku			Snettisham Stocks		
	Total	Wild	Planted	Total	Wild	Hatchery
Escapement	68,059	63,892	4,167			
Canadian Harvest						
Commercial	19,284	17,242	2,042 <sup>a</sup>			
Food Fishery	215	192	23			
Total	19,499	17,434	2,065			
Test Fishery Catch	10	10	0			
Above Border Run	87,568	81,336	6,232			
U.S. Harvest <sup>a</sup>						
District 111	74,682	63,002	11,680 <sup>b</sup>	42,011	9,544	32,467
Personal Use	1,010	921	89			
Total	75,692	63,923	11,769			
Test Fishery Catch	0					
<b>Total Run</b>	<b>163,260</b>	<b>145,259</b>	<b>18,001</b>			
Taku Harvest Plan	Total	Wild	Planted			
Escapement Goal	75,000	75,000	0			
TAC	88,260	70,259	18,001			
<u>Canada</u>						
Base Allowable	21,647	12,647	9,001			
Surplus Allowable	0	0				
Total	21,647	12,647	9,001			
Total %	24.5%	18.0%	50.0%			
Actual	19,499	17,434	2,065			
Actual %	22.1%	24.8%	11.5%			
<u>U.S.</u>						
Total	66,613	57,613	9,001			
Total %	75.5%	82.0%	50.0%			
Actual	75,692	63,923	11,769			
Actual %	85.8%	91.0%	65.4%			

<sup>a</sup> Harvest of planted fish includes 137 marked Stikine sockeye salmon.

<sup>b</sup> U.S. harvest estimate differs from Joint Interception Committee estimate because no estimates are made for catches other than the listed fisheries.

The 2008 pre-season forecast of 39,500 large Taku Chinook salmon did not allow for a directed Chinook salmon fishery beginning May 5 in District 111. Subsequent inseason

estimates did not support a directed Chinook salmon fishery. The 2008 District 111 drift gillnet fishery opened in June 15 in week 25.

Management actions to conduct the Taku River directed sockeye salmon drift gillnet fishery were limited to imposing restrictions in time, area, and gear. Because there is no bi-laterally agreed forecast for Taku River sockeye salmon, early season management of the District 111 fishery is based on fishery CPUE and Canyon Island fish wheel catches. As the fishing season progresses sufficient data is acquired to estimate the inriver run size from the mark-recapture program at Canyon Island and to use that estimate in conjunction with migratory timing and historical fishery harvest data to forecast the entire Taku sockeye salmon run. In the first week of the season (week 25), which began June 15, two days of fishing time were allowed in Taku Inlet, which was closed north of Jaw Point (Subdistrict 111-32), and Stephens Passage (Subdistrict 111-31) to conserve the weaker than expected Chinook salmon run. Additionally, by regulation, gillnets fished in District 111 through the fourth Saturday in June are restricted to a maximum 6 inch mesh. The traditional District 111 sockeye salmon harvest in the first week was 78% of average.

In week 26 (June 22-28), District 111 was open for three days, with Taku Inlet again closed north of Jaw Point and the 6 inch mesh maximum requirement. The sockeye salmon harvest in week 26 was 68% of average. The first weekly sockeye salmon inriver run projection estimate of 148,000 fish was announced in week 26 (Table 5).

With below average observed effort, cumulative catch of sockeye salmon in the Canyon Island fish wheels above average, and inriver estimate and projection indicating adequate passage of Taku sockeye salmon, fishing time in District 111 for week 27 (June 29-July 5) was set for an average of four days. The traditional District 111 sockeye salmon harvest in week 27 was 53% of average.

Table 5. U.S. inseason forecasts of terminal run size, TAC, inriver run size, and the U.S. harvest of Taku River sockeye salmon for 2008.

Stat Week	Inriver Run	Terminal Run <sup>a</sup>	Total TAC	U.S. TAC	Projected U.S. Catch
26	148,247	236,663	160,663	131,744	87,389
27	127,090	200,421	125,421	96,467	73,331
28	111,807	144,808	69,808	52,972	33,001
29	77,611	129,053	54,053	37,549	51,441
30	73,234	136,524	61,524	45,522	63,290
31	80,782	154,161	79,161	59,043	73,379
32	74,714	143,209	68,209	51,074	68,495
33	96,045	168,678	93,678	70,390	72,633
Final	89,894	169,771	94,726	72,432	79,832

<sup>a</sup>Terminal run does not include any marine harvest of Taku River salmon that might occur outside of District 111.

In week 28 (July 6-12) District 111 was open three days with weaker inriver indicators and increased effort. The traditional District 111 sockeye salmon harvest for the week was 31% of average.

With increased effort, poor inriver indicators and poor sockeye salmon CPUE, District 111 was open for two days during week 29 (July 13-19), and the traditional District 111 harvest was 103% average for the week. Otolith analysis indicates 15% of the harvest in Taku Inlet and 9% of the harvest in Stephens Passage were of planted Tatsamenie origin.

During week 30 (July 20-26), Section 11-B north of Circle Point was again open two days based on average effort, strong fishery CPUE, but poor inriver indicators. Section 11-B south of Circle Point was open for three days with a six inch minimum mesh restriction to protect returning Port Snettisham bound wild sockeye salmon. The projected inriver estimate in week 30 was for 71,000 sockeye salmon. The week 30, the sockeye salmon CPUE was 140% of average, and effort levels were 130% of average. Fish wheel catches improved although still below average for the time. The traditional District 111 sockeye salmon harvest of 30,150 fish was the peak of the season and was 152% of average. Otolith analysis indicates 16% of the harvest in Taku Inlet and 2% of the harvest in Stephens Passage were of planted Tatsamenie origin.

During week 31 (July 27-august 02), Section 11-B was again open for two days north of Circle Point, and for 3 days south of Circle Point with the six inch minimum mesh restriction. Fish wheel catches continued to improve with the daily catch equaling the average for the first time in a month. The inriver sockeye salmon projection was 82,400 fish. The sockeye salmon CPUE in week 31 was 106% of average, and the harvest was 108% of average. Otolith analysis indicated 11% of the harvest in Taku Inlet was of planted Tatsamenie origin, and 25% of the sockeye salmon harvest in Taku Inlet and 71% in Stephens Passage were Snettisham origin fish.

During week 32 (August 3-9), Taku Inlet was open for two days due to improving inriver indicators, but poor model projections. Stephens Passage was open for an average three days without the six inch minimum mesh restriction being past the peak presence of these fish in the fishery. The traditional District 111 drift gillnet sockeye salmon harvest of 12,200 fish was 50% of average.

The week 33 (August 10-16) opening was delayed until Monday to avoid conflict with the Golden North Salmon Derby taking place in Juneau area waters; Section 11B was open for two days due to poor model projections and weak escapements to Port Snettisham systems. The sockeye salmon harvest in District 111 was 18% of average. DIPAC Snettisham origin fish made up 27% of the harvest in Taku Inlet. The District 111 coho salmon harvest was 179% of average.

The fall drift gillnet season in District 111, when management focus switches from sockeye salmon to coho salmon abundance lasted eight weeks, beginning on August 17 in week 34, and lasting until October 8 in week 41. The first ADFG inriver coho salmon estimate generated in week 33 suggested a stronger run than forecast. Unfortunately, the above border test fishery that was to provide the second event for the inseason mark-recapture inriver estimates from both coho and sockeye salmon tagged at the Canyon Island fish wheels did not take place in 2008. Based on good coho catches in the District

111 fishery and average numbers of fish caught in the Canyon Island fish wheels, openings of three days per week were held for the remainder of the season. Based on the solid coho salmon inriver estimate generated in week 33 and the observed catches in the Canyon Island fish wheels, it was estimated that the 38,000 fish PST minimum above border goal was achieved by the end of week 36. The traditional District 111 sockeye salmon harvest for week 34 (August 17-24) was 23% of average (Appendix C.1). The week 34 traditional District 111 coho salmon harvest was 213% of average. The traditional District 111 chum salmon harvest of 2,150 fish was 131% of average.

The coho salmon harvest in week 35 (August 24-30) was 159% of average with coho salmon CPUE 190% of average. 1,100 chum salmon were harvested in week 35, 167% of average.

The season high harvest of 6,950 coho salmon by 32 boats in week 36 (August 31-September 6) was 159% of average and the 990 chum salmon harvested was 125% of average harvest for the week. In week 37 (September 7-13) 6,500 coho salmon were harvested, 127% of average. The week 37 chum salmon harvest of 990 fish was 158% of average. After averaging 42 boats per week between week 34 and 37, effort dropped to 24 boats in week 38 (September 14-20) and 12 boats in week 39 (September 21-27), with coho salmon harvests 45% and 129% respectively of average for these weeks. Chum salmon harvests showed a similar pattern with 32% and then 63% of average for these weeks. Four boats reported landing 150 coho salmon in week 40 (September 28-October 4), and the remaining week of the fishery, harvest information is confidential with less than three boats fishing. The season was closed to further fishing on October 8 in week 41

Several other fisheries in the Juneau area harvested transboundary Taku River salmon stocks in 2008. Personal use permits were used to harvest an estimated 1,010 Taku River sockeye salmon. A number of stocks are known to contribute to the Juneau area sport fishery, including those from the Taku, Chilkat, and King Salmon rivers, and local hatchery stocks, but the major contributor of large, wild mature fish was believed to be the Taku River. An estimated 1,255 of the Chinook salmon harvested in 2008 sport fishery were estimated to be of Taku River origin based on coded wire tag analysis and maturity data. The July Hawk Inlet shoreline commercial purse seine pink salmon fishery in Chatham Strait was not opened in 2008. A large number of stocks, including the Taku River, contribute to this pink salmon directed fishery. A purse seine test fishery was conducted each week in week 25 through week 29 between Hawk Inlet and Point Retreat, the results indicated below average abundance of pink salmon so no fishery was prosecuted.

### *Canadian Fisheries*

The Taku River commercial fishery harvest was 913 large Chinook, 330 non large Chinook, 19,284 sockeye, and 3,772 coho salmon (Appendix C.4). An additional 1,399 large Chinook, 139 small Chinook, and 10 sockeye salmon, were harvested in a commercial assessment fishery which was prosecuted in place of a test fishery prior to June 15. The commercial sockeye salmon catch was below average (Appendix D.5). Fish

originating from Taku fry plants contributed an estimated 2,042 fish to the catch, comprising 10% of the sockeye salmon harvest. The catch of adult Chinook salmon in the directed sockeye and coho salmon fisheries was below average. In 2005, as a result of the new Chinook salmon agreement which allows directed Chinook salmon fishing if abundance warrants, catch accounting for small salmon was revised from a commercial weight-based designation (previously referred to “non large” which were typically fish under 2.5 kg or 5 kg, depending on where they were being marketed), to a length-based designation (small Chinook salmon i.e. less than 660 mm in length from the middle of the eye to fork of tail (MEF)). Hence, comparisons with catches from previous years should be noted accordingly. The catch of coho salmon was below average. There were 33 days of fishing, below average; this is due, in part, to greater efficiency associated with a 20% increase in the permissible length of drift gillnets, relatively low river levels, and an early end to the fishing season. The seasonal fishing effort of 245 boat-days was below average. These figures do not include the Chinook salmon assessment (test) fishery in 2007 and 2008 or the directed Chinook salmon fishing which took place in 2005 and 2006. As in recent years, both set and drift gill netting techniques were used with the majority of the catch taken in drift gillnets. The maximum allowable mesh size was 20.4 cm (8.0 inches) until June 17 at which point it was reduced to 15.0 cm (5.9 inches) in order to minimize incidental catch of Chinook salmon.

In addition to the commercial catches, one large Chinook, 215 sockeye, and 67 coho salmon were harvested in the aboriginal fishery in 2008. It is estimated that 23 of the sockeye salmon were thermally marked Tatsamenie stock.

Recreational harvest figures are not available, but are believed to be negligible for all species except Chinook salmon. For this species, an assumption has been made that on average approximately 300 large fish are harvested annually. In 2008 Chinook salmon aerial survey results were below average.

As noted, a commercial assessment (test) fishery to capture Chinook salmon for stock assessment purposes took place from April 28 through June 11 (weeks 18-24) and landed 1,399 large Chinook, 139 small Chinook, and ten sockeye salmon. A catch-and-release coho salmon test fishery took place from September 2 through October 8 (weeks 36-41) and landed 1,012 coho, 32 sockeye, and 26 chum salmon; all fish were released.

The bilateral preseason Chinook salmon outlook was based on sibling relationships and forecast a terminal run of 39,406 fish, 33% below the average run of approximately 47,284 fish (Canadian estimate). This fell short of the number required for directed fishing, specifically 42,400 fish (the escapement goal point estimate, plus test fishery allocation as well as Canadian and U.S. base level catches). Normally, a test fishery would be prosecuted to provide the data for inseason estimates of abundance. However, as in 2007, Canada was unable to issue a licence for test fishing due to the recent Canadian court case *Larocque v. Canada*). Consequently, the commercial fishery was opened at an assessment level and managed to the weekly guidelines developed for the test fishery (Table 6).

Management of the commercial assessment fishery differed from that of 2007 by the following. The catch schedule was adjusted slightly to provide greater emphasis on weeks two through four, in order to increase the potential for reliable run assessments early in the season. The maximum length of drift-net was increased from 30.5 metres (100 feet) to 36.6 metres (120 feet) in order to increase efficiency, which was very low in 2007. Weekly fishing periods commenced at a consistent time, specifically noon on Monday. Setnets were not permitted for the duration of the fishery.

As in 2007, the commercial assessment fishery was monitored intensively. Catches were spread out over at least two days. Weekly fishing periods varied greatly in length, ranging from six days in the first week to six hours in the last week. However, all weekly periods commenced with a 48-hour opening except in weeks six and seven (which opened on three days and three hours respectively). Extensions were made as needed. Once the target for any given day or week was achieved, fishing ceased on a voluntary basis – it was not necessary to revoke any variation order (i.e. formally close the fishery). A Canada/U.S. joint inseason run size projection was made after the third opening and every week thereafter. Run strength was insufficient to permit normal commercial fishing until the start of sockeye salmon season in week 25.

The first opening of the commercial assessment fishery commenced at noon Monday, April 28 (week 18). Fishers had just arrived on site and the river level was very low so there was a high risk of catching nets on snags. Consequently no fishing took place during this period. The fishery was extended beyond Tuesday noon in two two-day increments. Fishing started on Wednesday afternoon (day four) and the target of 100 fish was achieved by the close of day five, with three licences. The weekly catch was 105 fish.

Table 6. Canadian inseason forecasts of terminal run size, catches in stock assessment fishery, and Canadian commercial fishery catches of Taku Chinook salmon, 2008.

Stat Week	Terminal Run	Canada BLC <sup>a</sup>	Weekly Guideline	Weekly Catch	Cum. Catch
18			100	105	105
19			200	195	300
20	22,613		300	293	593
21	23,943		275	282	875
22	23,415		225	224	1,099
23	23,760		200	211	1,310
24	21,990		100	89	1,399
25	26,585	1,500		319	319
26	27,870	1,500		321	640
27	26,851	1,500		134	774
28-29		1,500		139	913
Postseason Final	32,303				1,399/913

In week 19 (May 04-10), the initial 48-hour period was followed by a one day extension; however, this extension was unnecessary as the target was again achieved in two days. The weekly catch was 195 fish, five fish below the weekly target, bringing the season balance to 0. The number of licences fishing was four on day two and three on day three.



Week 20 (May 11-17) opened at noon on Monday. Day two saw a catch of 144 fish; the balance of the weekly total of 293 fish (seven fish short of target) was obtained by 11 p.m. the following day. There were four licences fishing in week three.

Week 21 (May 18-24), starting Monday, was again 48 hours. By 8 p.m. on Monday, 142 fish had been caught; fishing ceased until noon the following day. The cumulative catch at the close of the second day of fishing was about 25 short of the weekly target, so a four-hour extension was posted starting noon Wednesday. A total of 282 fish were landed - the weekly target of 275 fish was achieved and the shortfall from the previous week eliminated. There were five licences fishing this week.

Week 22 (May 25-31), starting Monday, was extended beyond 48 hours in two 12-hour increments and landed at total of 224 fish, within one fish of the weekly target of 225 fish. The number of licences fishing this week was six.

Week 23 (June 01-07) opened at noon on Monday for three days. The first 4.5 hours of fishing saw a catch of 142 fish, and fishing ceased until noon the following day; 69 fish were caught between noon and 2 p.m. giving a weekly total of 211 fish, eleven fish greater than the weekly target, bringing the season balance to 10 fish. There were six licences fishing again this week.

It was anticipated that the favourable fishing conditions would continue into week 24 (June 08-14), the final week of the assessment fishery, and there were three more licences on the river preparing for the sockeye salmon fishery. Due to these factors, as well as a weekly target of only 100 fish (effectively only 90 fish due to overage in the previous week), the initial opening was posted for only three hours starting at noon on Monday. A total of 41 fish were caught and the fishery was opened for another three hours starting at noon on the following day. This second period of fishing landed 48 fish, for a weekly total of 89 fish. This brought the assessment fishery total to 1,399 fish, within one fish of the target of 1,400 fish.

A total of eight inseason run size projections were made during the Chinook and sockeye salmon fishing seasons (Table 8). The first projection was made on Thursday May 15, after the week 20 opening. Based on a total of 185 tags applied, 593 fish inspected for tags and 26 tags recovered, it was estimated that 4,047 fish had passed the international border. Adding the estimated 155 fish which had been harvested in the U.S sport fishery through week 19, this was expanded using historical run timing at Canyon Island to give a terminal run size projection of 22,613 fish. This, along with all subsequent run projections, was well below both the preseason forecast of 39,406 fish, and the trigger for directed commercial fishing in Canada, 42,400 fish. Projections were quite consistent for the duration of the assessment fishery, and increased only slightly during the directed sockeye salmon fishery. The final joint inseason estimate of terminal run size in week 27 was 26,851 fish. This was based on an inriver run estimate of 23,623 fish coupled with U.S. harvest of 1,930 fish (1,180 sport and 750 gillnet) and expanded using an average timing of fish passing Canyon Island through July 1 (95%). The projected spawning

escapement estimate as of week 27 was approximately 24,000 fish, which is below the target of 36,000 spawners.

The harvest totals in the commercial assessment, directed sockeye salmon and aboriginal fisheries are 1,399, 913, and one, respectively. Assuming that 270 large fish were retained in the recreational fishery, the harvest excluding the assessment fishery totaled 1,184, well within the base level catch allocation of 1,500 fish.

Week 25 (June 15-21) was the start of the sockeye salmon season. As in past years, for the sockeye and coho salmon fisheries, guideline harvests were developed each week to guide management decisions so that: a) the catch was consistent with conservation and Treaty goals; and b) management was responsive to changes in projections of abundance, i.e. abundance-based. The guidelines were based on current inseason forecasts of the Canadian TAC (based on mark-recapture estimates) apportioned by historical run timing.

The Canadian preseason forecast for the total run of wild sockeye salmon was 181,038 fish. This was a drainage-wide stock recruitment-based forecast; as in 2007, a sibling-based forecast was not produced as scale pattern analysis to determine the contribution of Taku fish to U.S. harvests the previous year was still in progress. The stock-recruitment-based forecast was 26% below the average run size of 245,000 sockeye salmon (Canadian estimate). These figures assume a U.S. harvest of 5% of the total run in marine approach waters (i.e. outside District 111); the terminal run forecast was therefore approximately 172,000 fish.

As noted, the directed sockeye salmon commercial fishery commenced in week 25, for a scheduled opening of two days. The increase in maximum length of drift-net noted above for the assessment fishery i.e. from 30.5 metres (100 feet) to 36.6 metres (120 feet) was also in effect for this fishery and the coho salmon fishery which followed. This increase in net length did not apply to set nets. In order to limit incidental harvest of Chinook salmon, mesh size was restricted to sockeye salmon gear only, i.e. it was reduced from 20.4 cm (8.0 inches) to 15 cm (5.9 inches). This restriction was in place for the remainder of the season.

Based on the preseason forecast, the weekly guideline for week was 1,458 sockeye salmon. At the time of posting, Canyon Island fish wheel counts were roughly twice the average, despite water levels that were only about one half of average. A total of 1,443 sockeye salmon were caught this week – the CPUE of 85 fish per boat day (fbd) was the highest on record for this week. The fact that river levels were well below average throughout the two-day opening and the increased maximum allowable net length likely contributed to this. A total of 319 Chinook salmon were caught this week.

Week 26 (June 22-28) was opened on two days. The cumulative guideline harvest through this week based on the preseason forecast was 2,981 pieces, with a balance of 1,528 fish. The CPUE was 90 fbd on day 1, above the weekly average of 69 fbd. Canyon Island fish wheel counts were well above average. The first inseason run projection of the season indicated a run of approximately 450,000, over twice the preseason forecast.

Given the potential for an inaccurate projection this early in the season, it was assumed that run strength was average and the fishery was extended by one day. The catch of sockeye salmon for the week was 3,165, for a cumulative of, 4,618; this was 1,637 in the red relative to the guideline based on the preseason forecast, but on target assuming an average run. The weekly catch of Chinook salmon was 321 fish.

The week 27 (June 29-July 05) fishery opened for three days. Fishwheel catches were about average, as were catches for the previous week in Taku Inlet. However, inriver the high catch rates experienced to date were short-lived; CPUE for both days one and two were only about 50 fbd, compared to a weekly average of 89. This was despite river levels that were well below average and dropping. An inseason estimate made after day two projected a run of only 112,000 fish, with a guideline harvest of 3,041 fish. Applying a one-week late timing increased the projection to only 152,000 fish, with a cumulative guideline harvest of 4,653 fish. The weekly catch of sockeye salmon was only 1,036 fish, bringing the cumulative to 5,654. The weekly Chinook salmon catch was 134 fish.

Week 28 (July 06-12) was opened on two days, and extended one day, factoring in the observation that river levels had increased substantially during the later part of week 27 and continued to increase early this week, to about 9 feet on the gauge in the Canyon; this was about two feet above average. Again CPUE was well below average, specifically 28 fbd compared to a weekly average of 76. Weekly catches were 426 sockeye and 65 Chinook salmon.

Week 29 (July 13-19) opened on two days. Due in part to the poor fishing during the previous week, some of the more productive fishermen were not on site, and, for economy, set netting was favoured over drift-netting. As a result of the low effort, the fishery was extended by two days, catching an additional 418 sockeye salmon. CPUE was again limited but increased somewhat on day four, potentially heralding the beginning of the Tatsamenie run. Fish wheel catches were below average for the period. The total sockeye salmon catch for the week was 788 fish, for a cumulative of 6,868 fish. An assessment made after day four projected a run of 140,000 based on average timing, again below the preseason forecast. The cumulative guideline harvest based on this projection was 5,845 fish.

Week 30 (July 20-26) opened on three days. Although indications were that the catch to date was about 1,000 fish in excess of the guideline, CPUE in Taku Inlet had improved from about 25% of average to twice average. Inriver CPUE was up considerably from week 29, although still slightly below average (90 versus 97 fbd). It remained consistent over the three days, despite rapidly falling river levels. A projection made after day three suggested a run of approximately 149,000 fish, with a cumulative guideline harvest of 8,182 fish, leaving a balance of 1,164 for the remainder of the week. The fishery was not extended and the catch for the week was 2,418 sockeye salmon.

Table 7. Canadian inseason forecasts of total run size, total allowable catch (TAC), and spawning escapement of Taku sockeye salmon, 2008.

Stat.			Projected	Canadian	Inseason	Actual
Week	Total Run	TAC	Escapement	TAC	guideline	Catch
25	181,038	106,038	75,000	19,087	1,458	1,453
26	245,000	170,000	75,000	30,600	4,779	4,618
27	236,000	161,000		28,980	7,611	5,654
28	132,962	57,462		10,343	3,802	5,658
29	157,020	81,520		14,674	7,357	5,580
30	148,803	73,803	71,526	13,284	8,182	6,210
31	139,746	64,746		11,654	8,647	8,628
32	172,679	97,679	70,026	17,582	14,978	13,322
33	163,958	88,958	59,090	16,012	14,670	16,151
34	185,496	110,496	80,997	19,889	19,028	17,796

Week 31 (July 27-August 02) was opened on three days. The cumulative guideline harvest based on a run projection of 140,000 made at the close of the week 30 was only 19 fish; however there were indications of good run strength from Canyon Island and Taku Inlet. CPUE was 102 fbd on day one and 121 on day two, compared to a weekly average of 98 fbd. An assessment made after day two projected a run of 162,000 and a guideline balance of 768 fish; the fishery was not extended; day 3 saw a dramatic increase in CPUE, specifically 246 fbd, with a catch of 2,463. The final catch for the week was 4,694 fish.

The run projection made after day three of the week 31 fishery was up about 10,000 fish from the estimate made on day two, and identified a guideline harvest of 1,656 fish for the opening. In addition, there were indications that there were substantial numbers of thermally marked fish present. Consequently, week 32 (August 03-09) was posted for three days. Despite similar fishing conditions, CPUE was down to 79 fbd, increasing to 130 by the end of the opening; average CPUE for the week is 105 fbd. An assessment made after day one projected a run of 162,000 and a spawning escapement of only 61,000, below the lower end of the guideline harvest range of 71,000 to 80,000 fish. The fishery was again held to its initial posting, and the catch of sockeye salmon was 2,829 fish. Water levels rose substantially over the latter part of the week.

Week 33 (August 10-16) was posted for two days. With strong fish wheel counts on day one, the fishery was extended by one day. CPUE for the week was 61 fbd, compared to an average of 73 fbd, and yielded a catch of 1,645 fish. Fortunately, the run projection had increased to 185,000 fish by closing; this translated to a spawning escapement projection of 81,000.

This run assessment indicated a guideline harvest of 1,232 sockeye salmon for week 34 (August 17-23), which marked the beginning of coho salmon season. Based on this guideline and favourable coho salmon indicators, an opening was posted for three days. However, a Tulsequah jokulhaup started just after opening. Tenuous fishing conditions ensued and to compensate the fishery was extended by two days and then one additional day. The catch for week 34 totaled 800 sockeye and 1,117 coho salmon.

Week 34 marked the end of commercial fishing for the season as coho salmon prices were insufficient to sustain interest. The landing stations closed and licence holders vacated the fishery.

The final in season mark-recapture estimate for sockeye salmon was produced after day 2 in week 34, and indicated that 94,906 fish had crossed the international border to date. Based on average run timing (93% past the border) and factoring in U.S harvests this projected to a terminal run of 183,400 fish; this was close to the preseason forecast of 172,000 fish. The guideline harvest based on the projected run was 18,664; actual harvest to date (19,254 plus 201 in the aboriginal fishery) was within 4% of this. Note that this guideline assumed that the entire run was comprised of wild fish. Details on the contribution of thermally marked hatchery fish to the run are presented in the run reconstruction section. The projected spawning escapement at this time was approximately 81,000 sockeye salmon, just above the escapement goal range of 71,000 to 80,000 fish. The commercial fishery was then opened from week 36 (August 31-September 06) to late in week 40 (September 28-October 04). However, week 36 proved to be the last week of substantial commercial activity, with 1,062 coho and 578 sockeye salmon landed; landings after this totaled six fish.

The cumulative commercial fishery sockeye salmon CPUE for the season was 750 fbd; average. The increase in maximum drift-net length from 30.5 metres (100 feet) to 36.6 metres (120 feet), coupled with below average river level, likely had a substantial influence on catch rates. CPUE was well above average for weeks 25, 26 and 31; well below average for weeks 27, 28, 29, and 34 (during which the Tulsequah jokulhaup occurred); and, it was close to average for weeks 30, 32 and 33. As is typical, peak CPUE was observed in week 31.

The preseason outlook for Taku River coho salmon in 2008 was for a below average run. Based on catch rates in the Taku River CWT program, an estimated 1.3 million coho salmon smolt emigrated during the spring of 2007, with survivals to return as adults in 2008. Using a marine survival rate similar to the 97-07 average (8.7%), a total run of 111,500 was expected in 2008, well below the average run size of 184,400 fish. Using average U.S. exploitation rates (39%), this translated to a border escapement of approximately 68,400 fish. However, the 2007 outmigration experienced 3.7% survival, the lowest on record with 59% exploitation, one of the highest on record.

It had been anticipated that a test fishery would be implemented in order to provide coho salmon run assessment in the absence of a commercial fishery. However, due to unforeseen circumstances it was not possible to conclude the arrangements and attempts to make alternate arrangements were not successful. Consequently, a catch and release fishery was initiated by DFO staff on September 02). This continued through October 08, catching 1,012 coho, and 26 sockeye salmon; all fish were released.

Accordingly, as per PST provisions, the Canadian allowable catch after week 33 was 10,000 salmon. Based on inseason data, the actual treaty catch of coho salmon was 1,184 fish. This includes the commercial harvest taken after week 33 (1,117 fish) plus the

aboriginal harvest (67 fish); it is assumed that the recreational harvest of coho salmon was zero. The cumulative commercial coho salmon CPUE through week 34 was 136 fbd, 13% above the average of 120 fbd.

### *Escapement*

#### **Sockeye Salmon**

Spawning escapement of sockeye salmon into the Canadian portion of the Taku River drainage is estimated from the joint Canada/U.S. mark-recapture program. Counting weirs operated by DFO at Little Trapper and Tatsamenie lakes and by the TRTFN at Kuthai and King Salmon lakes provide information on the distribution and abundance of discrete spawning stocks within the watershed.

The sockeye salmon mark-recapture program has been operated annually since 1984 to estimate the above-border run size (i.e., border escapement); spawning escapement is then estimated by subtracting the inriver catch. The estimates of above border run and spawning escapement in 2008 are 87,568 and 68,059 sockeye salmon, respectively. The spawning escapement was below average (Appendix D.9), and was below the lower end of the interim escapement goal range of 71,000 to 80,000 sockeye salmon. The Canyon Island fish wheel catch of 3,736 sockeye salmon was below average.

The sockeye salmon count through the Kuthai Lake weir was 1,547 fish; below average and 20% of the primary brood year escapement of 7,769 fish (Appendix D.10). It does not appear that water levels in the Silver Salmon River prevented fish from reaching the lake, as was apparently the case in 2007. The fish were about nine days late arriving at the weir and the run mid-point (July 31) was about four days later than average.

A weir was operated at King Salmon Lake for the sixth consecutive season. As in 2007, difficulties were encountered in passing fish, in part due to low flows and the weir configuration. A total of 888 fish were enumerated. Only five fish passed through the weir in 2007, although several hundred fish were observed in the lake after it had been dismantled. Run timing has been variable to date; in 2008, the first sockeye salmon passed through the weir on July 18, and the mid-point was July 30.

The Little Trapper Lake weir count of 3,831 was well below average and well below the primary brood year escapement of 31,227 fish (Appendix D.10). These escapements were lowest, since the weir program began in 1983. The run was about 11 days late arriving, however, the mid-point was only two days later than average (August 10 versus August 8). Approximately 1,040 fish were held for broodstock.

The Tatsamenie Lake weir count of 8,976 fish was and was well above the primary brood year count of 4,515 fish. This met the management target of at least 8,000 sockeye salmon into Tatsamenie Lake, which was established in order to meet the broodstock collection target of 5 million eggs, and to increase escapement in general. In contrast to Kuthai and Little Trapper runs, key points of the migration were a few days early in 2008, with the fish arriving on August 8 and the mid-point on August 30. On average,

these dates are August 10 and September 2, respectively. Approximately 2,800 fish were held for broodstock.

### **Chinook Salmon**

Spawning escapement of Chinook salmon in the Canadian portion of the Taku drainage was estimated from the joint Canada/U.S. mark-recapture program. Tag application effort took place from late April through early October with the last tag applied in July. Tag recovery effort consisted of the commercial assessment (test) fishery from April 28 through June 15, the sockeye salmon and coho salmon commercial fisheries (weeks 25 - 34), and spawning ground sampling in August and September on the Nakina, Tatsatua, Kowatua, Nahlin, Dudidontu, Tseta, Yeth, King Salmon and Hackett Rivers. As was the case in 2007, the spawning ground sampling was more widespread than usual as a result of efforts to obtain baseline genetic samples. Estimates of above border inriver run and spawning escapement are 29,966 and 27,383 large Chinook salmon, respectively. This spawning escapement was well below the target of 36,000 fish (the escapement point goal,  $N_{MSY}$ ), and was below the lower end of the range of 30,000 to 55,000 fish, and below average escapement (Appendix D.11).

Aerial surveys of large Chinook salmon to the six escapement index areas annually surveyed by ADF&G were: Nakina 1,437 fish (below average), Kowatua 690 fish (average), Tatsamenie 1,083 fish (above average), Dudidontu, 480 fish (below average), Nahlin 1,121 fish (above average), and Tseta Creek 497 (well above average). Survey conditions were rated normal on all indices except for the Kowatua index, which was rated as excellent. The total of 5,308 large Chinook salmon observed was average. Surveys with poor viewing conditions are excluded from all averages.

Carcass weirs were operated on the Nakina and Tatsatua rivers in order to obtain tag and age-length-sex data. Totals of 225 and 481 large Chinook salmon were encountered, below average. Water levels were not atypical at either site in 2008.

### **Coho Salmon**

Spawning escapement of coho salmon in the Canadian portion of the Taku drainage was estimated from the joint Canada/U.S. mark-recapture program. Tag application and recovery occurred through the first week of October (both dates fall in week 40). The tag recovery effort consisted of the commercial fishery through week 34 followed by a limited catch-and-release set and drift gillnet fishery through the remainder of the season. The above border run and spawning escapement estimates are 99,199 fish and 95,360 fish respectively (Appendix D.13). The spawning escapement was below average, but approximately 2.3 times the upper end of the interim escapement goal range (27,500 to 35,000 fish).

### **Pink Salmon**

There is no program to estimate the escapement of Taku River pink salmon; however, the Canyon Island fish wheels provide an index of annual variation in border escapement. A

total of 4,704 pink salmon was captured the fish wheels in 2008 (Appendix D.15); this was below average.

### **Chum Salmon**

As with pink salmon, the Canyon Island fish wheels are used to determine annual variations in border escapement. A total of 350 chum salmon was captured in the wheels in 2008, which was above average (Appendix D.15). The Taku River fall chum salmon run has been depressed since 1988. It is unlikely that the spawning escapement goal of 50,000 to 80,000 fish has been achieved in recent years.

### ***Sockeye Salmon Run Reconstruction***

An estimated 63,002 wild Taku sockeye salmon were caught in the U.S. District 111 fishery. An additional 921 wild sockeye salmon were estimated to have been taken in the U.S. inriver personal use fishery. The estimated total U.S. harvest of wild Taku sockeye salmon is 63,923 fish (Table 4).

In the Canadian commercial fishery catch estimate of wild Taku sockeye salmon is 17,242 fish. An estimated 192 wild sockeye salmon were taken in the Canadian aboriginal fishery. Therefore, the estimated Canadian treaty harvest of wild Taku sockeye salmon is 17,434 fish (Table 4). An additional ten wild sockeye salmon were taken in test fisheries.

The contribution of Taku sockeye salmon from the fry planting program was estimated based on expansion of otolith-marked sockeye salmon recovered in the sampled catch. Estimates are 11,680 to the District 111 fishery, 89 to the inriver personal use fishery, 2,042 to the Canadian commercial fishery, and 23 to the aboriginal fishery (Table 4).

The estimate of the above-border run size of sockeye salmon, based on the joint Canada/U.S. mark-recapture program, is 87,568 fish. Deducting the Canadian inriver catch of 19,509 fish (in commercial, aboriginal and test fisheries) from the above-border run estimate results in an estimated escapement of 68,059 sockeye salmon. The total run of Taku sockeye salmon is estimated at 163,260 fish. Based on the escapement goal of 75,000 fish, the TAC was 88,260 sockeye salmon, of which the U.S. harvested 76% and Canada harvested 22% (Table 4). These percentages do not include test fishery catches.

The escapement of 4,167 Taku sockeye salmon originating from the fry planting program was estimated by sampling broodstock otoliths at Tatsamenie Lake and applying the mark rate (182/392) to the weir count of 8,976 fish. The total run Taku sockeye salmon from the fry planting program was estimated at 18,001 fish (Table 4).



## ALSEK RIVER

Alsek River salmon stocks contribute to the U.S. commercial gillnet fisheries located in Dry Bay, at the mouth of the Alsek River (Figure 3). Unknown quantities of Alsek River origin fish are also taken in the U.S. commercial gillnet and troll fisheries in the Yakutat area. No commercial fishery exists in the Canadian portions of the Alsek River drainage, although aboriginal and recreational fisheries occur in the Tatshenshini River and some of its headwater tributaries (Figure 3).

### *Harvest Regulations & Management Objectives*

Although catch sharing of Alsek River salmon stocks between Canada and the U.S. has not yet been specified, Annex IV does call for the development and implementation of cooperative abundance-based management plans and programs for Alsek River Chinook, sockeye and coho salmon. Interim escapement goal ranges for Alsek River sockeye and coho salmon were initially set by the TTC at 33,000 to 58,000 sockeye, and 5,400 to 25,000 coho salmon. The principle escapement-monitoring tool for Chinook, sockeye, and coho salmon stocks on the Alsek River is the Klukshu weir, operated by DFO in cooperation with the Champagne-Aishihik First Nation (CAFN). The weir has been in operation since 1976. To make the management objectives of Chinook and sockeye salmon better defined in terms of Klukshu stocks, revised goals, expressed in terms of Klukshu stocks only, were established in 1999 and adopted again in 2008. Mark-recapture programs to estimate the total inriver abundance and the fraction of the escapement contributed by the Klukshu stocks were in operation since 1997 for Chinook salmon and since 2000 for sockeye salmon. These however were discontinued in 2005.

The initiative to establish a specific Klukshu Chinook salmon spawning goal began in 1991 when the TTC set an interim spawning objective of 4,700 Klukshu Chinook salmon. This goal was based more on manager's intuition than on science. From 1995 through 1997, the TTC reviewed this escapement level and concluded that goal of 4,700 Chinook salmon was not supported by the data. A new goal range of 1,100 to 2,300 fish was proposed based on joint analyses of stock-recruitment data. The Parties conducted independent internal reviews of these analyses. Although there was not unanimous support for the proposal, there was agreement on establishing a minimum goal consistent with the lower end of the proposed range. As a result, Canadian and U.S. managers agreed to a minimum spawning escapement goal of 1,100 Chinook salmon for the Klukshu system for 2000 and this was used again in the 2008 season.

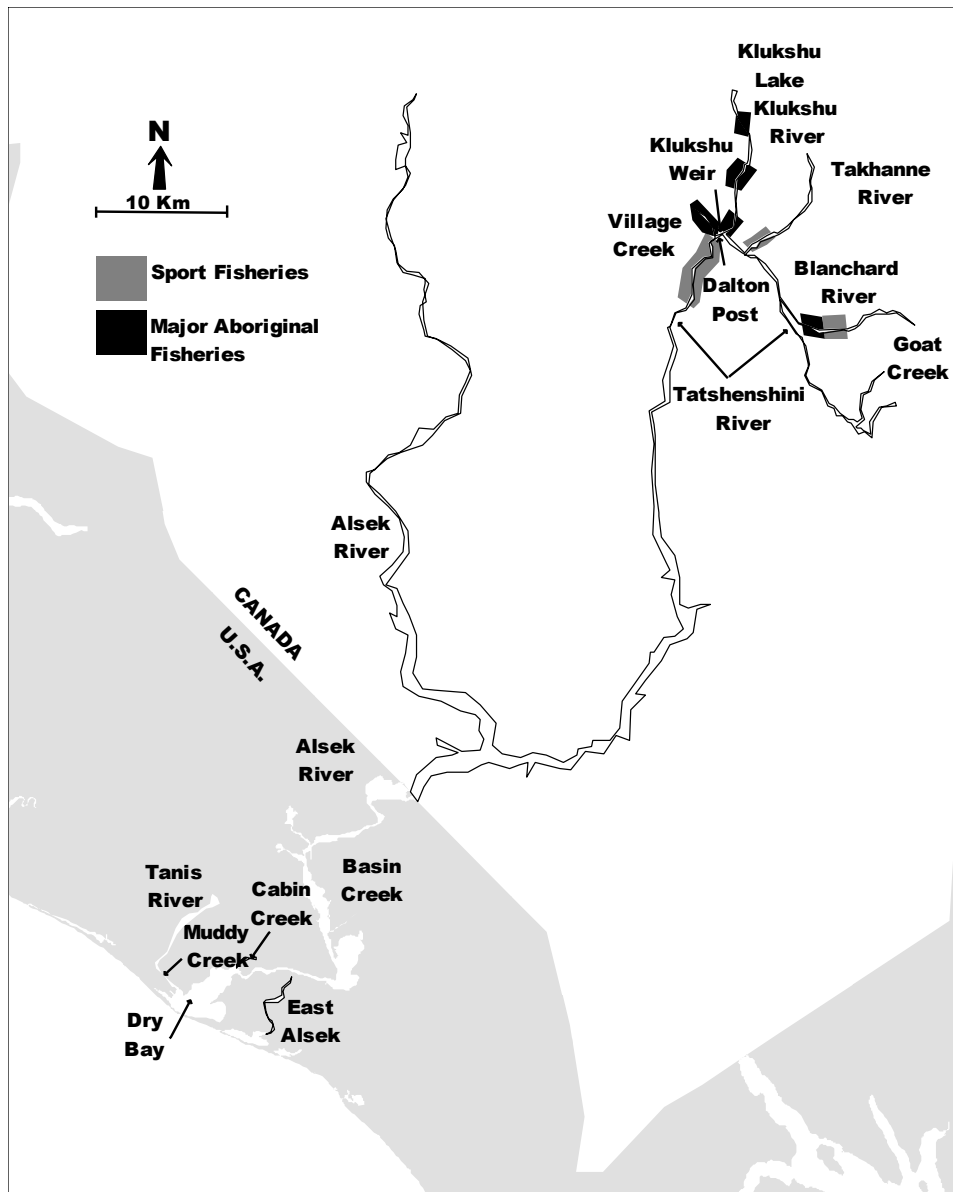


Figure 3. The Alesk River and principal U.S. and Canadian fishing areas.

The stock-recruitment analysis of Klukshu sockeye salmon data was completed in 2000 and has undergone internal peer review. The new escapement goal range for Klukshu River sockeye salmon is 7,500 to 15,000 spawners per year.

### *Preseason Forecasts*

The overall sockeye salmon run to the Klukshu River in 2008 was expected to be slightly above average in strength. Principal contributing brood years to the 2008 run were expected to be 2003 (Klukshu escapement of 32,120 fish) and 2004 (Klukshu escapement of 13,721 fish); average Klukshu escapement was 12,740 fish. The estimated production of Klukshu sockeye salmon for 2008 was 20,400 fish. Based on historical stock-

recruitment analysis, the range of Klukshu escapements that appear most likely to produce maximum sustained yields is 7,500 to 15,000 sockeye salmon.

The 2008 overall Alsek River sockeye salmon run was expected to be approximately 75,400 fish. This estimate was based on: a predicted run of 20,400 Klukshu sockeye salmon derived from the average historical Klukshu stock-recruitment data and an assumed Klukshu contribution of 27% (based on the 2001-2003 sockeye salmon radio tagging study). A run size of this magnitude is slightly above average run size estimate of approximately 67,300 fish (based on the Klukshu weir count expanded by 1/0.27 to account for other in-river escapement and an assumed U.S. harvest rate of 20%).

The contributing Klukshu early sockeye salmon run counts in 2003 and 2004 were 3,084 and 3,464, respectively (Appendix C.7). The principal brood year (2003) was near the optimum level of 2,500 sockeye salmon spawners as determined through separate stock-recruitment analyses by DFO of the early run. For 2008, the early run was expected to be above average.

The Klukshu Chinook salmon escapements in 2002 and 2003 were 2,134 and 1,661 fish, respectively. The 2002 and 2003 escapements were near average (1,500) and near the upper end of the optimum escapement range of 1,100 to 2,300 Chinook salmon estimated from current stock-recruitment analysis. As a result, the preliminary outlook was for an above average run. The 2008 overall Alsek River Chinook salmon run was expected to be approximately 16,000 fish. This estimate was based on: a predicted run of 2,900 Klukshu Chinook salmon derived from the historical Klukshu stock-recruitment data; and an assumed Klukshu contribution to the total run of approximately 18% (expansion factor of 5.5).

The coho salmon escapements observed at the Klukshu River in 2004 (750 coho salmon) and 2005 (663 coho salmon) suggests the escapement in 2008 would be below the average (Appendix C.7).

### *U.S. Fisheries*

Although harvest sharing arrangements of Alsek salmon stocks between Canada and the U.S. have not been specified, Annex IV of the Pacific Salmon Treaty does call for a cooperative attempt to rebuild depressed Chinook and early-run sockeye salmon stocks. Preseason expectations were for slightly above average runs of sockeye and Chinook salmon. These expectations were based on parent-year escapements to the Klukshu River. The Alsek River commercial fishery opened on the first Sunday in June, week 23 (June 1). The initial opening remained at 24 hours. Sockeye salmon CPUE remained very poor throughout the season, and fishing times remained at one day for the first eight weeks of the season. The Alsek was closed to commercial fishing for weeks 31 and 32 as a conservation measure, and when it reopened during week 33 fishing time remained at one day. Coho salmon are targeted from mid-August on and effort becomes minimal. Fishing times remained at three days per week for the entire coho salmon season. The Alsek

River remained open through the second week in October, and the river was not fished during the last week of the season.

The 2008 Dry Bay commercial set-gillnet fishery harvested 128 Chinook, 2,815 sockeye, and 2,668 coho salmon (Table 12). No pink and 2 chum salmon were harvested. A test fishery was conducted on the Alsek River for Chinook salmon in 2008, and that fishery produced another 465 Chinook and 55 sockeye salmon, for a total harvest of 593 Chinook and 2,870 sockeye salmon. The Chinook salmon harvest was above average, the sockeye salmon harvest was not just below average, but the single-season lowest catch on record for the Alsek. The coho salmon harvest was slightly below average. Very little effort was recorded during the coho salmon season due to market conditions, although the coho salmon harvest was the highest recorded in the past five years. The number of fishing days was 33. The total effort expended in the fishery was 171 boat-days, which was below average.

### *Canadian Fisheries*

Due to the elimination of the harvest monitor position in 2005, catches from the food fishery are largely unknown. The only harvest information for 2008 was the fish taken from the Klukshu River weir which was 0 Chinook, 0 sockeye, and 26 coho salmon. As a result of the poor runs of Chinook and sockeye salmon, discussions with DFO and the CAFN were held and it was decided to close the food fishery on July 23<sup>rd</sup> until further notice. On August 25<sup>th</sup>, after a request from CAFN to DFO was made, an exception was made to allow elders only to fish for sockeye salmon in Village Creek. Once the coho salmon had started to return to the Klukshu River, the food fishery was opened to coho salmon fishing only on the 26<sup>th</sup> of September.

Catch estimates for the Tatshenshini recreational fishery were well below average for Chinook salmon, with an estimated 7 fish retained, and sockeye salmon had no reported harvest, and no catches were recorded for coho salmon. On July 19<sup>th</sup>, the daily and possession limits for Chinook salmon were reduced to zero for the remainder of the year due to the projected lowest run of Chinook salmon since the weir program began in 1976. By July 22<sup>nd</sup>, it was decided to implement a full angling closure in the Yukon portion of the Tatshenshini River to protect the weak run of Chinook and early run sockeye salmon and on the 23<sup>rd</sup> of July, a salmon angling closure was implemented in the British Columbia sections of the Tatshenshini River for the remainder of the season. Retention of sockeye salmon in the Tatshenshini River was not permitted for the 2008 season due to the record poor runs.

Management of salmon in the Yukon is a shared responsibility between DFO and the Yukon Salmon Committee (YSC). The YSC was established in 1995 pursuant to the Comprehensive Land Claim Umbrella Final Agreement between the Government of Canada, the Council for Yukon Indians and the Government of the Yukon. The Committee is a public board consisting of ten members, 70% of which are appointed by Yukon First Nations. Two CAFN members sit on the YSC. Although the Committee currently operates by consensus, the voting structure of the Committee is organized so

that, should a vote be necessary, 50% of the votes reside with appointees of Yukon First Nations.

The 2008 Asek-Tatshenshini management plan, adopted by CAFN, YSC, and DFO, was based on the objectives described in the Harvest Regulations & Management Objectives section above. For Chinook and early run sockeye salmon management, the status of the Klukshu weir counts was to be reviewed on or about July 18 to ensure weir and spawning escapement targets were on track. The status of the late run sockeye salmon would be reviewed the first week of September. Adjustments to inseason fishing regimes in the recreational and aboriginal fisheries would be made if deemed necessary. Other key elements of the plan are described below.

The center of aboriginal fishing activity in the Asek River drainage occurs at the CAFN village of Klukshu, on the Haines road, about 60 km south of Haines Junction. Salmon are harvested by means of gaff, small gillnets, sport rods, and traditional fish traps as the fish migrate up the Klukshu River and into Klukshu Lake. The fishing plan for the aboriginal fishery in the Klukshu River for the period prior to August 15 allowed fishing by means of fish traps for two days per week. After August 15, it was planned that the traps would be fished three days per week. Conservation thresholds that might invoke restrictions in the Aboriginal fishery were projected Klukshu weir counts of <1,100 Chinook and <1,500 early sockeye salmon. Food fisheries also exist on Village Creek and in the headwaters of the Tatshenshini River and tributaries thereof (Goat Creek, Stanley Creek, Parton River, and the Blanchard River). The plan did not restrict the fishery other than to reserve Goat Creek, Stanley Creek, and the Parton River for elders only.

The majority of the recreational fishing effort on this drainage occurs on the Tatshenshini River, at and just downstream of the mouth of the Klukshu River in the vicinity of the abandoned settlement of Dalton Post. The management plan prohibited the retention of sockeye salmon in the recreational fishery prior to August 15 unless the weir count projection for the early run was >4,500 sockeye salmon. The Chinook salmon daily catch limit was one fish and the possession limit was two Chinook salmon. For other salmon species, the daily catch and possession limits were two and four fish, respectively. However, the aggregate limit for all salmon combined was two salmon per day, four fish in possession. Starting in 2003, recreational salmon fishing was permitted in the Tatshenshini River seven days a week; this fishery had previously been open from 6:00 am Saturday to 12:00 noon Tuesday each week. Headwater areas upstream of the British Columbia/Yukon border were to be closed in late July to protect spawning Chinook salmon. Conservation thresholds that were expected to invoke additional restrictions in the recreational fishery were projected Klukshu weir counts of <1,500 Chinook and < 10,600 sockeye salmon (early and late runs combined).

A mandatory Yukon Salmon Conservation Catch Card (YSCCC), introduced by the YSC in 1999, was required by all recreational salmon fishers in 2008. The purpose of the YSCCC is to improve harvest estimates and to serve as a statistical base to ascertain the importance of salmon to the Yukon recreational fishery. Anglers are required to report

their catch via mail by the late fall. Information requested includes the number, sex, size, date and location of salmon caught and released.

Since 2001, CAFN has imposed a fishing area closure from the Klukshu River Bridge crossing up to the new weir location to allow for better staging opportunities for salmon in the vicinity of the Klukshu/Tatshenshini confluence.

### *Escapement*

Total drainage abundance programs are being investigated as part of the development of abundance-based management regimes and to accurately assess whether the escapement goals for Alsek River Chinook and sockeye salmon stocks are appropriate and if so, are being achieved. At this time, there are no programs in place to estimate the drainage-wide coho salmon escapement. A large and variable proportion of the escapement of each species is enumerated at the weir on the Klukshu River. Current escapement monitoring programs including the Klukshu weir, Village Creek electronic counter, and aerial surveys allow annual comparisons of escapement indices. The most reliable long-term comparative escapement index for Alsek River drainage salmon stocks is the Klukshu River weir count. Escapements for 2008 are shown in Table 8.

#### **Sockeye Salmon**

The weir count and escapement estimates of Klukshu River sockeye salmon were both 2,741 fish in 2008 (Table 8, Appendices C.3 and C.7). The count of 43 early run fish (count through August 15) and the count of 2,698 late run fish were both well below average. The total escapement of 2,741 fish was the lowest on record, and was well below the lower end of the recommended escapement goal range of 7,500 to 15,000 fish. The sockeye salmon escapement to Village Creek was not estimated in 2008 due to a major malfunction in the counter.

#### **Chinook Salmon**

The most reliable comparative Chinook salmon escapement index for the Alsek River drainage is the Klukshu River weir count. The Chinook salmon weir and escapement counts in 2008 were both 466 (Table 8), and the lowest on record. The 2008 escapement was well below the revised interim escapement goal range of 1,100 to 2,300 Klukshu Chinook salmon.

#### **Coho Salmon**

The Klukshu weir count and escapement of 4,275 and 4,249 fish; above average (Table 8). The weir was removed prior to the completion of the coho salmon run and does not include fish that migrate after mid-October.

Table 8. Catch and Klukshu index escapement data for Alsek River sockeye, Chinook, and coho salmon for 2008.

	Sockeye	Chinook	Coho
Escapement Index <sup>a</sup>			
Klukshu Weir Count	2,741	466	4,275
Klukshu Escapement	2,741	466	4,249
Harvest <sup>b</sup>			
U.S. Commercial	2,815	128	2,668
U.S. Subsistence	117	28	26
U.S. Test	55	465	0
Canadian Sport	0	7	0
Canadian Aboriginal	0	0	0
Total	2,987	628	2,694

<sup>a</sup> Klukshu River salmon stocks represent an assumed large and variable portion of the total Alsek River salmon escapement.

<sup>b</sup> U.S. harvest estimate differs from Joint Interception Committee estimate because no estimates are made for catches other than the listed fisheries.

## ENHANCEMENT ACTIVITIES

### *Egg Collection*

In 2008, sockeye salmon eggs were collected at Tahltan Lake on the Stikine River for the twentieth year, and in the Tatsamenie Lake system on the Taku River, for the nineteenth year of this program.

#### **Tahltan Lake**

The egg collection was contracted to Arc Environmental Ltd. for the thirteenth consecutive year. The egg-take goal at Tahltan Lake is 6.0 million eggs; due to low escapement, 3.2 million eggs were collected. Fish were captured with a beach seine at the major spawning site as has been done in most years. Brood year 2008 egg takes were initiated on September 7th at Tahltan Lake and were completed on September 5<sup>th</sup>; there were 10 egg collections for 3.2 million eggs. The receipt of one lot of Tahltan eggs was delayed by 2 days, and two others by 1 day, due to unfavorable weather conditions. Eggs were collected from 1,157 females and a like number of males.

#### **Tatsamenie Lake**

B. Mercer and Associates Ltd was contracted to collect eggs. Tatsamenie Lake broodstock was captured for the fourteenth year at an adult enumeration weir located at the outlet of Tatsamenie Lake. Egg takes were initiated September 22nd at Tatsamenie Lake. An estimated 5,000,000 eggs were collected from 1,183 females and milt was collected from a like number of males. Tatsamenie Lake egg takes were completed on October 23rd with an estimated 5.0 million eggs. The receipt of one lot of Tatsamenie

eggs was delayed by 2 days, and three others by 1 day, also due to unfavorable weather conditions.

### **Trapper Lake**

Due to lowered adult escapement into Little Trapper Lake, only 100,000 eggs were collected from this stock, those eggs were planted in Tunjony Creek, a tributary of Big Trapper Lake. This project was operated with Northern Fund monies but will be reported in TBR reports. Evaluation of egg plants will take place in the spring using fyke nets and hydraulic sampling.

#### ***Incubation, Thermal Marking, and Fry Plants (2004 Brood Year)***

The egg incubation and thermal-marking program at Snettisham Hatchery went smoothly in year 2007/2008. Snettisham hatchery is operated by DIPAC (Douglas Island Pink and Chum, Inc.), a private aquaculture organization in Juneau. A co-operative agreement between ADF&G and DIPAC provides for Snettisham hatchery to serve the needs of the joint TBR enhancement projects.

Incubation of 2008 brood eggs took place at Snettisham Hatchery and the resultant fry were transported to the appropriate systems from May 28 to June 16, 2006. There were 5 incubators lost to IHNV this year; 3 from Tatsamenie and 2 from Trapper. This was greater than normal but losses over the life of the program are consistent with the Alaskan experience.

### **Tahltan Lake**

A total of 1.54 million fry from the 2007 Tahltan sockeye salmon egg take was planted back into Tahltan Lake in 2008. Survival from green-egg to outplanted fry was 70%. Fry outplanting took place from May 31 to June 4.

### **Tuya Lake**

There were 1.5 million fry planted in Tuya Lake from June 19 to June 20. These fish were from eggs collected at Tahltan Lake in the fall of 2007. Survival from green-egg to outplanted fry was 83%.

### **Tatsamenie Lake**

A total of 2.1 million fry from the 2007 egg-take was released into Tatsamenie Lake in 2008. There were three treatment groups: one group was released at the North end, one group mid lake, and one group held for extended rearing; outplanting took place from May 31 to June 13. Survival from green-egg to outplanted-fry was 58 %.

The strategy behind releasing at the different locations is to put some fry in an area with little natural production.



## *Outplant Evaluation Surveys*

### **Acoustic, Trawl, Beach seine and Limnological Sampling**

Standard limnological surveys were conducted at Tatsamenie, Tahltan, Trapper and Tuya Lakes. Hydroacoustic surveys with a newly purchased Bio-Sonics unit were conducted at Trapper Lake.

## *Thermal Mark Laboratories*

### **ADF&G Thermal Mark Laboratory**

During the 2008 season the ADFG thermal mark lab processed 14,037 sockeye otoliths collected by ADFG and DFO staff as part of the U.S./Canada fry-planting evaluation program. These collections came from commercial and test fisheries in U.S. waters and in Canadian fisheries on the Taku and Stikine Rivers over a 14-week period. In addition, several escapement samples were examined. The laboratory provided estimates on hatchery contributions for almost 90 distinct sampling collections. Estimates of the percentage of hatchery fish contributed to commercial fishery catches were provided to ADF&G and DFO fishery managers 24 to 48 hours after samples arrived at the lab.

Adult sockeye salmon otoliths were processed inseason by the ADFG otolith lab to estimate the weekly contribution of fish from US/Canada TBR fry planting programs to the District 106, 108, and 111 gillnet fisheries and to Canadian commercial fisheries in the Stikine and Taku Rivers. Contributions of thermally marked fish were an estimated 25,984 Stikine River fish to District 106 and 108 and subsistence and 11,769 Taku River fish to District 111 commercial and personal use fisheries. Estimated contributions of thermally marked fish to Canadian fisheries included 21,514 planted fish to Stikine River fisheries and 2,065 planted fish to the Taku River fisheries.

### **Canadian Thermal Mark Laboratory**

An estimated 532,700 smolt were thermally marked from the 1,402,995 fish outmigration through the Tahltan smolt weir in 2008. Samples from the returning adults indicated that 3,920 of the 8,052 Tahltan Lake spawners were thermally marked. For the Taku, an estimated 4,167 thermally marked fish contributed to the Tatsamenie weir count of 8,976 sockeye salmon.

## APPENDICES

### *Standards*

Large Chinook salmon are MEF length  $\geq 660$

Unless otherwise stated Chinook salmon are large

Data not available to estimate catches of Alaska Hatchery pink and chum salmon

All catches of Tahltan, Trapper, and Tatsamenie, unless otherwise noted, include both wild and hatchery fish.

**Appendix A. 1. Weekly salmon catch in the Alaskan District 106 commercial drift gillnet fisheries, 2008.**

Effort may be less than the sum of effort from 106-41&42 and 106-30 because some boats fished in more than one subdistrict.

Week	Start Date	Catch						Effort		
		Chinook		Sockeye	Coho	Pink	Chum	Permits	Days	Permit Days
		Large	non large							
24	8-Jun	179	8	83	94	0	22	13	2.0	26
25	15-Jun	177	31	1,242	2,012	18	438	24	2.0	48
26	22-Jun	175	54	3,561	6,538	1,213	3,243	45	4.0	180
27	29-Jun	318	132	7,244	10,582	1,918	11,639	65	4.0	260
28	6-Jul	61	51	5,219	5,887	2,429	11,622	47	3.0	141
29	13-Jul	58	71	6,215	4,664	4,032	18,449	50	2.0	100
30	20-Jul	39	59	2,980	2,289	4,162	12,680	39	2.0	78
31	27-Jul	6	42	1,231	2,020	7,209	4,251	24	2.0	48
32	3-Aug	5	49	1,629	3,447	18,969	5,380	38	2.0	76
33	10-Aug	3	33	525	1,768	12,607	2,285	28	2.0	56
34	17-Aug	1	18	293	3,010	24,714	2,345	37	2.0	74
35	24-Aug	3	12	49	4,950	5,501	2,868	31	2.0	62
36	31-Aug	0	0	44	12,565	4,583	7,337	60	3.0	180
37	7-Sep	15	6	208	29,283	2,485	11,430	83	4.0	332
38	14-Sep	7	3	8	18,730	368	5,334	85	4.0	340
39	21-Sep	2	1	2	7,634	9	2,558	51	3.0	153
40	28-Sep	0	0	0	601	0	275	14	3.0	42
Total		1,049	570	30,533	116,074	90,217	102,156		46.0	2,196

**Alaska Hatchery Contributions for Large Chinook and Coho**

Week	Start Date	Large Chinook		Coho	
		Hatchery	Wild	Hatchery	Wild
		24	8-Jun	51	128
25	15-Jun	49	128	1,031	981
26	22-Jun	133	42	4,307	2,231
27	29-Jun	129	189	5,056	5,526
28	6-Jul	17	44	2,630	3,257
29	13-Jul	0	58	1,323	3,341
30	20-Jul	0	39	901	1,388
31	27-Jul	0	6	195	1,825
32	3-Aug	0	5	138	3,309
33	10-Aug	0	3	236	1,532
34	17-Aug	0	1	293	2,717
35	24-Aug	0	3	720	4,230
36	31-Aug	0	0	4,291	8,274
37	7-Sep	0	15	11,401	17,882
38	14-Sep	0	7	10,860	7,870
39	21-Sep	0	2	8,109	-475
40	28-Sep	0	0	276	325
Total		380	669	51,807	64,267

**Appendix A. 2.** Weekly stock proportions of sockeye salmon harvested in the Alaskan District 106 commercial drift gillnet fisheries, 2008.

Data based on scale pattern analysis and thermal marks.

Week	Alaska	Canada	Stikine				Planted	CPUE of Stikine Fish			
			Tahltan	Tuya	Mainstem	Total		Tahltan	Tuya	Mainstem	Total
Proportions											
24	0.198	0.223	0.285	0.256	0.038	0.578	0.146	0.022	0.016	0.003	0.014
25	0.295	0.195	0.250	0.216	0.044	0.510	0.117	0.153	0.111	0.027	0.098
26	0.194	0.092	0.285	0.336	0.093	0.714	0.129	0.134	0.132	0.043	0.104
27	0.187	0.100	0.196	0.399	0.118	0.713	0.127	0.129	0.221	0.077	0.147
28	0.224	0.151	0.153	0.290	0.182	0.625	0.109	0.134	0.213	0.158	0.171
29	0.319	0.139	0.142	0.149	0.251	0.542	0.020	0.209	0.185	0.364	0.249
30	0.472	0.150	0.114	0.121	0.142	0.377	0.001	0.103	0.092	0.127	0.107
31	0.372	0.163	0.188	0.039	0.238	0.464	0.000	0.114	0.020	0.142	0.088
32	0.459	0.457	0.005	0.019	0.061	0.085	0.003	0.002	0.008	0.031	0.013
33	0.372	0.544	0.002	0.007	0.075	0.084	0.003	0.001	0.001	0.016	0.006
34	0.340	0.536	0.001	0.001	0.121	0.124	0.000	0.000	0.000	0.011	0.004
35	0.346	0.602	0.004	0.005	0.043	0.052	0.000	0.000	0.000	0.001	0.000
36	0.345	0.592	0.004	0.005	0.054	0.062	0.000	0.000	0.000	0.000	0.000
37	0.349	0.634	0.006	0.007	0.003	0.017	0.000	0.000	0.000	0.000	0.000
38	0.345	0.594	0.004	0.005	0.052	0.061	0.000	0.000	0.000	0.000	0.000
39	0.349	0.637	0.006	0.007	0.000	0.014	0.000	0.000	0.000	0.000	0.000
Total	0.281	0.164	0.165	0.238	0.152	0.555	0.073				
24	16	19	24	21	3	48	12	0.9	0.8	0.1	1.8
25	366	242	311	268	55	634	146	6.5	5.6	1.1	13.2
26	691	328	1,016	1,197	329	2,542	460	5.6	6.7	1.8	14.1
27	1,352	726	1,420	2,890	856	5,166	921	5.5	11.1	3.3	19.9
28	1,170	789	796	1,512	952	3,260	567	5.6	10.7	6.7	23.1
29	1,981	864	883	928	1,559	3,369	123	8.8	9.3	15.6	33.7
30	1,408	448	339	360	425	1,124	3	4.3	4.6	5.4	14.4
31	459	201	231	48	293	572	0	4.8	1.0	6.1	11.9
32	748	744	8	31	99	138	6	0.1	0.4	1.3	1.8
33	195	286	1	4	39	44	1	0.0	0.1	0.7	0.8
34	100	157	0	0	36	36	0	0.0	0.0	0.5	0.5
35	17	29	0	0	2	3	0	0.0	0.0	0.0	0.0
36	15	26	0	0	2	3	0	0.0	0.0	0.0	0.0
37	73	132	1	2	1	3	0	0.0	0.0	0.0	0.0
38	3	5	0	0	0	0	0	0.0	0.0	0.0	0.0
39	1	1	0	0	0	0	0	0.0	0.0	0.0	0.0
Total	8,593	4,997	5,031	7,261	4,651	16,943	2,240	42.3	50.3	42.8	135.3

**Appendix A. 3.** Weekly salmon catch and effort in the Alaskan Subdistrict 106-41&42 (Sumner Strait) commercial drift gillnet fishery, 2008.

Week	Start Date	Catch						Effort		
		Chinook		Sockeye	Coho	Pink	Chum	Permits	Days	Permit Days
		Large	non large							
24	8-Jun	132	0	83	91	0	18	10	2.0	20
25	15-Jun	90	8	990	1,156	15	334	17	2.0	34
26	22-Jun	110	33	3,109	2,789	153	3,044	32	4.0	128
27	29-Jun	127	44	5,721	5,538	313	7,265	41	4.0	164
28	6-Jul	34	7	4,307	2,583	958	10,520	35	3.0	105
29	13-Jul	28	23	4,196	2,630	1,014	12,281	33	2.0	66
30	20-Jul	3	2	980	623	731	3,724	20	2.0	40
31	27-Jul	0	0	402	656	1,200	1,531	9	2.0	18
32	3-Aug	0	0	277	1,223	3,319	966	13	2.0	26
33	10-Aug	3	3	278	1,159	4,365	1,526	17	2.0	34
34	17-Aug	0	0	38	1,249	2,635	626	13	2.0	26
35	24-Aug	2	1	34	4,459	2,252	2,502	23	2.0	46
36	31-Aug	0	0	27	9,927	1,830	5,421	41	3.0	123
37	7-Sep	3	3	203	21,026	907	8,033	53	4.0	212
38	14-Sep	4	0	5	14,433	85	4,110	63	4.0	252
39	21-Sep	2	1	2	5,473	6	2,112	39	3.0	117
40	28-Sep	0	0	0	525	0	243	12	3.0	36
<b>Total</b>		<b>538</b>	<b>125</b>	<b>20,652</b>	<b>75,540</b>	<b>19,783</b>	<b>64,256</b>		<b>46.0</b>	<b>1,447</b>

**Appendix A. 4.** Weekly stock proportions and catches of sockeye salmon harvested in the Alaskan Subdistrict 106-41&42 (Sumner Strait) commercial drift gillnet fishery, 2008.

Data based on scale pattern analysis and thermal marks.

Week	Alaska	Canada	Stikine			Planted	CPUE of Stikine Fish				
			Tahltan	Tuya	Mainstem		Total	Tahltan	Tuya	Mainstem	Total
<b>Proportions</b>											
24	0.198	0.223	0.285	0.256	0.038	0.578	0.146	0.032	0.014	0.003	0.015
25	0.198	0.223	0.285	0.256	0.038	0.578	0.146	0.224	0.101	0.023	0.107
26	0.124	0.093	0.310	0.377	0.096	0.783	0.147	0.204	0.124	0.049	0.120
27	0.110	0.101	0.201	0.478	0.110	0.789	0.158	0.190	0.226	0.082	0.174
28	0.166	0.162	0.139	0.336	0.197	0.673	0.127	0.154	0.187	0.172	0.175
29	0.208	0.163	0.093	0.214	0.322	0.629	0.029	0.160	0.184	0.435	0.253
30	0.340	0.101	0.051	0.333	0.176	0.559	0.003	0.034	0.110	0.092	0.087
31	0.439	0.271	0.000	0.119	0.172	0.290	0.000	0.000	0.036	0.082	0.041
32	0.399	0.219	0.005	0.111	0.266	0.382	0.005	0.001	0.016	0.060	0.026
33	0.389	0.587	0.004	0.013	0.007	0.024	0.005	0.001	0.001	0.001	0.001
34	0.349	0.637	0.006	0.007	0.000	0.014	0.000	0.000	0.000	0.000	0.000
35	0.349	0.637	0.006	0.007	0.000	0.014	0.000	0.000	0.000	0.000	0.000
36	0.349	0.637	0.006	0.007	0.000	0.014	0.000	0.000	0.000	0.000	0.000
37	0.349	0.637	0.006	0.007	0.000	0.014	0.000	0.000	0.000	0.000	0.000
38	0.349	0.637	0.006	0.007	0.000	0.014	0.000	0.000	0.000	0.000	0.000
39	0.349	0.637	0.006	0.007	0.000	0.014	0.000	0.000	0.000	0.000	0.000
<b>Total</b>	<b>0.177</b>	<b>0.151</b>	<b>0.168</b>	<b>0.336</b>	<b>0.169</b>	<b>0.672</b>	<b>0.106</b>	<b>0.235</b>	<b>0.468</b>	<b>0.298</b>	<b>1.000</b>
<b>Catches</b>											
24	16	19	24	21	3	48	12	1.2	1.1	0.2	2.4
25	196	221	282	253	37	573	144	8.3	7.4	1.1	16.8
26	386	290	964	1,171	298	2,433	457	7.5	9.1	2.3	19.0
27	628	578	1,152	2,734	629	4,515	905	7.0	16.7	3.8	27.5
28	714	696	599	1,449	849	2,896	547	5.7	13.8	8.1	27.6
29	872	684	392	898	1,351	2,640	123	5.9	13.6	20.5	40.0
30	333	99	50	326	172	548	3	1.2	8.1	4.3	13.7
31	176	109	0	48	69	117	0	0.0	2.6	3.8	6.5
32	111	61	1	31	74	106	1	0.1	1.2	2.8	4.1
33	108	163	1	4	2	7	1	0.0	0.1	0.1	0.2
34	13	24	0	0	0	1	0	0.0	0.0	0.0	0.0
35	12	22	0	0	0	0	0	0.0	0.0	0.0	0.0
36	9	17	0	0	0	0	0	0.0	0.0	0.0	0.0
37	71	129	1	2	0	3	0	0.0	0.0	0.0	0.0
38	2	3	0	0	0	0	0	0.0	0.0	0.0	0.0
39	1	1	0	0	0	0	0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>3,649</b>	<b>3,117</b>	<b>3,467</b>	<b>6,936</b>	<b>3,484</b>	<b>13,886</b>	<b>2,196</b>	<b>37.0</b>	<b>73.8</b>	<b>47.0</b>	<b>157.9</b>

**Appendix A. 5.** Weekly salmon catch and effort in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 2008.

Week	Start Date	Catch						Effort		
		Chinook		Sockeye	Coho	Pink	Chum	Permits	Days	Permit Days
		Large	non large							
24	8-Jun	47	8	0	3	0	4	3	2.0	6
25	15-Jun	87	23	252	856	3	104	8	2.0	16
26	22-Jun	65	21	452	3,749	1,060	199	13	4.0	52
27	29-Jun	191	88	1,523	5,044	1,605	4,374	27	4.0	108
28	6-Jul	27	44	912	3,304	1,471	1,102	13	3.0	39
29	13-Jul	30	48	2,019	2,034	3,018	6,168	19	2.0	38
30	20-Jul	36	57	2,000	1,666	3,431	8,956	20	2.0	40
31	27-Jul	6	42	829	1,364	6,009	2,720	15	2.0	30
32	3-Aug	5	49	1,352	2,224	15,650	4,414	25	2.0	50
33	10-Aug	0	30	247	609	8,242	759	12	2.0	24
34	17-Aug	1	18	255	1,761	22,079	1,719	24	2.0	48
35	24-Aug	1	11	15	491	3,249	366	8	2.0	16
36	31-Aug	0	0	17	2,638	2,753	1,916	20	3.0	60
37	7-Sep	12	3	5	8,257	1,578	3,397	30	4.0	120
38	14-Sep	3	3	3	4,297	283	1,224	26	4.0	104
39-40 <sup>a</sup>	21-28-Sep	0	0	0	2,237	3	478			
Total		511	445	9,881	40,534	70,434	37,900		46.0	799

<sup>a</sup>Weeks 39 and 40 are combined due to confidentiality

**Appendix A. 6.** Weekly stock proportions and catches of sockeye salmon harvested in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 2008.

Data based on scale pattern analysis and thermal marks.

Week	Alaska	Canada	Stikine			Planted	CPUE of Stikine Fish				
			Tahltan	Tuya Mainstem	Total		Tahltan	Tuya	Mainstem	Total	
<b>Proportions</b>											
25	0.674	0.083	0.113	0.059	0.070	0.243	0.005	0.047	0.000	0.039	0.052
26	0.674	0.083	0.113	0.059	0.070	0.243	0.005	0.026	0.000	0.021	0.029
27	0.475	0.097	0.176	0.103	0.149	0.427	0.011	0.065	0.000	0.073	0.082
28	0.499	0.102	0.217	0.069	0.113	0.399	0.022	0.132	0.000	0.092	0.127
29	0.550	0.089	0.244	0.015	0.103	0.361	0.000	0.338	0.000	0.191	0.262
30	0.537	0.174	0.145	0.017	0.126	0.288	0.000	0.189	0.000	0.220	0.197
31	0.340	0.111	0.279	0.000	0.270	0.549	0.000	0.201	0.000	0.260	0.207
32	0.471	0.505	0.005	0.000	0.019	0.024	0.003	0.003	0.000	0.018	0.009
33	0.351	0.496	0.001	0.000	0.152	0.153	0.000	0.000	0.000	0.055	0.022
34	0.339	0.521	0.000	0.000	0.140	0.140	0.000	0.000	0.000	0.026	0.010
35	0.339	0.521	0.000	0.000	0.140	0.140	0.000	0.000	0.000	0.005	0.002
36	0.339	0.521	0.000	0.000	0.140	0.140	0.000	0.000	0.000	0.001	0.001
37	0.339	0.521	0.000	0.000	0.140	0.140	0.000	0.000	0.000	0.000	0.000
38	0.339	0.521	0.000	0.000	0.140	0.140	0.000	0.000	0.000	0.000	0.000
<b>Total</b>	<b>0.500</b>	<b>0.190</b>	<b>0.158</b>	<b>0.033</b>	<b>0.118</b>	<b>0.309</b>	<b>0.004</b>	<b>0.524</b>	<b>0.084</b>	<b>0.392</b>	<b>1.000</b>
<b>Catches</b>											
24	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0
25	170	21	29	15	18	61	1	1.8	0.9	1.1	3.8
26	305	37	51	27	32	110	2	1.0	0.5	0.6	2.1
27	724	148	268	156	227	651	16	2.5	1.4	2.1	6.0
28	455	93	198	63	103	363	20	5.1	1.6	2.6	9.3
29	1,110	180	492	29	208	729	0	12.9	0.8	5.5	19.2
30	1,075	349	290	35	252	576	0	7.2	0.9	6.3	14.4
31	282	92	231	0	224	455	0	7.7	0.0	7.5	15.2
32	637	683	6	0	26	32	4	0.1	0.0	0.5	0.6
33	87	122	0	0	38	38	0	0.0	0.0	1.6	1.6
34	86	133	0	0	36	36	0	0.0	0.0	0.7	0.7
35	5	8	0	0	2	2	0	0.0	0.0	0.1	0.1
36	6	9	0	0	2	2	0	0.0	0.0	0.0	0.0
37	2	3	0	0	1	1	0	0.0	0.0	0.0	0.0
38	1	2	0	0	0	0	0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>4,944</b>	<b>1,880</b>	<b>1,564</b>	<b>325</b>	<b>1,168</b>	<b>3,057</b>	<b>44</b>	<b>38.3</b>	<b>6.1</b>	<b>28.7</b>	<b>73.2</b>



**Appendix A. 7.** Weekly salmon catch and effort in the Alaskan District 108 commercial drift gillnet fishery, 2008.

The permit days are adjusted for boats which did not fish the entire opening and are less than the sum of the permits times the days

Week	Start Date	Catch						Effort		Permit Days
		Chinook		Sockeye	Coho	Pink	Chum	Permits	Days	
		Large	non large							
19	4-May	320	7	0	0	0	0	31	2.0	62.0
20	11-May	769	20	0	0	0	1	53	2.0	106.0
21	18-May	1591	51	1	0	0	0	96	2.0	192.0
22	25-May	1396	67	0	0	0	0	103	1.0	103.0
23	1-Jun	1538	63	1	0	0	1	103	1.0	103.0
24	8-Jun	1,267	47	78	1	0	12	70	2.0	140.0
25	15-Jun	2,258	240	2,102	260	0	69	76	2.0	152.0
26	22-Jun	2,074	494	10,604	696	13	873	88	4.0	352.0
27	29-Jun	903	189	6,850	1,495	133	2,905	75	4.0	300.0
28	6-Jul	540	178	6,519	822	220	7,328	65	5.0	216.0
29	13-Jul	250	93	6,747	1,818	1,220	18,848	61	4.0	166.0
30	20-Jul	60	45	1,520	354	706	14,113	39	2.0	78.0
31	27-Jul	47	19	712	1,022	4,686	19,429	52	2.0	104.0
32	3-Aug	7	4	203	726	2,511	12,103	32	2.0	64.0
33	10-Aug	4	10	252	2,281	4,434	2,778	42	2.0	84.0
34	17-Aug	0	10	38	2,961	1,239	669	35	2.0	70.0
35	24-Aug	1	6	37	2,914	2,111	548	36	2.0	72.0
36	31-Aug	17	3	9	4,133	386	444	29	3.0	87.0
37	7-Sep	4	3	6	8,153	440	1,175	43	4.0	172.0
38	14-Sep	0	0	0	4,273	5	357	40	4.0	160.0
39	21-Sep	3	1	0	2,441	1	217	30	3.0	90.0
40	28-Sep	0	0	0	129	0	6	8	3.0	24.0
<b>Total</b>		<b>13,049</b>	<b>1,550</b>	<b>35,679</b>	<b>34,479</b>	<b>18,105</b>	<b>81,876</b>		<b>58.0</b>	<b>2,897</b>

Alaska Hatchery Contributions for Large Chinook and Coho

	Start Date	Large Chinook		Coho	
		Hatchery	Wild	Hatchery	Wild
19	4-May	0	320	0	0
20	11-May	95	674	0	0
21	18-May	336	1,255	0	0
22	25-May	253	1,143	0	0
23	1-Jun	201	1,337	0	0
24	8-Jun	387	880	0	1
25	15-Jun	1,146	1,112	70	190
26	22-Jun	1593	481	70	626
27	29-Jun	1035	-132	536	959
28	6-Jul	276	264	422	400
29	13-Jul	286	-36	633	1,185
30	20-Jul	0	60	0	354
31	27-Jul	20	27	183	839
32	3-Aug	0	7	23	703
33	10-Aug	0	4	285	1,996
34	17-Aug	0	0	111	2,850
35	24-Aug	0	1	286	2,628
36	31-Aug	0	17	445	3,688
37	7-Sep	0	4	3,281	4,872
38	14-Sep	0	0	1,530	2,743
39	21-Sep	0	3	1,697	744
40	28-Sep	0	0	103	26
<b>Total</b>		<b>5,627</b>	<b>7,422</b>	<b>9,674</b>	<b>24,805</b>

**Appendix A. 8.** Weekly stock proportions and stock-specific catch of sockeye salmon in the Alaskan District 108 commercial drift gillnet fishery, 2008.

Data based on scale pattern analysis and thermal marks.

Week	Alaska	Canada	Stikine			Planted Tahltan	CPUE of Stikine Fish				
			Tahltan	Tuya Mainstem	Total		Tahltan	Tuya Mainstem	Total		
<b>Proportions</b>											
20-24	0.025	0.032	0.541	0.321	0.080	0.943	0.188	0.001	0.001	0.000	0.001
25	0.025	0.032	0.541	0.321	0.080	0.943	0.163	0.144	0.106	0.027	0.097
26	0.017	0.083	0.465	0.371	0.063	0.900	0.217	0.269	0.266	0.046	0.201
27	0.083	0.073	0.371	0.420	0.054	0.845	0.224	0.163	0.228	0.030	0.143
28	0.113	0.266	0.244	0.246	0.131	0.621	0.148	0.142	0.176	0.096	0.139
29	0.189	0.093	0.325	0.138	0.255	0.719	0.097	0.255	0.133	0.252	0.216
30	0.132	0.018	0.065	0.109	0.675	0.849	0.051	0.024	0.051	0.320	0.122
31	0.043	0.050	0.012	0.125	0.771	0.908	0.000	0.002	0.020	0.129	0.046
32	0.170	0.017	0.000	0.137	0.676	0.814	0.000	0.000	0.010	0.052	0.019
33	0.319	0.128	0.000	0.095	0.458	0.553	0.000	0.000	0.007	0.033	0.012
34	0.319	0.128	0.000	0.095	0.458	0.553	0.044	0.000	0.001	0.006	0.002
35	0.319	0.128	0.000	0.095	0.458	0.553	0.044	0.000	0.001	0.006	0.002
36	0.319	0.128	0.000	0.095	0.458	0.553	0.044	0.000	0.000	0.001	0.000
37	0.319	0.128	0.000	0.095	0.458	0.553	0.044	0.000	0.000	0.000	0.000
<b>Total</b>	<b>0.089</b>	<b>0.110</b>	<b>0.352</b>	<b>0.291</b>	<b>0.159</b>	<b>0.801</b>	<b>0.165</b>	<b>0.385</b>	<b>0.312</b>	<b>0.304</b>	<b>1.000</b>
<b>Catch</b>											
20-24	2	3	43	26	6	75	15	0.1	0.0	0.0	0.1
25	52	67	1,138	675	169	1,983	342	7.5	4.4	1.1	13.0
26	183	883	4,929	3,938	672	9,538	2,306	14.0	11.2	1.9	27.1
27	565	497	2,542	2,876	369	5,787	1,537	8.5	9.6	1.2	19.3
28	739	1,732	1,591	1,603	853	4,047	964	7.4	7.4	3.9	18.7
29	1,272	627	2,196	932	1,720	4,848	654	13.2	5.6	10.4	29.2
30	201	28	99	166	1,026	1,291	77	1.3	2.1	13.2	16.5
31	30	35	8	89	549	646	0	0.1	0.9	5.3	6.2
32	34	3	0	28	137	165	0	0.0	0.4	2.1	2.6
33	80	32	0	24	115	139	0	0.0	0.3	1.4	1.7
34	12	5	0	4	17	21	2	0.0	0.1	0.2	0.3
35	12	5	0	4	17	20	2	0.0	0.0	0.2	0.3
36	3	1	0	1	4	5	0	0.0	0.0	0.0	0.1
37	2	1	0	1	3	3	0	0.0	0.0	0.0	0.0
<b>Total</b>	<b>3,189</b>	<b>3,919</b>	<b>12,547</b>	<b>10,365</b>	<b>5,659</b>	<b>28,571</b>	<b>5,899</b>	<b>52.0</b>	<b>42.1</b>	<b>41.1</b>	<b>135.1</b>

**Appendix A. 9.** Weekly salmon catch and effort and sockeye salmon stock composition in the Alaskan District 108 test fishery, 2008. There was no marine test fishery in 2008.

**Appendix A. 10.** Inseason estimates of gillnet, troll, recreational, and subsistence catch of Stikine River bound Chinook salmon in District 108, 2008.

Week	Start Date	Salmon Harvest								
		Gillnet			Troll			Rec	Subsistence	Total
		Chinook	Permits	Days	Chinook	Permits	Days	Chinook	Chinook	Large
18	27-Apr							38		38
19	4-May	318	31	2	72	19	5	192		582
20	11-May	670	53	2	160	28	5	170		1,000
21	18-May	1248	96	2	313	49	5	560		2,121
22	25-May	1139	103	1	154	34	3	195	2	1,489
23	1-Jun	1335	103	1	145	28	3	300	0	1,780
24	8-Jun	874	70	2	129	36	5	115	0	1,118
25	15-Jun	1,112	76	2	-1	23	5	72	6	1,190
26	22-Jun	481	88	4	79	11	5	-295	3	268
27	29-Jun	-132	75	4	12	2	1	5	10	-105
28	6-Jul	264	65	5					4	268
29	13-Jul	-36	61	4					1	-35
Total		7,274	821	29	1,063	230	37	1,352	26	9,715

**Appendix A. 11.** U.S. subsistence fishery harvest in the Stikine River, 2007.

Week	Start Date	Salmon Harvest							Permits
		Chinook		Sockeye	Coho	Pink	Chum	Dolly Varden	Reporting
		Large	non large						Harvest
22	25-May	2	0	0			0	0	
23	1-Jun	0	0	0			0	0	
24	8-Jun	0	0	0			0	0	
25	15-Jun	6	0	52			0	1	
26	22-Jun	3	6	134			1	1	
27	29-Jun	10	0	135			0	1	
28	6-Jul	4	0	81			0	2	
29	13-Jul	1	0	26			4	0	
30	20-Jul								
31	27-Jul								
32	3-Aug				1	15	5		
33	10-Aug				0	0	0		
34	17-Aug				0	0	0		
35	24-Aug				0	0	0		
36	31-Aug				15	3	2		
37	7-Sep				18	0	0		
38	14-Sep				8	0	0		
Total		26	6	428	42	18	12	5	22

**Appendix A. 12.** Weekly salmon catch and effort in the Canadian commercial fishery in the lower Stikine River, 2008.

The catch of large and non large Chinook was calculated postseason based on a weekly sampling regime.

Week	Start Date	Catch						Effort		
		Chinook		Sockeye	Coho	Pink	Chum	Permits	Days	Permit Days
		Large	non large							
19	4-May	99	2	0	0	0	0	12.00	2.0	24.0
20	11-May	393	31	0	0	0	0	12.00	2.0	24.0
21	18-May	530	44	0	0	0	0	12.00	3.0	36.0
22	25-May	470	17	0	0	0	0	11.60	5.0	58.0
23	1-Jun	1,423	119	1	0	0	0	12.00	5.0	60.0
24	8-Jun	1,752	163	33	1	0	0	12.00	3.0	36.0
25	15-Jun	1,059	95	478	0	8	9	12.00	3.0	36.0
26	22-Jun	647	203	8,378	0	0	0	12.00	5.0	60.0
27	29-Jun	356	151	9,791	0	1	3	12.00	5.0	60.0
28	6-Jul	177	50	3,574	0	0	0	12.00	3.0	36.0
29	13-Jul	90	26	2,912	1	0	0	12.00	2.0	24.0
30	20-Jul	41	6	1,472	1	0	0	12.00	2.0	24.0
31	27-Jul	9	1	1,581	10	0	0	11.00	2.0	22.0
32	3-Aug	3	0	366	18	47	55	6.00	1.0	6.0
33	10-Aug	1	0	44	30	0	0	5.00	1.0	5.0
34	17-Aug	0	0	0	0	0	0	0.00	0.0	0.0
35	24-Aug	0	0	0	0	0	0	0.00	0.0	0.0
36	31-Aug	0	0	4	1,737	23	11	5.00	7.0	35.0
37	7-Sep	1	0	2	600	9	12	5.00	4.0	20.0
Inseason		7,242	665							
Final		7,051	908	28,636	2,398	88	90		55.0	566.0

**Appendix A. 13.** Weekly sockeye salmon stock proportions and catch by stock in the Canadian commercial fishery in the lower Stikine River, 2008.

Sex specific age compositions were calculated and the stock composition of the females sampled for egg diameters was expanded to the catch by a If no fishery, commercial catch from comparable week is used.

Week	Proportion				Planted Tahltan	Catch			Tahltan	
	large Egg	Tahltan	Tuya	Mainstem		Tahltan	Tuya	Mainstem	Wild	Planted
24	1.000	0.529	0.441	0.029	0.235	18	15	1	10	8
25	0.977	0.521	0.444	0.036	0.222	249	212	17	143	106
26	0.978	0.521	0.444	0.035	0.224	4,367	3,718	293	2,492	1,875
27	0.974	0.555	0.412	0.033	0.326	5,437	4,035	319	2,242	3,195
28	0.938	0.464	0.467	0.069	0.202	1,660	1,669	245	938	722
29	0.824	0.419	0.352	0.229	0.135	1,220	1,025	667	826	394
30	0.428	0.169	0.261	0.570	0.085	249	384	839	124	125
31	0.190	0.153	0.052	0.794	0.065	242	83	1,256	140	102
32	0.063	0.036	0.030	0.934	0.016	13	11	342	7	6
33	0.033	0.000	0.020	0.980	0.000	0	1	43	0	0
34										
35										
36		0.000		1.000	0.000	0	0	4	0	0
37		0.000		1.000	0.000	0	0	2	0	0
Total						13,455	11,153	4,028	6,922	6,533
Proportion						0.470	0.389	0.141	0.242	0.228
Week	Catch/Effort below Porcupine			Total CPUE	CPUE			Tahltan		
	Sockeye	Permit	Day		Small Egg	Tahltan	Tuya	Mainstem	Wild	Planted
24	33	36.0		0.917	0.917	0.485	0.404	0.027	0.270	0.216
25	478	36.0		13.278	12.974	6.917	5.889	0.472	3.972	2.944
26	8,378	60.0		139.633	136.580	72.783	61.967	4.883	41.533	31.250
27	9,791	60.0		163.183	158.988	90.617	67.250	5.317	37.367	53.250
28	3,574	36.0		99.278	93.079	46.111	46.361	6.806	26.056	20.056
29	2,912	24.0		121.333	99.935	50.833	42.708	27.792	34.417	16.417
30	1,472	24.0		61.333	26.227	10.375	16.000	34.958	5.167	5.208
31	1,581	22.0		71.864	13.649	11.000	3.773	57.091	6.364	4.636
32	366	6.0		61.000	3.864	2.167	1.833	57.000	1.167	1.000
33	44	5.0		8.800	0.293	0.000	0.176	8.624	0.000	0.000
34				8.789	0.000	0.000	0.000	8.789	0.000	0.000
35				6.832	0.000	0.000	0.000	6.832	0.000	0.000
36				0.414	0.000	0.000	0.000	0.414	0.000	0.000
37				0.025	0.000	0.000	0.000	0.025	0.000	0.000
Total	28,629	309.0		756.68	546.51	291.29	246.36	219.030	156.311	134.977
Proportion					0.722	0.385	0.326	0.289	0.207	0.178

**Appendix A. 14.** Weekly salmon catch and effort in the Canadian commercial fishery in the upper Stikine River, 2008.

Week	Start Date	Catch						Effort		
		Chinook		Sockeye	Coho	Pink	Chum	Permits	Days	Permit Days
		Large	non large							
27	29-Jun	0	0	26				1.0	2.0	2.0
28	6-Jul	30	3	72				1.0	5.0	5.0
29	13-Jul	0	6	212				1.0	2.0	2.0
30	20-Jul	5	0	82				1.0	2.0	2.0
31	27-Jul									
32	3-Aug	5	0	113				1.0	2.0	2.0
Total		40	9	505	0	0	0	5.0	13.0	13.0

**Appendix A. 15.** Weekly salmon catch and effort in the Canadian Aboriginal fishery located at Telegraph Creek, on the Stikine River, 2008.

Week	Start Date	Catch						Effort			Tahltan Sport Fishery			
		Chinook		Sockeye	Coho	Pink	Chum	Permits	Days	Permit Days	Rod Hours	Chinook		
		Large	non large									Retained	Released	Total
21	18-May	1	0	0	0	0	0	1.00	1.0	1.0				
22	25-May	0	0	0	0	0	0	0.00	0.0	0.0				
23	1-Jun	34	0	0	0	0	0	3.00	6.0	18.0				
24	8-Jun	140	9	0	0	0	0	4.29	7.0	30.0				
25	15-Jun	109	17	5	0	0	0	4.29	7.0	30.0				
26	22-Jun	125	12	9	0	0	0	3.57	7.0	25.0				
27	29-Jun	54	27	220	0	0	0	2.83	7.0	19.8	16	0	0	0
28	6-Jul	137	54	1,151	0	0	0	12.71	7.0	89.0	202	25	1	26
29	13-Jul	45	8	1,823	0	0	0	12.43	7.0	87.0	70	16	1	17
30	20-Jul	60	5	743	0	0	0	7.29	7.0	51.0	110	8	2	10
31	27-Jul	7	5	234	0	0	0	3.71	7.0	26.0	2	0	0	0
32	3-Aug	48	12	270	0	0	0	2.57	7.0	18.0				
33	10-Aug	9	1	29	0	0	0	2.00	7.0	14.0				
34	17-Aug	0	0	26	0	0	0	1.00	3.0	3.0				
Total		769	150	4,510	0	0	0		80	411.8	399	49	4	53

**Appendix A. 16.** Catch by stock and week for sockeye salmon harvested in the Canadian upper river commercial and Aboriginal fisheries in the Stikine River, 2008.

Week	Start Date	Stock			Tahltan	
		Tahltan	Tuya Mainstem		Wild	Planted
Proportion by stock for upper river fisheries						
25	15-Jun	0.850	0.150	0.000	0.791	0.060
26	22-Jun	0.850	0.150	0.000	0.791	0.060
27	29-Jun	0.850	0.150	0.000	0.791	0.060
28	6-Jul	0.706	0.171	0.123	0.634	0.072
29	13-Jul	0.800	0.200	0.000	0.655	0.145
30	20-Jul	0.731	0.166	0.103	0.567	0.164
31	27-Jul	0.405	0.154	0.441	0.256	0.150
32	3-Aug	0.538	0.193	0.269	0.449	0.089
33	10-Aug	0.497	0.379	0.124	0.393	0.103
34	17-Aug	0.731	0.269	0.000	0.692	0.038
<b>Total</b>						
Catch by stock for upper river commercial fishery						
27	29-Jun	22	4	0	21	2
28	6-Jul	51	12	9	46	5
29	13-Jul	170	42	0	139	31
30	20-Jul	60	14	8	46	13
31	27-Jul					
32	3-Aug	61	22	30	51	10
<b>Total</b>		<b>363</b>	<b>94</b>	<b>48</b>	<b>302</b>	<b>61</b>
Catch by stock for upper river aboriginal fishery						
25	15-Jun	4	1	0	4	0
26	22-Jun	8	1	0	7	1
27	29-Jun	187	33	0	174	13
28	6-Jul	812	197	142	729	83
29	13-Jul	1,459	364	0	1,194	265
30	20-Jul	543	123	77	421	122
31	27-Jul	95	36	103	60	35
32	3-Aug	145	52	73	121	24
33	10-Aug	14	11	4	11	3
34	17-Aug	19	7	0	18	1
<b>Total</b>		<b>3,287</b>	<b>825</b>	<b>398</b>	<b>2,740</b>	<b>547</b>

**Appendix A. 17.** Weekly salmon catch and effort in the Canadian test fishery in the Stikine River, 2008.

Week	Start Date	Catch					# Drifts/ Chum Set Hours	
		Chinook		Sockeye	Coho	Pink		
		Large	non large					
<b>Drift gillnet</b>								
28	6-Jul	0	0	45	0	0	0	14
29	13-Jul	1	0	56	0	2	10	28
30	20-Jul	1	0	49	1	4	9	28
31	27-Jul	2	2	51	4	12	26	42
32	3-Aug	0	0	14	3	6	20	42
33	10-Aug	0	0	13	5	3	18	42
34	17-Aug	3	0	5	22	3	9	42
35	24-Aug	0	0	5	57	4	22	42
36	31-Aug	0	0	2	30	1	8	28
37	7-Sep	0	0	1	80	0	1	84
38	14-Sep	0	0	0	58	0	1	84
39	21-Sep	0	0	0	49	0	0	84
40	28-Sep	0	0	0	2	0	0	46
41	5-Oct	0	0	0	8	0	0	89
42	12-Oct	0	0	0	2	0	0	35
<b>Total</b>		7	2	241	321	35	124	730
<b>Set gillnet</b>								
28	6-Jul	1	1	223	0	2	3	24
29	13-Jul	1	3	188	0	8	21	36
30	20-Jul	0	2	176	1	11	35	36
31	27-Jul	3	2	195	4	53	63	60
32	3-Aug	0	0	43	9	10	19	60
33	10-Aug	0	0	5	3	1	2	60
34	17-Aug	1	0	17	48	5	8	60
35	24-Aug	0	0	23	151	4	3	60
		6	8	870	216	94	154	396
<b>Total Test Fishery Catch</b>								
28	6-Jul	1	1	268	0	2	3	14
29	13-Jul	2	3	244	0	10	31	28
30	20-Jul	1	2	225	2	15	44	28
31	27-Jul	5	4	246	8	65	89	42
32	3-Aug	0	0	57	12	16	39	42
33	10-Aug	0	0	18	8	4	20	42
34	17-Aug	4	0	22	70	8	17	42
35	24-Aug	0	0	28	208	8	25	42
36	31-Aug	0	0	2	30	1	8	28
37	7-Sep	0	0	1	80	0	1	84
38	14-Sep	0	0	0	58	0	1	84
39	21-Sep	0	0	0	49	0	0	84
40	28-Sep	0	0	0	2	0	0	46
41	5-Oct	0	0	0	8	0	0	89
42	12-Oct	0	0	0	2	0	0	35
<b>Total Test Catch</b>		13	10	1,111	537	129	278	1,126



**Appendix A. 18.** Weekly catch, CPUE, and migratory timing of Tahltan, Tuya, and mainstem sockeye salmon stocks in the Stikine test fishery, 2008.

Sex specific age compositions were calculated and the stock composition of the females sampled for egg diameters was expanded to the catch by age.  
 If no test fishery, commercial catch from comparable week is used.

Week	Proportions			Catch			CPUE			Migratory Timing			
	Tahltan	Tuya Mainstem		Tahltan	Tuya Mainstem		Tahltan	Tuya Mainstem	Total	Tahltan	Tuya Mainstem		
Drift gillnet													
25	0.521	0.444	0.036				0.224	0.191	0.015	0.430	0.012	0.010	0.001
26	0.521	0.444	0.035				2.356	2.006	0.158	4.521	0.122	0.104	0.008
27	0.555	0.412	0.033				2.934	2.177	0.172	5.283	0.151	0.112	0.009
28	0.567	0.414	0.019	26	19	1	1.823	1.331	0.060	3.214	0.094	0.069	0.003
29	0.545	0.365	0.090	31	20	5	1.090	0.730	0.180	2.000	0.056	0.038	0.009
30	0.418	0.324	0.258	20	16	13	0.731	0.568	0.451	1.750	0.038	0.029	0.023
31	0.191	0.085	0.724	10	4	37	0.232	0.104	0.879	1.214	0.012	0.005	0.045
32	0.035	0.035	0.930	0	0	13	0.012	0.012	0.310	0.333	0.001	0.001	0.016
33	0.000	0.000	1.000	0	0	13	0.000	0.000	0.310	0.310	0.000	0.000	0.016
34	0.000	0.000	1.000	0	0	5	0.000	0.000	0.119	0.119	0.000	0.000	0.006
35	0.000	0.000	1.000	0	0	5	0.000	0.000	0.119	0.119	0.000	0.000	0.006
36	0.000	0.000	1.000	0	0	2	0.000	0.000	0.071	0.071	0.000	0.000	0.004
37	0.000	0.000	1.000	0	0	1	0.000	0.000	0.012	0.012	0.000	0.000	0.001
Total				87	60	94	9.402	7.118	2.856	19.377			
Proportion				0.360	0.248	0.392					0.485	0.367	0.147
Set gillnet													
28	0.567	0.414	0.019	126	92	4	5.270	3.848	0.173	9.292	0.218	0.160	0.007
29	0.545	0.365	0.090	102	69	17	2.847	1.905	0.471	5.222	0.118	0.079	0.020
30	0.418	0.324	0.258	74	57	45	2.042	1.586	1.260	4.889	0.085	0.066	0.052
31	0.191	0.085	0.724	37	17	141	0.621	0.277	2.352	3.250	0.026	0.012	0.097
32	0.035	0.035	0.930	2	2	40	0.025	0.025	0.666	0.717	0.001	0.001	0.028
33	0.000	0.000	1.000	0	0	5	0.000	0.000	0.083	0.083	0.000	0.000	0.003
34	0.000	0.000	1.000	0	0	17	0.000	0.000	0.283	0.283	0.000	0.000	0.012
35	0.000	0.000	1.000	0	0	23	0.000	0.000	0.383	0.383	0.000	0.000	0.016
Total				341	236	293	10.805	7.642	5.672	24.119			
Proportion				0.392	0.271	0.336					0.448	0.317	0.235
Additional Drifts no additional drifts in 2008													

Total Test Fishery Catches	Tahltan			
	Wild	Plant	Wild	Plant
0	0.521	0.444	0.036	
26	0.521	0.444	0.035	
27	0.555	0.412	0.033	
28	0.567	0.414	0.019	152 111 5
29	0.545	0.365	0.090	133 89 22
30	0.418	0.324	0.258	94 73 58
31	0.191	0.085	0.724	47 21 178
32	0.035	0.035	0.930	2 2 53
33	0.000	0.000	1.000	0 0 18
34	0.000	0.000	1.000	0 0 22
35	0.000	0.000	1.000	0 0 28
36	0.000	0.000	1.000	0 0 2
37	0.000	0.000	1.000	0 0 1
38	0.000	0.000	0.000	0 0 0
Total	428	296	387	225 203
Proportion	0.385	0.266	0.348	

**Appendix A. 19.** Daily test catches taken from the upper Stikine test fishery located above the Tahltan River, 21-31 July, 2008.

All Chinook released, assumed 50% mortality.						
Date	Nets	Sockeye			Prop. Eggs <3.6mm	Chinook Catch
		Catch				
		Female	Male	Total		
21-Jul	4	34	71	105	0.95	
22-Jul	4	99	109	208	0.90	
23-Jul	6	130	99	229	0.90	
24-Jul	4	149	103	252	0.82	
25-Jul	5	140	95	235	0.76	
26-Jul	5	115	105	220	0.67	
27-Jul	5	98	86	184	0.56	
28-Jul	5	68	56	124	0.54	
29-Jul	5	76	70	146	0.72	
30-Jul	5	101	79	180	0.72	
31-Jul	5	38	34	72		
Total		1,048	907	1,955		14
Stock Proportions						
Date	All Tahltan	Proportions			Tahltan	
		Tuya	Mainstem	Wild	Planted	
21-Jul	0.426	0.538	0.036	0.239	0.188	
22-Jul	0.120	0.684	0.196	0.067	0.053	
23-Jul	0.182	0.580	0.238	0.102	0.080	
24-Jul	0.139	0.592	0.269	0.078	0.061	
25-Jul	0.273	0.480	0.247	0.153	0.120	
26-Jul	0.364	0.300	0.336	0.204	0.160	
27-Jul	0.500	0.420	0.080	0.280	0.220	
28-Jul	0.232	0.429	0.340	0.130	0.102	
29-Jul	0.278	0.449	0.273	0.156	0.122	
30-Jul	0.364	0.400	0.236	0.204	0.160	
31-Jul	0.364	0.400	0.236	0.204	0.160	
Total	0.278	0.489	0.233	0.156	0.122	
Stock Specific Catches						
Date	All Tahltan	Catch			Tahltan	
		Tuya	Mainstem	Wild	Planted	
21-Jul	45	56	4	25	20	
22-Jul	25	142	41	14	11	
23-Jul	42	133	55	23	18	
24-Jul	35	149	68	20	15	
25-Jul	64	113	58	36	28	
26-Jul	80	66	74	45	35	
27-Jul	92	77	15	52	40	
28-Jul	29	53	42	16	13	
29-Jul	41	66	40	23	18	
30-Jul	65	72	43	37	29	
31-Jul	26	29	17	15	12	
	543	956	455	304	239	

**Appendix A. 20.** Daily counts of adult sockeye salmon passing through Tahltan Lake weir, 2008.

Date	Cumulative			Date	Cumulative		
	Count	Count	Percent		Count	Count	Percent
7-Jul	Weir Installed			13-Aug	69	10,076	95.8
8-Jul	0	0	0.0	14-Aug	148	10,224	97.2
9-Jul	0	0	0.0	15-Aug	26	10,250	97.5
10-Jul	0	0	0.0	16-Aug	34	10,284	97.8
11-Jul	0	0	0.0	17-Aug	26	10,310	98.0
12-Jul	0	0	0.0	18-Aug	41	10,351	98.4
13-Jul	0	0	0.0	19-Aug	19	10,370	98.6
14-Jul	0	0	0.0	20-Aug	13	10,383	98.7
15-Jul	0	0	0.0	21-Aug	10	10,393	98.8
16-Jul	0	0	0.0	22-Aug	7	10,400	98.9
17-Jul	0	0	0.0	23-Aug	5	10,405	98.9
18-Jul	0	0	0.0	24-Aug	16	10,421	99.1
19-Jul	0	0	0.0	25-Aug	16	10,437	99.2
20-Jul	0	0	0.0	26-Aug	7	10,444	99.3
21-Jul	1,041	1,041	9.9	27-Aug	4	10,448	99.4
22-Jul	529	1,570	14.9	28-Aug	2	10,450	99.4
23-Jul	324	1,894	18.0	29-Aug	5	10,455	99.4
24-Jul	682	2,576	24.5	30-Aug	15	10,470	99.6
25-Jul	100	2,676	25.4	31-Aug	5	10,475	99.6
26-Jul	194	2,870	27.3	1-Sep	6	10,481	99.7
27-Jul	481	3,351	31.9	2-Sep	18	10,499	99.8
28-Jul	957	4,308	41.0	3-Sep	2	10,501	99.9
29-Jul	215	4,523	43.0	4-Sep	6	10,507	99.9
30-Jul	1,239	5,762	54.8	5-Sep	0	10,507	99.9
31-Jul	318	6,080	57.8	6-Sep	1	10,508	99.9
1-Aug	38	6,118	58.2	7-Sep	0	10,508	99.9
2-Aug	342	6,460	61.4	8-Sep	0	10,508	99.9
3-Aug	364	6,824	64.9	9-Sep	0	10,508	99.9
4-Aug	65	6,889	65.5	10-Sep	2	10,510	99.9
5-Aug	443	7,332	69.7	11-Sep	3	10,513	100.0
6-Aug	742	8,074	76.8	12-Sep	2	10,515	100.0
7-Aug	582	8,656	82.3	13-Sep	0	10,515	100.0
8-Aug	378	9,034	85.9	14-Sep	0	10,515	100.0
9-Aug	421	9,455	89.9	15-Sep	1	10,516	100.0
10-Aug	246	9,701	92.2	16-Sep	0	10,516	100.0
11-Aug	211	9,912	94.3	17-Sep	0	10,516	100.0
12-Aug	95	10,007	95.2	Weir Pulled			
				<u>Hatchery</u>	<u>Wild</u>	<u>Total</u>	
Total Counted				5,121	5,395	10,516	
Fish removed for broodstock				-1,152	-1,212	-2,364	47 released fate unknown
Fish removed for otolith samples				-49	-51	-100	
Total Spawners				3,920	4,132	8,052	

**Appendix A. 21.** Daily counts of sockeye salmon smolt migrating through Tahltan Lake smolt weir, 2008.

Date	Count	Cumulative		Date	Count	Cumulative	
		Count	Percent			Count	Percent
6-May	0	0	0.0	30-May	31,290	1,196,509	85.3
7-May	0	0	0.0	31-May	15,026	1,211,535	86.4
8-May	0	0	0.0	1-Jun	13,649	1,225,184	87.3
9-May	0	0	0.0	2-Jun	52,318	1,277,502	91.1
10-May	0	0	0.0	3-Jun	8,075	1,285,577	91.6
11-May	0	0	0.0	4-Jun	520	1,286,097	91.7
12-May	2	2	0.0	5-Jun	218	1,286,315	91.7
13-May	3	5	0.0	6-Jun	1,151	1,287,466	91.8
14-May	2	7	0.0	7-Jun	50,169	1,337,635	95.3
15-May	3,052	3,059	0.2	8-Jun	21,215	1,358,850	96.9
16-May	5,991	9,050	0.6	9-Jun	21,170	1,380,020	98.4
17-May	346,788	355,838	25.4	10-Jun	17,181	1,397,201	99.6
18-May	250,164	606,002	43.2	11-Jun	1,540	1,398,741	99.7
19-May	6,949	612,951	43.7	12-Jun	148	1,398,889	99.7
20-May	8,795	621,746	44.3	13-Jun	1,465	1,400,354	99.8
21-May	77,277	699,023	49.8	14-Jun	809	1,401,163	99.9
22-May	746	699,769	49.9	15-Jun	384	1,401,547	99.9
23-May	115,012	814,781	58.1	16-Jun	1,338	1,402,885	100.0
24-May	180,242	995,023	70.9	17-Jun	110	1,402,995	100.0
25-May	7,016	1,002,039	71.4				
26-May	85,029	1,087,068	77.5				
27-May	9,890	1,096,958	78.2				
28-May	2,016	1,098,974	78.3				
29-May	66,245	1,165,219	83.1				
					Wild	870,295	
					Hatchery	532,700	
Total						1,402,995	

**Appendix A. 22.** Daily counts of adult Chinook salmon passing through Little Tahltan weir, 2008.

Date	Large Chinook			Chinook non large		
	Count	Cumulative		Count	Cumulative	
		Count	Percent		Count	Percent
18-Jun						
19-Jun	0	0	0.0	0	0	0.0
20-Jun	0	0	0.0	0	0	0.0
21-Jun	0	0	0.0	0	0	0.0
22-Jun	0	0	0.0	0	0	0.0
23-Jun	0	0	0.0	0	0	0.0
24-Jun	0	0	0.0	0	0	0.0
25-Jun	0	0	0.0	0	0	0.0
26-Jun	0	0	0.0	0	0	0.0
27-Jun	0	0	0.0	0	0	0.0
28-Jun	0	0	0.0	0	0	0.0
29-Jun	0	0	0.0	0	0	0.0
30-Jun	0	0	0.0	0	0	0.0
1-Jul	0	0	0.0	0	0	0.0
2-Jul	0	0	0.0	0	0	0.0
3-Jul	0	0	0.0	0	0	0.0
4-Jul	0	0	0.0	0	0	0.0
5-Jul	0	0	0.0	0	0	0.0
6-Jul	3	3	0.1	0	0	0.0
7-Jul	0	3	0.1	0	0	0.0
8-Jul	0	3	0.1	0	0	0.0
9-Jul	0	3	0.1	0	0	0.0
10-Jul	0	3	0.1	0	0	0.0
11-Jul	0	3	0.1	0	0	0.0
12-Jul	2	5	0.2	0	0	0.0
13-Jul	0	5	0.2	0	0	0.0
14-Jul	75	80	3.0	6	6	4.3
15-Jul	52	132	5.0	6	12	8.6
16-Jul	108	240	9.0	12	24	17.3
17-Jul	0	240	9.0	0	24	17.3
18-Jul	90	330	12.4	5	29	20.9
19-Jul	207	537	20.2	11	40	28.8
20-Jul	1	538	20.2	0	40	28.8
21-Jul	3	541	20.3	3	43	30.9
22-Jul	37	578	21.7	1	44	31.7
23-Jul	8	586	22.0	0	44	31.7
24-Jul	334	920	34.5	25	69	49.6
25-Jul	188	1,108	41.6	8	77	55.4
26-Jul	357	1,465	55.0	15	92	66.2
27-Jul	236	1,701	63.9	12	104	74.8
28-Jul	12	1,713	64.3	7	111	79.9
29-Jul	238	1,951	73.3	17	128	92.1
30-Jul	30	1,981	74.4	0	128	92.1
31-Jul	64	2,045	76.8	3	131	94.2
1-Aug	125	2,170	81.5	2	133	95.7
2-Aug	44	2,214	83.1	0	133	95.7
3-Aug	57	2,271	85.3	1	134	96.4
4-Aug	142	2,413	90.6	0	134	96.4
5-Aug	88	2,501	93.9	1	135	97.1
6-Aug	40	2,541	95.4	0	135	97.1
7-Aug	19	2,560	96.1	2	137	98.6
8-Aug	70	2,630	98.8	0	137	98.6
9-Aug	6	2,636	99.0	0	137	98.6
10-Aug	22	2,658	99.8	2	139	100.0
11-Aug	4	2,662	100.0	0	139	100.0
12-Aug	1	2,663	100.0	0	139	100.0
Total Counted		2,663			139	
Broodstock		0				
Escapement		2,663			139	

**Appendix B. 1.** Salmon catch and effort in the Alaskan District 106 commercial drift gillnet fisheries, 1960-2008.

Effort may be less than the sum of effort from 106-41/42 and 106-30 since some boats fished in more than one subdist

Year	Catch					Effort		
	Chinook		Sockeye	Coho	Pink	Chum	Permit	Days
	Large	non large					Days	Open
1960	46		10,354	336	1,246	502	369	17
1961	416		20,614	14,934	124,236	64,479	1,737	57
1962	1,308		47,033	42,276	256,620	59,119	4,693	52
1963	1,560		80,767	52,103	514,596	90,103	5,589	51
1964	2,082		76,541	64,654	443,086	44,218	5,383	49
1965	1,802		87,749	75,728	625,848	27,658	4,507	51
1966	1,665		89,847	62,823	400,932	40,756	4,978	74
1967	1,318		86,385	17,670	91,609	26,370	2,511	27
1968	1,316		64,671	67,151	169,107	61,366	4,965	52
1969	877		70,318	10,280	197,073	10,903	2,112	31
1970	785		42,778	35,470	94,892	32,231	1,863	41
1971	1,336		53,202	48,085	527,975	37,680	2,774	47
1972	2,573		101,338	93,427	89,467	72,382	3,321	41
1973	1,931		71,995	38,447	303,621	87,729	3,300	26
1974	1,926		57,346	45,651	104,403	50,309	2,179	28
1975	2,587		32,051	30,962	203,015	23,968	1,649	18
1976	384		15,481	19,126	139,439	6,868	827	22
1977	671		67,023	8,401	419,107	13,300	1,381	28
1978	274		41,574	55,578	224,715	16,545	1,510	27
1979	2,720		66,373	28,083	648,212	35,507	2,703	31
1980	580		107,422	16,666	45,662	26,291	1,324	25
1981	1,565		182,001	22,614	437,573	34,296	2,926	26
1982	1,648		193,798	31,481	25,533	18,646	1,700	23
1983	567		48,842	62,442	208,290	20,144	1,453	31
1984	892		91,653	41,359	343,255	70,258	1,890	31
1985	1,687		264,987	91,188	584,953	69,673	2,673	31
1986	1,704		145,709	194,912	308,484	82,289	3,510	31
1987	836		136,427	34,534	243,482	42,025	1,767	20
1988	1,104		92,529	13,103	69,559	69,620	1,495	19
1989	1,544		192,734	92,385	1,101,194	67,351	3,222	34
1990	2,108		185,805	164,235	319,186	73,232	3,502	34
1991	2,055		144,104	198,160	133,566	124,630	3,620	39
1992	1,355		203,155	298,935	94,248	140,468	4,230	40
1993	992		205,955	231,038	537,960	134,601	4,353	38
1994	754		211,048	267,862	179,994	176,026	4,468	43
1995	951		207,298	170,561	448,163	300,078	3,657	34
1996	644		311,100	223,640	188,035	283,290	5,290	46
1997	1,075		168,518	77,550	789,051	186,456	3,668	39
1998	518		113,435	273,197	502,655	332,022	4,398	43
1999	518		104,878	203,262	490,716	448,367	4,943	50
2000	1,220		90,076	96,207	156,619	199,836	2,409	33
2001	1,057		164,013	188,465	825,330	282,910	3,854	50
2002	446		56,135	226,560	82,951	112,541	5,299	47
2003	422		116,904	212,057	470,697	300,253	6,744	59
2004	2,735		116,259	138,631	245,237	110,574	8,189	55
2005	1,526	46	110,192	114,440	461,187	198,564	9,634	53
2006	1,737	211	91,980	69,015	149,907	268,436	11,079	45
2007	1,852	292	92,481	80,573	383,355	297,998	2,741	49
Averages								
60-07	1,285		111,102	96,797	320,959	109,851	3,591	38.3
98-07	1,203		105,635	160,241	376,865	255,150	5,929	48.4
2008	1,049	570	30,533	116,074	90,217	102,156	2,196	46.0

**Appendix B.1.** Page 2 of 2.

## Alaska Hatchery Contributions for Large Chinook and Coho

	Large Chinook		Coho	
	Hatchery	Wild	Hatchery	Wild
1989	512	1,032	5,029	87,356
1990	1,009	1,099	50,354	113,881
1991	608	1,447	64,067	134,093
1992	658	697	112,824	186,111
1993	305	687	77,914	153,124
1994	402	352	36,805	231,057
1995	353	598	27,333	143,228
1996	324	320	55,218	168,422
1997	369	706	19,479	58,071
1998	290	228	101,129	172,068
1999	189	329	82,828	120,434
2000	790	430	48,169	48,038
2001	446	611	67,378	121,087
2002	161	285	78,485	148,075
2003	192	230	93,454	118,603
2004	1,281	1,454	49,501	89,130
2005	657	869	30,727	83,713
2006	998	739	22,265	46,750
2007	1,415	437	34,158	46,415
Averages				
89-07	577		55,637	
2008	380	669	51,807	64,267

**Appendix B. 2.** Stock proportions and catches of sockeye salmon in the Alaskan District 106 commercial drift gillnet fisheries, 1982-2008.

Catches do not include Blind Slough terminal area harvest. Data based on scale pattern analysis.

Year	Alaska	Canada	Stikine			Tahltan		
			Tahltan	Tuya Mainstem	Total	Wild	Planted	
<b>Proportions</b>								
1982	0.486	0.319			0.194			
1983	0.668	0.217	0.103		0.013	0.116		
1984	0.658	0.269	0.029		0.044	0.074		
1985	0.479	0.419	0.091		0.011	0.102		
1986	0.689	0.293	0.014		0.004	0.018		
1987	0.827	0.155	0.010		0.007	0.017		
1988	0.874	0.106	0.020		0.001	0.020		
1989	0.657	0.311	0.006		0.026	0.032		
1990	0.608	0.371	0.005		0.016	0.021		
1991	0.545	0.331	0.100		0.024	0.124		
1992	0.595	0.232	0.070		0.102	0.172		
1993	0.400	0.338	0.098		0.164	0.262		
1994	0.579	0.254	0.142		0.025	0.167	0.108	0.033
1995	0.316	0.560	0.081	0.001	0.043	0.124	0.044	0.036
1996	0.531	0.268	0.166	0.028	0.007	0.201	0.147	0.019
1997	0.576	0.271	0.058	0.079	0.016	0.153	0.037	0.021
1998	0.598	0.307	0.015	0.080	0.000	0.095	0.013	0.002
1999	0.671	0.092	0.057	0.061	0.118	0.237	0.054	0.003
2000	0.643	0.233	0.020	0.085	0.019	0.124	0.017	0.003
2001	0.525	0.332	0.039	0.079	0.025	0.143	0.029	0.010
2002	0.758	0.098	0.037	0.072	0.035	0.144	0.024	0.012
2003	0.742	0.096	0.075	0.053	0.035	0.162	0.039	0.036
2004	0.499	0.222	0.241	0.020	0.018	0.279	0.144	0.097
2005	0.474	0.317	0.182	0.000	0.027	0.209	0.088	0.094
2006	0.364	0.362	0.203	0.056	0.016	0.274	0.090	0.113
2007	0.471	0.120	0.322	0.082	0.005	0.409	0.122	0.200
<b>Averages</b>								
83-07	0.590	0.263	0.087	0.053	0.032	0.147	0.068	0.048
98-07	0.574	0.218	0.119	0.059	0.030	0.208	0.062	0.057
2008	0.281	0.164	0.165	0.238	0.152	0.555	0.091	0.073
<b>Catches</b>								
1982	94,275	61,853				37,670		
1983	32,603	10,589	5,020		631	5,650		
1984	60,278	24,624	2,673		4,078	6,751		
1985	126,914	111,015	24,045		3,013	27,058		
1986	100,337	42,685	2,081		606	2,687		
1987	112,893	21,190	1,376		968	2,344		
1988	80,868	9,784	1,813		64	1,877		
1989	126,603	59,959	1,111		5,061	6,172		
1990	112,983	68,921	915		2,986	3,901		
1991	78,533	47,707	14,364		3,501	17,864		
1992	120,977	47,207	14,187		20,784	34,971		
1993	82,300	69,617	20,204		33,833	54,037		
1994	122,118	53,683	29,876		5,371	35,247	22,857	7,019
1995	65,544	116,075	16,715	125	8,839	25,679	9,182	7,533
1996	165,221	83,271	51,598	8,821	2,189	62,608	45,826	5,772
1997	97,101	45,665	9,764	13,232	2,756	25,752	6,281	3,483
1998	67,890	34,811	1,678	9,020	36	10,734	1,477	201
1999	70,363	9,696	5,988	6,427	12,404	24,819	5,700	288
2000	57,935	20,996	1,827	7,612	1,706	11,145	1,573	254
2001	86,078	54,512	6,339	12,965	4,119	23,423	4,747	1,592
2002	42,573	5,487	2,055	4,058	1,962	8,075	1,375	680
2003	86,720	11,264	8,736	6,145	4,039	18,920	4,550	4,186
2004	58,006	25,787	28,027	2,382	2,058	32,467	16,721	11,306
2005	52,192	34,952	20,080	0	2,968	23,048	9,724	10,356
2006	33,454	33,337	18,640	5,122	1,427	25,189	8,277	10,363
2007	43,523	11,102	29,759	7,612	484	37,855	11,253	18,506
<b>Averages</b>								
83-07	83,360	42,157	12,755	6,425	5,035	21,131	10,682	5,824
98-07	59,873	24,194	12,313	6,134	3,120	21,568	6,540	5,773
2008	8,593	4,997	5,031	7,261	4,651	16,943	2,791	2,240



**Appendix B. 3.** Salmon catch and effort in the Alaskan Subdistrict 106-41/42 (Sumner Strait) commercial drift gillnet fishery, 1960-2008.

Year	Catch					Effort	
	Chinook	Sockeye	Coho	Pink	Chum	Permit Days	Days Open
1960	24	9,005	277	1,103	362	251	17
1961	75	9,488	1,851	26,435	9,657	359	48
1962	131	19,692	6,548	45,987	9,544	811	44
1963	310	45,305	15,727	135,503	50,380	2,311	47
1964	316	52,943	27,338	183,402	22,913	2,344	49
1965	679	58,736	30,570	162,271	15,763	1,658	51
1966	690	65,721	30,792	96,287	24,235	2,080	74
1967	668	60,148	10,573	52,284	19,626	1,463	27
1968	1,010	50,212	46,111	82,012	39,001	2,997	52
1969	607	46,258	6,094	92,075	6,393	1,147	31
1970	420	26,812	15,153	29,102	18,092	905	41
1971	671	33,991	24,727	283,739	19,329	1,619	50
1972	1,747	74,745	60,827	40,644	46,511	2,152	41
1973	1,540	55,254	24,921	160,297	62,486	2,253	26
1974	1,342	46,760	28,889	57,296	38,045	1,579	28
1975	467	19,319	4,650	29,340	7,762	515	17
1976	237	9,319	10,367	20,251	2,301	366	19
1977	202	47,408	1,819	51,038	4,240	447	17
1978	274	1,422	26,762	9,546	3,142	389	27
1979	458	34,807	12,087	176,395	16,816	952	25
1980	205	48,434	10,894	17,068	15,176	596	16
1981	598	132,293	13,161	220,194	25,682	1,732	25
1982	648	121,563	21,193	10,392	11,891	1,083	22
1983	268	28,153	41,208	74,347	13,001	875	32
1984	136	27,372	19,124	99,807	28,461	587	32
1985	538	172,088	50,577	319,379	45,566	1,726	38
1986	421	85,247	104,328	105,347	48,471	1,896	32
1987	441	79,165	17,776	117,059	25,877	978	20
1988	452	57,337	6,349	10,894	42,210	815	18
1989	581	107,886	55,671	418,044	40,156	1,716	34
1990	759	104,922	94,526	84,543	42,474	1,827	34
1991	844	89,355	136,990	64,334	85,435	2,118	39
1992	743	146,608	190,885	38,483	100,666	2,630	40
1993	458	129,859	134,902	296,986	96,995	2,728	38
1994	456	157,526	191,695	66,225	125,826	2,988	43
1995	663	133,713	109,613	154,004	189,369	2,349	34
1996	487	223,784	159,319	70,620	162,872	3,623	46
1997	829	118,675	52,917	414,619	100,612	2,402	39
1998	334	79,052	175,124	196,403	200,892	2,999	43
1999	397	73,378	130,083	277,194	284,807	3,294	50
2000	558	57,863	54,232	80,014	120,111	1,522	33
2001	516	99,219	133,956	345,385	168,265	2,406	50
2002	216	39,030	163,727	41,086	71,333	1,844	47
2003	254	88,595	147,674	290,508	238,734	2,763	59
2004	1,508	85,929	80,083	132,627	72,317	1,845	55
2005	988	83,647	77,059	293,017	151,785	2,000	53
2006	1,121	58,359	38,584	34,103	159,436	1,314	45
2007	1,112	72,412	51,557	160,473	199,284	1,868	49
Averages							
60-07	592	72,267	59,360	128,503	68,423	1,690	37.4
98-07	700	73,748	105,208	185,081	166,696	2,186	48.4
2008	538	20,652	75,540	19,783	64,256	1,447	46.0

**Appendix B. 4.** Stock proportions and catches of sockeye salmon in the Alaskan Subdistrict 106-41/42 (Sumner Strait) commercial drift gillnet fishery, 1985-2008.

Data based on scale pattern analysis.								
Year	Alaska	Canada	Stikine			Tahltan		
			Tahltan	Tuya Mainstem	Total	Wild	Planted	
Proportions								
1985	0.480	0.401	0.109		0.010	0.119		
1986	0.662	0.308	0.024		0.006	0.030		
1987	0.816	0.166	0.015		0.003	0.018		
1988	0.868	0.112	0.019		0.001	0.020		
1989	0.653	0.303	0.009		0.036	0.044		
1990	0.579	0.395	0.008		0.018	0.026		
1991	0.460	0.377	0.129		0.034	0.163		
1992	0.582	0.241	0.088		0.089	0.177		
1993	0.369	0.327	0.134		0.169	0.304		
1994	0.531	0.271	0.166		0.032	0.198	0.127	0.040
1995	0.287	0.565	0.099	0.001	0.048	0.149	0.049	0.051
1996	0.479	0.245	0.228	0.039	0.009	0.276	0.203	0.025
1997	0.538	0.269	0.079	0.101	0.014	0.193	0.056	0.023
1998	0.550	0.337	0.017	0.096	0.000	0.113	0.014	0.003
1999	0.618	0.101	0.074	0.079	0.128	0.281	0.070	0.004
2000	0.611	0.223	0.028	0.116	0.023	0.167	0.024	0.004
2001	0.493	0.336	0.032	0.112	0.028	0.171	0.017	0.015
2002	0.730	0.101	0.049	0.087	0.034	0.169	0.031	0.017
2003	0.700	0.095	0.097	0.068	0.040	0.204	0.050	0.047
2004	0.413	0.227	0.315	0.026	0.018	0.359	0.191	0.125
2005	0.405	0.338	0.227	0.000	0.029	0.256	0.104	0.123
2006	0.270	0.332	0.304	0.078	0.016	0.398	0.130	0.174
2007	0.367	0.126	0.403	0.099	0.005	0.507	0.152	0.251
Averages								
85-07	0.542	0.269	0.115	0.069	0.034	0.189	0.087	0.064
98-07	0.516	0.222	0.155	0.076	0.032	0.263	0.078	0.076
2008	0.177	0.151	0.168	0.336	0.169	0.672	0.062	0.106
Catches								
1985	82,563	68,962	18,801		1,762	20,563		
1986	56,462	26,214	2,070		501	2,571		
1987	64,582	13,170	1,155		258	1,413		
1988	49,776	6,426	1,071		64	1,135		
1989	70,436	32,663	957		3,830	4,787		
1990	60,795	41,415	801		1,911	2,712		
1991	41,123	33,644	11,541		3,048	14,588		
1992	85,364	35,277	12,961		13,005	25,967		
1993	47,970	42,450	17,446		21,992	39,438		
1994	83,692	42,620	26,164		5,050	31,214	19,934	6,230
1995	38,343	75,505	13,292	125	6,448	19,865	6,514	6,778
1996	107,193	54,823	50,924	8,731	2,113	61,768	45,340	5,584
1997	63,827	31,892	9,327	11,937	1,692	22,956	6,594	2,733
1998	43,479	26,661	1,326	7,555	31	8,912	1,125	201
1999	45,335	7,420	5,425	5,786	9,412	20,623	5,159	266
2000	35,327	12,875	1,617	6,727	1,317	9,661	1,363	254
2001	48,906	33,309	3,164	11,063	2,777	17,004	1,723	1,441
2002	28,487	3,928	1,896	3,394	1,325	6,615	1,216	680
2003	62,037	8,446	8,595	6,016	3,501	18,112	4,434	4,161
2004	35,521	19,534	27,098	2,244	1,532	30,874	16,385	10,713
2005	33,909	28,312	18,979	0	2,447	21,426	8,687	10,292
2006	15,750	19,394	17,729	4,553	933	23,215	7,603	10,126
2007	26,549	9,142	29,196	7,182	342	36,720	10,998	18,198
Averages								
85-07	53,366	29,308	12,241	5,793	3,708	19,223		
98-07	37,530	16,902	11,503	5,452	2,362	19,316	5,869	5,633
2008	3,649	3,117	3,467	6,936	3,483	13,886	1,271	2,196

**Appendix B. 5.** Salmon catch and effort in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 1960-2008.

Year	Catch					Effort	
	Chinook	Sockeye	Coho	Pink	Chum	Permit Days	Days Open
1960	22	1,349	59	143	140	118	13
1961	341	11,126	13,083	97,801	54,822	1,378	57
1962	1,177	27,341	35,728	210,633	49,575	3,882	52
1963	1,250	35,462	36,376	379,093	39,723	3,278	51
1964	1,766	23,598	37,316	259,684	21,305	3,039	49
1965	1,123	29,013	45,158	463,577	11,895	2,849	51
1966	975	24,126	32,031	304,645	16,521	2,898	74
1967	650	26,237	7,097	39,325	6,744	1,048	27
1968	306	14,459	21,040	87,095	22,365	1,968	52
1969	270	24,060	4,186	104,998	4,510	1,026	31
1970	365	15,966	20,317	65,790	14,139	1,025	41
1971	665	19,211	23,358	244,236	18,351	1,517	50
1972	826	26,593	32,600	48,823	25,871	1,276	41
1973	391	16,741	13,526	143,324	25,243	1,303	26
1974	584	10,586	16,762	47,107	12,264	712	28
1975	2,120	12,732	26,312	173,675	16,206	1,159	9
1976	147	6,162	8,759	119,188	4,567	527	21
1977	469	19,615	6,582	368,069	9,060	940	21
1978		40,152	28,816	215,169	13,403	1,148	16
1979	2,262	31,566	15,996	471,817	18,691	1,848	25
1980	375	58,988	5,772	28,594	11,115	749	25
1981	967	49,708	9,453	217,379	8,614	1,321	26
1982	1,000	72,235	10,288	15,141	6,755	647	21
1983	299	20,689	21,234	133,943	7,143	589	37
1984	756	64,281	22,235	243,448	41,797	1,236	24
1985	1,149	92,899	40,611	265,574	24,107	1,372	36
1986	1,283	60,462	90,584	203,137	33,818	1,664	31
1987	395	57,262	16,758	126,423	16,148	799	20
1988	652	35,192	6,754	58,665	27,410	682	19
1989	963	84,848	36,714	683,150	27,195	1,583	34
1990	1,349	80,883	69,709	234,643	30,758	1,676	34
1991	1,211	54,749	61,170	69,232	39,195	1,505	39
1992	612	56,547	108,050	55,765	39,802	1,603	40
1993	534	76,096	96,136	240,974	37,606	1,646	38
1994	298	53,522	76,167	113,769	50,200	1,606	43
1995	288	73,585	60,948	294,159	110,709	1,422	34
1996	157	87,316	64,321	117,415	120,418	1,580	39
1997	246	49,843	24,633	374,432	85,844	1,329	38
1998	184	34,383	98,073	306,252	131,130	1,522	43
1999	121	31,500	73,179	213,522	163,560	1,766	49
2000	662	32,213	41,975	76,605	79,725	934	33
2001	541	64,794	54,509	479,945	114,645	1,573	50
2002	230	17,105	62,833	41,865	41,208	896	47
2003	168	28,309	64,383	180,189	61,519	1,158	59
2004	1,227	30,330	58,548	112,610	38,257	953	55
2005	538	26,545	37,381	168,170	46,779	1,005	53
2006	616	33,621	30,431	115,804	109,000	761	45
2007	740	20,069	29,016	222,882	98,714	927	49
Averages							
60-07	708	38,835	37,437	192,456	41,428	1,405	37.4
98-07	503	31,887	55,033	191,784	88,454	1,150	48.3
2008	511	9,881	40,534	70,434	37,900	799	46.0

**Appendix B. 6.** Stock proportions and catches of sockeye salmon in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 1985-2008.

Data based on scale pattern analysis.

Year	Alaska	Canada	Stikine			Tahltan		
			All Tahltan	Tuya Mainstem	Total	Wild	Planted	
<b>Proportions</b>								
1985	0.477	0.453	0.056		0.013	0.070		
1986	0.726	0.272	0.000		0.002	0.002		
1987	0.844	0.140	0.004		0.012	0.016		
1988	0.883	0.095	0.021		0.000	0.021		
1989	0.662	0.322	0.002		0.015	0.016		
1990	0.645	0.340	0.001		0.013	0.015		
1991	0.683	0.257	0.052		0.008	0.060		
1992	0.630	0.211	0.022		0.138	0.159		
1993	0.451	0.357	0.036		0.156	0.192		
1994	0.718	0.207	0.069		0.006	0.075	0.055	0.015
1995	0.370	0.551	0.047	0.000	0.032	0.079	0.036	0.010
1996	0.665	0.326	0.008	0.001	0.001	0.010	0.006	0.002
1997	0.668	0.276	0.009	0.026	0.021	0.056	-0.006	0.015
1998	0.710	0.237	0.010	0.043	0.000	0.053	0.010	0.000
1999	0.795	0.072	0.018	0.020	0.095	0.133	0.017	0.001
2000	0.702	0.252	0.007	0.027	0.012	0.046	0.007	0.000
2001	0.574	0.327	0.049	0.029	0.021	0.099	0.047	0.002
2002	0.824	0.091	0.009	0.039	0.037	0.085	0.009	0.000
2003	0.872	0.100	0.005	0.005	0.019	0.029	0.004	0.001
2004	0.741	0.206	0.031	0.005	0.017	0.053	0.011	0.020
2005	0.689	0.250	0.041	0.000	0.020	0.061	0.039	0.002
2006	0.527	0.415	0.027	0.017	0.015	0.059	0.020	0.007
2007	0.846	0.098	0.028	0.021	0.007	0.057	0.013	0.015
<b>Average</b>								
85-07	0.683	0.255	0.024	0.018	0.029	0.063	0.019	0.006
98-07	0.728	0.205	0.023	0.021	0.024	0.067	0.018	0.005
2008	0.500	0.190	0.158	0.033	0.118	0.309	0.154	0.004
<b>Catch</b>								
1985	44,351	42,053	5,244		1,251	6,495		
1986	43,875	16,471	11		105	116		
1987	48,311	8,020	221		710	931		
1988	31,092	3,358	742		0	742		
1989	56,167	27,296	154		1,231	1,385		
1990	52,188	27,506	114		1,075	1,189		
1991	37,410	14,063	2,823		453	3,277		
1992	35,613	11,930	1,226		7,778	9,004		
1993	34,330	27,167	2,758		11,841	14,599		
1994	38,426	11,063	3,712		321	4,033	2,923	789
1995	27,201	40,570	3,423	0	2,391	5,814	2,668	755
1996	58,028	28,448	674	90	76	840	486	188
1997	33,274	13,773	437	1,295	1,064	2,796	-313	750
1998	24,411	8,150	352	1,465	5	1,822	352	0
1999	25,028	2,276	563	641	2,992	4,196	541	22
2000	22,608	8,121	210	885	389	1,484	210	0
2001	37,172	21,203	3,175	1,902	1,342	6,419	3,024	151
2002	14,086	1,559	159	664	637	1,460	159	0
2003	24,683	2,818	141	129	538	808	116	25
2004	22,485	6,253	929	138	526	1,593	336	593
2005	18,283	6,640	1,101	0	521	1,622	1,037	64
2006	17,704	13,943	911	569	494	1,975	674	237
2007	16,974	1,960	563	430	142	1,136	255	308
<b>Average</b>								
85-07	33,204	14,984	1,289	631	1,560	3,206	891	277
98-07	22,343	7,292	810	682	759	2,252	670	140
2008	4,944	1,880	1,564	325	1,168	3,057	1,520	44

**Appendix B. 7.** Salmon catch and effort in the Alaskan District 108 commercial drift gillnet fishery, 1960-2008.

Permit days are adjusted for boats which did not fish the entire opening and may total less than the sum of the per								
Year	Catch					Effort		
	Chinook		Sockeye	Coho	Pink	Chum	Permit Days	Days Open
	Large	non large						
1962	618		4,430	3,921	2,889	2,035	27	
1963	1,430		9,979	11,612	10,198	11,024	53	
1964	2,911		20,299	29,388	114,555	10,771	62	
1965	3,106		21,419	8,301	4,729	2,480	48	
1966	4,516		36,710	16,493	61,908	17,730	62	
1967	6,372		29,226	6,747	4,713	5,955	40	
1968	4,604		14,594	36,407	91,028	14,537	61	
1969	5,021		19,209	5,790	11,877	2,311	967	
1970	3,207		15,120	18,403	20,523	12,305	1,222	
1971	3,717		18,143	14,876	21,806	4,665	1,070	
1972	9,332		51,734	38,520	17,153	17,363	2,095	
1973	9,254		21,387	5,837	6,585	6,680	1,519	
1974	8,199		2,428	16,021	4,188	2,107	1,178	
1975	1,534		0	0	0	1	258	
1976	1,123		18	6,056	722	124	372	
1977	1,443		48,374	14,405	16,253	4,233	742	
1978	531		56	32,650	1,157	1,001	565	
1979	91		2,158	234	13,478	1,064	94	
1980	631		14,053	2,946	7,224	6,910	327	
1981	283		8,833	1,403	1,466	3,594	177	
1982	1,033		6,911	19,971	16,988	741	494	
1983	47		178	15,369	4,171	675	263	
1984	14		1,290	5,141	4,960	1,892	56	
1985	20		1,060	1,926	5,325	1,892	70	
1986	102		4,185	7,439	4,901	5,928	246	
1987	149		1,629	1,015	3,343	949	81	
1988	206		1,246	12	144	3,109	66	
1989	310		10,083	4,261	27,640	3,375	216	
1990	557		11,574	8,218	13,822	9,382	359	
1991	1,504		22,275	15,864	10,935	11,402	643	
1992	967		52,717	22,127	66,742	15,458	1,246	
1993	1,628		76,874	14,307	39,661	22,504	1,569	
1994	1,996		97,224	44,891	35,405	27,658	2,199	
1995	1,702		76,756	17,834	37,788	54,296	1,729	
1996	1,717		154,150	19,059	37,651	135,623	2,396	
1997	2,566		93,039	2,140	65,745	38,913	1,699	
1998	460		22,031	19,206	39,246	41,057	947	
1999	1,049		36,548	28,437	48,550	117,196	1,675	
2000	1,671		15,833	5,651	9,497	40,337	606	
2001	7		610	10,731	11,012	5,397	377	
2002	25		208	21,131	4,578	2,017	323	
2003	312		42,158	38,795	76,113	51,701	1,270	
2004	7,410		103,392	26,439	20,439	37,996	1,830	
2005	25,741	2,677	99,465	42,203	106,395	150,121	5,380	
2006	26,982	3,019	61,298	34,430	56,810	343,637	3,576	
2007	14,627	2,836	70,580	19,880	39,872	177,547	2,625	
Averages								
60-07	3,494		30,467	15,576	26,091	31,037	1,090	
98-07	7,828		45,212	24,690	41,251	96,701	1,861	
2008	13,049	1,550	35,679	34,479	18,105	81,876	2,897	

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**Appendix B.7.** Page 2 of 2.

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Alaska Hatchery Contributions for Large Chinook and Coho

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	Large Chinook		Coho	
	Hatchery	Wild	Hatchery	Wild
1989	83	227	55	4,206
1990	249	308	2,536	5,682
1991	490	1,014	3,442	12,422
1992	439	528	7,067	15,060
1993	762	866	890	13,417
1994	594	1,402	2,043	42,848
1995	757	945	1,087	16,747
1996	839	878	1,269	17,790
1997	731	1,835	161	1,979
1998	302	158	3,042	16,164
1999	361	688	6,361	22,076
2000	934	737	2,801	2,850
2001	0	7	2,565	8,166
2002	0	25	1,449	19,682
2003	209	103	7,260	31,535
2004	1,890	5,520	2,447	23,992
2005	1,816	23,925	8,986	33,217
2006	4,802	22,180	10,981	23,449
2007	5,483	9,144	7,992	11,888
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Averages				
89-07	1,080		3,811	
2008	5,627	7,422	9,674	24,805

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**Appendix B. 8.** Stock proportions and catches of sockeye salmon in the Alaskan District 108 commercial drift gillnet fishery, 1985-2008.

Data based on scale pattern analysis.								
Year	Alaska	Canada	Stikine			Tahltan		
			Tahltan	Tuya Mainstem	Total	Wild	Planted	
1985	0.064	0.000	0.292		0.644	0.936		
1986	0.206	0.017	0.094		0.683	0.777		
1987 <sup>a</sup>	0.125	0.000	0.438		0.437	0.875		
1988	0.213	0.039	0.178		0.571	0.749		
1989	0.117	0.054	0.034		0.795	0.829		
1990	0.395	0.128	0.111		0.366	0.477		
1991	0.173	0.118	0.395		0.314	0.709		
1992	0.163	0.051	0.258		0.528	0.786		
1993	0.231	0.114	0.256		0.399	0.655		
1994	0.326	0.208	0.362		0.103	0.466	0.246	0.116
1995	0.135	0.204	0.455	0.006	0.200	0.661	0.198	0.257
1996	0.102	0.082	0.622	0.069	0.125	0.816	0.552	0.070
1997	0.058	0.131	0.362	0.261	0.189	0.812	0.260	0.102
1998	0.115	0.108	0.189	0.244	0.343	0.777	0.182	0.008
1999	0.144	0.036	0.414	0.201	0.205	0.820	0.390	0.024
2000	0.204	0.128	0.132	0.261	0.275	0.669	0.100	0.032
2001	0.775	0.098	0.000	0.005	0.121	0.126	0.000	0.000
2002	0.875	0.120	0.000	0.000	0.005	0.005	0.000	0.000
2003	0.227	0.118	0.179	0.062	0.414	0.655	0.092	0.087
2004	0.100	0.030	0.613	0.018	0.239	0.869	0.361	0.252
2005	0.128	0.178	0.437	0.000	0.257	0.694	0.179	0.258
2006	0.067	0.130	0.588	0.081	0.135	0.803	0.257	0.331
2007	0.179	0.133	0.474	0.147	0.067	0.688	0.150	0.324
Averages								
85-07	0.223	0.097	0.299	0.104	0.322	0.681	0.212	0.133
98-07	0.281	0.108	0.303	0.102	0.206	0.611	0.171	0.131
2008	0.089	0.110	0.352	0.291	0.159	0.801	0.186	0.165
Catch								
1985	68	0	310		683	992		
1986	862	71	393		2,858	3,252		
1987	204	0	714		712	1,425		
1988	265	48	222		711	933		
1989	1,180	545	341		8,017	8,358		
1990	4,576	1,479	1,280		4,239	5,519		
1991	3,859	2,622	8,807		6,987	15,794		
1992	8,604	2,696	13,599		27,818	41,417		
1993	17,758	8,742	19,688		30,686	50,374		
1994	31,715	20,250	35,222		10,037	45,259	23,936	11,286
1995	10,374	15,641	34,950	461	15,330	50,741	15,224	19,726
1996	15,755	12,618	95,837	10,621	19,319	125,777	85,041	10,796
1997	5,381	12,152	33,644	24,288	17,574	75,506	24,144	9,500
1998	2,541	2,376	4,170	5,383	7,561	17,114	4,000	170
1999	5,255	1,313	15,134	7,360	7,486	29,980	14,258	876
2000	3,226	2,019	2,097	4,138	4,353	10,588	1,591	506
2001	473	60	0	3	74	77	0	0
2002	182	25	0	0	1	1	0	0
2003	9,568	4,958	7,562	2,615	17,455	27,632	3,896	3,666
2004	10,375	3,136	63,347	1,869	24,666	89,882	37,274	26,073
2005	12,742	17,661	43,467	0	25,595	69,062	17,853	25,614
2006	4,088	7,973	36,021	4,944	8,272	49,237	15,762	20,259
2007	12,653	9,374	33,439	10,398	4,716	48,553	10,572	22,867
Averages								
85-07	7,031	5,468	19,576	5,545	10,659	33,368	18,111	10,810
98-07	6,110	4,890	20,524	3,671	10,018	34,213	10,521	10,003
2008	3,189	3,919	12,547	10,365	5,659	28,571	6,648	5,899

<sup>a</sup>No data to separate Tahltan and Mainstem Stikine in 1987.

**Appendix B. 9.** Salmon catch in the Alaskan District 106 and 108 test fisheries, 1984-2008.

Table only includes years when test fisheries were operated.

Year	Catch					Boat Hours	
	Chinook		Sockeye	Coho	Pink		Chum
	Large	non large					
Sub-district 106-41 (Sumner Strait)							
1984	13		1,370	101	975	793	5.94
1985	16		4,345	301	3,230	746	6.51
1986	23		982	177	60	248	4.14
1987	24		2,659	799	4,117	741	21.17
1988	11		1,020	89	137	772	5.04
1989	11		2,043	275	6,069	856	2.51
1990	13		2,256	432	372	552	0.29
1994	0		12	1	0	16	0.46
Sub-district 106-30 (Clarence Strait)							
1986	24		363	95	80	58	0.97
1987	1		899	589	1,705	467	16.00
1988	10		16	412	112	598	4.99
1989	4		37	464	431	329	
Total District 106							
1984	13		1,370	101	975	793	5.94
1985	16		4,345	301	3,230	746	6.51
1986	47		1,345	272	140	306	5.11
1987	25		3,558	1,388	5,822	1,208	37.17
1988	21		1,036	501	249	1,370	10.03
1989	15		2,080	739	6,500	1,185	2.51
1990	13		2,256	432	372	552	0.29
1994	0		12	1	0	16	0.46
District 108							
1984	37		641	11	822	813	
1985	33		1,258	11	465	381	2.99
1986	79		564	3	36	315	3.01
1987	30		290	13	1,957	488	3.20
1988	65		451	9	1,091	1,009	5.28
1989	15		1,038	45	2,459	283	2.64
1990	19		866	45	942	643	0.29
1991	21		893	18	390	455	6.46
1992	26		1,299	23	855	252	3.29
1993	30		303	0	18	31	1.88
1998	0		3,510	142	61	235	1.88
1999	29		4,801	217	429	1,368	1.88
2000	21		4,686	140	53	724	



**Appendix B. 10.** Stock proportions of sockeye salmon in the Alaskan District 106 and 108 test fisheries, 1984-2008.

Table only includes years when test fisheries were operated and catches included sockeye salmon.

Data based on scale pattern analysis.

Year	Alaska	Canada	Stikine			Tahltan	
			Tahltan	Tuya Mainstem	Total	Wild	Planted
Sub-district 106-41 (Sumner Strait) Proportions							
1984	0.658	0.269	0.029	0.044	0.074		
1985	0.480	0.401	0.109	0.010	0.119		
1986	0.834	0.149	0.008	0.009	0.017		
1987	0.816	0.166	0.015	0.003	0.018		
1988	0.868	0.098	0.034	0.000	0.034		
1989	0.624	0.304	0.017	0.056	0.072		
1990	0.548	0.416	0.014	0.022	0.035		
1994	0.500	0.250	0.250	0.000	0.250	0.167	0.083
Sub-district 106-30 (Clarence Strait) Proportions							
1986	0.726	0.272	0.000	0.002	0.002		
1987	0.844	0.140	0.004	0.012	0.016		
1988	0.746	0.254	0.000	0.000	0.000		
1989	0.514	0.486	0.000	0.000	0.000		
District 106 Proportions							
1984	0.658	0.269	0.029	0.044	0.074		
1985	0.480	0.401	0.109	0.010	0.119		
1986	0.805	0.182	0.006	0.007	0.013		
1987	0.823	0.160	0.012	0.006	0.017		
1988	0.867	0.100	0.033	0.000	0.033		
1989	0.622	0.307	0.016	0.055	0.071		
1990	0.548	0.416	0.014	0.022	0.035		
1994	0.500	0.250	0.250	0.000	0.250	0.250	0.000
District 108 Proportions							
1985	0.064	0.000	0.292	0.644	0.936		
1986	0.134	0.044	0.486	0.336	0.822		
1987	0.125	0.000	0.438	0.437	0.875		
1988	0.205	0.049	0.132	0.614	0.746		
1989	0.132	0.084	0.072	0.712	0.784		
1990	0.417	0.172	0.094	0.318	0.411		
1991	0.128	0.128	0.494	0.251	0.745		
1992	0.149	0.076	0.333	0.442	0.774		
1993	0.168	0.109	0.475	0.248	0.719		
1998	0.064	0.041	0.353	0.438	0.104	0.895	0.336
1999	0.162	0.019	0.481	0.298	0.041	0.820	0.453
2000	0.110	0.116	0.302	0.321	0.150	0.774	0.240

**Appendix B. 11.** Stock specific catches of sockeye salmon in the Alaskan District 106 and 108 test fisheries, 1984-2008.

Table only includes years when test fisheries were operated and catches included sockeye salmon.

Data based on scale pattern analysis.

Year	Alaska	Canada	Stikine			Tahltan		
			Tahltan	Tuya Mainstem	Total	Wild	Planted	
<b>Sub-district 106-41 (Summer Strait) Catches</b>								
1984	901	368	40		61	101		
1985	2,085	1,741	475		44	519		
1986	819	146	8		9	17		
1987	2,169	442	39		9	47		
1988	886	100	35		0	35		
1989	1,274	621	34		114	148		
1990	1,237	939	31		49	80		
1994	6	3	3		0	3		
<b>Subdistrict 106-30 (Clarence Strait) Catches</b>								
1986	263	99	0		1	1		
1987	758	126	3		11	15		
1988	12	4	0		0	0		
1989	19	18	0		0	0		
<b>District 106 Catches</b>								
1984	901	368	40		61	101		
1985	2,085	1,741	475		44	519		
1986	1,082	245	8		9	17		
1987	2,928	568	42		20	62		
1988	898	104	35		0	35		
1989	1,293	639	34		114	148		
1990	1,237	939	31		49	80		
1994	6	3	3		0	3	3	0
<b>District 108 Catches</b>								
1985	81	0	367		810	1,177		
1986	76	25	274		190	464		
1987	36	0	127		127	254		
1988	93	22	59		277	336		
1989	137	87	75		739	814		
1990	361	149	81		275	356		
1991	114	114	441		224	665		
1992	194	99	432		574	1,006		
1993	51	33	144		75	219		
1998	224	145	1,238	1,538	365	3,141	1,181	57
1999	776	89	2,309	1,430	197	3,936	2,174	135
2000	516	544	1,416	1,505	705	3,626	1,125	291

**Appendix B. 12.** Annual harvests of Stikine River Chinook salmon in District 108 gillnet, troll, recreational, and subsistence fisheries, 2005-2008.

Year	Chinook Salmon Harvest								
	Gillnet			Troll <sup>a</sup>			Rec	Subsistence	Total
	Catch	Permits	Days	Catch	Permits	Days			
2005	22,402	789	41	4,308	252	61	3,002	15	29,727
2006	21,861	953	35	1,895	234	44	2,944	37	26,737
2007	9,099	736	27	1,346	226	30	3,273	37	13,755
2008	7,274	821	29	1,063	230	37	1,352	26	9,715

<sup>a</sup> All non large captured in the troll and recreational fishery were released.

**Appendix B. 13.** U.S. subsistence fishery harvest in the Stikine River, 2004-2008.

Year	Harvest						Permits Fished
	Chinook		Sockeye	Coho	Pink	Chum	
	Large	non large					
2004	12	9	243	0	22	11	16
2005	15	8	252	53	69	22	22
2006	37	17	390	21	23	20	22
2007	37	15	245	23	59	11	23
2008	26	6	428	42	18	12	22

**Appendix B. 14.** Salmon catch and effort in the Canadian commercial fishery in the lower Stikine River, 1979-2008.

Year	Catch					Effort		
	Chinook		Sockeye	Coho	Pink	Chum	Permit	
	Large	non large					Days	Days
1979 <sup>a</sup>	712	63	10,534	10,720	1,994	424	756.0	42.0
1980 <sup>b</sup>	1,488		18,119	6,629	736	771	668.0	41.0
1981 <sup>b</sup>	664		21,551	2,667	3,713	1,128	522.0	32.0
1982 <sup>b</sup>	1,693		15,397	15,904	1,782	722	1,063.0	71.0
1983	492	430	15,857	6,170	1,043	274	434.0	54.0
1984	no commercial fishery.							
1985	256	91	17,093	2,172	2,321	532	145.5	22.5
1986	806	365	12,411	2,278	107	295	239.0	13.5
1987	909	242	6,138	5,728	646	432	287.0	20.0
1988	1,007	201	12,766	2,112	418	730	320.0	26.5
1989	1,537	157	17,179	6,092	825	674	325.0	23.0
1990	1,569	680	14,530	4,020	496	499	328.0	29.0
1991	641	318	17,563	2,638	394	208	282.4	39.0
1992	873	89	21,031	1,850	122	231	235.4	55.0
1993	830	164	38,464	2,616	29	395	483.8	58.0
1994	1,016	158	38,462	3,377	89	173	430.1	74.0
1995	1,067	599	45,622	3,418	48	256	534.0	59.0
1996	1,708	221	66,262	1,402	25	229	439.2	81.0
1997	3,283	186	56,995	401	269	222	569.4	89.0
1998	1,614	328	37,310	726	55	13	374.0	46.5
1999	2,127	789	32,556	181	11	8	261.3	31.0
2000	1,970	240	20,472	298	181	144	227.0	23.3
2001	826	59	19,872	233	78	56	173.0	23.0
2002	433	209	10,420	82	19	33	169.0	21.0
2003	695	672	51,735	190	850	112	275.2	28.8
2004	2,481	2,070	77,530	271	8	134	431.0	43.0
2005	19,070	1,181	79,952	276	0	39	803.0	72.0
2006	15,098	1,955	95,791	72	0	14	775.1	68.7
2007	10,131	1,469	56,913	50	0	2	767.4	67.5
Averages								
79-07	2,678	517	33,162	2,949	581	313	440	44.8
98-07	5,444	897	48,255	238	120	56	426	42.5
2008	7,051	908	28,636	2,398	88	90	566.0	55.0

<sup>a</sup>In 1979 the lower and upper river commercial fishery catches were combined

<sup>b</sup>All Chinook combined.

**Appendix B. 15.** Sockeye salmon stock proportions and catch by stock in the Canadian commercial fishery in the lower Stikine River, 1979-2008.

Year	Proportions			Planted Tahltan	Catch			Tahltan		Stock Id Method	Fishery Timing
	Tahltan	Tuya Mainstem			Tahltan	Tuya Mainstem		Wild	Planted		
1979	0.433		0.567		4,561		5,973			circuli counts	
1980	0.309		0.691		5,599		12,520			circuli counts	
1981	0.476		0.524		10,258		11,293			circuli counts	
1982	0.624		0.376		9,608		5,789			circuli counts	
1983	0.422		0.578		6,692		9,165			circuli counts	
1984	There was no commercial fishery									SPA	
1985	0.623		0.377		10,649		6,444			SPA	
1986	0.489		0.511		6,069		6,342			SPA&GPA	
1987	0.225		0.775		1,380		4,758			SPA&GPA	
1988	0.161		0.839		2,062		10,704			SPA&GPA	
1989	0.164		0.836		2,813		14,366			Eggs &TMR	
1990	0.346		0.654		5,029		9,501			Eggs &TMR	
1991	0.634		0.366		11,136		6,427			Eggs &TMR	
1992	0.482		0.518		10,134		10,897			Eggs &TMR	
1993	0.537		0.463		20,662		17,802			Eggs &TMR	
1994	0.616		0.384		23,678		14,784			Eggs &TMR	commerca
1995	0.676	0.020	0.304	0.195	30,848	893	13,881	21,936	8,912	Eggs &TMR	commerca
1996	0.537	0.113	0.350	0.066	35,584	7,465	23,213	31,197	4,387	Eggs &TMR	commerca
1997	0.356	0.272	0.372	0.072	20,269	15,513	21,213	16,175	4,094	Eggs &TMR	commerca
1998	0.335	0.352	0.313	0.020	12,498	13,137	11,675	11,751	747	Eggs &TMR	commerca
1999	0.576	0.241	0.183	0.021	18,742	7,862	5,952	18,046	696	Eggs &TMR	commerca
2000	0.252	0.397	0.350	0.039	5,165	8,136	7,171	4,364	801	Eggs &TMR	commerca
2001	0.175	0.226	0.599	0.032	3,482	4,483	11,907	2,850	632	Eggs &TMR	test
2002	0.320	0.128	0.552	0.074	3,335	1,335	5,750	2,559	776	Eggs &TMR	test
2003	0.427	0.161	0.412	0.131	22,067	8,335	21,333	15,304	6,763	Eggs &TMR	test
2004	0.707	0.016	0.276	0.285	54,841	1,276	21,415	32,717	22,124	Eggs &TMR	commerca
2005	0.761	0.018	0.221	0.352	60,881	1,437	17,634	32,707	28,174	Eggs &TMR	commerca
2006	0.747	0.178	0.075	0.416	71,573	17,079	7,139	31,685	39,888	Eggs &TMR	commerca
2007	0.635	0.191	0.173	0.321	36,167	10,891	9,855	17,901	18,266	Eggs &TMR	commerca
Averages											
79-07	0.466	0.178	0.451	0.156	18,064	7,526	11,604	18,399	10,482		
98-07	0.494	0.191	0.315	0.169	28,875	7,397	11,983	16,988	11,887		
2008	0.470	0.389	0.141	0.228	13,455	11,153	4,028	6,922	6,533	Eggs &TMR	commerca

**Appendix B. 16.** Salmon catch and effort in the Canadian commercial fishery in the upper Stikine River, 1975-2008.

Year	Catch					Effort		
	Chinook		Sockeye	Coho	Pink	Chum	Permit	
	Large	non large					Days	Days
1975	178		270	45	0	0		
1976	236		733	13	0	0		
1977 <sup>a</sup>	62		1,975	0	0	0		
1978 <sup>a</sup>	100		1,500	0	0	0		
1979 <sup>b</sup>								
1980	156	75-85	700	40	20	0		
1981	154		769	0	0	0	11.0	5.0
1982	76		195	0	0	0	8.0	4.0
1983	75		614	0	0	4	10.0	8.0
1984	no commercial fishery.							
1985	62		1,084	0	0	0	14.0	6.0
1986	104	41	815	0	0	0	19.0	7.0
1987	109	19	498	0	0	19	20.0	7.0
1988	175	46	348	0	0	0	21.5	6.5
1989	54	17	493	0	0	0	14.0	7.0
1990	48	20	472	0	0	0	15.0	7.0
1991	117	32	761	0	0	0	13.0	6.0
1992	56	19	822	0	0	0	28.0	13.0
1993	44	2	1,692	0	0	0	48.0	22.0
1994	76	1	2,466	0	1	0	68.0	50.0
1995	9	17	2,355	0	0	0	54.0	25.0
1996	41	44	1,101	0	0	0	75.0	59.0
1997	45	6	2,199	0	0	0	42.0	29.0
1998	12	0	907	0	0	0	19.0	19.0
1999	24	12	625	0	0	0	19.0	18.0
2000	7	2	889	0	0	0	19.8	9.3
2001	0	0	487	0	0	0	6.0	4.0
2002	2	3	484	0	0	0	12.0	9.0
2003	19	12	454	0	0	0	10.0	10.0
2004	0	1	626	0	0	0	11.0	11.0
2005	28	1	605	0	0	0	13.0	13.0
2006	22	1	520	0	0	0	15.0	15.0
2007	10	25	912	0	0	0	17.0	17.0
Averages <sup>c</sup>								
75-07	68	15	915	3	1	1	23	14.9
98-07	12	6	651	0	0	0	14	12.5
2008	40	9	505	0	0	0	13.0	13.0

<sup>a</sup>All Chinook combined.

<sup>b</sup>In 1979 the lower and upper river commercial fishery catches were combined

<sup>c</sup> Chinook averages only since 1986 when large fish and jacks were recorded separately.

**Appendix B. 17.** Salmon catch in the Canadian Aboriginal fishery located at Telegraph Creek, on the Stikine River, 1972-2008.

Year	Aboriginal					Recreational	
	Chinook		Sockeye	Coho	Pink	Chum	large Chin
Large	nonl large						
1972			4,373	0	0	0	
1973	200		3,670	0	0	0	
1974	100		3,500	0	0	0	
1975	1,024		1,982	5	0	0	
1976	924		2,911	0	0	0	
1977	100		4,335	0	0	0	
1978	400		3,500	0	0	0	
1979	850		3,000	0	0	0	74
1980	587		2,100	100	0	0	136
1981	586		4,697	200	144	0	213
1982	618		4,948	40	60	0	181
1983	851	215	4,649	3	77	26	38
1984	643	59	5,327	1	62	0	83
1985	793	94	7,287	3	35	4	92
1986	1,026	569	4,208	2	0	12	93
1987	1,183	183	2,979	3	0	8	138
1988	1,178	197	2,177	5	0	3	204
1989	1,078	115	2,360	6	0	0	132
1990	633	259	3,022	17	0	0	129
1991	753	310	4,439	10	0	0	129
1992	911	131	4,431	5	0	0	181
1993	929	142	7,041	0	0	0	386
1994	698	191	4,167	4	0	0	218
1995	570	244	5,490	0	0	7	107
1996	722	156	6,918	2	0	3	162
1997	1,155	94	6,365	0	0	0	188
1998	538	95	5,586	0	0	0	165
1999	765	463	4,874	0	0	0	166
2000	1,109	386	6,107	3	0	0	226
2001	665	44	5,241	0	0	0	190
2002	927	366	6,390	0	0	0	420
2003	682	373	6,595	0	0	0	167
2004	1,425	497	6,862	4	0	0	91
2005	800	94	5,333	0	0	0	118
2006	616	122	5,094	0	4	0	40
2007	364	233	2,188	2	0	0	0
Averages							
72-07	754	225	4,560	12	11	2	154
98-07	789	267	5,427	1	0	0	158
2008	769	150	4,510	0	0	0	46

**Appendix B. 18.** Stock specific sockeye salmon catches in the Canadian upper river commercial and Aboriginal fisheries in the Stikine River, 1972-2008.

Year	Upper River Commercial					Aboriginal Fishery				
	All		Tahltan			All		Tahltan		
	Tahltan	Tuya Mainstem	Wild	Planted	Tahltan	Tuya Mainstem	Wild	Planted		
1972					3,936		437			
1973					3,303		367			
1974					3,150		350			
1975	243	27			1,784		198			
1976	660	73			2,620		291			
1977	1,778	198			3,902		434			
1978	1,350	150			3,150		350			
1979	Catches were included in the lower river commercial catc				2,700		300			
1980	630	70			1,890		210			
1981	692	77			4,227		470			
1982	176	20			4,453		495			
1983	553	61			4,184		465			
1984	There was no commercial fishery				4,794		533			
1985	976	108			6,558		729			
1986	734	82			3,787		421			
1987	448	50			2,681		298			
1988	313	35			1,959		218			
1989	444	49			2,124		236			
1990	425	47			2,720		302			
1991	685	76			3,995		444			
1992	740	82			3,988		443			
1993	1,523	169			6,337		704			
1994	2,219	247	1,904	315	3,750		417	3,217	533	
1995	2,120	60	176	1,508	612	4,941	139	410	3,514	1,427
1996	945	150	6	824	121	5,802	972	144	4,931	871
1997	1,152	834	213	914	238	3,318	2,403	644	2,631	687
1998	363	517	27	336	27	2,352	3,103	131	2,227	125
1999	359	206	60	356	3	3,038	1,423	413	2,903	135
2000	224	581	84	224	0	1,733	3,989	385	1,681	52
2001	213	229	45	148	65	1,795	2,939	507	1,454	341
2002	122	316	46	122	0	1,813	4,174	403	1,759	54
2003	316	100	38	219	97	3,987	1,571	1,037	2,659	1,328
2004	539	42	45	301	238	6,240	608	14	3,691	2,549
2005	582	13	10	437	145	5,099	71	163	3,845	1,254
2006	443	69	8	224	219	3,974	668	452	2,028	1,946
2007	600	39	273	386	214	1,406	91	691	888	518
Averages										
72-07	728		86			3,541		403		
98-07	376	211	64	275	101	3,144	1,864	420	2,313	830
2008	363	94	48	302	61	3,287	825	398	2,740	547



**Appendix B. 19.** Salmon catch in the combined Canadian net fisheries in the Stikine River, 1972-2008.

There was no commercial fishery in 1984.

Chinook averages only since 1983 when large and non large fish were recorded separ  
ESSR catches not included.

Year	Catch					
	Chinook		Sockeye	Coho	Pink	Chum
	Large	non large				
1972	0		4,373	0	0	0
1973	200		3,670	0	0	0
1974	100		3,500	0	0	0
1975	1,202		2,252	50	0	0
1976	1,160		3,644	13	0	0
1977	162		6,310	0	0	0
1978	500		5,000	0	0	0
1979	1,562	63	13,534	10,720	1,994	424
1980	2,231		20,919	6,769	756	771
1981	1,404		27,017	2,867	3,857	1,128
1982	2,387		20,540	15,944	1,842	722
1983	1,418	645	21,120	6,173	1,120	304
1984	643	59	5,327	1	62	0
1985	1,111	185	25,464	2,175	2,356	536
1986	1,936	975	17,434	2,280	107	307
1987	2,201	444	9,615	5,731	646	459
1988	2,360	444	15,291	2,117	418	733
1989	2,669	289	20,032	6,098	825	674
1990	2,250	959	18,024	4,037	496	499
1991	1,511	660	22,763	2,648	394	208
1992	1,840	239	26,284	1,855	122	231
1993	1,803	308	47,197	2,616	29	395
1994	1,790	350	45,095	3,381	90	173
1995	1,646	860	53,467	3,418	48	263
1996	2,471	421	74,281	1,404	25	232
1997	4,483	286	65,559	401	269	222
1998	2,164	423	43,803	726	55	13
1999	2,916	1,264	38,055	181	11	8
2000	3,086	628	27,468	301	181	144
2001	1,491	103	25,600	233	78	56
2002	1,362	578	17,294	82	19	33
2003	1,396	1,057	58,784	190	850	112
2004	3,906	2,568	85,018	275	8	134
2005	19,898	1,276	85,890	276	0	39
2006	15,736	2,078	101,405	72	4	14
2007	10,505	1,727	60,013	52	0	2
Averages						
72-07	2,875	726	31,140	2,308	463	245
98-07	6,246	1,170	54,333	239	121	56
2008	7,860	1,067	33,651	2,398	88	90

**Appendix B. 20.** Salmon catches in the Stikine River harvested under Canadian ESSR licenses, 1992-2008.

Year	Tahltan Area			Tuya Area				Total	
	Catch			Tahltan	Tuya Mainstem	Tahltan			
	Total	Wild	Planted			Wild	Planted		
1993	1,752	1,714	38					0	
1994	6,852	5,682	1,170					0	
1995	10,740	6,680	4,060					0	
1996	14,339	12,667	1,672		216			216	
1997					2,015			2,015	
1998					6,103			6,103	
1999					2,822			2,822	
2000					1,283			1,283	
2001								0	
2002								0	
2003					7,031			7,031	
2004					1,675			1,675	
2005								0	
2006								0	
2007								0	
2008								0	
Salmon taken for otolith samples when ESSR not operated.									
1997	378	302	76						
1998	390	364	26						
1999	429	404	25						
2000	406	324	82						
2001	50	30	20		410				
2002	400	285	115		501				
2003	400	225	175						
2004	420	225	195						
2005	400	242	158		148				
2006	400	206	194		0				
2007	200	115	85		151				
2008	100	49	51		280				
Experimental test fishery located in the mainstem Stikine between Tahltan and Tuya Rivers.									
2008				543	956	455	304	239	1,955

**Appendix B. 21.** Salmon catches and effort in Canadian test fisheries in the Stikine River, 1985-2008.

Year	Catches							Effort
	Chinook						Drift=#	
	Large	non large	Sockeye	Coho	Pink	Chum	Set=hr.	
Drift Test Fishery Catches								
1985								
1986	27		12	412	226	8	25	405
1987 <sup>a</sup>	128			385	162	111	61	845
1988	168		14	325	75	9	33	720
1989	116		4	364	242	41	46	870
1990	167		6	447	134	5	29	673
1991	90		1	503	118	37	30	509
1992	135		27	393	75	13	23	312
1993	94		11	440	37	6	18	304
1994	43		4	179	71	6	20	175
1995	18		13	297	35	4	12	285
1996	42		5	262	55	4	55	245
1997	30		7	245	11	9	15	210
1998	25		11	190	207	20	40	820
1999	53		43	410	312	11	17	1,006
2000	59		4	374	60	9	45	694
2001	128		3	967	257	74	47	883
2002	63		50	744	306	14	31	898
2003	64		62	997	291	92	54	660
2004	29		41	420	352	15	80	778
2005	14		8	339	444	9	43	780
2006	0		0	299	343	21	24	720
2007	2		0	435	89	71	31	224
Averages								
85-07	68		16	429	177	27	35	592
98-07	44		22	518	266	34	41	746
2008	7		2	241	321	35	124	730
Set Test Fishery Catches								
1985				1,340				
1986								
1987	61			1,283	620	587	193	1,456
1988	101		15	922	130	23	65	1,380
1989	101		20	1,243	502	249	103	1,392
1990	64		12	1,493	271	42	48	1,212
1991	77		15	1,872	127	197	48	1,668
1992	62		21	1,971	193	56	43	1,249
1993	85		11	1,384	136	6	63	1,224
1994	74		34	414	0	0	0	456
1995	61		35	850	166	5	41	888
1996	64		40	338	0	0	0	312
1997								
1998								
1999	49		16	803	64	6	10	1,577
2000	87		0	1,015	181	25	120	3,715
2001	56		7	2,223	1,078	124	61	2,688
2002	48		56	3,540	1,323	13	48	2,845
2003	14		91	2,173	525	200	85	1,116
2004	22		39	918	135	41	103	524
2005	19		13	1,312	271	62	50	396
2006	0		0	629	181	90	24	312
2007	3		0	673	99	256	33	336
Averages								
85-07	55		24	1,320	316	104	60	1,302
98-07	33		25	1,476	429	91	59	1,501
2008	6		8	870	216	94	154	396

Appendix B.21. Page 2 of 2.

Year	Catches						Effort		
	Chinook			non large	Sockeye	Coho	Pink	Chum	Set=#
	Caught	Released	Large						
Additional Test Fishery Catches									
1992	417			134	594	0	0	0	85
1993	389			65	1,925	2	1	3	266
1994	178			40	840	0	0	0	131
1995	169			136	1,423	26	1	9	222
1996	192			31	712	0	0	0	138
1997									
1998									
1999	751			38	4,683	16	18	2	531
2000	787			14	989	195	0	9	1,427
2001	1,652			49	91	426	0	1	1,399
2002	1,545			217	128	1,116	0	1	2,048
2003	1,225			617	186	883	5	29	1,915
2004	0			0	0	0	0	0	0
2005	0			0	0	0	0	0	0
2006	0			0	0	0	0	0	0
2007	0			0	0	0	0	0	0
Averages									
85-07	522			96	827	190	2	4	583
98-07	662			104	675	293	3	5	813
2008	0			0	0	0	0	0	0
Total Test Fishery Catches									
1985	0			0	1,340	0	0	0	
1986	27			12	412	226	8	25	
1987	189			30	1,668	782	698	254	
1988	269			29	1,247	205	32	98	
1989	217			24	1,607	744	290	149	
1990	231			18	1,940	405	47	77	
1991	167			16	2,375	245	234	78	
1992	614			182	2,958	268	69	66	
1993	568			87	3,749	175	13	84	
1994	295			78	1,433	71	6	20	
1995	248			184	2,570	227	10	62	
1996	298			76	1,312	55	4	55	
1997	30			7	245	11	9	15	
1998	25			11	190	207	20	40	
1999	853			97	5,896	392	35	29	
2000	933	226		18	2,378	436	34	174	
2001	1,836	401		59	3,281	1,761	198	109	
2002	1,656	378		323	4,412	2,745	27	80	
2003	1,303			770	3,356	1,699	297	168	
2004	51			80	1,338	487	56	183	
2005	33			21	1,651	715	71	93	
2006	0			0	928	524	111	48	
2007	5			0	1,108	188	327	64	
Averages									
85-07	428			92	2,061	546	113	86	
98-07	670			138	2,454	915	118	99	
2008	13			10	1,111	537	129	278	

anon large Chinook from both set and drift nets in 1987.

**Appendix B. 22.** Sockeye salmon stock proportions and catch by stock in the test fishery in the lower Stikine River, 1985-2008.

Average proportions were from averages of weekly estimates.

Year	Catch					Proportions				Fishery	
	Tahltan		Tuya Mainstem	Marked Tahltan	Tahltan		Average	Tuya Mainstem	Stock Id Method		Timing
	U.S.	Canada			U.S.	Canada					
1985	560	439		841		0.418	0.328	0.372		0.628 circuli counts	
1986	164	127		267		0.398	0.308	0.352		0.648 circuli counts	
1987	513	397		1,213		0.308	0.238	0.273		0.727 circuli counts	
1988	408	295		895		0.327	0.237	0.282		0.718 circuli counts	
1989		414		1,192			0.258	0.258		0.742 circuli counts	
1990		822		1,058			0.454	0.454		0.546 SPA	
1991		1,443		931			0.608	0.608		0.392 SPA	
1992		1,912		1,046			0.646	0.646		0.354 SPA&GPA	
1993		2,184		1,564			0.583	0.583		0.417 SPA&GPA	
1994		1,228		205			0.857	0.857		0.143 SPA&GPA	
1995		2,064	20	486	729		0.803	0.803	0.008	0.189 Eggs &TMR	
1996		875	116	321	108		0.667	0.667	0.088	0.245 Eggs &TMR	
1997		97	54	94	20		0.396	0.396	0.220	0.384 Eggs &TMR	
1998		70	51	69	4		0.368	0.368	0.268	0.363 Eggs &TMR	
1999		3,031	1,564	1,301	113		0.514	0.514	0.265	0.221 Eggs &TMR	
2000		605	982	791	94		0.254	0.254	0.413	0.333 Eggs &TMR	commerca
2001		684	924	1,673	124		0.208	0.208	0.282	0.510 Eggs &TMR	commerca
2002		1,726	694	1,992	402		0.391	0.391	0.157	0.451 Eggs &TMR	commerca
2003		1,505	428	1,423	374		0.448	0.448	0.128	0.424 Eggs &TMR	commerca
2004		686	44	608	277		0.512	0.512	0.033	0.455 Eggs &TMR	commerca
2005		895	8	748	327		0.542	0.542	0.005	0.453 Eggs &TMR	commerca
2006		329	13	586	183		0.355	0.355	0.014	0.631 Eggs &TMR	commerca
2007		290	84	734	116		0.262	0.262	0.076	0.662 Eggs &TMR	test
Averages											test
85-07								0.452	0.151	0.462	test
98-07								0.386	0.164	0.450	commerca
2008		428	296	387	203		0.385	0.385	0.266	0.348 Eggs &TMR	commerca

**Appendix B. 23.** Estimated proportion of inriver run comprised of Tahltan, Tuya, and mainstem sockeye salmon stocks, 1979-2008.

Average proportions were from averages of weekly stock composition and migratory timing (from drift test fishery) estimates.

Year	Tahltan			Tuya	Mainstem	Stock Id Method	Fishery Timing
	U.S.	Canada	Average				
1979	0.433				0.567	circuli counts	
1980	0.305				0.695	circuli counts	
1981	0.475				0.525	circuli counts	
1982	0.618				0.382	circuli counts	
1983	0.489	0.423	0.456		0.544	circuli counts	
1984	0.635	0.394	0.493		0.507	SPA	
1985	0.621	0.363	0.466		0.534	SPA	
1986	0.398	0.500	0.449		0.551	SPA&GPA	
1987	0.338	0.257	0.304		0.696	SPA&GPA	
1988	0.209	0.122	0.172		0.828	SPA&GPA	
1989		0.188			0.812	Eggs &TMR	
1990		0.417			0.583	Eggs &TMR	
1991		0.561			0.439	Eggs &TMR	
1992		0.496			0.504	Eggs &TMR	
1993		0.477			0.523	Eggs &TMR	
1994		0.606			0.394	Eggs &TMR	commerci
1995		0.578		0.016	0.406	Eggs &TMR	commerci
1996		0.519		0.104	0.377	Eggs &TMR	commerci
1997		0.297		0.229	0.474	Eggs &TMR	commerci
1998		0.309		0.348	0.344	Eggs &TMR	commerci
1999		0.545		0.245	0.209	Eggs &TMR	commerci
2000		0.260		0.391	0.349	Eggs &TMR	commerci
2001		0.202		0.268	0.530	Eggs &TMR	test
2002		0.360		0.141	0.498	Eggs &TMR	test
2003		0.421		0.158	0.421	Eggs &TMR	test
2004		0.664		0.026	0.311	Eggs &TMR	commerci
2005		0.662		0.020	0.318	Eggs &TMR	commerci
2006		0.672		0.144	0.185	Eggs &TMR	commerci
2007		0.541		0.165	0.294	Eggs &TMR	commerci
Averages							
79-07			0.446		0.476		
98-07			0.463	0.191	0.346		
2008		0.385	0.385	0.326	0.289	Eggs &TMR	commerci

**Appendix B. 24.** Counts of adult sockeye salmon migrating through Tahltan Lake weir, 1959-2008.

Daily counts were unavailable in 1963. A rock slide blocked the entrance during some of the migration in 1965.

Year	Weir Installed	Date of Arrival			Weir Pulled	Total Count	Brood-stock	Otolith		Spawners		
		First	50%	90%				ESSR	Samples	Total	Natural Hatchery	
1959	30-Jun	2-Aug	12-Aug	16-Aug		4,311						
1960	15-Jul	2-Aug	24-Aug	27-Aug		6,387						
1961	20-Jul	9-Aug	11-Aug	15-Aug		16,619						
1962	1-Aug	2-Aug	5-Aug	8-Aug		14,508						
1963	3-Aug					1,780						
1964	23-Jul	26-Jul	14-Aug	25-Aug		18,353						
1965	19-Jul	18-Jul	2-Sep	7-Sep		1,471						
1966	12-Jul	3-Aug	13-Aug	21-Aug		21,580						
1967	11-Jul	14-Jul	21-Jul	28-Jul		38,801						
1968	11-Jul	21-Jul	25-Jul	8-Aug		19,726						
1969	7-Jul	11-Jul	18-Jul	31-Jul		11,805						
1970	5-Jul	25-Jul	1-Aug	11-Aug		8,419						
1971	12-Jul	19-Jul	28-Jul	12-Aug		18,523						
1972	13-Jul	13-Jul	19-Jul	31-Aug	21-Aug	52,545						
1973	10-Jul	24-Jul	30-Jul	7-Aug	1-Sep	2,877						
1974	3-Jul	28-Jul	3-Aug	17-Aug	13-Sep	8,101						
1975	10-Jul	25-Jul	8-Aug	17-Aug	28-Aug	8,159						
1976	16-Jul	29-Jul	1-Aug	6-Aug	24-Aug	24,111						
1977	6-Jul	11-Jul	16-Jul	10-Aug	25-Aug	42,960						
1978	10-Jul	10-Jul	20-Jul	29-Jul	26-Aug	22,788						
1979	9-Jul	23-Jul	1-Aug	11-Aug	31-Aug	10,211						
1980	4-Jul	15-Jul	22-Jul	12-Aug	3-Sep	11,018						
1981	30-Jun	16-Jul	26-Jul	3-Aug	8-Sep	50,790						
1982	2-Jul	10-Jul	19-Jul	29-Jul	4-Sep	28,257						
1983	27-Jun	5-Jul	22-Jul	5-Aug	7-Sep	21,256						
1984	20-Jun	19-Jul	24-Jul	3-Aug	29-Aug	32,777						
1985	28-Jun	18-Jul	31-Jul	6-Aug	5-Sep	67,326						
1986	10-Jul	26-Jul	4-Aug	11-Aug	4-Sep	20,280						
1987	14-Jul	21-Jul	4-Aug	13-Aug	27-Aug	6,958						
1988	16-Jul	16-Jul	6-Aug	14-Aug	29-Aug	2,536						
1989	7-Jul	9-Jul	1-Aug	14-Aug	4-Sep	8,316	2,210			6,106		
1990	6-Jul	15-Jul	26-Jul	3-Aug	28-Aug	14,927	3,302			11,625		
1991	30-Jun	17-Jul	25-Jul	7-Aug	5-Sep	50,135	3,552			46,583		
1992	9-Jul	18-Jul	25-Jul	3-Aug	2-Sep	59,907	3,694			56,213		
1993	7-Jul	10-Jul	28-Jul	10-Aug	11-Sep	53,362	4,506	1,752		47,104	46,074 1,030	
1994	7-Jul	14-Jul	30-Jul	9-Aug	7-Sep	46,363	3,378	6,852		36,133	29,961 6,172	
1995	8-Jul	9-Jul	24-Jul	12-Aug	16-Sep	42,317	4,902	10,740		26,675	16,591 10,084	
1996	6-Jul	14-Jul	22-Jul	4-Aug	10-Sep	52,500	4,402	14,339		33,759	29,823 3,936	
1997	9-Jul	15-Jul	25-Jul	26-Aug	26-Sep	12,483	2,294		378	9,811	7,829 1,982	
1998	9-Jul	11-Jul	25-Jul	26-Aug	17-Sep	12,658	3,099		390	9,169	8,553 616	
1999	10-Jul	19-Jul	31-Jul	13-Aug	15-Sep	10,748	2,870		429	7,449	6,952 497	
2000	9-Jul	21-Jul	25-Jul	3-Aug	4-Sep	6,076	1,717		406	3,953	3,152 801	
2001	8-Jul	19-Jul	31-Jul	9-Aug	14-Sep	14,811	2,386		50	12,375	7,475 4,900	
2002	7-Jul	12-Jul	25-Jul	8-Aug	14-Sep	17,740	3,051		400	14,289	10,490 3,799	
2003	7-Jul	11-Jul	29-Jul	8-Aug	18-Sep	53,933	3,946		400	49,587	27,893 21,694	
2004	7-Jul	12-Jul	25-Jul	10-Aug	15-Sep	63,372	4,243		420	58,709	28,715 29,994	
2005	7-Jul	11-Jul	4-Aug	25-Aug	15-Sep	43,446	3,424		400	39,622	23,202 16,420	
2006	9-Jul	12-Jul	27-Jul	20-Aug	13-Sep	53,855	3,403		400	50,052	25,926 24,126	
2007	9-Jul	20-Jul	8-Aug	19-Aug	15-Sep	21,074	2,839		200	18,035	10,362 7,673	
Averages												
59-07	09-Jul	18-Jul	30-Jul	11-Aug	06-Sep	25,168						
98-07	08-Jul	14-Jul	28-Jul	15-Aug	15-Sep	29,771	3,098		350	26,324	15,272	11,052
2008	13-Jul	21-Jul	30-Jul	10-Aug	18-Sep	10,516	2,364		100	8,052	4,132	3,920

**Appendix B. 25.** Aerial survey counts of Mainstem sockeye salmon stocks in the Stikine River drainage, 1984-2008.

The index represents the combined counts from eight spawning areas.

Survey conditions were exceptionally poor; therefore, the counts probably did reflect relative abundance.

Year	Chutine River	Scud River	Porcupine Slough	Christina Creek	Craig River	Bronson Slough	Verrett Creek	Verrett Slough	Escapement Index
1984	526	769	69	130	102		640		2,236
1985	253	282	69	67	27		383		1,081
1986	139	151	6	0	0		270		566
1987	6	490	62	6	30		103		697
1988	14	219	22	7	0		114		376
1989	29	269	133	10	60	60	180	68	809
1990	24	301	31	4	0	0	301	82	743
1991	0	100	61		7	32	179	8	387
1992	164	1,242	90	50	17	138	163	22	1,886
1993	57	321	141	28	2	79	107	142	877
1994	267	292	66			62	147	114	948
1995	13	260	11			72	47	31	434
1996	134	351	149			27	54	338	1,053
1997	204	271	25			12	116	32	660
1998	230	246	89			9	183	135	892
1999	56	301	64			54	98	78	651
2000	47	86	86			32	0	90	341
2001	601	2,037	268			163	217	232	3,518
2002	239	216	95			13	353		916
2003	240	71	239			0	54		604
2004	245	262	56			0	85		648
2005	66	124	111			23	158	76	558
2006	276	288	59			0	140	180	943
2007	0	17	34	0		3	45	21	120
Averages									
84-07	160	374	85	30	25	41	172	87	914
98-07	200	365	110	0		30	133	81	919
2008	83	41	33	0		0	15	231	403



**Appendix B. 26.** Estimates of sockeye salmon smolt migrating through Tahltan Lake smolt weir, 1984-2008.

Estimate changes due to overcrowding mortality, 1987 and expansions by average % of outmigration by date from historical data90-92.									
Year	Weir Installed	Date of Arrival			Total Count	Total Estimate	Date and Change	Smolt	
		First	50%	90%				Natural	Hatchery
1984	10-May	11-May	23-May	6-Jun		218,702			
1985	25-Apr	23-May	31-May	28-May		613,531			
1986	8-May	10-May	31-May	7-Jun		244,330			
1987	7-May	15-May	23-May	24-May	810,432	780,432	5/22 -30,000		
1988	1-May	8-May	20-May	6-Jun		1,170,136			
1989	5-May	8-May	22-May	6-Jun		580,574			
1990	5-May	15-May	29-May	5-Jun	595,147	610,407	6/14 97.5%		
1991	5-May	14-May	21-May	30-May	1,439,676	1,487,265	6/13 96.8%	1,220,397	266,868
1992	7-May	13-May	21-May	27-May	1,516,150	1,555,026	6/14 97.5%	750,702	804,324
1993	7-May	11-May	17-May	22-May		3,255,045		2,855,562	399,483
1994	8-May	8-May	16-May	12-Jun		915,119		620,809	294,310
1995	5-May	6-May	13-May	11-Jun		822,284		767,027	55,257
1996	11-May	11-May	20-May	25-May		1,559,236		1,408,020	151,216
1997	7-May	11-May	23-May	30-May		518,202		348,685	169,517
1998	7-May	8-May	25-May	5-Jun		540,866		326,420	214,446
1999	6-May	10-May	9-Jun	15-Jun		762,033		468,488	293,545
2000	7-May	9-May	22-May	17-Jun		619,274		355,618	263,656
2001	6-May	7-May	24-May	18-Jun		1,495,642		841,268	654,374
2002	6-May	14-May	27-May	12-Jun		1,873,598		1,042,435	831,163
2003	6-May	11-May	29-May	6-Jun		1,960,480		979,442	981,038
2004	6-May	10-May	21-May	25-May		2,116,701		825,513	1,291,188
2005	6-May	7-May	17-May	25-May		1,843,804		943,929	899,875
2006	6-May	10-May	25-May	2-Jun		2,195,266		1,773,062	422,204
2007	6-May	16-May	21-May	28-May		1,055,114		644,987	410,127
Averages									
84-07	05-May	11-May	23-May	03-Jun		1,200,961		951,316	494,270
98-07	06-May	10-May	25-May	06-Jun		1,446,278		777,259	584,648
2008	06-May	12-May	23-May	02-Jun		1,402,995		870,295	532,700

**Appendix B. 27.** Weir counts of Chinook salmon at Little Tahltan River, 1985-2008.

Year	Weir Installed	Date of Arrival			Total Broodstock Count and Other	Natural Spawners	Total Natural Spawners
		First	50%	90%			
Large Chinook							
1985	3-Jul	4-Jul	30-Jul	6-Aug	3,114		3,114
1986	28-Jun	29-Jun	21-Jul	5-Aug	2,891		2,891
1987	28-Jun	4-Jul	24-Jul	2-Aug	4,783		4,783
1988	26-Jun	27-Jun	18-Jul	3-Aug	7,292		7,292
1989	25-Jun	26-Jun	23-Jul	2-Aug	4,715		4,715
1990	22-Jun	29-Jun	23-Jul	4-Aug	4,392		4,392
1991	23-Jun	25-Jun	20-Jul	3-Aug	4,506		4,506
1992	24-Jun	4-Jul	21-Jul	30-Jul	6,627	-12	6,615
1993	20-Jun	21-Jun	16-Jul	28-Jul	11,449	-12	11,437
1994	18-Jun	28-Jun	22-Jul	2-Aug	6,387	-14	6,373
1995	17-Jun	20-Jun	17-Jul	4-Aug	3,072	0	3,072
1996	17-Jun	26-Jun	16-Jul	30-Jul	4,821	0	4,821
1997	14-Jun	22-Jun	16-Jul	29-Jul	5,557	-10	5,547
1998	13-Jun	19-Jun	14-Jul	29-Jul	4,879	-6	4,873
1999	18-Jun	27-Jun	19-Jul	1-Aug	4,738	-5	4,733
2000	19-Jun	23-Jun	21-Jul	5-Aug	6,640	-9	6,631
2001	20-Jun	23-Jun	18-Jul	2-Aug	9,738	-8	9,730
2002	20-Jun	23-Jun	18-Jul	27-Jul	7,490	-14	7,476
2003	20-Jun	20-Jun	19-Jul	6-Aug	6,492	0	6,492
2004	18-Jun	19-Jun	20-Jul	31-Jul	16,381	0	16,381
2005	19-Jun	21-Jun	22-Jul	4-Aug	7,387	0	7,387
2006	20-Jun	26-Jun	21-Jul	29-Jul	3,860	0	3,860
2007	4-Jul	10-Jul	29-Jul	4-Aug	562	0	562
Averages							
85-07	21-Jun	25-Jun	20-Jul	01-Aug	5,990		5,986
98-07	20-Jun	24-Jun	20-Jul	01-Aug	6,817	-4	6,813
2008	19-Jun	6-Jul	26-Jul	4-Aug	2,663	0	2,663
non large Chinook							
1985	3-Jul	4-Jul	31-Jul	10-Aug	316		3,430
1986	28-Jun	3-Jul	25-Jul	6-Aug	572		3,463
1987	28-Jun	3-Jul	26-Jul	6-Aug	365		5,148
1988	26-Jun	27-Jun	17-Jul	2-Aug	327		7,619
1989	25-Jun	26-Jun	23-Jul	2-Aug	199		4,914
1990	22-Jun	5-Jul	22-Jul	30-Jul	417		4,809
1991	23-Jun	3-Jul	24-Jul	7-Aug	313		4,819
1992	24-Jun	12-Jul	22-Jul	30-Jul	131		6,758
1993	20-Jun	30-Jun	14-Jul	1-Aug	60		11,509
1994	18-Jun	2-Jul	22-Jul	5-Aug	121		6,508
1995	17-Jun	22-Jun	28-Jul	10-Aug	135		3,207
1996	17-Jun	12-Jul	25-Jul	5-Aug	22		4,843
1997	14-Jun	26-Jun	21-Jul	1-Aug	54		5,611
1998	13-Jun	26-Jun	20-Jul	7-Aug	37		4,916
1999	18-Jun	1-Jul	23-Jul	6-Aug	202		4,940
2000	19-Jun	23-Jun	20-Jul	5-Aug	108		6,748
2001	20-Jun	23-Jun	27-Jul	3-Aug	269		10,007
2002	20-Jun	26-Jun	21-Jul	7-Aug	618		8,108
2003	20-Jun	30-Jun	21-Jul	5-Aug	334		6,826
2004	18-Jun	21-Jun	19-Jul	31-Jul	250		16,631
2005	19-Jun	29-Jun	23-Jul	4-Aug	231		7,618
2006	20-Jun	7-Jul	23-Jul	5-Aug	93		3,953
2007	4-Jul	15-Jul	29-Jul	1-Aug	12		574
Averages							
85-07	21-Jun	30-Jun	22-Jul	04-Aug	225		6,216
98-07	20-Jun	29-Jun	22-Jul	04-Aug	215		7,032
2008	19-Jun	14-Jul	25-Jul	29-Jul	139		2,802

**Appendix B. 28.** Index counts of Stikine Chinook salmon escapements, 1979-2008. Counts do not include jacks (fish < 660mm mef length).

Inriver run and escapement generated from mark-recapture studies, inriver and marine caught as reported in ADF&G fisheries data series reports  
 Total run from jointly accepted US and Canadian catch estimates. Counts do not include non large Chinook. Terminal run includes only catches in the Stikine River and I

Year	Inriver		Marine	Total	% to	Little Tahltan		Tahltan	Beatty	Andrew Creek		
	Run	Catches				Escapement	Catch			Run	Little Tahltan	Weir
1979								1,166		2,118		327 Weir inc.
1980								2,137		960	122	282 Weir inc.
1981								3,334		1,852	558	536 Weir inc.
1982								2,830		1,690	567	672 Weir inc.
1983								594		453	83	366 Weir inc.
1984								1,294			126	389 Weir inc.
1985								3,114	1,598	1,490	147	320 Foot
1986								2,891	1,201	1,400	183	708 Foot
1987								4,783	2,706	1,390	312	788 Heli
1988								7,292	3,796	4,384	593	564 Foot
1989								4,715	2,527		362	530 Aerial
1990								4,392	1,755	2,134	271	664 Foot
1991								4,506	1,768	2,445	193	400 Aerial
1992								6,627	3,607	1,891	362	778 Heli
1993								11,437	4,010	2,249	757	1,060 Foot
1994								6,373	2,422		184	572 Heli
1995								3,072	1,117	696	152	343 Foot
1996	31,718	2,769	28,949			0.167		4,821	1,920	772	218	335 Heli
1997	31,509	4,513	26,996			0.205		5,547	1,907	260	218	293 Foot
1998	28,133	2,165	25,968			0.188		4,873	1,385	587	125	487 Foot
1999	23,716	3,769	19,947			0.237		4,733	1,379			605 Aerial
2000	30,301	2,770	27,531			0.241		6,631	2,720			690 Aerial
2001	66,646	4,103	62,543			0.156		9,730	4,258			1,054 Aerial
2002	53,983	3,808	50,175	3,587	57,570	0.149		7,476	Missed peak survey time			876 Aerial
2003	43,022	3,057	39,965	3,895	46,917	0.162		6,492	1,903			595 Foot
2004	52,538	3,638	48,900	9,599	62,137	0.335		16,381	6,014			1,534 Foot
2005	60,615	20,049	39,806	29,760	89,615	0.182		7,253				1,015 Foot
2006	40,181	15,776	24,405	26,771	66,952	0.158		3,860				1,089 Foot
2007	25,069	10,509	14,560	12,433	37,502	0.039		562				890 Aerial
Averages												
79-07								5,981	2,374	1,575	291	647
98-07	42,344		35,380					6,799	2,943			884
02-07	45,775		36,302	14,550	60,815	0.171		7,004	3,959			1,000
2008	26,284	7,932	18,352	9,715	35,999	0.145		2,663				530 Heli

**Appendix B. 29.** Index counts of Stikine coho salmon escapements, 1984-2008.

Missing data due to poor survey conditions and Craig count low in 2004 due to survey conditions.

Year	Date	Katete		Craig	Bronson		Scud		Porcupine	Christina	Total
		West	Katete		Verrett	Slough	Slough	Scud			
1984	30-Oct	147	313	0	15	42					517
1985	25-Oct	590	1,217	735	39	0	924	365			3,870
1986											
1987											
1988	28-Oct	32	227		175		97	53	0		584
1989	29-Oct	336	896	992	848	120	707	90	55		4,044
1990	30-Oct	94	548	810	494		664	430			3,040
1991	29-Oct	302	878	985	218		221	352			2,956
1992	29-Oct	295	1,346	949	320		462	316			3,688
1993	30-Oct						206	324			
1994	1-Nov	28	652	1,026	466		448	1,105			3,725
1995	30-Oct	211	208	1,419	574		621	719			3,752
1996	30-Oct	163	232	205	549		630	1,466			3,245
1997	1-Nov	2	0	19	116		272	648			1,057
1998	30-Oct	14	63	141	282		143	450			1,093
1999	5-Nov	163	773	891	490		661	894			3,872
2000	2-Nov				5		95	206			306
2001	2-Nov	207	1,401	3,121	708		1,571	397			7,405
2002	5-Nov	806	2,642	4,488	1,695		1,389	1,626			12,646
2003											
2004	3-Nov	78	762	19	959		173	1,009			3,000
2005	31-Oct	300	1,195	444	353		218	689			3,199
2006	2-Nov	350	543	675	403		95	147			2,213
2007	10-Nov	66	190	567	240		153	341			1,557
Average											
84-07		220	741	971	447	54	488	581	28		3,288
98-07		248	946	1,293	571		500	640			3,921
2008	7-Nov			535	501		86	25			1,147

### Appendix B. 30. Stikine River sockeye salmon run size, 1979-2008.

The averages for 1983-1985 are averages of weekly run timing estimates as well as stock composition estimates and are not simple averages. Escapement includes fish later captured for broodstock and biological samples. Catches include test fishery catches.

Year	Inriver Run			Inriver		Marine	Total
	Canada	U.S.	Average	Catch	Escapement	Catch	Run
1979		40,353	40,353	13,534	26,819	8,299	48,652
1980		62,743	62,743	20,919	41,824	23,206	85,949
1981		138,879	138,879	27,017	111,862	27,538	166,417
1982		68,761	68,761	20,540	48,221	42,408	111,169
1983	77,260	66,838	71,683	21,120	50,563	5,772	77,455
1984	95,454	59,168	76,211	5,327	70,884	7,736	83,947
1985	237,261	138,498	184,747	26,804	157,943	29,747	214,494
1986			69,036	17,846	51,190	6,420	75,456
1987			39,264	11,283	27,981	4,085	43,350
1988			41,915	16,538	25,377	3,181	45,096
1989			75,054	21,639	53,415	15,492	90,546
1990			57,386	19,964	37,422	9,856	67,242
1991			120,152	25,138	95,014	34,323	154,476
1992			154,542	29,242	125,300	77,394	231,936
1993			176,100	52,698	123,402	104,630	280,730
1994			127,527	53,380	74,147	80,509	208,036
1995			142,308	66,777	75,531	76,420	218,728
1996			184,400	90,148	94,252	188,385	372,785
1997			125,657	67,819	57,838	101,258	226,915
1998			90,459	50,096	40,363	30,989	121,448
1999			65,879	46,773	19,106	58,735	124,614
2000			53,145	31,129	22,016	25,359	78,504
2001			103,755	28,881	74,874	23,500	127,255
2002			68,635	21,706	46,929	8,076	76,711
2003			194,425	69,171	125,254	46,552	240,977
2004			189,415	88,031	101,384	122,349	311,764
2005			167,570	87,541	80,030	92,110	259,680
2006			193,768	102,333	91,435	74,426	268,194
2007			110,132	61,121	49,011	86,408	196,540
Averages							
79-07			110,135	41,190	68,944	48,797	158,932
98-07			123,718	58,678	65,040	56,850	180,569
2008			74,275	36,717	37,558	45,942	120,217
Tahltan sockeye run size							
1979			17,472	7,261	10,211	5,076	22,548
1980			19,137	8,119	11,018	11,239	30,376
1981			65,968	15,178	50,790	16,189	82,157
1982			42,493	14,236	28,257	20,918	63,412
1983			32,684	11,428	21,256	5,073	37,758
1984			37,571	4,794	32,777	3,102	40,673
1985			86,008	18,682	67,326	25,197	111,205
1986			31,015	10,735	20,280	2,757	33,771
1987			11,923	4,965	6,958	2,259	14,182
1988			7,222	4,686	2,536	2,129	9,351
1989			14,110	5,794	8,316	1,561	15,671
1990			23,923	8,996	14,927	2,307	26,230
1991			67,394	17,259	50,135	23,612	91,006
1992			76,681	16,774	59,907	28,218	104,899
1993			84,068	32,458	51,610	40,036	124,104
1994			77,239	37,728	39,511	65,101	142,340
1995			82,290	50,713	31,577	51,665	133,955
1996			95,706	57,545	38,161	147,435	243,141
1997			37,319	24,836	12,483	43,408	80,727
1998			27,941	15,283	12,658	7,086	35,027
1999			35,918	25,170	10,748	23,431	59,349
2000			13,803	7,727	6,076	5,340	19,143
2001			20,985	6,174	14,811	6,339	27,324
2002			24,736	6,996	17,740	2,055	26,791
2003			81,808	27,875	53,933	16,298	98,106
2004			125,677	62,305	63,372	91,535	217,213
2005			110,903	67,457	43,446	63,714	174,617
2006			130,174	76,319	53,855	54,923	185,097
2007			59,537	38,463	21,074	63,330	122,867
Averages							
79-07			53,162	23,654	29,509	28,666	81,828
98-07			63,148	33,377	29,771	33,405	96,553
2008			28,592	18,076	10,516	17,743	46,335

-Continued-

**Appendix B.30.** Page 2 of 2.

Year	Inriver Run			Inriver Catch	Escapement	Marine Catch	Total Run
	Canada	U.S.	Average				
Tuya sockeye run size							
1995			2,216	1,112	1,104	586	2,802
1996			19,158	8,919	10,239	19,442	38,600
1997			28,738	20,819	7,919	37,520	66,258
1998			31,442	22,911	8,531	15,941	47,383
1999			16,165	13,877	2,288	15,217	31,382
2000			20,779	14,971	5,808	13,255	34,034
2001			27,783	8,575	19,208	12,968	40,751
2002			9,707	6,519	3,188	4,058	13,765
2003			30,814	17,465	13,349	8,760	39,574
2004			4,909	3,645	1,264	4,257	9,166
2005			3,325	1,529	1,796	131	3,456
2006			27,806	17,829	9,977	10,122	37,928
2007			18,176	11,105	7,071	18,050	36,227
Averages							
98-07			19,091	11,843	7,248	10,276	29,367
2008			24,183	13,324	10,858	17,765	41,948
Mainstem sockeye run size							
1979			22,880	6,273	16,608	3,223	26,103
1980			43,606	12,800	30,806	11,967	55,573
1981			72,911	11,839	61,072	11,349	84,260
1982			26,267	6,304	19,964	21,490	47,757
1983			38,999	9,692	29,307	699	39,698
1984			38,640	533	38,107	4,634	43,274
1985			98,739	8,122	90,617	4,550	103,289
1986			38,022	7,111	30,910	3,663	41,685
1987			27,342	6,318	21,023	1,826	29,168
1988			34,693	11,852	22,841	1,052	35,745
1989			60,944	15,845	45,099	13,931	74,875
1990			33,464	10,968	22,495	7,549	41,013
1991			52,758	7,879	44,879	10,712	63,470
1992			77,861	12,468	65,393	49,176	127,037
1993			92,033	20,240	71,792	64,594	156,627
1994			50,288	15,652	34,636	15,408	65,696
1995			57,802	14,953	42,850	24,169	81,971
1996			69,536	23,684	45,852	21,508	91,044
1997			59,600	22,164	37,436	20,330	79,930
1998			31,077	11,902	19,175	7,962	39,039
1999			13,797	7,726	6,071	20,087	33,884
2000			18,563	8,431	10,132	6,764	25,327
2001			54,987	14,132	40,855	4,193	59,180
2002			34,191	8,191	26,001	1,963	36,154
2003			81,803	23,831	57,972	21,494	103,297
2004			58,828	22,080	36,748	26,556	85,385
2005			53,343	18,555	34,788	28,265	81,608
2006			35,788	8,185	27,603	9,381	45,169
2007			32,418	11,553	20,865	5,027	37,445
Averages							
79-07			48,661	12,389	36,272	14,603	63,265
98-07			41,480	13,459	28,021	13,169	54,649
2008			21,500	5,316	16,183	10,434	31,934

**Appendix C. 1.** Weekly salmon catch and effort in the Alaskan District 111 and Subdistrict 111-32 (Taku Inlet), commercial drift gillnet fishery, 2008.

Week	Start Date	Catch						Effort		
		Chinook		Sockeye	Coho	Pink	Chum	Boats	Days Open	Boat Days
		Large	non large							
District 111 catches										
25	15-Jun	615	164	4,030	5	0	1,469	44	2.0	88
26	22-Jun	388	84	5,247	18	8	12,449	59	3.0	177
27	29-Jun	252	86	6,414	121	351	113,896	77	4.0	308
28	6-Jul	151	73	5,511	318	2,548	167,795	116	3.0	348
29	13-Jul	50	12	20,576	300	4,261	169,915	112	2.0	224
30	20-Jul	93	17	30,152	1,251	9,392	181,961	135	3.0	405
31	27-Jul	63	3	27,190	2,002	18,277	81,433	141	3.0	423
32	3-Aug	27	0	12,218	2,881	38,510	33,596	114	3.0	342
33	10-Aug	20	6	2,819	3,453	13,349	6,198	84	2.0	168
34	17-Aug	22	16	1,652	4,301	3,056	2,167	51	3.0	153
35	24-Aug	3	0	451	4,999	367	1,087	32	3.0	96
36	31-Aug	18	9	237	6,961	42	988	47	3.0	141
37	7-Sep	15	2	86	6,486	1	989	39	3.0	117
38	14-Sep	3	0	104	1,893	0	101	24	3.0	72
39	21-Sep	0	0	5	2,193	0	51	13	3.0	39
40-41	28-Sep-5-Oct	1	0	1	167	0	0			
Total		1,721	472	116,693	37,349	90,162	774,095		49.0	3,116

Alaska Hatchery Contributions for Large Chinook and Coho

Week	Start Date	Large Chinook		Coho	
		Hatchery	Wild	Hatchery	Wild
		25	15-Jun	202	413
26	22-Jun	191	197	0	18
27	29-Jun	187	65	0	121
28	6-Jul	38	113	0	318
29	13-Jul	0	50	0	300
30	20-Jul	26	67	0	1,251
31	27-Jul	0	63	0	2,002
32	3-Aug	71	-44	84	2,797
33	10-Aug	0	20	238	3,215
34	17-Aug	0	22	717	3,584
35	24-Aug	0	3	134	4,865
36	31-Aug	0	18	711	6,250
37	7-Sep	0	15	560	5,926
38	14-Sep	0	3	0	1,893
39	21-Sep	0	0	0	2,193
40-41	28-Sep-5-Oct	0	1	0	167
Total		715	1,006	2,443	34,906

Subdistrict 111-32 Catches including hatchery fish (Taku Inlet)

25	15-Jun	610	164	3,997	5	0	1,445		
26	22-Jun	335	66	4,358	8	3	9,546		
27	29-Jun	223	80	5,466	100	209	98,710		
28	6-Jul	93	48	3,737	180	1,081	101,384		
29	13-Jul	36	1	16,158	178	1,869	107,547		
30	20-Jul	52	12	22,080	563	4,801	105,934		
31	27-Jul	22	2	15,038	972	8,181	49,400		
32	3-Aug	21	0	6,677	1,562	15,381	22,576		
33	10-Aug	6	0	1,607	1,676	4,030	3,688		
34	17-Aug	21	16	1,332	3,626	1,810	1,614		
35	24-Aug	3	0	403	4,800	217	957		
36	31-Aug	0	0	196	5,779	7	804		
37	7-Sep	14	0	82	6,076	1	913		
38	14-Sep	3	0	104	1,893	0	101		
39	21-Sep	0	0	5	2,193	0	51		
40-41	28-Sep-5-Oct	1	0	1	167	0	0		
Total		1,440	389	81,241	29,778	37,590	504,670	46.0	2,223

**Appendix C. 2.** Estimate of the proportion of natural and planted sockeye salmon stock groups harvested in the Alaskan District 111 commercial drift gillnet fishery by week, 2008.

Data based on analysis of scale patterns, otolith marks, and incidence of brain parasites. Does not include catches inside Port Snettisham											
Week	Kuthai	King		Mainstem	Tatsamenie		Total			Wild	U.S.
		Salmon	Trapper		Wild	Planted	Taku	Crescent	Speel	Snett.	Hatchery
25	0.826	0.009	0.000	0.140	0.000	0.015	0.990	0.000	0.004	0.004	0.006
26	0.748	0.000	0.000	0.151	0.000	0.017	0.917	0.022	0.020	0.041	0.042
27	0.375	0.016	0.000	0.304	0.000	0.042	0.737	0.074	0.139	0.214	0.049
28	0.121	0.051	0.071	0.342	0.048	0.109	0.741	0.074	0.079	0.153	0.106
29	0.019	0.021	0.069	0.307	0.173	0.151	0.740	0.063	0.053	0.116	0.144
30	0.000	0.014	0.000	0.303	0.153	0.118	0.588	0.047	0.047	0.094	0.318
31	0.000	0.002	0.000	0.222	0.201	0.092	0.517	0.004	0.041	0.046	0.438
32	0.000	0.000	0.000	0.266	0.222	0.079	0.567	0.007	0.036	0.042	0.390
33	0.000	0.000	0.000	0.231	0.257	0.096	0.585	0.003	0.018	0.021	0.394
34	0.000	0.000	0.000	0.231	0.257	0.096	0.585	0.003	0.018	0.021	0.394
35	0.000	0.000	0.000	0.231	0.257	0.096	0.585	0.003	0.018	0.021	0.394
36	0.000	0.000	0.000	0.231	0.257	0.096	0.585	0.003	0.018	0.021	0.394
37	0.000	0.000	0.000	0.231	0.257	0.096	0.585	0.003	0.018	0.021	0.394
38	0.000	0.000	0.000	0.231	0.257	0.096	0.585	0.003	0.018	0.021	0.394
39	0.000	0.000	0.000	0.231	0.257	0.096	0.585	0.003	0.018	0.021	0.394
40	0.000	0.000	0.000	0.231	0.257	0.096	0.585	0.003	0.018	0.021	0.394
41	0.000	0.000	0.000	0.231	0.257	0.096	0.585	0.003	0.018	0.021	0.394
Total	0.092	0.011	0.016	0.267	0.154	0.100	0.640	0.034	0.048	0.082	0.278

**Appendix C. 3.** Weekly stock-specific catch of wild and planted Taku River and Port Snettisham sockeye salmon harvested in the Alaskan District 111 commercial drift gillnet fishery, 2008.

Data based on analysis of scale patterns, otolith marks, and incidence of brain parasites. Does not include catches inside Port Snettisham											
Week	Kuthai	King		Mainstem	Tatsamenie		Total			Wild	
		Salmon	Trapper		Wild	Planted	Taku	Crescent	Speel	Snett.	
25	3,328	37	0	565	0	59	3,989	0	17	17	
26	3,926	0	0	795	0	90	4,811	114	103	217	
27	2,406	102	0	1,949	0	272	4,730	478	892	1,370	
28	665	279	390	1,886	263	600	4,084	410	434	845	
29	384	425	1,426	6,313	3,567	3,115	15,232	1,304	1,080	2,385	
30	0	415	0	9,142	4,620	3,549	17,727	1,416	1,420	2,837	
31	0	44	0	6,033	5,458	2,512	14,048	118	1,124	1,243	
32	0	2	0	3,246	2,712	970	6,930	83	435	518	
33	0	1	0	653	726	270	1,649	8	52	60	
34	0	0	0	382	425	158	966	4	30	35	
35	0	0	0	104	116	43	264	1	8	10	
36	0	0	0	55	61	23	139	1	4	5	
37	0	0	0	20	22	8	50	0	2	2	
38	0	0	0	24	27	10	61	0	2	2	
39	0	0	0	1	1	0	3	0	0	0	
40	0	0	0	0	0	0	0	0	0	0	
41	0	0	0	0	0	0	1	0	0	0	
Total	10,709	1,308	1,816	31,170	17,999	11,680	74,682	3,939	5,605	9,544	



**Appendix C. 4.** Weekly salmon catch and effort in the Canadian commercial fishery in the Taku River, 2008.

Week	Start Date	Catch						Effort		
		Chinook		Sockeye	Coho	Pink	Chum	Average Permits	Days Fished	Permit Days
		Large <sup>a</sup>	non large							
25	15-Jun	319	128	1438	0	0	0	8.50	2.00	17.00
26	22-Jun	321	126	3,164	0	0	0	9.00	3.00	27.00
27	29-Jun	134	46	1,051	0	0	0	7.33	3.00	22.00
28	6-Jul	65	20	426	16	0	0	5.00	3.00	15.00
29	13-Jul	51	9	813	151	0	0	6.00	4.00	24.00
30	20-Jul	17	1	2,418	370	0	0	9.00	3.00	27.00
31	27-Jul	5	0	4,694	513	0	0	10.00	3.00	30.00
32	3-Aug	1	0	2,829	586	0	0	9.00	3.00	27.00
33	10-Aug	0	0	1,645	1,019	0	0	9.00	3.00	27.00
34	17-Aug	0	0	806	1,117	0	0	4.83	6.00	29.00
<b>Total</b>		<b>913</b>	<b>330</b>	<b>19,284</b>	<b>3,772</b>	<b>0</b>	<b>0</b>		<b>33</b>	<b>245</b>

<sup>a</sup> Prior to 2005, Chinook catch was broken down into non large and non larges; therefore only total catch of chinook should be used for comparison purposes.

**Appendix C. 5.** Weekly stock proportions of sockeye salmon harvested in the Canadian commercial fishery in the Taku River, 2008.

Data based on analysis of scale patterns and thermal marks.

Week	Start Date	Kuthai	King	Little	Tatsamenie		Planted Stikine	
			Salmon	Trapper	Mainstem	Wild		Planted
25	15-Jun	0.988	0.000	0.000	0.012	0.000	0.000	0.000
26	22-Jun	0.902	0.000	0.031	0.067	0.000	0.000	0.000
27	29-Jun	0.854	0.000	0.003	0.122	0.000	0.000	0.021
28	6-Jul	0.509	0.028	0.100	0.321	0.000	0.000	0.042
29	13-Jul	0.522	0.054	0.026	0.397	0.000	0.000	0.000
30	20-Jul	0.056	0.034	0.000	0.474	0.203	0.234	0.000
31	27-Jul	0.000	0.000	0.112	0.288	0.470	0.118	0.011
32	3-Aug	0.000	0.000	0.063	0.168	0.603	0.156	0.010
33	10-Aug	0.000	0.000	0.087	0.232	0.555	0.116	0.011
34	17-Aug	0.000	0.000	0.127	0.129	0.555	0.189	0.000
<b>Total</b>		<b>0.308</b>	<b>0.007</b>	<b>0.058</b>	<b>0.222</b>	<b>0.299</b>	<b>0.099</b>	<b>0.007</b>

**Appendix C. 6.** Weekly stock-specific catch of sockeye salmon in the Canadian commercial fishery in the Taku River, 2008.

Data based on analysis of scale patterns and thermal marks.

Week	Start Date	Kuthai	King			Tatsamenie		Stikine
			Salmon	Trapper	Mainstem	Wild	Planted	Marked
25	15-Jun	1,421	0	0	17	0	0	0
26	22-Jun	2,855	0	97	212	0	0	0
27	29-Jun	898	0	3	128	0	0	22
28	6-Jul	217	12	42	137	0	0	18
29	13-Jul	424	44	21	323	0	0	0
30	20-Jul	134	83	0	1,146	490	565	0
31	27-Jul	0	0	526	1,354	2,208	555	50
32	3-Aug	0	0	178	474	1,705	442	29
33	10-Aug	0	0	143	381	912	190	17
34	17-Aug	0	0	103	104	447	153	0
Total		5,949	139	1,114	4,276	5,763	1,905	137

**Appendix C. 7.** Weekly salmon catch and effort in the Canadian test and stock assessment fisheries in the Taku River, 2008.

Week	Start Date	Catch						Effort		
		Chinook		Sockeye	Coho	Pink	Chum	Average Permits	Days Fished	Permit Days
Large	non large									
18	27-Apr	105	3	0	0	0	0	2.0	1.9	3.8
19	4-May	195	11	0	0	0	0	3.5	1.4	5.0
20	11-May	293	30	0	0	0	0	4.0	1.5	5.8
21	18-May	282	33	0	0	0	0	5.0	1.3	6.7
22	25-May	224	19	0	0	0	0	6.0	3.0	18.0
23	1-Jun	211	21	0	0	0	0	6.0	0.3	1.6
24	8-Jun	89	22	10	0	0	0	9.0	0.3	2.4
Total		1,399	139	10	0	0	0		10	43
released	2-Sept-8-Oct			32	1,102		26			

**Appendix C. 8.** Mark-recapture estimate of above border run of Chinook, sockeye, and coho salmon in the Taku River, 2008.

Recovery Week	Start Date	Above Border Run	Canadian Harvests				Above Border Escapement
			Commercial	Test	Aboriginal	Recreational	
<b>Inseason Chinook Estimates</b>							
18	27-Apr			105			
19	4-May	1,293		300			993
20	11-May	4,198		593			3,605
21	18-May	7,290		875			6,415
22	25-May	11,030		1,099			9,931
23	1-Jun	13,877		1,310			12,567
24	8-Jun	18,724		1,399			17,325
25	15-Jun	21,748	319	1,399			20,030
26	22-Jun	22,153	640	1,399			20,114
27	29-Jun	23,659	774	1,399			21,486
28	6-Jul	23,985	839	1,399			21,747
29	13-Jul	24,022	890	1,399			21,733
30	20-Jul	23,204	907	1,399			20,898
Inseason Estimate		23,204	907	1,399			20,898
Final escapement estimate		29,801	913	1,399	1	105	27,383
<b>Sockeye</b>							
22	25-May		139				139
23	1-Jun		2,397				2,397
24	8-Jun	657	657	0	10		647
25	15-Jun	1,821	1,821	1,438	0		383
26	22-Jun	3,352	3,352	3,164	0		188
27	29-Jun	2,185	2,185	1,051	0		1,134
28	6-Jul	8,446	8,446	426	0		8,020
29	13-Jul	21,487	21,487	813	0		20,674
30	20-Jul	19,564	19,564	2,418	0		17,146
31	27-Jul	6,169	6,169	4,694	0		1,475
32	3-Aug	6,731	6,731	2,829	0		3,902
33	10-Aug	8,700	8,700	1,645	0		7,055
34	17-Aug	4,961	4,961	806	0		4,155
35	24-Aug		782	0	0		782
36	31-Aug		46	0			46
37	7-Sep		132	0			132
M-R Estimate		84,073	87,568				
95% C.I.							
Total Estimate			87,568	19,284	10	215	68,059
<b>Coho</b>							
28-31	6-Jul			1,050			
32	3-Aug			586			
33	10-Aug	19,281		1,019			
34	17-Aug	28,803		1,117			
35	24-Aug						
36	31-Aug			261			
37	7-Sep			115			
38-41	14-Sep	103,263		636			
M-R Estimate		103,263					
95% C.I.							
Total Estimate		99,199	3,772	1,012	67		95,360

**Appendix C. 9.** Daily counts of adult sockeye salmon passing through Tatsamenie weir, 2008.

Date	Count	Cumulative	
		Count	Percent
7-Aug	0	0	0.0
8-Aug	0	0	0.0
9-Aug	0	0	0.0
10-Aug	8	8	0.1
11-Aug	15	23	0.3
12-Aug	26	49	0.5
13-Aug	96	145	1.6
14-Aug	67	212	2.4
15-Aug	23	235	2.6
16-Aug	83	318	3.5
17-Aug	89	407	4.5
18-Aug	40	447	5.0
19-Aug	72	519	5.8
20-Aug	81	600	6.7
21-Aug	83	683	7.6
22-Aug	147	830	9.2
23-Aug	205	1,035	11.5
24-Aug	309	1,344	15.0
25-Aug	460	1,804	20.1
26-Aug	676	2,480	27.6
27-Aug	352	2,832	31.6
28-Aug	201	3,033	33.8
29-Aug	551	3,584	39.9
30-Aug	385	3,969	44.2
31-Aug	398	4,367	48.7
1-Sep	394	4,761	53.0
2-Sep	118	4,879	54.4
3-Sep	521	5,400	60.2
4-Sep	246	5,646	62.9
5-Sep	214	5,860	65.3
6-Sep	76	5,936	66.1
7-Sep	92	6,028	67.2
8-Sep	98	6,126	68.2
9-Sep	232	6,358	70.8
10-Sep	92	6,450	71.9
11-Sep	193	6,643	74.0
12-Sep	219	6,862	76.4
13-Sep	113	6,975	77.7
14-Sep	196	7,171	79.9
15-Sep	108	7,279	81.1
16-Sep	2	7,281	81.1
17-Sep	427	7,708	85.9
18-Sep	42	7,750	86.3
19-Sep	564	8,314	92.6
20-Sep	23	8,337	92.9
21-Sep	120	8,457	94.2
22-Sep	31	8,488	94.6
23-Sep	91	8,579	95.6
24-Sep	9	8,588	95.7
25-Sep	64	8,652	96.4
26-Sep	47	8,699	96.9
27-Sep	52	8,751	97.5
28-Sep	18	8,769	97.7
29-Sep	10	8,779	97.8
30-Sep	14	8,793	98.0
1-Oct	54	8,847	98.6
2-Oct	28	8,875	98.9
3-Oct	29	8,904	99.2
4-Oct	11	8,915	99.3
5-Oct	43	8,958	99.8
6-Oct	1	8,959	99.8
7-Oct	0	8,959	99.8
8-Oct	17	8,976	100.0
9-Oct	0	8,976	100.0
10-Oct	0	8,976	100.0
11-Oct	0	8,976	100.0
Counts		8,976	
Outlet spawners		<15	
Broodstock		-2,800	
Spawners <sup>a</sup>		6,176	

<sup>a</sup> Broodstock included 1,183 males and 1,183 females which were spawned successfully, and mortalities and released fish. It is not know if the released fish spawned successfully

**Appendix C. 10.** Daily counts of adult sockeye salmon passing through Little Trapper Lake weir, 2008.

Date	Count	Cumulative	
		Count	Percent
22-Jul	0	0	0.00
23-Jul	0	0	0.00
24-Jul	0	0	0.00
25-Jul	0	0	0.00
26-Jul	0	0	0.00
27-Jul	0	0	0.00
28-Jul	0	0	0.00
29-Jul	0	0	0.00
30-Jul	0	0	0.00
31-Jul	0	0	0.00
1-Aug	0	0	0.00
2-Aug	2	2	0.05
3-Aug	1	3	0.08
4-Aug	2	5	0.13
5-Aug	28	33	0.86
6-Aug	90	123	3.21
7-Aug	191	314	8.20
8-Aug	562	876	22.87
9-Aug	558	1,434	37.43
10-Aug	544	1,978	51.63
11-Aug	313	2,291	59.80
12-Aug	163	2,454	64.06
13-Aug	183	2,637	68.83
14-Aug	195	2,832	73.92
15-Aug	136	2,968	77.47
16-Aug	21	2,989	78.02
17-Aug	63	3,052	79.67
18-Aug	94	3,146	82.12
19-Aug	95	3,241	84.60
20-Aug	66	3,307	86.32
21-Aug	52	3,359	87.68
22-Aug	51	3,410	89.01
23-Aug	14	3,424	89.38
24-Aug	117	3,541	92.43
25-Aug	34	3,575	93.32
26-Aug	20	3,595	93.84
27-Aug	24	3,619	94.47
28-Aug	7	3,626	94.65
29-Aug	8	3,634	94.86
30-Aug	24	3,658	95.48
31-Aug	39	3,697	96.50
1-Sep	31	3,728	97.31
2-Sep	37	3,765	98.28
3-Sep	17	3,782	98.72
4-Sep	0	3,782	98.72
5-Sep	27	3,809	99.43
6-Sep	10	3,819	99.69
7-Sep	1	3,820	99.71
8-Sep	8	3,828	99.92
9-Sep	1	3,829	99.95
10-Sep	0	3,829	99.95
11-Sep	2	3,831	100.00
12-Sep	0	3,831	100.00
13-Sep	----Weir Removed----		
Counts		3,831	
Outlet spawners			
Broodstock <sup>a</sup>		-1,040	
Spawners		2,791	

<sup>a</sup> Broodstock removals included 336 females and 295 males which were spawned success mortalities, and released fish. It is not known if thte released fish spawned successfully.

**Appendix C. 11.** Daily counts of adult salmon passing through the King Salmon Lake weir, 2008.

Date	Count	Cumulative	
		Count	Percent
5-Jul	0	0	0.00
6-Jul	0	0	0.00
7-Jul	0	0	0.00
8-Jul	0	0	0.00
9-Jul	0	0	0.00
10-Jul	0	0	0.00
11-Jul	0	0	0.00
12-Jul	0	0	0.00
13-Jul	0	0	0.00
14-Jul	0	0	0.00
15-Jul	0	0	0.00
16-Jul	0	0	0.00
17-Jul	0	0	0.00
18-Jul	57	57	6.42
19-Jul	0	57	6.42
20-Jul	0	57	6.42
21-Jul	23	80	9.01
22-Jul	21	101	11.37
23-Jul	72	173	19.48
24-Jul	65	238	26.80
25-Jul	0	238	26.80
26-Jul	29	267	30.07
27-Jul	142	409	46.06
28-Jul	0	409	46.06
29-Jul	7	416	46.85
30-Jul	29	445	50.11
31-Jul	33	478	53.83
1-Aug	19	497	55.97
2-Aug	27	524	59.01
3-Aug	1	525	59.12
4-Aug	37	562	63.29
5-Aug	59	621	69.93
6-Aug	30	651	73.31
7-Aug	3	654	73.65
8-Aug	34	688	77.48
9-Aug	3	691	77.82
10-Aug	75	766	86.26
11-Aug	0	766	86.26
12-Aug	19	785	88.40
13-Aug	0	785	88.40
14-Aug	45	830	93.47
15-Aug	0	830	93.47
16-Aug	6	836	94.14
17-Aug	1	837	94.26
18-Aug	1	838	94.37
19-Aug	4	842	94.82
20-Aug	0	842	94.82
21-Aug	0	842	94.82
22-Aug	46	888	100.00
23-Aug	0	888	100.00
24-Aug	0	888	100.00
25-Aug	0	888	100.00
Total		888	

**Appendix C. 12.** Daily counts of adult sockeye salmon passing through the Kuthai Lake weir, 2008.

Date	Count	Cumulative	
		Count	Percent
5-Jul	0	0	0.00
6-Jul	0	0	0.00
7-Jul	0	0	0.00
8-Jul	0	0	0.00
9-Jul	0	0	0.00
10-Jul	0	0	0.00
11-Jul	0	0	0.00
12-Jul	0	0	0.00
13-Jul	0	0	0.00
14-Jul	0	0	0.00
15-Jul	0	0	0.00
16-Jul	0	0	0.00
17-Jul	0	0	0.00
18-Jul	0	0	0.00
19-Jul	15	15	0.97
20-Jul	0	15	0.97
21-Jul	8	23	1.49
22-Jul	38	61	3.94
23-Jul	0	61	3.94
24-Jul	172	233	15.06
25-Jul	39	272	17.58
26-Jul	124	396	25.60
27-Jul	87	483	31.22
28-Jul	78	561	36.26
29-Jul	100	661	42.73
30-Jul	37	698	45.12
31-Jul	85	783	50.61
1-Aug	67	850	54.95
2-Aug	76	926	59.86
3-Aug	22	948	61.28
4-Aug	86	1,034	66.84
5-Aug	3	1,037	67.03
6-Aug	9	1,046	67.61
7-Aug	33	1,079	69.75
8-Aug	78	1,157	74.79
9-Aug	9	1,166	75.37
10-Aug	44	1,210	78.22
11-Aug	23	1,233	79.70
12-Aug	52	1,285	83.06
13-Aug	71	1,356	87.65
14-Aug	58	1,414	91.40
15-Aug	33	1,447	93.54
16-Aug	9	1,456	94.12
17-Aug	3	1,459	94.31
18-Aug	11	1,470	95.02
19-Aug	25	1,495	96.64
20-Aug	12	1,507	97.41
21-Aug	4	1,511	97.67
22-Aug	0	1,511	97.67
23-Aug	11	1,522	98.38
24-Aug	3	1,525	98.58
25-Aug	9	1,534	99.16
26-Aug	7	1,541	99.61
27-Aug	6	1,547	100.00
28-Aug	0	1,547	100.00
29-Aug	0	1,547	100.00
Total count		1,547	
Harvest above weir		0	
Escapement		1,547	

**Appendix C. 13.** Daily counts of large (>659mm MEF length) Chinook salmon carcasses at the Nakina River weir, 2008.

Date	Count				Cumulative	
	Female	Male	Unknown	Combined	Count	Percent
30-Jul	0	0	0	0	0	0.00
31-Jul	0	0	0	0	0	0.00
1-Aug	0	0	0	0	0	0.00
2-Aug	1	0	0	1	1	0.00
3-Aug	0	0	0	0	1	0.00
4-Aug	0	1	0	1	2	0.01
5-Aug	0	0	0	0	2	0.01
6-Aug	2	0	0	2	4	0.02
7-Aug	2	1	0	3	7	0.03
8-Aug	2	2	0	4	11	0.05
9-Aug	0	5	0	5	16	0.07
10-Aug	4	7	1	12	28	0.12
11-Aug	7	10	1	18	46	0.20
12-Aug	5	9	0	14	60	0.27
13-Aug	4	12	0	16	76	0.34
14-Aug	9	13	0	22	98	0.44
15-Aug	6	6	0	12	110	0.49
16-Aug	4	10	0	14	124	0.55
17-Aug	4	7	0	11	135	0.60
18-Aug	2	8	0	10	145	0.64
19-Aug	4	9	0	13	158	0.70
20-Aug	13	25	1	39	197	0.88
21-Aug	8	14	0	22	219	0.97
22-Aug	2	4	0	6	225	1.00
23-Aug	0	0	0	0	225	1.00
Total	79	143	3	225		



**Appendix D. 1.** Salmon catches and effort in the Alaskan District 111 and Subdistrict 111-32 (Taku Inlet) commercial drift gillnet fishery, 1960-2008.

S. Chum and F. Chum refer to Summer and Fall runs of these fish, fish harvested prior to week 34 are considered summer chum, and fish harvested in week 34 and beyond are considered fall chum.

Days open are for the entire district and include openings to harvest spawner chinook salmon, 1960-1975.

Year	Catch						Effort	
	Chinook	Sockeye	Coho	Pink	S. Chum	F. Chum	Boat Days	Days Open
District 111 Catches								
1960	8,810	42,819	22,374	33,155	8,754	33,098		60.0
1961	7,434	45,981	15,486	41,455	8,578	15,855		62.0
1962	5,931	36,745	15,661	17,280	7,453	13,182		52.0
1963	2,652	24,119	10,855	21,392	12,335	7,779		54.0
1964	2,509	34,140	29,315	26,593	4,970	7,883		56.0
1965	4,170	27,569	32,667	2,768	3,842	7,691		63.0
1966	4,829	33,925	26,065	23,833	5,015	30,118		64.0
1967	5,417	17,735	40,391	12,372	2,183	20,651		53.0
1968	4,904	19,501	39,103	67,365	5,747	16,143		60.0
1969	6,986	41,169	10,802	73,927	4,851	10,198	1,518	41.5
1970	3,357	50,922	44,960	197,017	19,593	90,797	2,688	53.0
1971	6,958	66,181	41,830	31,484	31,813	59,332	3,053	55.0
1972	10,955	80,404	49,780	144,339	67,126	80,831	3,103	51.0
1973	9,799	85,317	35,453	58,186	33,296	75,949	3,286	41.0
1974	2,908	38,670	38,667	57,731	11,263	75,423	2,315	29.5
1975	2,182	32,513	1,185	9,567	2,091	587	1,084	15.5
1976	1,757	61,749	41,729	14,962	6,027	75,776	1,914	25.0
1977	1,068	70,097	54,917	88,578	8,995	52,107	2,258	27.0
1978	1,926	55,398	31,944	51,385	9,076	27,178	2,174	26.0
1979	3,701	122,148	16,194	152,836	5,936	55,261	2,269	28.8
1980	2,251	123,451	41,677	296,572	33,627	159,020	4,123	30.9
1981	1,721	49,942	26,711	254,856	22,546	53,892	2,687	30.0
1982	3,057	83,625	29,072	109,297	14,867	22,741	2,433	35.5
1983	888	31,821	21,455	66,239	6,160	9,104	1,274	33.0
1984	1,773	77,233	33,836	145,971	45,811	40,930	2,757	52.5
1985	2,636	88,077	55,597	311,248	58,972	47,748	3,264	48.0
1986	2,584	73,061	30,512	16,568	29,909	28,883	2,129	32.8
1987	2,076	75,212	35,219	363,439	57,280	64,380	2,514	34.8
1988	1,779	38,923	44,881	157,831	80,307	59,271	2,135	32.0
1989	1,811	74,019	51,812	180,597	18,022	18,955	2,333	41.0
1990	3,480	126,884	67,530	153,036	112,336	33,463	3,188	38.3
1991	3,217	109,877	126,436	74,183	147,404	13,771	4,145	57.0
1992	2,341	135,411	172,662	314,445	97,725	14,802	4,550	50.0
1993	6,748	171,556	65,536	17,081	156,033	10,447	3,827	43.0
1994	5,047	105,861	188,501	401,525	198,002	16,169	5,078	66.0
1995	4,660	103,377	83,626	41,269	339,178	10,920	4,034	49.0
1996	2,659	199,014	33,633	12,660	347,612	6,455	3,229	46.0
1997	2,804	94,745	3,515	51,424	173,804	3,060	2,107	33.0
1998	794	69,677	28,713	168,283	291,416	4,695	3,070	48.0
1999	1,841	79,425	17,273	59,316	429,213	4,639	2,841	59.0
2000	1,137	168,272	7,546	54,716	665,582	3,013	2,919	40.0
2001	1,696	290,450	22,529	122,829	235,276	1,693	4,731	54.0
2002	1,840	178,488	39,823	77,562	230,092	929	4,095	62.0
2003	1,465	205,433	23,707	112,395	169,214	1,206	3,977	73.5
2004	2,291	241,254	45,289	150,272	125,965	5,422	3,342	59.0
2005	21,999	87,254	20,725	181,513	89,757	3,453	3,427	68.0
2006	11,106	134,781	59,422	185,102	374,130	7,707	3,517	89.0
2007	1,223	112,241	22,394	100,375	581,843	8,326	3,505	64.0
Averages								
60-07	4,066	89,926	41,646	110,559	112,313	29,394	2,997	47.64
98-07	4,539	156,728	28,742	121,236	319,249	4,108	3,542	62
2008	1,721	116,693	37,349	90,162	768,712	5,383	3,116	49.00

-Continued-

**Appendix D.1.** Page 2 of 2.

Days open are for the entire district and include openings to harvest spawner chinook salmon, 1960-1975.								
Year	Catch						Effort	
	Chinook	Sockeye	Coho	Pink	S. Chum	F. Chum	Boat Days	Days Open
Subdistrict 111-32 Catches (Taku Inlet)								
1960	8,763	26,641	20,282	26,777	4,566	28,720	1,680	60.0
1961	7,269	30,805	14,618	34,615	6,863	14,876	2,901	62.0
1962	5,719	25,969	13,699	10,006	5,418	11,812	1,568	52.0
1963	2,547	16,079	9,406	18,102	8,085	7,071	1,519	51.0
1964	2,482	28,873	28,603	22,177	3,919	7,822	1,491	56.0
1965	4,146	23,828	32,382	2,641	3,604	7,691	1,332	60.0
1966	4,817	28,301	24,153	22,490	4,350	27,327	1,535	58.0
1967	5,351	14,537	39,983	11,619	1,569	20,463	1,663	50.0
1968	4,862	16,952	37,570	55,527	4,646	15,597	2,420	60.0
1969	6,874	38,260	10,131	66,991	4,233	9,926	1,413	42.0
1970	3,073	41,476	37,587	143,886	14,208	76,795	2,425	53.0
1971	6,753	62,459	38,571	30,765	31,110	54,696	2,849	55.0
1972	9,633	62,877	38,568	78,673	45,955	60,097	2,797	51.0
1973	9,525	80,063	29,770	55,234	30,817	61,025	3,135	41.0
1974	2,280	26,256	27,670	32,684	6,469	51,063	1,741	30.0
1975	1,998	28,201	429	8,084	1,639	31	986	15.0
1976	1,693	51,674	31,641	11,868	3,766	42,674	1,582	23.0
1977	754	47,512	48,403	67,072	5,436	43,595	1,879	27.0
1978	1,642	43,795	21,620	41,624	7,142	18,101	1,738	24.0
1979	3,016	103,043	12,741	114,324	4,317	46,142	2,011	29.0
1980	1,986	108,577	35,814	241,085	25,779	131,126	3,634	31.0
1981	1,325	39,963	20,936	98,524	10,407	40,212	1,740	22.0
1982	2,841	75,012	24,761	77,942	11,558	18,363	2,130	36.0
1983	689	25,957	17,665	40,996	3,171	7,813	1,065	31.0
1984	1,414	59,229	25,951	83,028	28,214	27,967	2,120	39.0
1985	2,152	70,160	45,106	176,710	35,897	40,530	2,116	37.0
1986	1,877	60,106	26,474	9,772	14,646	24,790	1,413	30.0
1987	1,534	54,436	23,342	200,203	31,992	28,891	1,517	30.0
1988	949	23,752	33,159	41,625	25,969	27,010	1,213	29.0
1989	1,606	68,104	44,034	141,385	15,254	15,491	1,909	36.0
1990	2,432	110,006	60,078	101,168	88,350	29,099	2,879	38.0
1991	2,614	96,006	118,902	44,347	97,577	12,279	3,324	52.0
1992	1,672	103,238	152,598	180,340	57,153	11,649	3,407	43.0
1993	4,413	144,982	58,062	8,801	101,356	7,760	3,372	43.0
1994	3,051	88,625	156,314	198,507	129,350	12,280	3,960	60.0
1995	3,497	81,266	70,826	18,469	192,557	8,786	3,061	45.0
1996	2,412	188,412	31,828	12,123	294,890	5,245	2,685	41.0
1997	2,724	84,115	2,993	38,794	143,354	1,936	1,761	30.0
1998	634	47,413	24,606	85,269	192,057	2,800	2,007	39.0
1999	1,762	68,914	14,086	43,958	327,706	2,643	2,563	58.0
2000	1,032	127,274	6,299	25,729	453,147	1,311	2,325	38.0
2001	1,290	179,683	12,647	49,174	141,715	1,012	3,635	55.0
2002	1,546	113,110	30,501	40,283	108,171	671	2,792	54.0
2003	1,386	130,303	20,577	77,459	106,373	894	2,685	64.5
2004	1,734	71,578	34,763	31,501	54,454	3,546	1,627	50.0
2005	21,922	54,847	17,610	137,791	49,595	5,084	2,947	65.0
2006	11,002	64,240	52,364	71,368	220,969	5,516	2,470	81.0
2007	1,098	71,099	18,096	57,827	384,357	5,434	2,941	64.0
Averages								
60-07	3,662	66,834	35,380	66,445	73,836	22,618	2,249	44.59
98-07	4,341	92,846	23,155	62,036	203,854	2,891	2,599	56.85
2008	1,440	81,241	29,778	37,590	500,230	4,440	2,223	46.00

**Appendix D. 2.** Stock proportions and catches of sockeye salmon in the Alaska District 111 commercial drift gillnet fishery, 1983-2008.

Data based on analysis of scale patterns, otolith marks, and incidence of brain parasites. Does not include catches inside Port Snettisham												
Week	King		Little Trapper		Mainstem	Tatsamenie		Total			Wild	U.S.
	Kuthai	Salmon	Wild	Planted		Wild	Planted	Taku	Crescent	Speel	Snett.	Planted
Proportions												
1983												
1984								0.755			0.245	
1985								0.758			0.242	
1986								0.838			0.162	
1987	0.061		0.266		0.303	0.204		0.834	0.090	0.076	0.166	
1988	0.078		0.234		0.376	0.031		0.720	0.157	0.123	0.280	
1989 <sup>a</sup>	0.118		0.158		0.305	0.082		0.663	0.266	0.071	0.337	
1990	0.077		a		a	0.156		0.849	0.051	0.100	0.152	
1991	0.036		0.197		0.336	0.286		0.855	0.112	0.033	0.145	
1992	0.039		0.297		0.373	0.232		0.941	0.059	0.000	0.059	
1993	0.048		0.220		0.445	0.191		0.904	0.036	0.060	0.096	
1994	0.062		0.328		0.308	0.123		0.822	0.069	0.109	0.178	
1995	0.110		0.356		0.361	0.091		0.917	0.036	0.022	0.058	0.025
1996	0.046		0.214	0.010	0.428	0.153	0.029	0.880	0.018	0.075	0.093	0.026
1997	0.069		0.117	0.010	0.499	0.232	0.014	0.941	0.013	0.032	0.045	0.014
1998	0.067		0.170	0.011	0.282	0.286	0.011	0.826	0.027	0.026	0.053	0.120
1999	0.087		0.158	0.008	0.209	0.245	0.004	0.710	0.026	0.007	0.033	0.257
2000	0.176		0.259	0.003	0.235	0.119	0.005	0.797	0.049	0.023	0.072	0.131
2001	0.139		0.273	0.002	0.211	0.151	0.008	0.783	0.004	0.054	0.058	0.160
2002	0.076		0.130	0.000	0.268	0.207	0.031	0.713	0.014	0.032	0.046	0.241
2003	0.098		0.254	0.000	0.173	0.126	0.004	0.654	0.014	0.032	0.047	0.299
2004	0.087	0.016	0.225	0.000	0.398	0.033	0.004	0.755	0.009	0.047	0.064	0.181
2005	0.064	0.043	0.041	0.000	0.233	0.042	0.004	0.427	0.011	0.040	0.052	0.522
2006	0.021	0.024	0.080	0.000	0.456	0.040	0.008	0.629	0.048	0.097	0.145	0.226
2007	0.066		0.058		0.355	0.089	0.034	0.603	0.083	0.023	0.106	0.291
Averages												
86-07	0.075		0.195	0.004	0.329	0.149	0.014	0.763	0.055	0.049	0.104	0.199
98-07	0.083		0.155	0.001	0.290	0.121	0.012	0.672	0.027	0.040	0.068	0.260
2008	0.092	0.011	0.016		0.267	0.154	0.100	0.640	0.034	0.048	0.082	0.278
Catches												
1983												
1984								24,025			7,796	
1985								58,543			18,690	
1986								73,809			14,268	
1987	4,489		19,441		22,104	14,900		60,934	6,610	5,516	12,127	
1988	5,893		17,594		28,286	2,352		54,124	11,814	9,274	21,088	
1989 <sup>a</sup>	4,598		6,153		11,865	3,194		25,811	10,365	2,748	13,112	
1990	5,696		a		a	11,536		62,805	3,789	7,425	11,214	
1991	4,539		24,952		42,676	36,332		108,499	14,242	4,143	18,385	
1992	4,295		32,685		40,957	25,475		103,412	6,465	0	6,465	
1993	6,543		29,818		60,224	25,853		122,438	4,912	8,060	12,972	
1994	10,673		56,350		52,876	21,139		141,038	11,877	18,641	30,518	
1995	11,638		37,644		38,179	9,585		97,046	3,859	2,319	6,178	2,637
1996	4,788		22,109	1,017	44,278	15,767	3,049	91,008	1,901	7,741	9,642	2,727
1997	13,742		23,307	1,920	99,231	46,148	2,859	187,207	2,544	6,416	8,960	2,848
1998	6,345		16,105	1,031	26,694	27,107	1,006	78,288	2,558	2,510	5,068	11,389
1999	6,055		11,018	570	14,560	17,040	250	49,493	1,784	500	2,284	17,900
2000	14,016		20,596	247	18,680	9,421	367	63,327	3,879	1,814	5,693	10,405
2001	23,357		45,977	279	35,451	25,347	1,301	131,712	621	9,088	9,709	26,851
2002	22,042		37,862	0	77,938	60,109	9,057	207,008	4,097	9,331	13,428	70,014
2003	17,474		45,308	0	30,819	22,449	660	116,710	2,559	5,779	8,338	53,440
2004	15,462	2,829	39,989	0	70,801	5,876	767	134,276	1,622	8,361	11,431	32,196
2005	11,413	7,579	7,307	0	41,342	7,501	676	75,818	2,028	7,124	9,153	92,756
2006	1,495	1,715	5,699	0	32,591	2,860	579	44,940	3,418	6,953	10,371	16,161
2007	7,087	0	6,224	0	38,084	9,484	3,684	64,563	8,878	2,475	11,353	31,213
Average <sup>b</sup>												
86-07	9,419		24,420	390	41,125	19,227	2,036	96,318	5,122	5,867	11,058	28,514
98-07	12,026	2,913	22,667	110	39,626	17,591	1,955	95,287	3,042	5,583	8,770	37,960
2008	10,709	1,308	1,816	0	31,170	17,999	11,680	74,682	3,939	5,605	9,544	32,467

<sup>a</sup> The Trapper and Mainstem groups were combined in the 1989 analysis and were 45,573 fish.

<sup>b</sup> Averages for individual stocks do not include 1989.

**Appendix D. 3.** Proportion of wild Taku River sockeye salmon in the Alaskan District 111 commercial drift gillnet catch by week, 1983-2008.

Data based on scale patterns and incidence of brain parasites and includes only wild fish (estimated from thermal mark analysis).

Year	Week										Total
	25	26	27	28	29	30	31	32	33	34	
1983		0.996	0.842	0.819	0.663	0.527	0.836	0.534	0.719	0.759	0.755
1984	0.970	0.956	0.843	0.670	0.588	0.712	0.728	0.809	0.726		0.758
1985	0.999	0.986	0.928	0.974	0.868	0.706	0.737	0.826	0.801		0.838
1986	0.938	0.953	0.873	0.880	0.852	0.777	0.851	0.757	0.893	0.739	0.834
1987		0.982	0.901	0.884	0.948	0.414	0.619	0.689	0.841	0.731	0.720
1988		0.964	0.886	0.889	0.510	0.643	0.677	0.528	0.478	0.346	0.663
1989	0.943	0.989	0.979	0.852	0.835	0.641	0.681	0.919	0.676		0.848
1990	0.874	0.935	0.904	0.773	0.782	0.863	0.943	0.939	0.878	0.862	0.855
1991	0.988	0.979	0.953	0.979	0.951	0.933	0.936	0.890	0.885	0.875	0.941
1992		0.978	0.985	0.956	0.916	0.943	0.893	0.858	0.766	0.766	0.904
1993		0.961	0.901	0.837	0.856	0.781	0.790	0.829	0.738	0.706	0.822
1994		1.000	0.981	0.973	0.967	0.870	0.835	0.938	0.804	0.901	0.917
1995	0.942	0.889	0.903	0.858	0.872	0.868	0.761	0.759	0.705	0.740	0.841
1996	1.000	0.998	0.909	0.974	0.950	0.991	0.914	0.945	0.879	0.804	0.953
1997	0.992	0.970	0.910	0.926	0.951	0.939	0.939	0.925	0.872	0.906	0.938
1998		0.964	0.974	0.978	0.971	0.949	0.948	0.942	0.997	0.857	0.955
1999		0.966	0.988	0.953	0.934	0.917	0.878	0.833	0.732	0.665	0.917
2000		0.973	0.962	0.958	0.929	0.898	0.872	0.907	0.908	0.858	0.931
2001	0.995	0.998	0.948	0.888	0.908	0.930	0.961	0.945	0.858	0.858	0.936
2002	0.986	0.989	0.993	0.970	0.872	0.946	0.829	0.880	0.851	0.851	0.933
2003	1.000	0.987	0.961	0.994	0.970	0.929	0.883	0.795	0.236	0.236	0.931
2004		0.968	0.950	0.930	0.939	0.884	0.731	0.799	0.909	0.891	0.891
2005	0.973	0.973	0.953	0.947	0.932	0.924	0.881	0.885	0.786	0.767	0.905
2006	0.957	0.957	0.912	0.856	0.896	0.819	0.802	0.842	0.970	0.970	0.914
2007	1.000	0.992	0.934	0.807	0.716	0.821	0.879	0.824	0.812	0.786	0.925
Average											
83-07	0.970	0.972	0.931	0.901	0.863	0.825	0.832	0.832	0.789	0.767	0.873
98-07	0.985	0.977	0.957	0.928	0.907	0.902	0.866	0.865	0.806	0.774	0.924
2008	0.975	0.900	0.695	0.632	0.589	0.470	0.424	0.488	0.489	0.489	0.868

**Appendix D. 4.** Salmon catch in the U.S. subsistence and personal use fisheries in the Taku River, 1967-2008.

The subsistence fishery was open 1967 to 1976 and 1985 and the personal use fishery was open 1989-2010.  
The harvests are minimum estimates because not all permits are filled out and returned.

Year	Catch					Permits
	Chinook	Sockeye	Coho	Pink	Chum	
1967	0	103	221	9	25	
1968	3	41	196	19	10	
1969	0	122	8	11	0	
1970	0	304	0	20	8	
1971	0	512	0	42	0	
1972	0	554	0	103	7	
1973	0	1,227	0	64	14	
1974	0	1,431	0	118	5	
1975	0	170	0	3	0	
1976	0	351	4	22	0	
1985	0	920	35	16	1	54
1989	25	562	57	591	16	75
1990	26	793	103	111	46	95
1991	25	800	86	97	2	88
1992	21	1,217	88	100	0	125
1993	9	1,201	25	93	3	128
1994	21	1,111	93	76	3	116
1995	18	990	97	40	6	106
1996	33	1,189	67	110	5	130
1997	16	1,053	27	86	1	123
1998	15	1,153	86	225	2	130
1999	22	1,254	44	105	3	147
2000	22	1,134	31	68	7	128
2001	8	1,462	22	195	11	163
2002	14	1,289	68	59	20	136
2003	13	1,126	57	237	2	123
2004	25	1,150	120	109	3	131
2005	32	1,150	134	155	15	132
2006	18	804	134	503	27	105
2007	22	566	60	247	0	91
Averages						
67-07	13	858	62	121	8	
98-07	19	1,109	76	190	9	130
2008	46	1,010	91	88	88	125

**Appendix D. 5.** Salmon catch and effort in the Canadian commercial fishery in the Taku River, 1979-2008.

Year	Catch						Effort	
	Chinook		Sockeye	Coho	Pink	Chum	Boat Days	Days Open
	Large	non large						
1979	97		13,578	6,006	13,661	15,474	599	50.0
1980	225		22,602	6,405	26,821	18,516	476	39.0
1981	159		10,922	3,607	10,771	5,591	243	31.3
1982	54		3,144	51	202	3	38	13.0
1983	156	400	17,056	8,390	1,874	1,760	390	64.0
1984	294	221	27,242	5,357	6,964	2,492	288	30.0
1985	326	24	14,244	1,770	3,373	136	178	16.0
1986	275	77	14,739	1,783	58	110	148	17.0
1987	127	106	13,554	5,599	6,250	2,270	280	26.0
1988	555	186	12,014	3,123	1,030	733	185	14.7
1989	895	139	18,545	2,876	695	42	271	25.3
1990	1,258	128	21,100	3,207	378	12	295	28.3
1991	1,177	432	25,067	3,415	296	2	284	25.0
1992	1,445	147	29,472	4,077	0	7	291	27.0
1993	1,619	171	33,217	3,033	16	15	363	34.0
1994	2,065	235	28,762	14,531	168	18	497	74.0
1995	1,577	298	32,640	13,629	2	1	428	51.1
1996	3,331	144	41,665	5,028	0	0	415	65.0
1997	2,731	84	24,003	2,594	0	1	394	47.0
1998	1,107	227	19,038	5,090	0	2	299	42.0
1999	908	257	20,681	4,416	0	0	300	34.0
2000	1,576	87	28,009	4,395	0	0	351	39.0
2001	1,458	118	47,660	2,568	0	0	382	41.5
2002	1,561	291	31,053	3,082	0	0	286	33.0
2003	1,894	547	32,730	3,168	0	0	275	44.0
2004	2,082	335	20,148	5,966	0	0	294	40.0
2005	7,399	821	21,697	4,924	0	0	561	68.0
2006	7,377	207	21,099	8,567	391	0	518	77.0
2007	874	424	16,714	5,121	0	0	313	55.0
Averages								
79-07	1,538	244	22,841	4,889	2,516	1,627	332	40
98-07	2,624	331	25,883	4,730	39	0	358	47
2008	913	330	19,284	3,772	0	0	245	33

**Appendix D. 6.** Sockeye salmon stock proportions and catch by stock in the Canadian commercial fishery on the Taku River, 1986-2008.

Data based on scale pattern and thermal mark analyses.

Year	Kuthai	King	Little Trapper		Mainstem	Tatsamenie		Marked Stikine	Total Wild	Total Planted
		Salmon	Wild	Planted		Wild	Planted			
Proportions										
1986	0.111		0.397		0.350	0.143			1.000	
1987	0.062		0.201		0.649	0.088			1.000	
1988	0.143		0.417		0.343	0.098			1.000	
1989 <sup>a</sup>	0.053		a		a	0.203			1.000	
1990	0.112		0.388		0.338	0.163			1.000	
1991	0.064		0.308		0.452	0.176			1.000	
1992	0.092		0.240		0.569	0.099			1.000	
1993	0.126		0.392		0.432	0.049			1.000	
1994	0.158		0.482		0.302	0.058			1.000	
1995	0.047		0.427	0.010	0.373	0.112	0.031		0.959	0.041
1996	0.105		0.221	0.008	0.442	0.215	0.010		0.982	0.018
1997	0.120		0.282	0.019	0.277	0.294	0.008		0.973	0.027
1998	0.225		0.207	0.028	0.254	0.283	0.003		0.969	0.031
1999	0.389		0.305	0.008	0.145	0.147	0.006		0.986	0.014
2000	0.172		0.205	0.000	0.326	0.282	0.016		0.984	0.016
2001	0.184		0.168	0.000	0.364	0.246	0.039		0.961	0.039
2002	0.316		0.428	0.000	0.192	0.062	0.002		0.998	0.002
2003	0.231	0.023	0.378	0.000	0.271	0.089	0.008		0.992	0.008
2004	0.168	0.071	0.132	0.000	0.586	0.031	0.013		0.987	0.013
2005	0.098	0.038	0.204	0.000	0.505	0.143	0.012		0.988	0.012
2006	0.055	0.028	0.176	0.000	0.474	0.229	0.038		0.962	0.038
2007	0.102	0.000	0.101	0.000	0.524	0.170	0.096	0.007	0.897	0.103
Averages <sup>b</sup>										
86-07	0.147		0.289		0.389	0.151			0.983	
98-07	0.194	0.032	0.231	0.004	0.364	0.168	0.023		0.973	0.027
2008	0.308	0.007	0.058	0.000	0.222	0.299	0.099	0.007	0.894	0.106
Catch										
1986	1,629		5,855		5,152	2,103			14,739	
1987	834		2,728		8,793	1,199			13,554	
1988	1,715		5,005		4,122	1,172			12,014	
1989 <sup>a</sup>	990		a		a	3,763			18,545	
1990	2,355		8,183		7,131	3,431			21,100	
1991	1,601		7,721		11,327	4,418			25,067	
1992	2,699		7,085		16,764	2,924			29,472	
1993	4,192		13,036		14,347	1,641			33,217	
1994	4,544		13,858		8,684	1,676			28,762	
1995	1,528		13,934	331	12,185	3,659	1,003		31,306	1,334
1996	4,357		9,195	331	18,422	8,959	401		40,933	732
1997	2,891		6,758	456	6,637	7,060	201		23,346	657
1998	4,279		3,944	533	4,829	5,397	56		18,449	589
1999	8,044		6,314	171	2,992	3,034	126		20,384	297
2000	4,809		5,745	0	9,122	7,897	436		27,573	436
2001	8,748		8,005	0	17,330	11,709	1,868		45,792	1,868
2002	9,826		13,305	0	5,948	1,925	49		31,004	49
2003	7,568	755	12,383	0	8,855	2,902	267		32,463	267
2004	3,381	1,430	2,653	0	11,799	620	266		19,882	266
2005	2,120	829	4,433	0	10,950	3,108	257		21,440	257
2006	1,168	589	3,704	0	9,993	4,840	805		20,294	805
2007	1,697	0	1,694	0	8,759	2,838	1,602	125	14,987	1,727
Averages <sup>b</sup>										
86-07	3,809		7,407		9,721	3,929			25,043	
98-07	5,164	721	6,218	70	9,058	4,427	573		25,239	644
2008	5,949	139	1,114	0	4,276	5,763	1,905	137	17,242	2,042

<sup>a</sup> The Trapper and Mainstem groups were combined in the 1989 analysis with 13,792 fish or .744 proportion.

<sup>b</sup> Averages do not include 1989.

**Appendix D. 7.** Salmon catches in the Canadian Aboriginal fishery on the Taku River, 1980-2008.

Year	Chinook		Sockeye	Coho	Pink	Chum
	Large	non large				
1980	85		150	0	0	15
1981						
1982						
1983	9		0	0	0	0
1984	0		50	15	0	0
1985	4		167	22	0	0
1986	10		200	50	0	0
1987	0		96	113	0	0
1988	27		245	98	0	0
1989	6		53	146	0	0
1990	0		89	6	0	0
1991	0		150	20	0	0
1992	121		352	187	0	0
1993	25		140	8	0	0
1994	119		239	162	4	0
1995	70		71	109	0	7
1996	63		360	24	0	0
1997	103		349	96	0	0
1998	60		239	0	0	0
1999	50		382	471	0	0
2000	50		140	342	0	0
2001	125		210	500	0	25
2002	37		155	688	0	0
2003	277	237	267	416	4	0
2004	530	116	120	450	0	0
2005	212		161	162	0	0
2006	222		85	300	0	0
2007	167	16	159	155	0	0
Averages						
80-07	91		178	175	0	2
98-07	173		192	348	0	3
2008	1		215	67	0	0



**Appendix D. 8.** Salmon catch in the Canadian test fishery in the Taku River, 1987-2008.

Year	Catch					
	Chinook		Sockeye	Coho	Pink	Chum
	Large	non large				
1987			237	807		
1988	72		708	422	52	222
1989	31		207	1,011	0	13
1990	48		285	472	0	0
1991	0		163	2,004	3	295
1992	0		38	1,277	0	76
1993 <sup>a</sup>	0		166	1,593	0	50
1994	There was no Canadian test fishery in 1994.					
1995	There was no Canadian test fishery in 1995.					
1996	There was no Canadian test fishery in 1996.					
1997						
1998	There was no Canadian test fishery in 1998.					
1999	577	2	88	688	0	0
2000	1,312	87	319	710	0	0
2001	1,175	229	247	31	0	0
2002	1,311	355	518	32	0	0
2003	1,403	397	27	59	0	0
2004	1,489	294	91	3,268	0	0
2005	0	0	244	3,173	0	0
2006	630	9	262	2,802	0	0
2007	1,396	302	376	2,674	0	0
Averages						
87-07	630		248	1,314	4	44
98-07	1,033	186	241	1,493	0	0
2008	1,399	139	10	0	0	0
additional fish released						
	Catch release					
	Chinook		Sockeye	Coho	Pink	Chum
	Large	non large				
1997			1	39		
1998						
1999	181					
2000	439					
2001	871		82	2,976		159
2002	1,132		161	3,767	7	11
2003			197	4,031	7	222
2004						
2005						
2006						
2007						
2008			32	1012		26

<sup>a</sup> Incomplete harvest data.

**Appendix D. 9. Taku River sockeye salmon run size, 1984-2008.**

Run estimate does not include spawning escapements below the U.S./Canada border. The early season sockeye expansion is based on the proportion of fish wheel sockeye catch that occurs before the fishery opens.

Year	Above Border M-R				Expanded						
	Run	Start	Expansion		Run	Canadian	U.S.	Total	Exploitation		
	Estimate	Date	Method	Factor	Estimate	Catch	Escape.	Catch		Run	
1984	133,414	17-Jun	Ave.(88-90&95-96) FW CPUE	0.056	141,254	27,292	113,962	58,543	199,796	0.430	
1985	118,160	16-Jun	Ave.(88-90&95-96) FW CPUE	0.047	123,974	14,411	109,563	74,729	198,703	0.449	
1986	104,162	22-Jun	Ave.(88-90&95-96) FW CPUE	0.095	115,045	14,939	100,106	60,934	175,980	0.431	
1987	87,554	21-Jun	Ave.(88-90&95-96) FW CPUE	0.088	96,023	13,887	82,136	55,154	151,178	0.457	
1988	86,629	19-Jun	1988 FW CPUE	0.065	92,641	12,967	79,674	25,811	118,452	0.327	
1989	99,467	18-Jun	1989 FW CPUE	0.128	114,068	18,805	95,263	63,367	177,435	0.463	
1990	117,385	10-Jun	1990 CPUE	0.002	117,573	21,474	96,099	109,292	226,865	0.576	
1991	153,773	9-Jun	Ave.(88-90&95-96) FW CPUE	0.007	154,873	25,380	129,493	104,931	260,103	0.502	
1992	162,003	21-Jun	Ave.(88-90&95-96) FW CPUE	0.032	167,376	29,862	137,514	123,655	291,031	0.527	
1993	138,523	13-Jun	Ave.(88-90&95-96) FW CPUE	0.026	142,148	33,523	108,625	142,239	284,387	0.618	
1994	129,119	12-Jun	Ave.(88-90&95-96) FW CPUE	0.019	131,580	29,001	102,579	98,157	229,737	0.553	
1995	145,264	11-Jun	1995 FW CPUE	0.008	146,450	32,711	113,739	91,998	238,448	0.523	
1996	132,322	9-Jun	1996 FW CPUE	0.017	134,651	42,025	92,626	188,396	323,047	0.713	
1997	93,816	3-May	1997 FW CPUE	0.017	95,438	24,352	71,086	79,341	174,779	0.593	
1998	89,992	2-May	No Expansion		89,992	19,277	70,715	50,646	140,638	0.497	
1999	113,706	14-May	No Expansion		113,706	21,151	92,555	64,581	178,287	0.481	
2000	115,693	14-May	No Expansion		115,693	28,468	87,225	132,846	248,539	0.649	
2001	192,245	27-May	No Expansion		192,245	48,117	144,128	208,470	400,715	0.640	
2002	135,233	19-May	No Expansion		135,233	31,726	103,507	117,999	253,232	0.591	
2003	193,390	20-May	No Expansion		193,390	33,024	160,366	135,402	328,792	0.512	
2004	127,047	12-May	No Expansion		127,047	20,359	106,688	76,968	204,015	0.477	
2005	142,155	5-May	No Expansion		142,155	22,102	120,053	46,090	188,245	0.362	
2006	167,597	20-May	No Expansion		167,597	21,446	146,151	65,827	233,424	0.374	
2007	104,815	19-May	2007 FW CPUE	0.002	105,012	17,248	87,764	65,129	170,141	0.484	
Averages											
84-07	128,478	31-May			131,465	25,141	106,324	93,354	224,832	0.527	
98-07	138,187	15-May			138,207	26,276	111,931	96,396	234,603	0.507	
2008	84,073	17-May	2008 FW CPUE	0.040	87,568	19,509	68,059	75,692	163,260	0.583	

**Appendix D. 10.** Sockeye salmon escapement estimates of Taku River and Port Snettisham sockeye salmon stocks, 1979-2008.

Spawners equals escapement to the weir minus fish collected for brood stock.											
Year	Little Trapper		Tatsamenie		King Salmon	Kuthai Lake	Nahlin River	Crescent Lake		Speel Lake	
	Count	Escapement	Escapement	Spawners	Weir	Weir	Weir	Escapement	Spawners	Escapement	Spawners
1980							1,658				
1981							2,299				
1982											
1983 <sup>b</sup>	7,402	7,402						19,422	19,422	10,484	10,484
1984	13,084	13,084						6,707	6,707	9,764	9,764
1985 <sup>b</sup>	14,889	14,889	13,093	13,093				7,249	7,249	7,073	7,006
1986	13,820	13,820	11,446	11,446				3,414	3,414	5,857	5,457
1987 <sup>b</sup>	12,007	12,007	2,794	2,794				7,839	7,839	9,319	9,319
1988 <sup>cd</sup>	10,637	10,637	2,063	2,063			138	1,199	1,199	969	710
1989 <sup>d</sup>	9,606	9,606	3,039	3,039				1,109	775	12,229	10,114
1990 <sup>d</sup>	9,443	7,777	5,736	4,929			2,515	1,262	757	18,064	16,867
1991 <sup>a</sup>	22,942	21,001	8,381	7,585				9,208	8,666	299	299
1992 <sup>ac</sup>	14,372	12,732	6,576	5,681		1,457	297	22,674	21,849	9,439	8,136
1993 <sup>d</sup>	17,432	16,685	5,028	4,230		6,312	2,463				
1994	13,438	12,691	4,371	3,578		5,427	960				
1995 <sup>ac</sup>	11,524	11,524	8,000	6,607		3,310	3,711			16,208	14,260
1996 <sup>f</sup>	5,483	5,483	10,381	8,026		4,243	2,538			20,000	18,610
1997 <sup>g</sup>	5,924	5,924	8,363	5,981		5,746	1,857			4,999	i
1998 <sup>h</sup>	8,717	8,717	5,997	4,735		1,934	345			13,358	i
1999	11,805	11,805	2,104	1,888		10,042				10,277	i
2000	11,551	11,551	7,575	5,570		4,096				6,764	i
2001	16,860	16,860	22,575	19,579		1,663	935			8,060	i
2002 <sup>j</sup>	7,973	11,484	5,495	4,091		7,697				5,016	i
2003	31,227	31,227	4,515	2,965		7,769				7,014	i
2004	9,613	9,613	1,951	1,357	5,005	1,578	0	na	na	7,813	i
2005	16,009	16,009	3,372	2,445	1,046	6,004	0	na	na	7,538	i
2006	25,670	25,670	22,475	19,820	2,177	1,015	0	na	na	4,165	i
2007	7,153	6,340	11,187	8,384	5	204	0	na	na	3,099	i
Averages											
83-07	13,143	12,982	7,675	6,517		4,281	1,126	8,008	7,788	8,600	9,252
98-07	14,658	14,928	8,725	7,083	2,058	4,200	213			7,310	
2008	3,831	2,791	8,976	6,176	888	1,547	0	na	na	1,763 <sup>i</sup>	

<sup>a</sup> Mark-recapture estimates for Crescent 91, 92 Speel 95

<sup>b</sup> Weir count plus spawning ground survey. Trapper 83, 85, 87

<sup>c</sup> Weir counts are incomplete. Kuthai 92, Nahlin 88, 92

<sup>d</sup> Counts may be low due to uncounted fish passage past weir. Crescent 88-90, Speel 90, Kuthai 93

<sup>e</sup> In 1995 the weir was moved upstream to Tatsamenie Lake, the count of 8,000 is an expansion (based on past experience) of the 5,780 fish counted there.

<sup>f</sup> The estimated return of 10,381 through the Tatsamenie Lake weir in 1996 is thought to represent approximately 80% of the sockeye run past the old weir location at Little Tatsamenie Lake. This results in a potential run of 12,976 sockeye salmon.

<sup>g</sup> The estimated return of 8,363 through the Tatsamenie Lake weir in 1997 is thought to represent approximately 80% of the sockeye run past the old weir location at L. Tatsamenie Lake resulting in a potential run of 10,454 sockeye.

<sup>h</sup> The estimated count of 5,997 fish through Tatsamenie Lake weir in 1998 does not include an estimated 1,499 fish spawning in the outlet stream i.e. total estimate 7,496.

<sup>i</sup> Minimum estimates of run size

<sup>j</sup> In 2002 the Trapper weir count was expanded by 69% migratory timing to account for fish passage during high water and the Kuthai weir count had 102 fish removed for an aboriginal food fishery.

**Appendix D. 11.** Taku River Chinook salmon run size, 1989-2008.

Run estimate does not include spawning escapements below the U.S./Canada border.								
Year	Above Border M-R		Confidence Intervals		Canadian Catch <sup>a</sup>	Spawning Escapement	U.S. Catch <sup>b</sup>	Total Run
	Run Estimate	Start Date	Lower	Upper				
Large Fish Only								
1989	41,464		29,263	51,395	1,135	40,329		
1990	53,561		33,863	70,421	1,419	52,142		
1991					1,555			
1992					1,636			
1993					1,716			
1994					2,187			
1995	35,557		23,887	43,723	1,752	33,805	2,791	38,348
1996	82,518		61,285	96,753	3,499	79,019	6,399	88,917
1997	117,877	3-May	79,878	149,998	2,939	114,938	7,214	125,091
1998	32,311	3-May	6,108	55,970	1,272	31,039	2,361	34,672
1999	18,426	3-May	11,978	27,490	1,640	16,786	3,179	21,605
2000	38,040	24-Apr	19,912	41,146	3,043	34,997	1,971	40,011
2001	49,527	28-Apr	30,285	55,675	2,863	46,664	1,965	51,492
2002	58,058	26-Apr	30,931	73,887	3,014	55,044	3,252	61,310
2003	40,114	27-Apr	25,147	54,387	3,679	36,435	2,473	42,587
2004	78,985	27-Apr	50,189	86,209	3,953	75,032	3,986	82,971
2005	46,441	25-Apr	37,691	55,442	7,716	38,725	22,036	68,477
2006	50,630	30-Apr	39,737	61,617	8,334	42,296	12,921	63,551
2007	17,396	29-Apr	7,896	32,220	2,542	14,854	2,327	19,723
Averages								
89-07	50,727				2,942	47,474	5,606	56,827
98-07	42,993				3,806	39,187	5,647	48,640
2008	29,801	27-Apr	7,896	32,220	2,418	27,383	3,413	33,214

<sup>a</sup>From 1999-2004 to determine the number of large fish in the Canadian harvest, the average % of large fish (75%) was applied to all catches except the recreational catch, which is assumed to be 100% large and comprise 300 fish annually.

<sup>b</sup> U.S. catch includes D111 commercial gillnet and Juneau area sport fishery harvests; the estimate of large fish for the commercial fishery includes age-1.3 and older fish; all sport harvests are assumed to be large fish.

**Appendix D. 12.** Aerial survey index escapement counts of large (3-ocean and older) Taku River Chinook salmon, 1975-2008.

Year	Kowatua	Tatsatua	Dudidontu	Tseta	Nakina	Nahlin	Total Index
							Count without Tseta
1975			15		1,800	274	2,089
1976	341	620	40		3,000	725	4,726
1977	580	573	18		3,850	650	5,671
1978	490	550		21	1,620	624	3,284
1979	430	750	9		2,110	857	4,156
1980	450	905	158		4,500	1,531	7,544
1981	560	839	74	258	5,110	2,945	9,528
1982	289	387	130	228	2,533	1,246	4,585
1983	171	236	117	179	968	391	1,883
1984 <sup>ab</sup>	279	616		176	1,887	951	3,733
1985	699	848	475	303	2,647	2,236	6,905
1986	548	886	413	193	3,868	1,612	7,327
1987	570	678	287	180	2,906	1,122	5,563
1988	1,010	1,272	243	66	4,500	1,535	8,560
1989	601	1,228	204	494	5,141	1,812	8,986
1990	614	1,068	820	172	7,917	1,658	12,077
1991	570	1,164	804	224	5,610	1,781	9,929
1992	782	1,624	768	313	5,750	1,821	10,745
1993	1,584	1,491	1,020	491	6,490	2,128	12,713
1994	410	1,106	573	614	4,792	2,418	9,299
1995	550	678	731	786	3,943	2,069	7,971
1996	1,620	2,011	1,810	1,201	7,720	5,415	18,576
1997	1,360	1,148	943	648	6,095	3,655	13,201
1998	473	675	807	360	2,720	1,294	5,969
1999	561	431	527	221	1,900	532	3,951
2000	702	953	482	160	2,907	728	5,772
2001	1,050	1,024	479	202	1,552	935	5,040
2002	945	1,145	834	192	4,066	1,099	8,089
2003	850	1,000	644	436	2,126	861	5,481
2004	828	1,396	1,036	906	4,091	1,787	9,138
2005	833	1,146	318	215	1,213	471	3,981
2006	1,180	908	395	199	1,900	955	5,338
2007	262	390	4	199	NA	277	933
Averages							
75-07	694	930	490	344	3,664	1,467	7,587
98-07	768	907	553	309	2,497	894	5,369
2008	690	1,083	480	497	1,437	1,121	5,308

<sup>a</sup> Partial survey. Tseta 84

<sup>b</sup> Extrapolated results. Nahlin 84

**Appendix D. 13. Taku River (above border) coho salmon run size, 1987-2008.**

The run estimates do not include spawning escapements below the U.S./Canada border. Estimates are expanded if mark-recapture activities terminate prior to run completion.

Year	Above Border M-R		Expansion		Expanded Estimate	Canadian		U.S. Catch	Total Run	Total Exploitation Rate
	Run Estimate	End Date	Method	Factor		Catch	Escape.			
	1987	43,750	20-Sep	Test Fish CPUE	1.42	61,976	6,519	55,457		
1988	43,093	18-Sep		1.00	43,093	3,643	39,450			
1989	60,841	1-Oct		1.00	60,841	4,033	56,808			
1990	75,881			1.00	75,881	3,685	72,196			
1991	132,923			1.00	132,923	5,439	127,484			
1992	50,557	5-Sep	District 111-32 CPUE	1.79	90,394	5,541	84,853	96,371	186,765	0.546
1993	62,076	11-Sep	District 111-32 CPUE	1.84	114,091	4,634	109,457	97,783	211,874	0.483
1994	98,643	24-Sep	District 111-32 CPUE	1.13	111,036	14,693	96,343	228,700	339,736	0.716
1995	61,738	30-Sep	District 111-32 CPUE	1.12	69,448	13,738	55,710	111,668	181,116	0.692
1996	44,172	28-Sep	District 111-32 CPUE	1.12	49,687	5,052	44,635	44,596	94,283	0.527
1997	35,035	27-Sep	District 111-32 CPUE	1.00	35,035	2,690	32,345	15,852	50,887	0.364
1998	49,290	26-Sep	District 111-32 CPUE	1.35	66,472	5,090	61,382	53,454	119,926	0.488
1999	59,052	3-Oct	Troll CPUE	1.12	66,343	5,575	60,768	50,833	117,176	0.481
2000	70,147	2-Oct	no expansion	1.00	70,147	5,447	64,700	39,002	109,149	0.407
2001	107,493	5-Oct	no expansion	1.00	107,493	3,099	104,394	55,286	162,779	0.359
2002	223,162	7-Oct	no expansion	1.00	223,162	3,802	219,360	80,114	303,276	0.277
2003	186,755	8-Oct	no expansion	1.00	171,562	3,643	167,919	78,334	265,089	0.309
2004	139,011	8-Oct	no expansion	1.00	143,970	9,432	134,538	112,524	256,494	0.475
2005	143,817	8-Oct	no expansion	1.00	99,811	8,259	91,552	79,179	222,996	0.392
2006	134,053	8-Oct	no expansion	1.00	134,053	11,669	122,384	92,641	226,694	0.460
2007	82,319	8-Oct	Troll CPUE	1.00	82,319	7,993	74,367	50,975	133,294	0.442
Averages										
87-07	88,027	9/28		1.14	95,702	6,364	89,338	79,176	181,365	
98-07	113,986	10/5		1.05	116,533	6,397	110,136	67,225	183,758	0.413
2008	99,199	8-Oct	Troll CPUE	1.00	99,199	3,839	95,360	74,071	173,270	0.450

**Appendix D. 14. Escapement counts of Taku River coho salmon, 1984-2008.**

Counts are for age-.1 fish and do not include non large. Because of variability between methods, visibility, observers, and timing, these counts are not an index of run strength.

Year	Yehring Creek		Sockeye Creek	Johnson Creek	Fish Creek	Flannigan Slough	Tatsamenie River	Hackett River	Dudidontu River	Upper Nahlin River	
	Weir	Aerial	Aerial	Ar/Foot	Aerial	Aerial	Weir	Weir	Aerial	Aerial	Weir
1984		2,900	275	235	700	1,480					
1985		560	740	150	1,000	2,320	<b>201</b>	1,031			
1986	2,116 <sup>a</sup>	1,200	<b>174</b>	70	<b>53</b>	<b>1,095</b>	<b>344</b>	2,723	108	318	
1987	1,627 <sup>a</sup>	<b>565</b>	<b>980</b>	150	250	<b>2,100</b>	<b>173</b>	1,715	276	165	
1988	1,423	<b>658</b>	<b>585</b>	500	<b>1,215</b>	<b>1,308</b>	663 <sup>a</sup>	1,260	367	694	1,322
1989	<b>1,570</b>	600	400	400	235	1,670	712 <sup>a</sup>		115	322	
1990	<b>2,522</b>	220	<b>193</b>		<b>425</b>	<b>414</b>	669 <sup>a</sup>		25	256	
1991		<b>475</b>	<b>399</b>	120	<b>1,378</b>	<b>1,348</b>	1,101		458	<b>176</b>	
1992		<b>1,267</b>	<b>594</b>	654	478	1,288	730				<b>970<sup>a</sup></b>
1993		<b>250</b>	130	90	380	70	<b>88</b>				<b>326</b>
1994		500	60	450	200	50	168				<b>2,112</b>
1995		70	230	170	132	421	<b>62</b>				
1996		35	28	50	250	278	<b>21</b>				
1997		500	10	550	600						
1998		280		300	450						
1999		1,050			400						
2000		450		500	1,800						

Surveys Discontinued

<sup>a</sup> Weir count combined with spawning ground count. Tatsamenie 88-90, Yehring 86-87, Nahlin 92.

Bold--Incomplete count or minimal estimates

**Appendix D. 15.** Canyon Island fish wheel salmon counts and periods of operation on the Taku River, 1983-2008.

Total counts from both fishwheels and supplemental gillnet when water is too low for fishwheels								
Year	Period of Operation	Catch					Pink	
		Chinook	Sockeye	Coho	Pink	Chum	even year	odd year
1984	6/15-9/18	138	2,334	889	20,751	316	20,751	
1985	6/16-9/21	184	3,601	1,207	27,670	1,376		27,670
1986	6/14-8/25	571	5,808	758	7,256	80	7,256	
1987	6/15-9/20	285	4,307	2,240	42,786	1,533		42,786
1988	5/11-9/19	1,436	3,292	2,168	3,982	1,089	3,982	
1989	5/05-10/01	1,811	5,650	2,243	31,189	645		31,189
1990	5/03-9/23	1,972	6,091	1,860	13,358	748	13,358	
1991	6/08-10/15	680	5,102	4,922	23,553	1,063		23,553
1992	6/20-9/24	212	6,279	2,103	9,252	189	9,252	
1993	6/12-9/29	562	8,975	2,552	1,625	345		1,625
1994	6/10-9/21	906	6,485	4,792	27,100	367	27,100	
1995	5/4-9/27	1,535	6,228	2,535	1,712	218		1,712
1996	5/3-9/20	1,904	5,919	1,895	21,583	388	21,583	
1997	5/3-10/1	1,321	5,708	1,665	4,962	485		4,962
1998	5/2-9/15	894	4,230	1,777	23,347	179	23,347	
1999	5/3-10/3	440	4,636	1,848	23,503	164		23,503
2000	4/23-10/3	1,211	5,865	1,877	6,529	423	6,529	
2001	4/23-10/5	1,262	6,201	2,380	9,134	250		9,134
2002	4/24-10/7	1,578	5,812	3,766	5,672	205	5,672	
2003	4/20-10/08	1,351	5,970	3,002	15,492	268		15,492
2004	4/30-10/06	2,234	6,255	3,163	8,464	414	8,464	
2005	4/25-10/05	517	3,953	1,476	15,839	258		15,839
2006	4/27-10/03	544	5,296	2,811	21,725	466	21,725	
2007	4/27-10/01	430	7,698	2,117	12,405	482		12,405
Averages								
84-07		999	5,487	2,335	15,787	498	14,085	17,489
98-07		1,046	5,592	2,422	14,211	311	13,147	15,275
2008	4/23-10/03	1,298	3,736	2,213	4,704	350	4,704	



**Appendix E. 1.** Weekly salmon catch and effort in the lower Alsek River fisheries, 2008.

Week	Start Date	Catch						Effort		
		Chinook		Sockeye	Coho	Pink	Chum	Boats	Days Open	Boat Days
		Large	Jack							
Test Fishery										
21	20-May	6		0						
22	27-May	88		3						
23	3-Jun	94		6						
24	10-Jun	112		10						
25	17-Jun	140		23						
26	24-Jun	25		13						
Total		465	0	55	0	0	0			
Commercial Fishery										
23	3-Jun	5	0	5	0	0	0	4	1	4.0
24	10-Jun	30	0	73	0	0	0	8	1	8.0
25	17-Jun	55	0	206	0	0	0	10	1	10.0
26	24-Jun	20	0	225	0	0	0	12	1	12.0
27	1-Jul	15	0	761	0	0	0	14	1	14.0
28	8-Jul	1	0	521	0	0	0	14	1	14.0
29	15-Jul	1	0	785	0	0	0	13	1	13.0
30	22-Jul	1	0	107	0	0	0	9	1	9.0
31	29-Jul								0	
32	5-Aug								0	
33	12-Aug	0	0	34	11	0	0	3	1	3.0
34	19-Aug	0	0	21	351	0	0	6	3	18.0
35	26-Aug	0		74	428		2	6	3	18.0
36	2-Sep	0		2	582			6	3	18.0
37	9-Sep	0		0	590			4	3	12.0
38-40	16-30 Sep	0	0	1	706	0	0			
Total		128	0	2,815	2,668	0	2		33	171.0

**Appendix E. 2.** Weekly salmon catch and effort in the Canadian Aboriginal and sport fisheries in the Alsek River, 2008.

Week	Date	Chinook			Sockeye			Coho		
		Recreational		Aborigina Total <sup>b</sup>	Recreational		Aborigina Total <sup>b</sup>	Recreational		Aborigina Total <sup>b</sup>
		Kept <sup>a</sup>	Released <sup>a</sup>		Kept	Released		Kept	Released	
24	10-Jun	0		0	0		0	0		0
25	17-Jun	0		0	0		0	0		0
26	24-Jun	0		0	0		0	0		0
27	1-Jul	0		0	0		0	0		0
28	8-Jul	0		0	0		0	0		0
29	15-Jul	7	Data	7	0	Data	0	0	Data	0
30	22-Jul	0	Not	0	0	Not	0	0	Not	0
31	29-Jul	0	Available	0	0	Available	0	0	Available	0
32	5-Aug	0		0	0		0	0		0
33	12-Aug	0		0	0		0	0		0
34	19-Aug	0		0	0		0	0		0
35	26-Aug	0		0	0		0	0		0
36	2-Sep	0		0	0		0	0		0
37	9-Sep	0		0	0		0	0		0
38	16-Sep	0		0	0		0	0		0
39	23-Sep	0		0	0		0	0		0
40	30-Sep	0		0	0		0	0		0
41	7-Oct	0		0	0		0	0		0
42	14-Oct	0		0	0		0	0		0
43	21-Oct	0		0	0		0	0		0
44	28-Oct	0		0	0		0	0		0
45	4-Nov	0		0	0		0	0		0
46	11-Nov	0		0	0		0	0		0
Total		7	0	7	0	0	0	0	0	0
Village Creek food fish			NA			NA			NA	
Harvest at Klukshu River weir			0			0			26	
Food fish above Klukshu Weir			NA			NA			NA	

<sup>a</sup> Includes estimates of sport catch (kept and released) in Takhanne and Blanchard rivers; estimates based on salmon catch card information.

<sup>b</sup> Does not include released recreational or aboriginal fish.

**Appendix E. 3.** Daily counts of salmon passing through Klukshu River weir, 2008.

Includes all Chinook

Date	Chinook			Sockeye			Coho		
	Cumulative			Cumulative			Cumulative		
	Daily	Daily	Prop.	Daily	Daily	Prop.	Daily	Daily	Prop.
5-Jun	0	0	0.000	0	0	0.000	0	0	0.000
6-Jun	0	0	0.000	0	0	0.000	0	0	0.000
7-Jun	0	0	0.000	0	0	0.000	0	0	0.000
8-Jun	0	0	0.000	0	0	0.000	0	0	0.000
9-Jun	0	0	0.000	0	0	0.000	0	0	0.000
10-Jun	0	0	0.000	0	0	0.000	0	0	0.000
11-Jun	0	0	0.000	0	0	0.000	0	0	0.000
12-Jun	0	0	0.000	0	0	0.000	0	0	0.000
13-Jun	0	0	0.000	0	0	0.000	0	0	0.000
14-Jun	1	1	0.002	0	0	0.000	0	0	0.000
15-Jun	0	1	0.002	0	0	0.000	0	0	0.000
16-Jun	0	1	0.002	0	0	0.000	0	0	0.000
17-Jun	1	2	0.004	0	0	0.000	0	0	0.000
18-Jun	0	2	0.004	0	0	0.000	0	0	0.000
19-Jun	0	2	0.004	0	0	0.000	0	0	0.000
20-Jun	0	2	0.004	0	0	0.000	0	0	0.000
21-Jun	1	3	0.006	0	0	0.000	0	0	0.000
22-Jun	1	4	0.009	0	0	0.000	0	0	0.000
23-Jun	1	5	0.011	0	0	0.000	0	0	0.000
24-Jun	1	6	0.013	0	0	0.000	0	0	0.000
25-Jun	0	6	0.013	0	0	0.000	0	0	0.000
26-Jun	0	6	0.013	0	0	0.000	0	0	0.000
27-Jun	0	6	0.013	0	0	0.000	0	0	0.000
28-Jun	0	6	0.013	0	0	0.000	0	0	0.000
29-Jun	0	6	0.013	0	0	0.000	0	0	0.000
30-Jun	0	6	0.013	0	0	0.000	0	0	0.000
1-Jul	0	6	0.013	0	0	0.000	0	0	0.000
2-Jul	1	7	0.015	0	0	0.000	0	0	0.000
3-Jul	1	8	0.017	0	0	0.000	0	0	0.000
4-Jul	3	11	0.024	0	0	0.000	0	0	0.000
5-Jul	3	14	0.030	0	0	0.000	0	0	0.000
6-Jul	1	15	0.032	1	1	0.000	0	0	0.000
7-Jul	1	16	0.034	0	1	0.000	0	0	0.000
8-Jul	0	16	0.034	0	1	0.000	0	0	0.000
9-Jul	2	18	0.039	0	1	0.000	0	0	0.000
10-Jul	0	18	0.039	0	1	0.000	0	0	0.000
11-Jul	1	19	0.041	0	1	0.000	0	0	0.000
12-Jul	0	19	0.041	0	1	0.000	0	0	0.000
13-Jul	3	22	0.047	1	2	0.001	0	0	0.000
14-Jul	2	24	0.052	1	3	0.001	0	0	0.000
15-Jul	7	31	0.067	0	3	0.001	0	0	0.000
16-Jul	4	35	0.075	0	3	0.001	0	0	0.000
17-Jul	6	41	0.088	1	4	0.001	0	0	0.000
18-Jul	5	46	0.099	0	4	0.001	0	0	0.000
19-Jul	2	48	0.103	1	5	0.002	0	0	0.000
20-Jul	6	54	0.116	1	6	0.002	0	0	0.000
21-Jul	37	91	0.195	0	6	0.002	0	0	0.000
22-Jul	8	99	0.212	0	6	0.002	0	0	0.000
23-Jul	7	106	0.227	0	6	0.002	0	0	0.000
24-Jul	5	111	0.238	0	6	0.002	0	0	0.000
25-Jul	12	123	0.264	1	7	0.003	0	0	0.000
26-Jul	154	277	0.594	1	8	0.003	0	0	0.000
27-Jul	13	290	0.622	2	10	0.004	0	0	0.000
28-Jul	14	304	0.652	0	10	0.004	0	0	0.000
29-Jul	15	319	0.685	0	10	0.004	0	0	0.000
30-Jul	19	338	0.725	0	10	0.004	0	0	0.000
31-Jul	9	347	0.745	0	10	0.004	0	0	0.000
1-Aug	11	358	0.768	0	10	0.004	0	0	0.000
2-Aug	18	376	0.807	1	11	0.004	0	0	0.000
3-Aug	10	386	0.828	0	11	0.004	0	0	0.000
4-Aug	5	391	0.839	2	13	0.005	0	0	0.000
5-Aug	1	392	0.841	0	13	0.005	0	0	0.000
6-Aug	10	402	0.863	0	13	0.005	0	0	0.000
7-Aug	6	408	0.876	0	13	0.005	0	0	0.000
8-Aug	21	429	0.921	0	13	0.005	0	0	0.000
9-Aug	10	439	0.942	0	13	0.005	0	0	0.000
10-Aug	6	445	0.955	7	20	0.007	0	0	0.000
11-Aug	1	446	0.957	0	20	0.007	0	0	0.000

Date	Chinook			Sockeye			Coho		
	Daily	Cumulative		Daily	Cumulative		Daily	Cumulative	
		Daily	Prop.		Daily	Prop.		Daily	Prop.
12-Aug	2	448	0.961	4	24	0.009	0	0	0.000
13-Aug	0	448	0.961	14	38	0.014	0	0	0.000
14-Aug	4	452	0.970	4	42	0.015	0	0	0.000
15-Aug	0	452	0.970	1	43	0.016	0	0	0.000
16-Aug	0	452	0.970	1	44	0.016	0	0	0.000
17-Aug	3	455	0.976	1	45	0.016	0	0	0.000
18-Aug	0	455	0.976	0	45	0.016	0	0	0.000
19-Aug	0	455	0.976	2	47	0.017	0	0	0.000
20-Aug	2	457	0.981	0	47	0.017	0	0	0.000
21-Aug	3	460	0.987	58	105	0.038	0	0	0.000
22-Aug	5	465	0.998	7	112	0.041	0	0	0.000
23-Aug	0	465	0.998	0	112	0.041	0	0	0.000
24-Aug	1	466	1.000	0	112	0.041	0	0	0.000
25-Aug	0	466	1.000	1	113	0.041	0	0	0.000
26-Aug	0	466	1.000	180	293	0.107	0	0	0.000
27-Aug	0	466	1.000	186	479	0.175	0	0	0.000
28-Aug	0	466	1.000	0	479	0.175	0	0	0.000
29-Aug	0	466	1.000	24	503	0.184	0	0	0.000
30-Aug	0	466	1.000	0	503	0.184	0	0	0.000
31-Aug	0	466	1.000	0	503	0.184	0	0	0.000
1-Sep	0	466	1.000	0	503	0.184	0	0	0.000
2-Sep	0	466	1.000	2	505	0.184	0	0	0.000
3-Sep	0	466	1.000	0	505	0.184	0	0	0.000
4-Sep	0	466	1.000	1	506	0.185	0	0	0.000
5-Sep	0	466	1.000	0	506	0.185	0	0	0.000
6-Sep	0	466	1.000	0	506	0.185	0	0	0.000
7-Sep	0	466	1.000	0	506	0.185	0	0	0.000
8-Sep	0	466	1.000	1	507	0.185	0	0	0.000
9-Sep	0	466	1.000	0	507	0.185	0	0	0.000
10-Sep	0	466	1.000	0	507	0.185	0	0	0.000
11-Sep	0	466	1.000	0	507	0.185	0	0	0.000
12-Sep	0	466	1.000	0	507	0.185	0	0	0.000
13-Sep	0	466	1.000	1	508	0.185	0	0	0.000
14-Sep	0	466	1.000	24	532	0.194	0	0	0.000
15-Sep	0	466	1.000	82	614	0.224	0	0	0.000
16-Sep	0	466	1.000	32	646	0.236	0	0	0.000
17-Sep	0	466	1.000	642	1,288	0.470	0	0	0.000
18-Sep	0	466	1.000	86	1,374	0.501	0	0	0.000
19-Sep	0	466	1.000	39	1,413	0.516	0	0	0.000
20-Sep	0	466	1.000	196	1,609	0.587	1	1	0.000
21-Sep	0	466	1.000	26	1,635	0.596	0	1	0.000
22-Sep	0	466	1.000	3	1,638	0.598	0	1	0.000
23-Sep	0	466	1.000	26	1,664	0.607	1	2	0.000
24-Sep	0	466	1.000	18	1,682	0.614	1	3	0.001
25-Sep	0	466	1.000	12	1,694	0.618	0	3	0.001
26-Sep	0	466	1.000	6	1,700	0.620	0	3	0.001
27-Sep	0	466	1.000	28	1,728	0.630	0	3	0.001
28-Sep	0	466	1.000	86	1,814	0.662	1	4	0.001
29-Sep	0	466	1.000	52	1,866	0.681	0	4	0.001
30-Sep	0	466	1.000	104	1,970	0.719	356	360	0.084
1-Oct	0	466	1.000	632	2,602	0.949	1,009	1,369	0.320
2-Oct	0	466	1.000	109	2,711	0.989	1,167	2,536	0.593
3-Oct	0	466	1.000	22	2,733	0.997	276	2,812	0.658
4-Oct	0	466	1.000	3	2,736	0.998	70	2,882	0.674
5-Oct	0	466	1.000	1	2,737	0.999	162	3,044	0.712
6-Oct	0	466	1.000	1	2,738	0.999	121	3,165	0.740
7-Oct	0	466	1.000	0	2,738	0.999	20	3,185	0.745
8-Oct	0	466	1.000	0	2,738	0.999	10	3,195	0.747
9-Oct	0	466	1.000	1	2,739	0.999	21	3,216	0.752
10-Oct	0	466	1.000	0	2,739	0.999	27	3,243	0.759
11-Oct	0	466	1.000	2	2,741	1.000	372	3,615	0.846
12-Oct	0	466	1.000	0	2,741	1.000	660	4,275	1.000
Total Count		466			2,741			4,275	
Adjustments									
Catch at weir		0			0			26	
Catch above weir		NA			NA			NA	
Total Escapement		466			2,741			4,249	

**Appendix E. 4.** Salmon catch and effort in the U.S. Commercial fishery in the Alsek River, 1960 to 2008.

Year	Catch					Effort	
	Chinook	Sockeye	Coho	Pink	Chum	Boat Days	Days Open
1960							
1961	2,120	23,339	7,679	84	86	1,436	80.0
1962							
1963	131	6,055	7,164	42	34	692	68.0
1964	591	14,127	9,760	144	367	592	68.0
1965	719	28,487	9,638	10	72	1,016	72.0
1966	934	29,091	2,688	22	240	500	64.0
1967	225	11,108	10,090	107	30	600	68.0
1968	215	26,918	10,586	82	240	664	68.0
1969	685	29,259	2,493	38	61	807	61.0
1970	1,128	22,654	2,188	6	26	670	52.3
1971	1,222	25,314	4,730	3	120	794	60.5
1972	1,827	18,717	7,296	37	280	640	65.0
1973	1,757	26,523	4,395	26	283	894	52.0
1974	1,162	16,747	7,046	13	107	699	46.0
1975	1,379	13,842	2,230	16	261	738	58.0
1976	512	19,741	4,883	0	368	550	58.5
1977	1,402	40,780	11,817	689	483	882	57.0
1978	2,441	50,580	13,913	59	233	929	57.0
1979	2,525	41,449	6,158	142	263	1,110	51.0
1980	1,382	25,522	7,863	21	1,005	773	42.0
1981	779	23,641	10,232	65	816	588	40.0
1982	532	27,443	6,534	6	358	552	33.0
1983	94	18,293	5,253	20	432	487	38.0
1984	60	14,326	7,868	24	1,610	429	33.0
1985	213	5,792	5,490	3	427	277	33.0
1986	481	24,791	1,344	13	462	517	34.0
1987	347	11,393	2,517	0	1,924	388	40.5
1988	223	6,286	4,986	7	908	324	34.0
1989	228	13,513	5,972	2	1,031	378	38.0
1990	78	17,013	1,437	0	495	374	38.0
1991	103	17,542	5,956	0	105	530	49.0
1992	301	19,298	3,116	1	120	372	46.0
1993	300	20,043	1,215	0	49	372	40.0
1994	805	19,639	4,182	0	32	403	61.0
1995	670	33,112	14,184	13	347	879	53.5
1996	772	15,182	5,514	0	165	419	51.0
1997	568	25,879	11,427	0	34	611	59.0
1998	550	15,007	4,925	1	145	358	41.0
1999	482	11,441	5,660	0	112	319	44.0
2000	677	9,522	5,103	5	130	307	37.0
2001	541	13,995	2,909	8	17	234	50.0
2002	700	16,918	9,525	0	1	270	73.0
2003	937	39,698	47	0	0	271	60.0
2004	656	18,030	2,475	0	2	280	76.5
2005	239	7,572	1,196	0	0	171	41.0
2006	530	9,842	701	2	3	248	45.0
2007	400	19,795	134	0	0	199	47.0
Averages							
60-07	753	20,549	5,707	37	311	558	51.6
98-07	571	16,182	3,268	2	41	277	50.6
2008	128	2,815	2,668	0	0	171	30.0

**Appendix E. 5.** Salmon catch in the U.S. subsistence and personal use fisheries in the Alsek River, 1976-2008.

Catches are those reported on returned permits			
Year	Catch		
	Chinook	Sockeye	Coho
1976	13	51	5
1977	18	113	0
1978			
1979	80	35	70
1980	57	41	62
1981	32	50	74
1982	87	75	50
1983	31	25	50
1984			
1985	16	95	0
1986	22	241	45
1987	27	173	31
1988	13	148	9
1989	20	131	34
1990	85	144	12
1991	38	104	0
1992	15	37	44
1993	38	96	28
1994	60	47	20
1995	51	167	53
1996	60	67	28
1997	38	273	26
1998	63	158	42
1999	44	152	21
2000	73	146	31
2001	19	72	45
2002	60	232	35
2003	24	176	27
2004	51	224	21
2005	31	63	62
2006	47	272	23
2007	79	298	27
Averages			
76-07	41	119	31
98-07	43	147	29
2008	34	200	28

**Appendix E. 6.** Salmon catches in the Canadian Aboriginal and sport fisheries in the Alsek River, 1976 to 2008.

Year	Chinook		Sockeye			Coho			
	Aboriginal	recreational	Total	Aboriginal	recreational	Total	Aboriginal	recreational	Total
1976	150	200	350	4,000	600	4,600	0	100	100
1977	350	300	650	10,000	500	10,500	0	200	200
1978	350	300	650	8,000	500	8,500	0	200	200
1979	1,300	650	1,950	7,000	750	7,750	0	100	100
1980	150	200	350	800	600	1,400	0	200	200
1981	150	315	465	2,000	808	2,808	0	109	109
1982	400	224	624	5,000	755	5,755	0	109	109
1983	300	312	612	2,550	732	3,282	0	16	16
1984	100	475	575	2,600	289	2,889	0	20	20
1985	175	250	425	1,361	100	1,461	50	100	150
1986	102	165	267	1,914	307	2,221	0	9	9
1987	125	367	492	1,158	383	1,541	0	49	49
1988	43	249	292	1,604	322	1,926	0	192	192
1989	234	272	506	1,851	319	2,170	0	227	227
1990	202	555	757	2,314	392	2,706	0	75	75
1991	509	388	897	2,111	303	2,414	0	227	227
1992	148	103	251	2,592	582	3,174	0	213	213
1993	152	171	323	2,361	329	2,690	0	37	37
1994	289	197	486	1,745	261	2,006	8	69	77
1995	580	1,044	1,624	1,745	682	2,427	83	527	610
1996	448	650	1,098	1,204	157	1,361	56	9	65
1997	232	298	530	484	36	520	5	0	5
1998	171	175	346	567	18	585	72	40	112
1999	238	174	412	554	0	554	0	28	28
2000	65	77	142	745	0	745	51	1	52
2001	120	157	277	1,173	4	1,177	5	94	99
2002	120	197	317	2,194	61	2,255	6	283	289
2003	90	138	228	2,734	61	2,795	0	192	192
2004	139	46	185	1,875	247	2,122	0	127	127
2005	58	56	114	581	13	594	20	51	71
2006	2	17	19	1,321	6	1,327	0	0	0
2007	1	40	41	1,330	10	1,340	1	0	1
Averages									
76-07	234	274	508	2,421	316	2,737	11	113	124
98-07	100	108	208	1,307	42	1,349	16	82	97
2008	0	7	7	0	0	0	26	8	34

**Appendix E. 7.** Annual Klukshu River weir counts of Chinook, sockeye, and coho salmon, 1976 to 2008.

The escapement count equals the weir count minus the aboriginal fishery catch above the weir and broodstock taken.

Year	All Chinook			Sockeye		Coho <sup>a</sup>		
	Count	Escape. <sup>c</sup>	Early <sup>c</sup>	Late	Total	Escape.	Count	Escape. <sup>b</sup>
1976	1,278	1,153	181	11,510	11,691	7,941	1,572	
1977	3,144	2,894	8,931	17,860	26,791	15,441	2,758	
1978	2,976	2,676	2,508	24,359	26,867	19,017	30	
1979	4,404	2,454	977	11,334	12,311	7,051	175	
1980	2,637	2,487	1,008	10,742	11,750	10,850	704	
1981	2,113	1,963	997	19,351	20,348	18,448	1,170	
1982	2,369	1,969	7,758	25,941	33,699	28,899	189	
1983	2,537	2,237	6,047	14,445	20,492	18,017	303	
1984	1,672	1,572	2,769	9,958	12,727	10,227	1,402	
1985	1,458	1,283	539	18,081	18,620	17,259	350	
1986	2,709	2,607	416	24,434	24,850	22,936	71	
1987	2,616	2,491	3,269	7,235	10,504	9,346	202	
1988	2,037	1,994	585	8,756	9,341	7,737	2,774	
1989	2,456	2,289	3,400	20,142	23,542	21,636	2,219	
1990	1,915	1,742	1,316	24,679	25,995	24,607	315	
1991	2,489	2,248	1,924	17,053	18,977	17,645	8,540	8,478
1992	1,367	1,242	11,339	8,428	19,767	18,269	1,145	1,145
1993	3,302	3,220	5,369	11,371	16,740	14,921	788	788
1994	3,727	3,628	3,247	11,791	15,038	13,892	1,232	1,232
1995	5,678	5,394	2,289	18,407	20,696	19,817	3,614	3,564
1996	3,599	3,382	1,502	6,818	8,320	7,891	3,465	3,465
1997	2,989	2,829	6,565	4,931	11,496	11,303	307	302
1998	1,364	1,347	597	12,994	13,591	13,580	1,961	1,961
1999	2,193	2,168	371	5,010	5,381	5,101	2,531	2,531
2000	1,365	1,321	237	5,314	5,551	5,422	4,832	4,791
2001	1,825	1,738	908	9,382	10,290	9,329	748	746
2002	2,240	2,134	11,904	13,807	25,711	23,587	9,921	9,921
2003	1,737	1,661	3,084	31,278	34,362	32,120	3,689	3,689
2004	2,525	2,445	3,464	11,884	15,348	13,721	750	750
2005	1,070	963	994	2,379	3,373	3,167	683	663
2006	568	566	247	13,208	13,455	12,890	420	420
2007	677	676	2,725	6,231	8,956	8,310	300	299
Averages								
76-07	2,345	2,149	3,046	13,722	16,768	14,705	1,849	
98-07	1,556	1,502	2,453	11,149	13,602	12,740	2,584	2,577
2008	466	466	43	2,698	2,741	2,741	4,275	4,275

<sup>a</sup> Weir was removed prior to the end of the coho run.

<sup>b</sup> The chinook and sockeye escapements into Klukshu Lake are calculated from the weir count minus fish harvested above the weir site minus broodstock taken. The remainder of the food fishery harvest occurred below the weir, at Village Creek, and Blanchard and Takhanne Rivers.

<sup>c</sup> Includes sockeye counts up to and including August 15.



**Appendix E. 8.** Alsek River sockeye salmon escapement 2000 to 2006.

The 2000-2004 estimates are based on a mark-recapture study. The 2005 estimate was based on GSI analysis and the expansion of the Klukshu River weir count.

Year	Inriver Run Estimate	Confidence Interval		Canadian Catch	Spawning Escapement	U.S. Catch	Total Run	Percent Klukshu
		Lower	Upper					
2000	37,887	23,410	52,365	745	37,142	9,668	47,555	14.7%
2001	31,164	23,143	39,185	1,177	29,987	14,067	45,231	33.0%
2002	95,427	55,893	134,961	2,255	93,172	17,150	112,577	26.9%
2003	103,507	74,350	132,664	2,795	100,712	39,874	143,381	33.2%
2004	83,703	39,566	127,841	2,122	81,581	18,152	101,855	18.3%
2005	57,817	21,907	93,727	594	57,223	7,635	65,452	5.8%
2006	48,901	41,234	56,569	1,327	47,574	10,114	59,015	27.5%
Averages								
00-06	65,487			1,574	63,913	16,666	82,152	22.8%

**Appendix E. 9.** Alsek River sockeye salmon counts from U.S. and Canadian aerial surveys and from the electronic counter at Village Creek, 1985-2008.

Surveys not made every year at each tributary.

Year	U.S. Aerial Surveys				Canada Aerial Surveys <sup>a</sup>		Village Creek Counter
	Basin Creek	Cabin Creek	Muddy Creek	Tanis River	Tatshenshini River	Neskataheen Lake	
1985	2,600			2,200			
1986	100		300	2,700	536	750	1,490
1987	350	220		1,600			1,875
1988	500			750	433	456	<b>433</b>
1989	320			680	1,689	1,700	9,569
1990	275	300		3,500			<b>5,313</b>
1991				800			<b>86</b>
1992	1,000	10		50			<b>7,447</b>
1993	4,800			900			<b>2,104</b>
1994	250			600	366		<b>3,921</b>
1995	2,700			350			4,042
1996	325			650			1,583
1997	600			350			2,267
1998				130			826
1999	30			800			<b>NA</b>
2000	25			180			1,860
2001				700			<b>1,897</b>
2002		No surveys flown					2,765
2003		No surveys flown					<b>2,778</b>
2004		No surveys flown					<b>1,968</b>
2005		No surveys flown					1,408
2006		No surveys flown					979
2007		No surveys flown					10,254
Averages							
85-07	991	177	300	996	756	969	3,089
98-07	28			453			2,748
2008	No surveys flown						<b>NA</b>

<sup>a</sup> Includes several streams from Lo-Fog to Goat Creek.

Bold are incomplete counts

**Appendix E. 10.** Aerial survey index counts of Alsek River Chinook salmon escapements, 1984 to 2008.

Year	Blanchard River	Takhanne River	Goat Creek
1984	304	158	28
1985	232	184	
1986	556	358	142
1987	624	395	85
1988	437	169	54
1989	Io Survey -Poor Cond.	158	34
1990	Io Survey -Poor Cond.	325	32
1991	121	86	63
1992	86	77	16
1993	326	351	50
1994	349	342	67 <sup>a</sup>
1995	338	260	
1996	132	230	12
1997	109	190	
1998	71	136	39
1999	371	194	51
2000	163	152	33
2001	543	287	21
2002	351	220	86
2003	127	105	10
2004	84	46	no survey
2005	112	47	7
2006	98	28	9
2007	39	32	45
Averages			
84-07	253	189	44
98-07	196	125	33
2008	65	41	11

<sup>a</sup>Late survey date which missed the peak of spawning.

**Appendix E. 11.** Alesek River run of large ( $\geq 660$  mef) Chinook salmon, 1997-2004. Estimates are based on a mark-recapture study and include the percent of Chinook salmon.

Estimates are based on a mark-recapture study and include the percent of Chinook salmon spawning in Klukshu River; the program was discontinued in 2005.

Year	Inriver Run			U.S. Catch		Total Inriver Run	Canadian Catch		
	Dry Bay	Confidence Interval		Dry Bay	Commercial subsistence		Aboriginal	Sport Escapement	
		Lower	Upper						
1997	15,250	9,081	21,418	568	38	15,856	232	298	14,720
1998	4,967	3,027	9,765	550	63	5,580	171	175	4,621
1999	11,969	8,243	22,035	482	44	12,495	238	174	11,557
2000	8,432	6,805	14,308	677	73	9,182	65	77	8,290
2001	11,246	9,146	14,303	541	19	11,806	120	157	10,969
2002	8,807	8,345	10,790	700	60	9,567	120	197	8,490
2003	5,105	4,302	6,310	937	24	6,066	90	138	4,877
2004	7,565			656	38	8,259	139	46	7,380
Averages									
97-04	9,168			639	45	9,851	147	158	8,863

Klukshu weir count of large chinook salmon as a percent of the Alesek escapement of large chinook salmon

Year	Weir Count		Percent Klukshu
	All	Large	
1997	2,989	2,864	19.5%
1998	1,364	1,184	25.6%
1999	2,193	1,663	14.4%
2000	1,365	1,218	14.7%
2001	1,825	1,538	14.0%
2002	2,240	2,067	24.3%
2003	1,737	1,313	26.9%
2004	2,525	2,376	32.2%
Averages			
97-04	2,030	1,778	21.5%

**Appendix E. 12.** Aerial survey counts of coho salmon from U.S. lower Alesek River tributaries, 1985-2000

Year	Combined U.S. Tributary Counts
1985	450
1986	1,100
1987	100
1988	1,900
1989	1,990
1990	1,600
1991	500 <sup>a</sup>
1992	1010 <sup>a</sup>
1993	800 <sup>a</sup>
1994	975 <sup>a</sup>
1995	1,050
1996	1,550
1997	No surveys due to poor weather conditions
1998	500
1999	No surveys due to poor weather conditions
2000	620
Averages	
85-00	1,010

**Appendix F. 1.** Tahltan Lake egg collection, fry plants, and survivals, 1989-2008.

Number for eggs and fry are millions. Eggs collected from Tahltan broodstock are used for outplants to both Tahltan and Tuya Lakes.

Brood Year	Egg Take		Designated Tahltan	Fry Planted	Percent Fertilized	Survival		Thermal Mark Pattern
	Target	Collected <sup>a</sup>				Fertilized Egg to Fry	Green Egg to Fry	
1989 <sup>a</sup>	3.000	2.955	2.955	1.042	0.704	0.501	0.353	1:1.4
1990	5.000	4.511	4.511	3.585	0.824	0.964	0.795	1:1.3
1991	5.000	4.246	1.514	1.415	0.949	0.984	0.935	1:1.4
1992	5.400	4.901	2.154	1.947	0.919	0.983	0.904	1:1.5+2.3
1993	6.000	6.140	0.969	0.904	0.946	0.986	0.933	1:1.6+2.5N
1994	6.000	4.183	1.418	1.143	0.929	0.868	0.806	1:1.6
1995	6.000	6.891	3.008	2.296	0.906	0.843	0.763	1:1.7
1996	6.000	6.402	3.169	2.313	0.923	0.791	0.730	1:1.6
1997	6.000	3.221	2.700	1.900	0.812	0.867	0.704	2:1.6
1998	6.000	4.022	1.998	1.671	0.911	0.918	0.836	1:1.7
1999	6.000	3.505	2.773	2.228	0.901	0.892	0.803	2:1.6
2000	6.000	2.388	2.388	1.873	0.920	0.853	0.784	1:1.7
2001	6.000	3.306	3.306	2.533	0.829	0.924	0.766	2:1.6
2002	6.000	4.050	2.780	2.623	0.926	1.019	0.944	1:1.7
2003	6.000	5.391	2.661	2.226	0.899	0.931	0.837	1:1.6 & 1:1.5+2.4
2004	6.000	5.701	1.966	1.266	0.803	0.802	0.644	1:1.6+2.6
2005	6.000	4.552	1.809	1.280	0.800	0.884	0.708	1:1.4+2.2
2006	6.000	4.360	2.954	2.466	0.910	0.917	0.835	1:1.3n,2.2
2007	6.000	4.061	2.209	1.540	0.756	0.922	0.697	1,2n,3
Averages								
89-07	5.705	4.462	2.486	1.908	0.872	0.887	0.778	
98-07	6.000	4.134	2.484	1.971	0.866	0.906	0.785	
2008	6.000	3.159	1.895	1.395	0.848	0.868	0.736	1,4H

**Appendix F. 2.** Tuya Lake fry plants and survivals, 1991-2008.

Numbers for eggs and fry are millions

Brood Year	Egg Take		Percent Fertilized	Survival		Thermal Mark Pattern
	Designated Tuya	Fry Planted		Fertilized Egg to Fry	Green Egg to Fry	
1991	2.732	1.632	0.944	0.633	0.597	1:1.6
1992	2.747	1.990	0.929	0.780	0.724	1:1.7
1993	5.171	4.691	0.911	0.996	0.907	1:1.4+2.5N
1994	2.765	2.267	0.870	0.943	0.820	1:1.4
1995	3.883	2.474	0.795	0.802	0.637	1:1.4+2.4
1996	3.233	2.614	0.932	0.868	0.809	1:1.4
1997	0.521	0.433	0.911	0.912	0.831	2:1.4
1998	2.024	1.603	0.917	0.864	0.792	1:1.4
1999	1.053	0.867	0.960	0.858	0.823	2:1.4
2000 <sup>a</sup>	0.000	0.000				
2001 <sup>a</sup>	0.000	0.000				
2002	1.271	1.124	0.904	0.978	0.884	1:1.7+2.3
2003	2.730	2.445	0.927	0.966	0.896	1:1.4
2004	3.734	3.201	0.921	0.931	0.857	1:1.6+2.4
2005	2.744	2.138	0.900	0.866	0.779	1:1.4+2.4
2006	1.410	1.201	0.920	0.926	0.852	1:1.3,2.3
2007	1.852	1.537	0.856	0.970	0.830	2,1,3
Averages						
91-07	2.228	1.777	0.906	0.886	0.803	
98-07	1.682	1.412	0.913	0.920	0.839	
2008	0.988	0.832	0.854	0.986	0.842	6H

<sup>a</sup> All eggs collected in 2000 and 2001 were for backplant into Tahltan Lake.

**Appendix F. 3. Tatsamenie Lake egg collection, fry plants, and survivals, 1989-2008.**

Brood Year	Egg Take			Fry Planted	Survival <sup>b</sup>			Thermal Mark Pattern	Last Date Released	
	Target	Collected <sup>a</sup>	Transport		Fertilized Egg to Fry	Fertilized	Green			egg to Fry
1990	2.500	0.985	0.985	0.673	0.775	0.882	0.683		1:1.3	22-Jun
1991	1.500	1.360	1.360	1.232	0.927	0.977	0.906		2:1.4	26-Jun
1992	1.750	1.486	1.486	0.909	0.858	0.713	0.612		1:1.5	14-Jul
1993	2.500	1.144	1.144	0.521	0.619	0.735	0.455		2:1.5	14-Jul
1994	2.500	1.229	1.229	0.898	0.801	0.912	0.731		1:1.5	21-Jul
1995	2.500	2.407	2.407	1.724	0.843	0.850	0.716		1:1.5	25-Jun
1996	5.000	4.934	4.934	3.945	0.849	0.942	0.800		1:1.5&1:1.5,2.3	27-Jun
1997	5.000	4.651	4.651	3.597	0.910	0.850	0.773		2:1&2:1.5,2.3	9-Jul
1998	2.500	2.414	2.414	1.769	0.897	0.817	0.733		1:1.4+2.5&1:1.4+2.3	30-Jun
1999	2.500	0.461	0.461	0.350	0.922	0.824	0.759		2:1.5	4-Jul
2000	3.000	2.816	2.572	2.320	0.943	0.956	0.902		1.1.5+2.3&1.1.5	26-Jun
2001	4.800	4.364	3.499	2.233	0.900	0.709	0.638		2:1.5&2:1.5,2.3	25-Jun
2002	3.000	2.498	2.302	1.353	0.823	0.714	0.588		1:1.4&1:1.4+2.3	27-May
2003	5.000	2.642	2.452	2.141	0.919	0.950	0.873		1.1.5+2.3&1.1.5	27-May
2004	5.000	0.750	0.750	0.628	0.933	0.898	0.837		1:1.4+2.5n&1:1.4+2.3,3.3	20-May
2005	5.000	1.811	1.811	1.471	0.936	0.868	0.813		1:1.4+2.3&1:1.4+2.5	8-Jun
2006	5.000	4.810	4.810	3.705	0.920	0.837	0.770		1:1.2,2.1,3.2&1:1.2,2.2,3.3&1:1.2,2.2,3.1	13-Jun
2007	5.000	3.673	3.673	2.122	0.885	0.653	0.578		2n3&2.3n,1&1.3n,2&3.2n,1	6-Jun
Averages										
90-07	3.558	2.469	2.386	1.755	0.870	0.838	0.732			
98-07	4.080	2.624	2.474	1.809	0.908	0.823	0.749			
2008	5.000	4.902	4.373	3.873	0.892	0.993	0.886		3,2H & 3,3H	3-Jun

**Multiple Release Treatments**

Brood Year	Treatment 1				Treatment 2				
	Mark	Treatment	Number Released	Last Date Released	Mark	Treatment	Number Released	Last Date Released	
1996	1:1.5	onshore	3.441	27-Jun	1:1.5,2.3	onshore	0.500	27-Jun	
1997	2:1.5	onshore	3.202	29-Jun	2:1.5,2.3	fed at lake	0.394	9-Jul	
1998	1:1.4+2.5	unfed	0.751	9-Jun	1:1.4+2.3	fed at lake	1.018	30-Jun	
1999	2:1.5	fed at lake	0.350	4-Jul					
2000	1.1.5+2.3	fed early	1.265	15-Jun	1.1.5	fed late	1.054	26-Jun	
2001	2:1.5	unfed early	0.727	30-May	2:1.5,2.3	fed	1.432	25-Jun	
2002	1:1.4	direct release early	0.911	27-May	1:1.4+2.3	fed - IHN loss	0.000	none	
2003	1.1.5+2.3	unfed early south	1.005	27-May	1.1.5	unfed early north	1.136	24-May	
2004	1:1.4+2.5N	unfed early south	0.367	20-May	1:1.4+2/3,3.3	unfed early north	0.261	20-May	
2005	1:1.4+2.3	unfed early south	0.775	8-Jun	1:1.4+2.5	unfed early north	0.696	8-Jun	
2006	:1.2,2.1,3.2	unfed early south	1.808	7-Jun	1:1.2,2.2,3.3,1.2,2.2,3.1	unfed early north	1.897	13,7-Jun	
2007	1,3n,2	unfed early midlake	0.971	6-Jun	2n3 2,3n1	unfed early north	1.150	5-Jun	
2007	3,2n,1	extended rearing <sup>c</sup>	0.400	8-Jun					
Averages									
98-07			0.893				0.960		
2008	3,3H	extended rearing	0.115			lake rear			

<sup>a</sup> Eggs not transported but placed in inlake incubator; 2000 = 244,000, 2001 = 865,000, 2002 196,000, 2003 = 190,000.

<sup>b</sup> Survival rates are for hatchery eggs and hatchery fry plants and do not include the lake incubators.

<sup>c</sup> All died to IHN