

**PACIFIC SALMON COMMISSION  
JOINT TRANSBOUNDARY TECHNICAL COMMITTEE**

**FINAL ESTIMATES OF TRANSBOUNDARY RIVER SALMON  
PRODUCTION, HARVEST AND ESCAPEMENT  
AND A REVIEW OF JOINT  
ENHANCEMENT ACTIVITIES IN 2010**

**REPORT TCTR (15)-2**

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## ACRONYMS

ADF&G	Alaska Department of Fish and Game
AC	Allowable Catch
AF	Aboriginal Fishery
BLC	Base Level Catch
CAFN	Champagne Aishihik First Nation
CCPH	Cumulative Catch per Hour
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)
GSI	Genetic Stock Identification
IHN	Infectious Hematopoietic Necrosis (a virus which infects sockeye salmon)
LCM	Latent Class Model
MEF	Mid Eye Fork (fish length measurement)
MR	Mark–Recapture
MSY	Maximum Sustained Yield
POH	Post-Orbital-Hyperal (fish length measurement)
PSC	Pacific Salmon Commission
PST	Pacific Salmon Treaty
SCMM	Stikine Chinook Management Model
SHA	Special Harvest Area
SMM	Stikine Management Model
SPA	Scale Pattern Analysis
SW	Statistical Week
TAC	Total Allowable Catch
TMR	Thermal Mark Recovery
TRTFN	Taku River Tlingit First Nation
TBR	Transboundary River
TTC	Transboundary Technical Committee
YSC	Yukon Salmon Committee

## CALENDAR OF STATISTICAL WEEKS

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

## EXECUTIVE SUMMARY

Final estimates of harvests and escapements of Pacific salmon returning to the transboundary Stikine, Taku, and Alsek rivers for 2010 are presented and compared with historical patterns. Average, unless defined otherwise, refers to the most recent 10-year average (2000–2009). Relevant information pertaining to the management of appropriate U.S. and Canadian fisheries is presented and the use of inseason management models is discussed. Final results from TBR sockeye salmon *Oncorhynchus nerka* enhancement projects are also reviewed.

### *Stikine River*

The 2010 Stikine River sockeye salmon run was estimated to be 157,000 fish, of which approximately 96,000 fish were harvested in various fisheries including test fisheries. An estimated 61,000 Stikine River fish escaped to spawn, including 13,000 fish that migrated to the Tuya River block that were not harvested. The Tahltan Lake sockeye salmon escapement of 23,000 was within the goal range (18,000 to 30,000 fish). The estimated U.S. commercial harvest of Stikine River sockeye salmon in Districts 106 and 108, including the Stikine River subsistence fishery, was 41,000 fish. The Canadian inriver commercial harvest was 3,000 fish and aboriginal fishery harvest was 7,000 fish; total harvest 50,500 fish. The inriver test fishery harvested 2,000 sockeye salmon and there was no marine test fishery for sockeye salmon in 2010. Weekly inseason run projections from the Stikine Management Model (SMM) ranged from 166,000 to 215,000 sockeye salmon; the final inseason model prediction was 215,000 fish, with a total allowable catch (TAC) of 95,000 fish. Weekly inseason run projections using other methods ranged from 166,000 to 190,000 sockeye salmon. The final inseason run size based on other methods was 181,000 with a TAC of 105,000 fish. Based on the final postseason run size estimate of 157,000 the TAC was 42,000 Stikine River fish for each country, Canada harvested 120% and the U.S. harvested 96% of their respective TACs. Broodstock collection removed 4,500 fish and otolith sampling removed 380 sockeye salmon from the escapement to Tahltan Lake leaving a spawning escapement of 18,200 fish. The estimated spawning escapement of 25,000 mainstem Stikine River sockeye salmon was within the goal range of 20,000 to 40,000 fish for this stock group.

The final 2010 Stikine River large Chinook salmon terminal run was estimated at 20,000 fish, of which approximately 4,500 fish were harvested in various fisheries. An estimated 15,000 Stikine River fish escaped to spawn, below the escapement point estimate of 17,400 Chinook salmon but within the escapement goal range of 14,000 to 28,000 large Chinook salmon. The run and harvest were both below average. The Little Tahltan River large Chinook salmon escapement of 1,100 fish was below the Canadian escapement target of 3,300 fish and below the lower bound of the escapement target range of 2,700 to 5,300 Chinook salmon. The estimated U.S. commercial harvest of Stikine River large Chinook salmon in Districts 108 gillnet, test, troll, subsistence, and sport fisheries was 1,300 fish. The estimated Canadian commercial, Aboriginal, assessment/test, and sport fisheries harvest was 3,200 fish. Traditional MR, model, and other assessment estimates are used to generate inseason run sizes from SW 23 through the remainder of the run. 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 32,000 fish. Weekly inseason run projections ranged from 19,900 to 25,500 Chinook salmon. The final post season estimate run size estimate of 20,000 large Chinook salmon indicated zero TAC.

The 2010 run size of Stikine River coho salmon cannot be quantified. The U.S. terminal 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 District 106 was 226,000 fish (45% Alaska hatchery) and in District 108 harvest was 43,000 fish (41% Alaska hatchery); both were 60% above average. The Canadian inriver coho salmon harvest of 5,300 fish was well above average. The aerial survey count of 1,800 fish from six index sites combined was below average. The cumulative CPUE observed in the coho test fishery was above average.

### ***Taku River***

The final postseason estimate of the 2010 Taku River sockeye salmon run is 155,800 fish, including an estimated U.S. harvest of 46,800 fish and an estimated above border spawning escapement of 88,400 sockeye salmon. The run size was below average, but was above the escapement goal range of 71,000 to 80,000 fish. An estimated 45,800 Taku River sockeye salmon were harvested in the District 111 commercial fishery which is below average and an additional 1,000 fish were harvested in the U.S. inriver personal use fishery. Canadian inriver commercial fisheries harvested 20,200 fish and the aboriginal fishery harvested 200 fish; the commercial fishery was below average while the aboriginal catch was above average. The U.S. harvested 72% of the U.S. AC and Canada harvested 126% of the Canadian AC.

The harvest of large Chinook salmon in the Canadian commercial fishery in the Taku River was 5,240 fish. The Canadian Aboriginal fishery in the Taku River harvested 130 large Chinook salmon. District 111 mixed stock drift gillnet fishery harvested 530 Taku large Chinook salmon, based on postseason GSI analysis. The final above border spawning escapement estimated from the MR program is 28,800 fish.

The estimated above border run of Taku River coho salmon in 2010 was 141,200 fish. The Canadian inriver commercial and test fishery harvest of 14,400 coho salmon was above average. After Canadian harvests are subtracted from the above border run, the above border spawning escapement estimate was 126,800 coho salmon, which exceeds the minimum escapement goal of 38,000 fish. The U.S. harvest of 62,000 coho salmon in the District 111 mixed stock fishery was above average. Alaskan hatcheries contributed an estimated 5,100 fish or 8.3% of the District 111 harvest.

### ***Alsek River***

The Alsek River sockeye salmon harvest of 13,000 fish in the U.S. commercial fishery was below average. The Canadian inriver harvest was 400 sockeye salmon for Klukshu River and 1,700 fish in Aboriginal harvest with no harvests not reported for Village Creek. The Klukshu River weir count of 19,000 sockeye salmon was above average and

the goal range of 7,500 to 15,000 fish. The count of 5,100 early run sockeye salmon (count through August 15) and the late run count of 13,900 were both above average.

The Chinook salmon run to the Alsek River appeared to be average or above average. The U.S. Dry Bay catch of 270 large Chinook salmon was below average. The Canadian recreational fishery harvest of 100 fish and Aboriginal harvest of 200 were both above average. The 2,400 Chinook salmon counted through the Klukshu River weir was above average and above the escapement 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 2,000 coho salmon was below average as was the Canadian inriver aboriginal fishery harvest of 4 fish. 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 is over.

### *Enhancement*

Eggs and milt were collected from the year 2010 sockeye salmon escapements at Tahltan, Tatsamenie and Little Trapper lakes. A total of 6.0 million eggs were collected at Tahltan Lake, and 2.1 million at Tatsamenie Lake.

Outplants of 2009 brood year sockeye salmon fry in May and June 2010 were as follows: 1.8 million fry into Tahltan Lake; 977 thousand fry into Tuya Lake; and 717 thousand fry into Tatsamenie Lake. Green-egg to stocked-fry survivals were 70%, 52%, and 58% for the Tahltan, Tuya, and Tatsamenie, respectively. Survivals were lower due to loss of 4 incubators due to IHN.

The egg incubation and thermal marking program was continued at Snettisham Hatchery in 2009. Snettisham hatchery is operated by DIPAC, a private aquaculture organization in Juneau. A cooperative 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 U.S./Canada TBR fry stocking programs to the District 106, 108, and 111 gillnet fisheries and to Canadian commercial fisheries in the Stikine and Taku rivers. Final estimates of the contribution of stocked fish to Alaskan harvest were 19,000 stocked Stikine River fish to District 106 and 108, and 940 stocked Taku River fish to District 111. Final estimates of the contribution of stocked fish to Canadian fisheries included 28,000 fish to Stikine River fisheries and 630 stocked fish to the Taku River fisheries.

## INTRODUCTION

This report presents preliminary estimates of the 2010 harvest and escapement data for Pacific salmon runs to the transboundary Stikine, Taku, and Alsek rivers and describes management actions taken during the season. Harvest and effort data are presented by 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 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 TAC estimates for the various species and rivers. The results of this meeting are summarized in: Pacific Salmon Commission Transboundary Technical Committee, TCTR(10)-1 *Salmon Management and Enhancement Plans for the Stikine, Taku and Alsek Rivers, 2010. April 2010.*

Run reconstruction analyses are conducted on the sockeye salmon *Oncorhynchus nerka* and Chinook salmon *O. tshawytscha* runs to the Stikine and Taku rivers and to the Taku River for coho salmon *O. kisutch* 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 and troll fisheries as well as recreational and subsistence fisheries in Alaskan Districts 106 and 108, by Canadian commercial gillnet and test fisheries located in the lower and upper Stikine River, and by a Canadian AF in the upper portion of the river (Figure 1). In addition, Canadian terminal area fisheries are occasionally 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 U.S. subsistence fishery was opened in 2004 for sockeye salmon and in 2005 for Chinook and coho salmon. Additional catches of unknown quantity are taken in U.S. troll, gillnet, seine, and sport fisheries in locations beyond Districts 106 and 108.

In 1993, the U.S. 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. The three areas in District 108 and one area in District 6 have remained unchanged and have opened in the absence of District 108 directed Stikine River Chinook salmon fisheries.



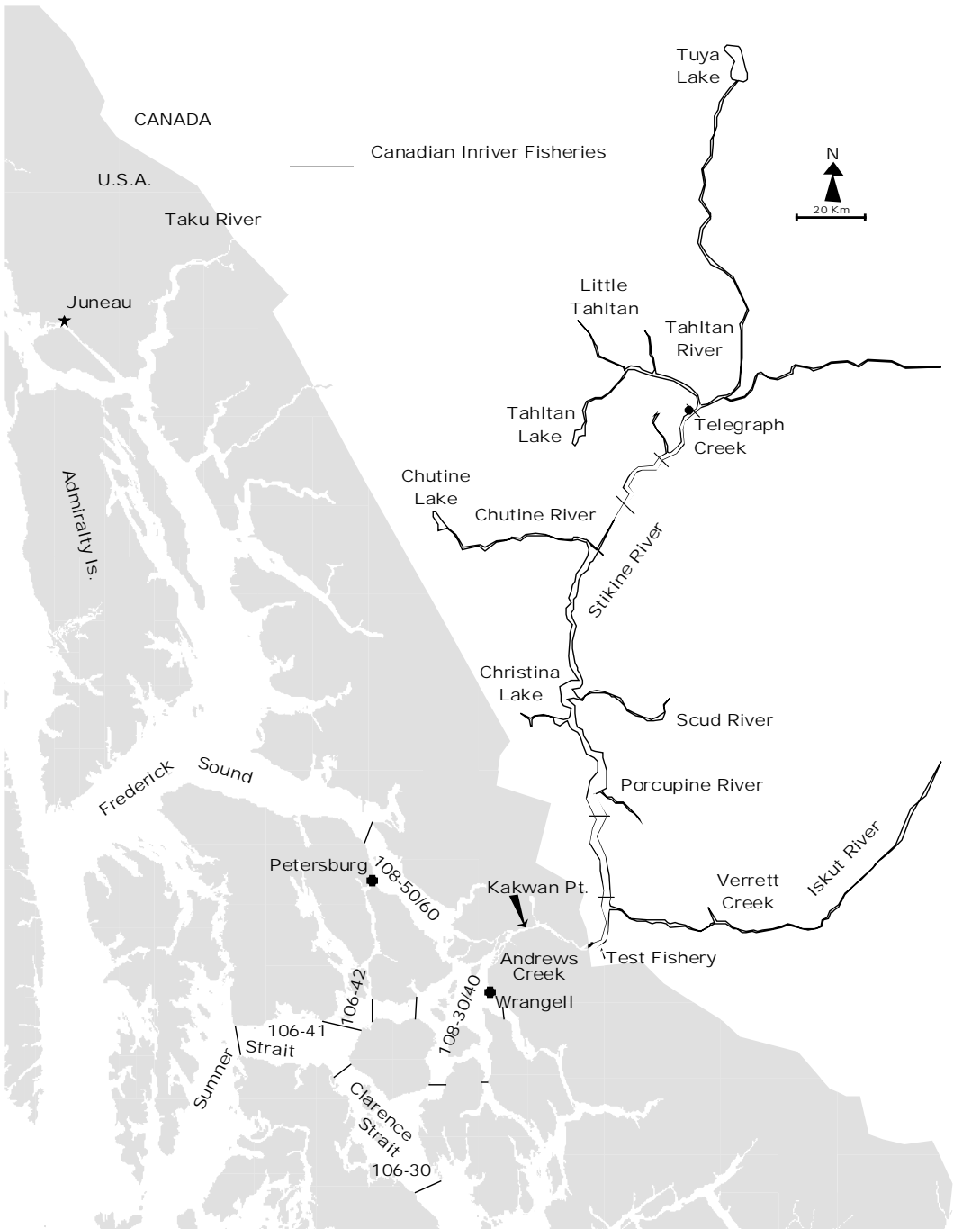


Figure 1. The Stikine River and principal U.S. and Canadian fishing areas.

## *Harvest Regulations and the Joint Management Model*

Fishing arrangements in place for salmon originating from the Canadian portion of the Stikine River watershed are provided in Annex IV, Chapter 1 of the PST and can be found at: <http://www.psc.org/pubs/treaty.pdf>. These arrangements include: directed fisheries for Chinook salmon; continuation of a U.S. subsistence fishery on Chinook, sockeye, and coho salmon stocks within the U.S. section of the Stikine River; continuation of coho salmon catch shares; and, a sockeye salmon catch sharing arrangement based on the presumed production of enhanced fish.

As in most previous years, the 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 Chinook salmon model is referred to as the SCMM and served as a key management tool governing weekly fishing regimes for Stikine River Chinook salmon. The SCMM, however, was complemented inseason with a concurrent mark-capture study and other inriver assessment methods. The sockeye salmon model is referred to as the SMM. The SMM was complemented inseason with concurrent inriver run size estimates based on fishery performance against historical fishery performance and run size estimates.

### **Chinook Salmon**

The SCMM model is based on the linear regression (correlation) between weekly cumulative CPUE of large Chinook salmon at the tagging site, located near the mouth of the Stikine River, and total run size based on MR studies conducted in 1996–2005 (2006–2009 correlation not used). Most of the CPUE and run size data sets (CPUE vs. run size) are significantly correlated. Inseason model estimates were available commencing in SW 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 SW 23. 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 preseason run size estimate of 22,900 large Chinook salmon was below the threshold run size limit of 28,100 fish (Table 1) hence, no new directed Chinook fisheries were permitted at the outset of the fishing season. The threshold number is the sum of the midpoint escapement goal (21,000) + the Canadian BLC (2,300) + the U.S. BLC (3,400) + the inriver assessment/test fishery harvest (1,400). Both countries, however, are permitted to harvest Chinook salmon caught as bycatch taken in the course of the targeted sockeye salmon fisheries for run sizes forecasted to be below 28,100 fish. Moreover, an inriver assessment/test fishery implemented on the Canadian side of the border is designed to provide inseason run estimates while harvesting a maximum of 1,400 large Chinook salmon.

Table 1. Stikine River large Chinook salmon run size based on a model, mark–recapture estimates, other methods, and weekly inseason harvest estimates from the District 108 gillnet, sport, and troll fisheries, inriver assessment/test fishery, and the Canadian gillnet and sport fisheries, 2010.

SW	Start Date	Terminal Run		TAC			Estimated Harvest	
		Estimate	Method	Total	Weekly	Cumulative	Weekly	Cumulative
Canada Estimates <sup>a</sup>								
19	02-May	22,900	Preseason	3,700	67	67	60	60
20	09-May	22,900	Preseason	3,700	190	257	170	230
21	16-May	22,900	Preseason	3,700	230	487	213	444
22	23-May	22,900	Preseason	3,700	213	700	265	708
23	30-May	22,300	Average <sup>a</sup>	3,700	175	875	199	907
24	06-Jun	19,715	Average <sup>a</sup>	3,700	282	1,157	430	1,338
25	13-Jun	20,968	Average <sup>a</sup>	3,700	422	1,580	294	1,631
26	20-Jun	20,646	Average <sup>a</sup>	3,700	876	2,455	578	2,209
27	27-Jun	21,924	Average <sup>a</sup>	3,700	578	3,034	535	2,745
28	04-Jul	21,924	Average <sup>a</sup>	3,700	283	3,317	206	2,950
29	11-Jul	21,924	Average <sup>a</sup>	3,700	173	3,490	138	3,088
30	18-Jul	21,924	Average <sup>a</sup>	3,700	93	3,583	18	3,107
31	25-Jul	21,924	Average <sup>a</sup>	3,700	32	3,615	27	3,134
32	01-Aug	21,924	Average <sup>a</sup>	3,700	24	3,640	4	3,138
33	08-Aug	21,924	Average <sup>a</sup>	3,700	18	3,657	1	3,139
34	15-Aug	21,924	Average <sup>a</sup>	3,700	43	3,700		3,139
Postseason Final		19,615				3,700		3,139
U.S. Estimates <sup>a</sup>								
18	25-Apr	22,900	Preseason	0	0	0	24	24
19	2-May	22,900	Preseason	0	0	0	36	60
20	9-May	22,900	Preseason	0	0	0	75	135
21	16-May	22,900	Preseason	0	0	0	167	302
22	23-May	22,900	Preseason	0	0	0	375	677
23	30-May	22,300	Average <sup>a</sup>	0	0	0	261	938
24	6-Jun	19,715	Average <sup>a</sup>	0	0	0	159	1,097
25	13-Jun	20,968	Average <sup>b</sup>	0	0	0	177	1,274
26	20-Jun	20,646	Average <sup>c</sup>	0	0	0	263	1,537
27	27-Jun	21,924	Average <sup>b</sup>	0	0	0	246	1,784
28	4-Jul	21,924	Average <sup>b</sup>	0	0	0	153	1,936
29	11-Jul	21,924	Average <sup>b</sup>	0	0	0	63	1,999
Postseason Final		19,615						1,993

<sup>a</sup> Average of mark–recapture and SCMM

<sup>b</sup> TAC includes the base level catch for U.S. and Canada plus a test fish allocation of 1,400 Chinook salmon for Canada

<sup>c</sup> The test fish allocation of 1,400 fish was distributed over a seven week period (SW 19–25). The weekly harvest was loosely based on the average run timing through the lower Stikine River commercial fishing grounds where the test fishery was conducted (the TAC in SW 24–25 from the upper fishery were added). The Canadian base level catch of 2,300 fish was distributed over the balance of the Chinook salmon run, with an allocation of 800 fish to the upper Stikine River Aboriginal, sport, and commercial fisheries. The upper Stikine River guideline TAC(s) were based on historical run timing from stat SW 24–34.

The Canadian guideline harvests, based on a harvest goal of 1,400 fish, taken from SW 19 to SW 25, were derived from historical run timing data from the 2005–2009 inriver commercial fisheries, and the 2000–2003 inriver assessment/test fisheries. The U.S. guidelines were derived from historical run timing in District 108 (1969–1973, 2005–2008) and historical CPUE from the Kakwan Point tagging site, delayed one week

(1996–2004) and the 2001–2003 average CPUE from the Canadian Chinook salmon assessment/test fishery delayed one week.

The preseason forecast for Stikine River large Chinook salmon terminal run was approximately 22,900 fish (Table 1) which indicated a run size as below average. This forecast was used during SW 19–22. After SW 22, inseason projections of total terminal run size and TAC were used to assist in determining weekly fishing plans (Table 1). The inseason estimates were based on averaging the SCMM and the MR estimate. The weekly inputs to the model included: harvest and effort data from Kakwan Point, the District 108 sport, troll, and gillnet harvest. The Canadian sport and gillnet harvests were also added to the model.

Joint Canadian and U.S. inseason predictions of terminal run size ranged from 19,700 to 22,300 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 of the current week and were used to set the following week's fishery openings. Managers used the average of the model and MR estimates in SW 23–34. All inseason projections indicated a run size that was less than the preseason expectation and below the 2002–2009 average run size. Based on MR data from the inriver commercial fishery, the preliminary postseason estimated terminal run size of Stikine Chinook salmon was 20,356 large Chinook salmon, near the final inseason estimate of 21,924 large Chinook salmon (Table 1). The 2010 Little Tahltan escapement of 1,057 fish represents approximately 7% of the total inriver escapement of 15,171 fish, compared to the average of approximately 18%.

### **Sockeye Salmon**

The preseason forecast for the Stikine River sockeye salmon run was approximately 187,700 fish (Table 2), characterized as an average run. The forecast included approximately 59,200 natural Tahltan fish, 32,000 enhanced Tahltan fish, 48,500 enhanced Tuya fish, and 48,000 mainstem fish. The preseason forecast was used through SW 27 for the inriver fishery. After SW 27, Canada used the SMM and other methods to generate weekly run sizes. The U.S. used the SMM beginning in SW 27 for District 106 and 108.

Starting in SW 27, weekly inputs of the harvest, effort, and stock composition were entered into the SMM to provide weekly forecasts of run size and TAC. Specific inputs include proportion Tahltan/Tuya from egg diameters, proportion enhanced Tuya from thermal mark analyses of otoliths in the Canadian lower river test (when in operation) and commercial fisheries; the upper river harvest in the AF and upper river commercial fishery; the catch, effort and assumed stock composition in Subdistrict 106-41 (Sumner Strait), District 108, and Subdistrict 106-30 (Clarence Strait).

The SMM provides inseason projections of the Stikine River sockeye salmon run, including: the Tahltan stock (wild and enhanced combined); the stocked Tuya stock; and the mainstem stocks. The SMM uses linear regression by historical stock specific harvest data to predict run size from cumulative CPUE for each week of the fisheries. It breaks

the stock proportions in District 106 and 108 catches, from historical postseason scale pattern analysis (SPA) into triggers of run size for Tahltan and Mainstem; the averages used each week depended upon whether the run was judged to be below average (0–40,000), average (40,000–80,000), or above average (+80,000). The SMM for 2010 was based on CPUE data from 1994 to 2006 from the Alaska District 106 fishery and the Canadian commercial fishery in the lower river and from the lower Stikine River test fishery from 1986 to 2004. The enhanced Tuya and Tahltan stock proportions are adjusted inseason based on the analysis of otolith samples taken in Districts 106 and 108.

Generally, the SMM has used the Canadian Lower River Commercial (LRCF) fishery CPUE to estimate the inriver run size, but both LRCF and Lower River Test fishery CPUE were entered into the SMM model to compare and contrast the respective run sizes generated from each of the inputs. In 2010 the upper commercial fishing zone (Flood fishery) was not opened for harvest; in years that it is opened, the harvest and effort from this area are excluded from the CPUE and not used in the model estimate. 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 licence was permitted, while in 1996–1999 and 2005–2009 two nets per license were allowed. Only one net was permitted in the 2010 fishing season and the model was adjusted accordingly.

Table 2. Weekly forecasts of run size and total allowable catch for Stikine River sockeye salmon as estimated inseason by the Stikine Management Model, 2010.

SW	Start Date	Terminal Run		TAC			Cumulative Harvest	
		Estimate	Method	Total	U.S.	Canada	U.S.	Canada
Model runs generated by Canada								
25	13-Jun	187,770	Preseason	119,100	59,550	59,550		25
26	20-Jun	187,770	Preseason	119,100	59,550	59,550		1,956
27	27-Jun	165,509	Model	98,770	49,385	49,385		13,716
28	4-Jul	165,509	Model	98,770	49,385	49,385		25,060
29	11-Jul	186,576	Inriver Regression	108,522	54,261	54,261		38,475
30	18-Jul	190,048	Inriver Regression	111,446	55,723	55,723		44,959
31	25-Jul	190,048	Inriver Regression	111,446	55,723	55,723		47,721
32	1-Aug	180,980	Inriver Regression and model	107,668	53,834	53,834		49,405
33	8-Aug	180,209	Inriver Regression and model	106,926	53,463	53,463		50,187
34	15-Aug	176,906	Inriver Reg./run reconstruction	101,816	50,908	50,908		50,355
35	22-Aug	180,953	Inriver Reg./run reconstruction	104,854	52,427	52,427		50,478
36	29-Aug	180,953	Inriver Reg./run reconstruction	104,854	52,427	52,427		50,543
Model runs generated by U.S.								
25	13-Jun		Preseason	118,672	59,336	59,336	7,875	1,852
26	21-Jun	187,700	Preseason	118,672	59,336	59,336	14,378	6,023
27	28-Jun	178,523	Model	100,809	50,405	50,405	33,500	22,718
28	5-Jul	166,113	Model	146,106	73,053	73,053	36,721	27,377
29	12-Jul	209,026	Model	139,965	69,983	69,983	42,002	38,049
30	19-Jul	206,580	Model	152,502	76,251	76,251	44,580	47,485
31	26-Jul	219,927	Model	122,933	61,466	61,466	40,969	48,246
32	2-Aug	189,336	Average Model/Run reconstruction	145,577	72,788	72,788	41,696	49,907
33	9-Aug	213,381	Model	146,021	73,010	73,010	41,696	49,907
34	16-Aug	214,520	Model	118,672	59,336	59,336	7,875	1,852
Postseason estimate		157,001		84,507	42,254	42,254	50,540	40,647

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

The weekly inputs to the Tahltan sockeye salmon regression model included the cumulative weekly CPUE of Tahltan Lake sockeye salmon (1998–2008: from SW 28 to 33 all correlations were significant and ranged from an  $r^2$  of 0.67 in SW 28 to an  $r^2$  of 0.91 SW 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 or calculated based on a regression of cumulative CPUE against the inriver run size (1998–2008: from SW 28 to 33 all correlations were significant and ranged from an  $r^2$  of 0.31 in SW 28 to an  $r^2$  of 0.64 SW 33). The contribution of Tuya sockeye salmon (thermal marks) and mainstem sockeye salmon (large eggs) were expressed as a ratio of the total Tahltan Lake run. 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.

Canadian inseason predictions of terminal run ranged from 165,500 to 219,000 sockeye salmon; U.S. forecasts ranged from 165,500 to 213,500 (Table 2). 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.

### *U.S. Fisheries*

The 2010 gillnet harvest in District 106 was 2,473 Chinook, 112,450 sockeye, 225,550 coho, 309,795 pink, and 97,948 chum salmon. Salmon harvests were above average for Chinook, sockeye, and coho salmon. The pink salmon harvest was average and chum salmon harvest was below average. The final postseason estimate of Stikine River sockeye salmon harvested in District 106 was 13,887 fish or approximately 12% of the harvest. An estimated 100,408 coho salmon in the District 106 harvest were of Alaska hatchery origin, 45% of the total coho salmon harvest. The District 106 drift gillnet fishery was open for 47 days from June 14 through October 12. Total 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 above average for every week of the season with the exception of SW 28 through 30 and SW 40 and 42. The greatest effort in vessels fishing (105 boats), and the greatest number of boat days (315) both occurred in SW 33. The total season effort was above average at 3,161 boat days.

The Sumner Strait fishery (Subdistrict 106-41/42) harvested an estimated 12,274 Stikine River sockeye salmon (Table 3), 21% of the total sockeye salmon harvest in that subdistrict. The Clarence Strait fishery (Subdistrict 106-30) harvested an estimated 1,613 Stikine River sockeye salmon, 3% of the total sockeye salmon harvest in that subdistrict.

The District 108 total season gillnet harvest was 2,359 Chinook, 32,737 sockeye, 42,772 coho, 58,610 pink, and 51,005 chum salmon. Coho and pink salmon harvests were above average, while Chinook, sockeye, and chum salmon harvests were below average. The District 108 fishery harvested an estimated 25,106 Stikine River sockeye salmon, 77% of the District 108 sockeye salmon harvest. The District 108 fishery started on June 21 after being postponed for Stikine Chinook salmon conservation. District 108 closed concurrently with District 106 on October 12. The 47 days the district was open is near average excluding the directed Chinook salmon fishery. The average days fished in District 108 including the directed Chinook salmon fisheries is 51 days. An estimated 41% (17,421 fish) of the District 108 coho salmon harvest was of Alaskan hatchery origin. The Alaska hatchery Chinook salmon contribution in District 108 was estimated at 1,085 fish, 70% of the total harvest. The weekly fishing effort in number of vessels fishing in District 108 was variable with SW 27 and 33 through 41 being above average and SW 26, 28 through 32, and 42 being below average.

Table 3. Terminal run reconstruction for Stikine River sockeye salmon, 2010.

	All Tahltan	Tuya	Mainstem	Total	Tahltan	
				Stikine	Enhanced Tahltan	Wild Tahltan
Escapement <sup>a</sup>	22,702	13,350	24,831	60,883	9,596	13,106
ESSR Harvest <sup>b</sup>	0			0		
Broodstock	4,484			4,484	1,807	2,677
Natural Spawning	18,218		24,831	43,049	7,789	10,429
Excess <sup>c</sup>		13,350		13,350		
Biological Samples	158	224		382	74	84
Canadian Harvest						
Aboriginal	4,145	3,004	127	7,276	1,654	2,490
Upper Commercial	687	520	9	1,215	268	419
Lower Commercial	19,185	14,965	7,899	42,049	5,126	14,059
Total	24,016	18,489	8,035	50,540	7,048	16,968
% Harvest	57.8%	60.5%	42.2%	55.4%	50.2%	61.6%
Test Fishery Harvest						
Tuya Test	453	190	1,114	1,757	105	348
	1,192	1,429	171	2,792	530	662
All Inriver harvest (harvest plus samples)	25,661	20,108	9,320	55,089	7,683	17,978
	25,819	20,332	9,320	55,471		
Inriver Run	48,521	33,682	34,152	116,354	17,279	31,084
U.S. Harvest <sup>a</sup>						
106-41&42	4,959	5,210	2,105	12,274	2,035	2,924
106-30	272	565	776	1,613	105	167
108	11,645	5,811	7,651	25,106	4,665	6,980
Subsistence	689	479	485	1,653	184	505
Total	17,565	12,064	11,018	40,647	6,990	10,575
% Harvest	42.2%	39.5%	57.8%	44.6%	49.8%	38.4%
Test Fishery Harvest						
	0	0	0	0	0	0
<b>Terminal Run</b>	<b>66,086</b>	<b>45,746</b>	<b>45,169</b>	<b>157,001</b>	<b>24,268</b>	<b>41,660</b>
Escapement Goal	24,000	0	30,000			
Terminal Excess <sup>d</sup>		16,927				
Total TAC	41,633	28,819	14,055	84,507		
Total Harvest <sup>e</sup>	42,034	30,743	20,167	92,944		
Canada TAC						
Actual Harvest <sup>f</sup>	20,816	14,410	7,028	42,254		
% of total TAC	115%	128%	114%	120%		
U.S. TAC						
Actual Harvest <sup>f</sup>	20,816	14,410	7,028	42,254		
% of total TAC	84%	84%	157%	96%		

U.S. overage/underage

Canada overage/underage

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

<sup>b</sup> Harvest 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 Harvestes.

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

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



In 2014, the U.S. subsistence Chinook, sockeye, and coho salmon fisheries were conducted on the Stikine River and were managed by the USFS. Subsistence fisheries were restricted to federally qualified users and a permit issued by the USFS was required to participate. Subsistence fishing was restricted to the waters of the Stikine River from marine waters to the U.S./Canadian border and fishing in “clearwater” tributaries or side channels or at stock assessment sites was prohibited. Annual guideline harvest levels were 125 Chinook, 600 sockeye, and 400 coho salmon. 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 fishery when nets with mesh up to 8 inches were allowed. Subsistence fishing was allowed from June 14 to June 20 to target Chinook salmon, June 21 to July 31 to target sockeye salmon, and August 1 to October 1 to target coho salmon. A total of 124 permits were issued and the estimated harvests included 53 Chinook, 1,653 sockeye, and 135 coho salmon.

Preseason and inseason estimates of Stikine River Chinook salmon terminal run sizes did not result in ACs or ACs large enough to allow U.S. directed commercial and sport fisheries. The preseason forecast of 23,000 large Stikine River Chinook salmon was not large enough to yield any AC. Inseason forecasts ranging between 19,700 and 22,000 large Stikine Chinook salmon were similar to the preseason forecast and yielded minimal U.S. ACs. The postseason estimate of the total terminal run size based on MR information is 29,300 Stikine River Chinook salmon netting a U.S. AC of 480 fish (Table 1).

U.S. harvests of large Stikine River Chinook salmon in all District 108 fisheries were minimal. Estimated harvest of large Stikine River Chinook salmon harvested in the District 108 drift gillnet fishery from 26 through 29 (during sockeye salmon management period) was 348 fish. The initial gillnet sockeye season opening was postponed by one week in District 106 and by two weeks in District 108 due to Stikine Chinook salmon conservation concerns. District 108 troll hatchery access openings through the end of June resulted in a total harvest of 427 Stikine Chinook salmon. Troll hatchery access openings were also reduced for Stikine Chinook conservation in SW 23 through 25. Two of the three hatchery access areas (the two having the highest component of Stikine Chinook salmon in the harvests) within District 108 were reduced to one day openings in SW 23 through 25. The District 108 sport fish Stikine Chinook salmon harvest estimate from SW 18 through 29 was 965 fish. The final cumulative U.S. harvest of large Stikine Chinook salmon through SW 29, including the Stikine subsistence fishery and District 108 test fishery, was 1,303 fish. The final postseason estimate of the total terminal run was 19,615 large Chinook salmon and was based upon MR information. Based upon that final postseason estimate of the run size, the U.S. allowable catch was no large Stikine Chinook salmon above the BLC.

The initial gillnet sockeye season opening was postponed by one week in District 106 and by two weeks in District 108 due to Stikine Chinook salmon conservation concerns. Directed sockeye salmon drift gillnet fisheries in District 106 began in SW 25 at 12:00 noon on Monday, June 14, for an initial two-day period. By regulation, Monday openings

occurred during the first two sockeye salmon periods. The first sockeye salmon opening is normally two days and any decision to extend fishing is based on fishery performance estimated by management biologists monitoring the fishery on the grounds. Sockeye salmon harvest was below average in most areas and the fishery was allowed to close as announced. For this initial sockeye opening 16 boats fished in Clarence Strait (106-30) and 57 boats fished in Sumner Strait (106-41). The preseason SMM forecasted a total Stikine River TAC of 118,672 sockeye salmon and a Tahltan TAC of 66,325 sockeye salmon (Table 2). This run size would allow the U.S. fisheries to harvest a total of 59,336 Stikine River fish, which includes 33,163 Tahltan fish. The preseason forecast was used for SW 25– 27 while inriver run estimates were produced weekly starting in SW 27 and used through the remainder of the season.

During SW 26 (June 20–26), 52 boats fished in Sumner Strait, 15 boats fished in Clarence Strait, and 40 boats fished in District 108. Both districts were open for three days of fishing. This was the first opening of the season in District 108. Due to Stikine Chinook salmon conservation concerns, fishing boundary lines for the initial commercial opening in District 108 were expanded beyond the Stikine River Flats. The initial opening was announced for two days in each district and was extended by an additional day in both districts largely due to above average sockeye harvest rates observed. In addition, most, if not all, fishermen were using gillnets designed to catch sockeye further reducing harvest of Chinook salmon. The harvest pattern in District 106 was of concern because sockeye salmon harvest rates in the Point Baker section of the district were below expectations; this section usually has high harvest rates. The inseason otolith readings for subdistrict 106-41 indicated that 9.2% of the harvest was comprised of thermally marked Tahltan fish while 23.0% were Tuya fish. In District 108, 23.8% were thermally marked Tahltan fish and 26.4% were Tuya fish.

During SW 27 (June 27–July 3), 49 boats fished in Sumner Strait, 42 boats fished in Clarence Strait, and 69 boats fished in District 108. Both districts were opened for an initial three days this week based on near average sockeye harvest rates and inriver fishing conditions. On the grounds surveys of the gillnet fleet indicated those boats targeting sockeye salmon in District 108 had above average harvest rates. The District 106 sockeye harvest rates were split, with Clarence Strait and the Macnamara shoreline having solid harvest rates; however, the Point Baker area, although improved from the previous week, continued to have below average harvest rates. Although, there was below average sockeye harvest rates in Sumner Strait, the harvest rates were above average everywhere else, so a 24-hour midweek opening in District 108 was announced. The inseason otolith readings for subdistrict 106-41 for SW 27 indicated that 13% of the harvest was comprised of thermally marked Tahltan fish while 16% were Tuya fish. The District 108 reading indicated 22.2% thermally marked Tahltan fish and 23.9% Tuya fish. The first inseason terminal run estimate was produced this week and resulted in a total run that was over 20,000 fish less than the preseason forecast. This estimate reduced the U.S. TAC to 50,400 Stikine sockeye with 29,300 Tahltan fish. The U.S. Tahltan sockeye catch estimate at this point was 9,000 fish.

During SW 28 (July 4–July 10), District 106 and 108 were opened for an initial two days. There were 21 boats fishing in Clarence Strait, 27 boats in Sumner Strait, and a total of 32 boats fishing in District 108 for the week. Surveys on the fishing grounds indicated that sockeye salmon harvest rates were above average in District 106 (with the Point Baker area showing marked improvement) and above average for those boats targeting sockeye salmon in Section 8-B. With average to above average sockeye salmon harvest rates and a proportion of the District 108 fleet targeting chum salmon, a 24-hour extension was announced in both districts. Thermal marks for 106-41 were not available at the time the estimates of harvest and run size were made. In District 108, marked Tahltan fish contributed 35.4% while marked Tuya fish contributed 59.4%. The Stikine sockeye salmon model estimate increased the total Stikine sockeye salmon U.S. TAC to 73,000 fish with a Tahltan TAC of 50,400 fish. The estimated cumulative U.S. harvest of Tahltan sockeye salmon was 19,000 fish. The mainstem run forecast remained consistent at to the prior week and the preseason forecast at 47,400 fish with a U.S. TAC of 8,500 fish. The estimated U.S. harvest of mainstem fish at this point was 3,200 fish. As in prior weeks, it was thought the SMM was overestimating run size because the continued low water levels on the Stikine River created near ideal inriver fishing conditions.

During SW 29 (July 11–July 17), 30 boats fished in Clarence Strait, 30 boats fished in Sumner Strait, and 54 boats fished in District 108. This was the initial week of the McDonald Lake sockeye salmon conservation period, which preempted a reduction of fishing time for a maximum of two days in District 6. Any additional time during this three-week period would be in the form of a midweek opening in District 108. The effort fell substantially this week in both districts. Sockeye salmon harvest rates were above average in District 106 and in District 108. Due to the reduced effort in both districts, strong catch rates in District 106, and harvestable surplus indicated by the model, a 24-hour midweek opening was scheduled. The inseason otolith readings for SW 29 indicated that the marked Tahltan fish contributed 5.0% of the 106-41 harvest and 5.4% of the District 108 harvest. The marked Tuya fish contributed to 5.0% of the 106-41 harvest and 33.9% of the District 108 harvest. The estimates of Tahltan run size decreased while the estimates of Tuya and mainstem run size increased. It was again thought the SMM was continuing to overestimate run sizes due to continued low water on Stikine. The estimate of U.S. TAC of Tahltan fish decreased to 36,400 fish while the estimate of mainstem TAC increased to 18,000 fish. The U.S. cumulative harvest estimate of Tahltan sockeye salmon was 21,000 and the U.S. cumulative harvest estimate of mainstem sockeye salmon was 4,400.

During SW 30 (July 18–July 24), 58 boats fished in District 106, and 41 boats fished in District 108. Both districts were open for an initial two days. Effort dropped from the previous week to the lowest point of the season in District 106. Sockeye salmon harvest rates in District 106 continued to be above average; however, due to McDonald Lake sockeye salmon conservation only two days were allowed. Effort in 108 remained stable and below average. Harvest rates in District 108 dropped from previous weeks and due to concerns over mainstem stocks no additional time was granted in District 108. The inseason otolith readings for SW 30 indicated that marked Tahltan fish contributed 1.8% of the 106-41 harvest and 4.3% of the District 108 harvest. The SMM estimated a U.S.

Tahltan TAC of 36,200 sockeye salmon this week. The U.S. harvest of Tahltan sockeye salmon through SW 30 was estimated at 23,200 fish. The SMM estimated a U.S. mainstem harvest of 6,700 sockeye salmon with a U.S. TAC of 23,400 fish. Low water conditions on the Stikine River persisted; sustaining the belief the SMM was overestimating run sizes.

During SW 31 (July 25–July 31), 64 boats fished in District 106 and 41 boats fished in District 108. Both districts were open for an initial two days. Sockeye salmon harvest rates continued to be above average in District 106 and near average for the small number of boats targeting sockeye salmon in District 108. The model produced this week decreased the mainstem run estimate and the assessment from the Tahltan River weir showed the potential for weaker than expected escapement. Due to constraints from McDonald Lake sockeye salmon and concern for mainstem stocks, no additional time was given in either district. This was the last week of restrictions based on McDonald Lake sockeye salmon and for sockeye salmon based management in both districts. The preliminary postseason run reconstruction indicated a U.S. harvest of 48,229 Stikine sockeye salmon comprised of 24,871 Tahltan fish, 13,323 Tuya fish, and 10,035 mainstem fish. The U.S. TAC for each component was 24,258 Tahltan fish, 16,657 Tuya fish, and 6,447 mainstem fish.

During SW 32 through 35 (August 1–August 28), both Districts 106 and 108 were managed for pink salmon. Section D of District 106 was closed from SW 32 through SW 36. Both districts were initially open for two days the first week due to below average harvest and poor pink salmon escapements. Abundance indicators showed an increase and the remainder of the opening during this period were 3-day openings. Pink salmon harvests in both districts are not always a true reflection of abundance because low prices for pink salmon and harvests of other more valuable species may affect the fishing patterns and methods. During the 2010 season, the fishing effort was generally above the average effort in both districts throughout the pink salmon management period. Above average coho salmon harvests and an increase in the price paid for pink salmon were likely the catalysts behind the increased effort in both districts. Total pink salmon harvests were above average in District 106 and District 108 and may be attributed to the increase in the exvessel value increase seen for pink salmon this year.

Coho salmon management typically commences in late August or early September in both the District 106 and 108 gillnet fisheries. SW 36 the management emphasis changed from pink to coho salmon. Prior to the switch to coho salmon management, the District 106 fishery harvested 121,898 coho salmon, approximately 54% of the total District 106 coho salmon catch. The Neck Lake/Burnett Inlet enhanced summer coho runs made up a significant component of this early coho salmon harvest with an estimated contribution of 49,000 coho salmon in the District 106 fishery prior to SW 36. The average weekly Alaska hatchery coho salmon harvest rate in the District 106 fishery was above average until SW 30, at which point it remained below average until SW 34. SW 35 through 38 had above average hatchery harvest component and from SW 39 throughout the end of the season the hatchery component remained below average. Total average weekly coho salmon harvest rates in District 106 were near to above average though out the season

with only SW 29, 30, and 40 being slightly below average. In District 108, weekly coho salmon harvests were generally above average throughout the end of the season. Coho salmon harvests in both districts tapered off after SW 38 and 39. During the coho salmon management period, both districts had three-day openings except for SW 39 and 42, which were two-day openings. The 2010 gillnet season in both districts ended at noon on Tuesday, October 12.

### *Canadian Fisheries*

The combined Canadian commercial and aboriginal gillnet fisheries, and sport fishery harvests in the Stikine River were 1,819 large Chinook (includes 64 release mortalities), 698 nonlarge Chinook (includes 28 release mortalities), 50,540 sockeye, 5,301 coho, 122 chum, and 209 pink salmon. In addition, some pink and chum salmon were released; all of the 232 steelhead trout caught were released. A 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 yielded a catch of 2,792 sockeye, 8 Chinook salmon, 8 nonlarge Chinook, 2 pink, and 1 coho salmon. A total of 1,364 large Chinook and 140 nonlarge Chinook were harvested by the commercial fleet under the auspices of a test fishery. The PST test fishery quota was 1,400 large Chinook to be taken, in proportion to historical average run timing, between SW 19 and 25 (May 02 to June 19).

The harvest of large Chinook salmon was 75% below average and the lowest harvest recorded since the targeted Chinook salmon fishery started in 2005. Harvests of nonlarge Chinook salmon were also well below average. The sockeye salmon harvest was 7% below average. The final estimate of the total contribution of sockeye salmon from the Canada/U.S. fry-stocking programme to the combined Canadian Aboriginal and commercial fisheries was 25,537 fish, 51% of the harvest. The harvest of 5,301 coho salmon was well above the average of 978 fish.

A sockeye salmon test fishery was conducted for stock assessment purposes in the lower Stikine River from July 16 to September 04, 2010. The test fishery was located immediately upstream from the Canada/U.S. border. Test fishery catches totaled: 2 large Chinook, no nonlarge Chinook, 1,757 sockeye, 741 coho, 227 pink, 117 chum salmon, and 71 steelhead trout (all steelhead trout, chum and pink salmon were released). The objectives of the sockeye salmon test fishery were similar to those in previous years: to provide inseason harvest, stock ID and effort data for input, if necessary, 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 component of the sockeye salmon run due to budget constraints. Proxy test fishery harvests and CPUE were calculated for this period of the migration based on the performance of the commercial fishery and the historical correlation between commercial and test CPUE, 1996–2004.

A coho salmon test fishery was conducted in the lower Stikine River from September 05 to October 13, 2010. The test fishery was located immediately upstream from the Canada/U.S. border. Test fishery harvest was 344 coho, 2 chum, 2 pink, and 27 steelhead

trout (all steelhead trout were released). The objective of this test fishery was to provide an index harvest expressed in cumulative weekly CPUE to complement and compare with the existing test fishery historical data set (1986–2009), which provided an interannual measure of the relative run strength of Stikine coho salmon.

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

The lower Canadian commercial fishery in the lower Stikine River harvested 1,209 large Chinook, 698 nonlarge Chinook, 50,540 sockeye, 5,301 coho, 209 pink, and 122 chum salmon. An additional 1,364 large Chinook salmon were harvest in the inriver test fishery and accounted against the test fish allocation of 1,400 large Chinook salmon. A total of 232 steelhead trout were released in 2010; some pink and chum salmon were also released. The harvest of Chinook salmon excludes an estimated released fish mortality of 28 large and 32 nonlarge fish. The harvest of large Chinook salmon was well below average, while the harvest of nonlarge Chinook salmon was below average. The harvest of coho salmon was well above average. The sockeye salmon harvest was average. There was not a targeted Chinook salmon fishery in 2010. The commercial fishing fleet, however, served as a test fishery during SW 19–25 (May 02 to June 19), with a capped harvest quota of 1,400 pieces. The fleet targeted sockeye salmon for a total of 23 days; below the average of 31 days. The coho salmon fishery was opened for a total of 16 days; above the average of 8 days.

Based on final estimates the stock composition of the lower river sockeye salmon harvest was 5,126 enhanced Tahltan fish, which accounted for 12% of the sockeye salmon harvest; 14,059 wild Tahltan fish accounting for 33% of the harvest; 7,899 mainstem fish accounting for 19% of the harvest; and 14,965 enhanced Tuya fish which accounted for 36% of the catch (Table 3).

Stock compositions of the commercial Chinook salmon harvest taken incidentally in the targeted sockeye 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 harvest of Chinook salmon of Little Tahltan origin was under 100 large Chinook salmon, the harvest of large Chinook salmon originating from ‘other’ stocks was approximately 1,100 fish.

Weekly Chinook and sockeye salmon guideline harvests, based on SCMM, SMM, MR, 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. A 1,100 large Chinook salmon were allocated to the upper Stikine fisheries after SW 25 to help manage the lower river harvest. The allocations were 120 fish in the sport fishery, 30 fish in the upper commercial fishery, and 650 fish in the Aboriginal fishery. A total of 8,000 sockeye salmon were 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 SW 25 was focused primarily on

the harvest of large Chinook salmon, under the auspices of an inriver test fishery. From SW 26 through SW 29, management emphasis switched to the Tahltan and Tuya lake sockeye salmon stock groupings after which time the sole focus was the management of mainstem sockeye salmon stocks through the end of the sockeye fishery on SW 34. The management mainstem sockeye salmon was advanced from SW 31 to SW 30 in 2010 in an attempt to avert the downward trending escapement of this stock. The coho salmon management regime commenced on SW 35.

The preseason estimate of 22,900 large Chinook salmon was under the treaty agreed to threshold run size of 28,100 fish. Targeted commercial fisheries, therefore, could not be prosecuted by either Canada or the U.S. Members of the TTC agreed to Canada conducting an inriver test fishery under a tightly controlled fishing regime undertaken by the lower Stikine commercial fishery fleet. This was done in order to collect inseason CPUE and tag recovery data required to generate weekly run size estimates. The test fishery (here known as an assessment fishery) harvest was capped at 1,400 large Chinook salmon. Weekly quotas were loosely apportioned to run timing through the lower Stikine commercial fishery from SW 19–25. The weekly quotas were weighed slightly to the front end of the run in order to maximize the probability of recovering tagged fish and generating a population estimate early in the run. Following are the weekly quotas: SW 19, 67 fish; SW 20, 190 fish; SW 21, 230 fish; SW 22, 213 fish; SW 23, 175 fish; SW 24, 257 fish; and SW 35, 268 fish. Any shortfalls or overages in the weekly harvests were added to or subtracted from the following week's quota. The Chinook salmon assessment fishery commenced at 0800 hours May 06 (SW 19) for a scheduled opening of 12 hours. Fishers were limited to one net with a maximum length of 135 m. The maximum mesh size was 203 mm (8 inches). The fishing zone extended from the Canada/ U.S. boundary to a point near the confluence of the Porcupine and Stikine rivers.

The first opening, SW 19, was based on a test fish guideline harvest of 67 large Chinook salmon. Fishing conditions were relatively good. The estimated harvest at 1400 hours of 22 fish did not warrant an extension. The fishery was thus held at 12 hours; the total harvest was 60 large and 4 nonlarge Chinook salmon. The c/b/d adjusted for comparison purposes, specifically expanded by 30% to reflect what the c/b/d would have been should the standard two nets had been deployed, was 13.3 vs the 5-year average of 5.7 large Chinook salmon. The CPUE at the Kakwan tagging site was approximately 42% of average and the harvest to date taken by the District 108 recreational fishery was 28% of average.

The fishery was posted for 12 hours in SW 20 with a weekly guideline harvest of 196 large Chinook salmon. The estimated harvest at 1400 hours was 29 fish which prompted an 18 hour extension. The harvest after 24 hours fishing was only 85 large Chinook salmon and resulted in the fishery being extended another 24 hours for a total fishing time of 2.2 days. The final harvest was 170 large and 8 nonlarge Chinook salmon taken under good fishing conditions. The c/b/d of 8 large Chinook salmon was slightly below the 5-year average of 14 large Chinook salmon. The CPUE at the Kakwan tagging site was only 46 percent of average, while the catch to date taken by the District 108 recreational fishery was approximately 20 percent of average.

The fishery was posted for 12 hours in SW 21 with a weekly guideline harvest of 254 large Chinook salmon. The estimated harvest at 1400 hours was 45 fish which prompted an 18 hour extension. The harvest after 24 hours fishing was only 129 large Chinook salmon and resulted in the fishery being extended another 10 hours for a total fishing time of 2.0 days. The final harvest was 203 large and 9 nonlarge Chinook salmon taken under moderate fishing conditions (river starting to rise). The c/b/d of 11 large Chinook salmon was below the 5-year average of 18 large Chinook salmon. The CPUE at the Kakwan tagging site was 39% of average, while the harvest to date taken by the District 108 recreational fishery was 25% of average. A good measure of the fleet switched from set gillnets to drift gillnets, which was prompted by the increase in river volume. Drift fishing is, in general, more productive than fishing set nets at moderate to high flow regimes.

In SW 22 the fishery was posted for 12 hours with a weekly guideline harvest of 260 large Chinook salmon. The estimated catch at 1400 hours was 68 fish which prompted a 12 hour extension for a total fishing time of one day. The final harvest was 216 large and 20 nonlarge Chinook salmon taken under moderate fishing conditions (river continuing to rise). The c/b/d of 24 large Chinook salmon was above the 5-year average of 15 large Chinook salmon. The CPUE at the Kakwan tagging site was only 35 percent of average, while the harvest to date taken by the District 108 recreational fishery was 31 percent of average. The first inseason run size estimate was generated on Wednesday of this week. The run size estimate, based on averaging the model and MR estimate, of 25,100 large Chinook salmon slightly exceeded the trigger run size of 24,500 which permits a directed commercial harvest. It was decided by both Canadian and U.S. managers to forego this estimate and maintain the use of the preseason estimate. This decision was based on the uncertainty around the new estimate, i.e. only 20 percent of the run had transited the Kakwan test/tagging site and only 10 tags were recovered in the assessment fishery to date.

In SW 23 the fishery was posted for 12 hours with a weekly guideline harvest of 230 large Chinook salmon. The estimated harvest at 1400 hours (2:00p.m.) was 59 fish which prompted a 12 hour extension for a total fishing time, again this week, of one day. The final harvest was 176 large and 13 nonlarge Chinook salmon taken under moderate fishing conditions (river was relatively high, but crested during the assessment fishery). The c/b/d of 20 large Chinook salmon was slightly below the 5-year average of 23 large Chinook salmon. The CPUE at the Kakwan tagging site was only 29 percent of average, while the harvest to date taken by the District 108 recreational fishery was approximately 38 percent of average. The new run size estimate, based on averaging the model and MR estimate, of 22,300 large Chinook salmon was slightly short of the trigger run size of 24,500 which permits a directed commercial harvest. Both managers concluded that in all likelihood the run was returning in numbers near or less than the preseason season expectation of 22,900 large Chinook salmon. It was highly unlikely that a directed fishery would be mounted on this year's run.



The fishery was posted for 12 hours in SW 24 with a weekly guideline harvest of 295 large Chinook salmon. The estimated harvest at 1400 hours was 107 fish which prompted a 2 hour extension for a total fishing time of 14 hours. The final harvest was 328 large and 42 nonlarge Chinook salmon taken under superb fishing conditions (river unseasonably low and dropping). The c/b/d of 61 large Chinook salmon was well above the 5-year average of 35 large Chinook salmon. The CPUE at the Kakwan tagging site was only 32 percent of average, while the harvest to date taken by the District 108 recreational fishery was approximately 38 percent of average. The harvests taken in the upper Stikine aboriginal fishery, however, were slightly above average. The new run size estimate, based on averaging the model and MR estimate, dropped from 22,300 to 19,700 large Chinook salmon.

The fishery was posted for 12 hours in SW 25 with a weekly guideline harvest of 235 large Chinook salmon. The estimated harvest at 1400 hours was 108 fish which prompted a 2 hour extension for a total fishing time, again this week, of 14 hours. The final harvest was 211 large and 44 nonlarge Chinook salmon taken under good fishing conditions (river unseasonably low). The c/b/d of 52 large Chinook salmon was well above the 5-year average of 30 large Chinook salmon. The CPUE at the Kakwan tagging site was only 44 percent of average, while the harvest to date taken by the District 108 recreational fishery was approximately 40 percent of average. The harvests taken in the upper Stikine aboriginal fishery, however, were well above average. The new run size estimate, based on averaging the model and MR estimate, increased from 19,700 to 20,700 large Chinook salmon. This week marked the final week of the Chinook salmon assessment fishery. The total harvest of 1,364 large Chinook salmon was just short of the 1,400 fish quota. A total of 21 tags were recovered in the course of the fishery, which provided for inseason MR estimates and accounted for approximately 30 percent of the tag recoveries for the total season.

In SW 26 the fishery management focus switched from Chinook to sockeye salmon; however, the weak run of Chinook salmon resulted in managing the fishery based on both sockeye and Chinook salmon harvests considerations. The sockeye salmon management regime was focused on the Tahltan stock grouping and remained so till SW 29. The guideline harvest for Chinook salmon was based on the BLC of 1,500 large fish, partitioned by historical run timing through the fishery from SW 26–30. (*The total BLC was 2,300 fish; the balance remaining after the 1,500 fish lower river allocation was allocated to aboriginal, upper commercial and recreational fisheries.*) In order to minimize the incidental catch of Chinook salmon, a mesh size restriction of 140 mm (5.5in) was implemented. The start time for weekly fishing periods returned to Sunday at 1200 hours, the standard opening schedule used in past commercial fisheries. Fishers were permitted one net only and the commercial fishing grounds remained the same as what was defined in the Chinook salmon assessment fishery. As in 2009, fishers were requested to release all healthy large Chinook salmon caught in the course of the sockeye salmon fishery. Fishers were required to log the number of all released fish in release forms provided by DFO.

The fishery was posted for an initial one day opening in SW 26 with a Chinook salmon guideline catch of 700 fish and a sockeye salmon guideline harvest of 4,000 fish, including 3,000 Tahltan Lake sockeye salmon. The sockeye salmon TAC was based on the preseason expectation of 187,700 fish. A harvest estimate of 303 sockeye and 105 Chinook salmon after 6 hours fishing prompted a one day extension. The day one harvest of 726 fish was below expectations; the sockeye salmon c/b/d of 78 fish was above the 38 fish c/b/d average, but Tahltan Lake component was only average. The Chinook salmon harvest was only 225 fish, half of expectation based on the 6 hour harvest report. It was decided to hold on two days in light of the average Tahltan Lake fish c/b/d in concert with the substandard harvests reported from District 106 last week and the incidental harvest of Chinook salmon. The fishing conditions were very good due to unseasonably low water flows; hence, the exploitation rate was probably higher than what it would have been during normal flow regimes. The two day fishery yielded a harvest of 460 large Chinook (5 released), 339 nonlarge Chinook, and 1,835 sockeye salmon, which was below the Chinook salmon guideline harvest and well below the sockeye salmon guideline harvest of 4,000 fish. The total weekly sockeye salmon harvest was comprised of 24% Tahltan enhanced, 36% Tahltan wild, 34% Tuya, and 6% mainstem fish. The Tahltan c/b/d was 46 fish; average 43 fish. Both U.S. districts 106 and 108 harvests improved slightly this week. The Chinook salmon harvests in upper Stikine fishery continue to be above average. The Little Tahltan weir was installed this week. Thirty-three Chinook salmon transited the weir vs. an average count of 93 by this date. The Kakwan cumulative CPUE was 46% of average.

The fishery was posted for an initial three day opening in SW 27 with a Chinook salmon guideline harvest of 600 fish and a sockeye salmon guideline catch of 14,000 fish, including 9,500 Tahltan Lake sockeye. The sockeye salmon TAC was based on the preseason expectation of 187,700 fish. An inseason model estimate of 165,000 fish generated midweek resulted in the TAC dropping to approximately 10,000 fish, including a Tahltan TAC of 6,800 fish. The near average harvests and c/b/d reported after the second day of fishing prompted a one day extension for a total fishing time of four days this week: the extension was based on the preseason estimate of 187,700 fish. Because the first model run generated during the midweek showed a drop in the forecast, the fishery was held at just four days. The fishing conditions were very good due to unseasonably low water flows; hence, the exploitation rate was probably higher than what it would have been during normal flow regimes. The four day fishery yielded a harvest of 476 (27 released) large Chinook, 182 nonlarge Chinook, and 11,479 sockeye salmon, which was below the Chinook salmon guideline harvest and above the sockeye salmon guideline harvest approximately 10,000 fish, based on the most recent run size estimate of 165,200 fish. The total weekly sockeye harvest was comprised of 27% Tahltan enhanced, 30% Tahltan wild, 40% Tuya, and 3% mainstem fish. The Tahltan fish c/b/d was 102 fish; average 112 fish. The Tahltan TAC of 5,400 fish was exceeded by approximately 1,300 fish. The preliminary U.S. harvest estimates for last week, which were reported as being above average, were approximately half of the actual harvest. This statistic caused some concern as the U.S. preliminary harvests played a role in the decision to extend one day this week. Further, the record low flows probably resulted in an increased exploitation rate and an inflated CPUE than what would have been observed

in normal flow years. The 'inflated' CPUE, which drives the SMM, may result in over estimating the run size. The Chinook salmon harvests in upper Stikine fishery continue to be above average, whereas the Little Tahltan weir count of 40 fish lagged well behind the average of 443 large Chinook salmon. The Kakwan cumulative CPUE was 41% of average this week.

In SW 28 the fishery was posted for an initial two day opening with a Chinook salmon guideline harvest of 403 fish and a guideline harvest of 6,800 Tahltan sockeye salmon. Of the several run size estimates generated to date, ranging from 165,000 to 212,000 sockeye, the lowest estimate based on last week's model run was adopted to govern this week's fishery. This decision was made principally on the uncertainties around and the suspicion that the exploitation rate CPUE under the current extreme low flow regimes was causing the model to overestimate the run size. The day one harvest of 2,300 sockeye salmon, including a harvest of approximately 1,300 Tahltan fish prompted a one day extension. There were no further extensions given; the fishery was held at three days. The three day fishery yielded a harvest of 144 large Chinook (9 released), 96 nonlarge Chinook, and 9,175 sockeye salmon including 4,611 Tahltan fish. The Chinook salmon harvest was below the guideline harvest as was the catch of Tahltan sockeye salmon. The total weekly sockeye salmon harvest was comprised of 20% Tahltan enhanced, 30% Tahltan wild, 48% Tuya, and 2% mainstem fish. The Tahltan fish c/b/d was 96 fish; average 117 fish. The Tahltan TAC of 6,800 fish was not met, with a total harvest of only 4,611 fish. SW 28 marks the historical peak of the Tahltan run through the fishery. It was suspected at this juncture of the fishery that the Tahltan run was not returning in the numbers expected based on the pre-season estimate, and that the low water was confounding the in-season estimates by driving the models to generate an inflated version of the run size. The preliminary U.S. harvest estimates for this week, however, indicated harvests that were slightly above average. The upper river aboriginal fishery harvests were reported as being fair. It was suspected that due to low water conditions that the sockeye would arrive at the aboriginal fishing site earlier than normal. The Chinook salmon harvests in upper Stikine fishery dropped dramatically and were below the seasonal average. The Little Tahltan weir count of only 145 fish continues to lag well behind the average of 1,215 large Chinook salmon. The upper Stikine recreational fishery harvests were reported as being poor.

In SW 29 the fishery was posted for an initial two day opening with a guideline harvest of 4,800 Tahltan sockeye salmon. Based on an in-river run size regression, the run size increased to 186,000 fish, including 76,400 Tahltan fish. The day one harvest of 2,174 fish, including a harvest of approximately 1,340 Tahltan fish prompted a one day extension. The day two harvest of approximately 1,900 Tahltan fish prompted another one day extension. There were no further extensions given; the fishery was held at four days. The four day fishery yielded a harvest of 101 large Chinook (16 released), 64 nonlarge Chinook, and 10,324 sockeye salmon, including a Tahltan sockeye salmon harvest of 4,758 fish; close to the guideline harvest of 4,800 fish. The total weekly sockeye salmon harvest was comprised of 13% Tahltan enhanced, 33% Tahltan wild, 43% Tuya, and 11% mainstem sockeye respectively. The Tahltan fish c/b/d was 74 fish; average 84 fish. SW 29 marked the end of the Tahltan Lake sockeye salmon management

regime. The balance of the sockeye salmon fishery decisions for the lower commercial fishery was driven by mainstem sockeye salmon abundance and TAC. The upper river aboriginal harvests were nearly double the average, as was the Tahltan weir count which stood at 13,900 fish as of this week. The fish entered the lake early again this year as was the case in 2009. Their early entry was attributed to the low flow conditions (record lows in some days) that provided for ease of migration. The Little Tahltan weir count of only 158 fish continues to lag well behind the average of 2,367 large Chinook salmon. The upper Stikine recreational fishery harvests were reported as being poor.

In SW 30 the fishery was posted for an initial two day opening with a guideline harvest of 1,300 mainstem sockeye salmon. The run size increased to 190,000 based on an inriver run size regression, including 45,400 mainstem fish. The day one harvest of 2,441 fish, including a harvest of approximately 1,000 mainstem fish did not trigger an extension. In fact it was projected that the mainstem guideline harvest would be exceeded this week. The contribution of mainstem fish dramatically increased this week, jumping from 11% fish in SW 29 to 47% fish this week. The two day fishery yielded a harvest of 10 large Chinook (3 released), 14 nonlarge Chinook, and 4,744 sockeye salmon, including a 2,251 mainstem fish, exceeding the guideline harvest by 951 fish. The total weekly sockeye salmon harvest was comprised of 12% Tahltan enhanced, 10% Tahltan wild, 31% Tuya, and 47% mainstem fish. The mainstem fish c/b/d was 70 fish; average 56 fish. The upper river aboriginal harvests remained strong, whereas the Tahltan weir count waned dramatically from its initial, high early counts. The projected escapement, based on an early running timing, was only 15,000 fish. The Little Tahltan weir count of only 641 fish continues to lag well behind the average of 4,209 large Chinook salmon. The Tahltan River was surveyed to determine if the migrant Chinook and sockeye salmon were holding along its length. Very few Chinook salmon were observed. There were no obvious signs of barriers that impeded their migration. Large numbers of sockeye salmon, however, appeared to be held up by a chute falls located on the Tahltan River upstream of its confluence with the Little Tahltan River. This chute falls was subject to stream bed modification done by DFO in the mid 1960(s).

In SW 31 the fishery was posted for an initial two day opening with a guideline harvest of 1,100 mainstem sockeye salmon. The run size remained at 190,000 based on an inriver run size regression, including 45,400 mainstem sockeye salmon. The day one harvest of only 749 sockeye salmon, including a harvest of approximately 375 mainstem sockeye salmon did not trigger an extension. The two day fishery yielded a harvest of 13 large Chinook (4 released), 4 nonlarge Chinook, and 1,855 sockeye salmon including 1,015 mainstem fish, close to the guideline catch by 1,100 fish. The total weekly sockeye salmon harvest was comprised of 6% Tahltan enhanced, 24% Tahltan wild, 16% Tuya, and 55% mainstem sockeye. The mainstem fish c/b/d was 32 fish; average 60 fish. The upper river Aboriginal effort dropped, while the harvests remained relatively strong. The Tahltan weir count showed some improvement this week. The projected escapement based on an early running timing was 21,000 fish.

In SW 32 the fishery was posted for an initial one day opening with a guideline harvest of 400 mainstem fish. The TAC was based run size estimate of 180,200 fish generated from

an inriver regression model ran late in SW 31. The estimated mainstem sockeye salmon run size was 43,000 fish. A harvest estimate taken after 8 hours fishing yielded a catch of 400 fish (79% mainstem). A new inriver regression model estimate, using the most recent catches, indicated a mainstem run size of approximately 60,000 fish. A mainstem estimate of 48,700 fish, and a TAC of 1,500 for this week, was generated on day one of this week's fishery by averaging the latest inriver regression estimate and the estimate generated late in SW 31, less 10% of the mainstem component (professional judgment). In light of the mainstem guideline harvest of 1,500 fish, the day one harvest of 915 sockeye salmon, including a harvest of approximately 850 mainstem fish, did not trigger an extension. The two day fishery yielded a harvest of 3 large Chinook, 26 coho, and 1,554 sockeye salmon, including 1,433 mainstem fish, close to the guideline harvest. The total weekly sockeye salmon harvest was comprised of 3% Tahltan enhanced, 1% Tahltan wild, 4% Tuya, and 92% mainstem sockeye salmon. The mainstem sockeye salmon c/b/d was 60 fish; average 50 fish. The upper river aboriginal effort continues to drop. The Tahltan weir count to date was 20,100 fish; the projected escapement based on an early run timing scenario increased to 22,000 fish.

In SW 33 the fishery was posted for an initial one day opening with a guideline harvest of 750 mainstem fish. The TAC was based on a run size estimate of 180,200 fish generated from two runs of an inriver regression model, minus 10% of the mainstem component. The estimated mainstem sockeye salmon run size was 47,800 fish. A harvest estimate taken after 20 hours fishing yielded a harvest of 500 fish (88% mainstem). As a result, the fishery was extended 6 hours. This week's fishery yielded a harvest of 1 large Chinook, 109 coho, and 727 sockeye salmon, including 657 mainstem fish, close to the guideline harvest. The total weekly sockeye salmon harvest was comprised of 1% Tahltan enhanced, 6% Tahltan wild, 2% Tuya, and 91% mainstem fish. The mainstem sockeye salmon c/b/d was 44 fish; average 32 fish. Only one net remains fishing in the upper river Aboriginal fishery. The Tahltan weir count to date was 21,200 fish; the projected escapement based on an early run timing scenario remained at approximately 22,000 sockeye salmon.

In SW 34 the fishery was posted for an initial one day opening. The run size estimate was 176,900 fish. The fishery was not extended. This week's fishery yielded a harvest of 197 coho and 168 sockeye salmon, including 147 mainstem fish. The total weekly sockeye salmon harvest was comprised of no Tahltan enhanced, 11% Tahltan wild, 2% Tuya, and 87% mainstem fish. The mainstem sockeye salmon c/b/d was 12 fish; average 9 fish. There was no Aboriginal fishing activity conducted this week. The Tahltan weir count to date was 21,700 fish; the projected escapement based on an early run timing scenario remained at approximately 22,000 fish.

In SW 35 the fishery was opened for an initial two day period with dual management objectives focused on both coho and sockeye salmon. On average 91% of the sockeye salmon run has passed the fishery by this week. The sockeye run size increased to 180,900 fish, including a mainstem component of 47,500 fish. The guideline harvest for this stock grouping was less than 200 fish. After one day of fishing and a total harvest of 88 sockeye and 395 coho salmon, it was decided to hold the fishery at two days.

In SW 36–37 the fishery was opened for an initial three day period. The fleet size was reduced to only five licences; hence, the exploitation rate was expected to be substantially reduced. The management goal was to harvest the 5,000 quota allotted under the terms of the PST. After two days of fishing and a harvest of 718 coho and 32 sockeye salmon the fishery was extended two days. After four days of fishing and a harvest of 1,427 coho and 53 sockeye salmon the fishery was extended for a five day period. Finally, two, two day extensions were given in order to harvest the 5,000 piece quota. The final day of fishing was September 11. The final coho salmon harvest was 5,301 fish; 349 fish were taken in the course of the sockeye salmon fishery and, therefore, not counted toward the 5,000 piece allocation.

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

A small commercial fishery has existed near Telegraph Creek on the upper Stikine River since 1975. A total of 1,215 sockeye salmon were caught in 2010, which was above the average of 796 fish. The total nonlarge Chinook salmon harvest of 48 was well above the average harvest of 8 fish, while the harvest of 16 large Chinook salmon was near the average harvest. The fishing effort of 15 boat days fished was average. 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. In suit with the lower Stikine commercial fishery, there was no targeted Chinook salmon fishery conducted in the upper Stikine in 2010.

### **Aboriginal Fishery**

The Stikine River aboriginal fishery, which is located near Telegraph Creek, B.C., harvested 512 large Chinook, 232 nonlarge Chinook, and 7,276 sockeye salmon. The harvest of large Chinook salmon was 35% below average, while the harvest of sockeye salmon was 36% above average. The harvest of nonlarge Chinook salmon was average. As in 2009, the sockeye salmon run timing to the fishing grounds was approximately one week early. The fishing conditions were very good throughout the course of the fishery which extended from SW 27–33.

### **Recreational Fishery**

The Stikine River salmon recreational 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 rivers. In 2010 the harvest estimate was 50 large Chinook salmon, all of which were taken in the Telegraph Creek area. The fishing success was reported as very poor throughout the course of the Chinook salmon run.

## *Escapement*

### **Sockeye Salmon**

A total of 22,860 sockeye salmon were counted through the Tahltan Lake weir in 2010; 28% below the average of 31,550 fish. The 2010 count was approximately 5% below the escapement point estimate of 24,000 and 15% above the lower end of the escapement goal range of 18,000 to 30,000 fish. An estimated 7,789 fish (48%) originated from the fry-stocking program which is below the 38% contribution of smolts observed in 2007, the principal cycle year contributing to the 2010 run. A total of 158 sockeye salmon were sacrificed at the weir for stock composition analysis. The goal to collect a minimum of 300 fish was aborted inseason due to run size concerns. In addition, a total of 4,484 sockeye salmon were collected for broodstock, resulting in a spawning escapement of 18,218 sockeye salmon in Tahltan Lake.

The spawning escapements for the non-Tahltan and the Tuya stock groups are calculated using stock ID, test fishery, and inriver commercial harvest data. Because the test fishery was not conducted at the outset of the sockeye run a decision was made to use the weekly rate of change from the Stikine River lower river commercial fishery to assess weekly inseason run size. Based on this run reconstruction approach the escapement estimates were 24,831 mainstem and 13,350 Tuya sockeye salmon. The mainstem spawning escapement is 15% below average and below the point escapement goal of 30,000 fish, but is within the range of 20,000 to 40,000 fish. The aerial survey results index count was 1,117 fish, observed on 12 Sept, was 32% above average. It appears that advancing the inriver management of mainstem sockeye salmon date one week starting on SW 30 succeeded in improving the escapement numbers to the indices streams.

The existence of enhanced Tuya sockeye salmon 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 2004 and 2005 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/spawning of Tuya strays with natural sockeye salmon may occur. To address problems associated with fish capture in the lower Tuya River; a fishway/trapping apparatus was constructed during the spring of 2006. Unfortunately the Tuya fish trapping project was not prosecuted because of a major rockslide 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 2007 and 2008.

A steering committee, consisting of Canadian and U.S. 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 rockslide area.

For the second consecutive year since the barrier was removed a field visit was conducted to assess the success of the 2008 blasting and to collect baseline biological samples from Tuya River sockeye salmon. On the 21 July, while en route to camp, an aerial survey was done. Although the viewing conditions were somewhat impaired due to the murky nature of the flow, large schools of salmon were observed above the blast site; no fish were observed below the blast site. In past aerial surveys conducted after the 2006 rockslide no fish were observed above the rockslide while many fish (schools) were observed below. It should be noted that these aerial surveys had poor viewing conditions and the fish observed were in large schools that the surveyor could only identify as such. Nonetheless, the contrast with fish distribution in 2006–2008 compared to fish distribution in 2010 was evident. In addition to the aerial survey, set gillnets were fished above and below the blast site. Sockeye, Chinook, and pink salmon were caught at both sites. The set net site located below the blast site, however, had the highest catch, which was probably due to the quality of set net site in that it was set in a natural holding area below the blast site. Most fish were caught by angling, as the extremely low water conditions rendered the set net sites of moderate utility. Eight visual assessment of fish passage was conducted at the blast site. The number of salmon breaches and the number of successful attempts were recorded over a 60 minute period per day, from July 21–24. Of the total 468 breaches observed, 80 fish or 17.1% succeeded in ascending the river. The 2009 study showed that only 7% of the fish succeeded negotiating the chute. Eighty-seven percent of the breaches and 17% of the successes occurred at river right section of the flow. This is the site of the original channel before the 2008 blasting project diverted a large measure of flow to river left. The attraction of this site (river right) is probably due to the 2-3 m vertical falls and plunge pool located there. The balance of the flow was located at the blast site. In light of the observation articulate above, and in concert with the 2009 study, it is reasonable to conclude that the 2008 blasting project succeeded in its objective which was to provide fish passage around the barrier that slid into the river in July 2006.

Work continues in the development of a weir/fish trap combination compatible with the Tuya River flow regime. A template model from a fence located in the Docee River, B.C. is being considered. An initial routing for a tote road scouted in May 2009 was surveyed by DFO surveyors in late August 2010. The final drawings will be used to estimate the cost of constructing a tote road to the new proposed fishing site. Permitting requirements, including community meeting(s), have yet to addressed.

The third year of an experimental test fishery designed to harvest Tuya River sockeye salmon at a site on the mainstem Stikine River located between the mouths of the Tahltan and Tuya rivers was conducted from July 21 to 29. The total harvest from the test fishery was 2,792 sockeye, 7 large Chinook, 8 nonlarge Chinook, 2 pink, and 1 coho salmon. Otolith analyses indicate that 1,429 fish (52%) were Tuya origin. The balance of the catch consisted of 19% Tahltan enhanced, 24% Tahltan wild, and 6% mainstem sockeye



salmon. 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 2010 Chinook salmon escapement enumerated at the Little Tahltan River weir was 1,057 large fish and 221 nonlarge Chinook salmon. The escapement of large Chinook salmon in the Little Tahltan River was well below the average of 6,343 fish and below the Canadian escapement target for this stock of 3,300 large Chinook salmon. The weir count was also below the low end of the Canadian escapement target range of 2,700 to 5,300 large fish. The nonlarge Chinook count was average.

A MR study was conducted again in 2010 concurrent with the SCMM to assess the inriver Chinook salmon abundance. Inseason MR estimates were calculated weekly post SW 23. The postseason estimate of total Stikine River spawning escapement based on tag recoveries in the commercial fishery and spawning ground recoveries was 15,116 large Chinook salmon, 44% below the average escapement of 34,510. The escapement was 13% below the escapement goal of 17,400 large Chinook salmon, but within the escapement goal range of 14,000 to 28,000 fish. The escapement to the Little Tahltan River represented approximately 7% of the total Stikine River escapement. The percentage is well below average.

Stikine River Chinook salmon run timing to the Lower Stikine commercial fishing grounds was normal, as was the entry time to the Little Tahltan weir. Verrett Creek escapements counts were judged as relatively weak, but an improvement from the 2007–2009 runs, as reported by the carcass pitch crew stationed at the creek from 2005–2012 August. The Verrett Creek project is primarily a study to collect spaghetti tags; not to assess escapement numbers. A below average run of Shakes Creek Chinook salmon was also reported by residents living at the creek mouth.

### **Coho Salmon**

Aerial surveys of six index sites were conducted on November 03. The combined count of 1,715 coho salmon, under moderate viewing conditions, was 53% below the average of 3,750 coho salmon. All indices, except the Porcupine slough site, were below average. The count of spawning coho at the Porcupine slough site was 70% above average. There were very poor showings of spawners in the West Katete, Katete, and Craig rivers. The average counts from these three sites are approximately 2,600 fish, while this year's count was 305 fish.

A coho salmon drift gillnet test fishery was conducted from September 04 to October 13 2010. The total harvest was 344 coho, 2 pink, 2 chum salmon, and 27 steelhead trout was taken in 483 drift fishing events. Each event was approximately 10-15 minutes in length. Net dimension were constant at 33 m, 150cm mesh, by 30 meshes deep. The total cumulative weekly CPUE (catch per drift) was 6.7 fish; average 5.5 fish. It should be

noted that the fishing 2010 conditions unusually good due to low river flows. This test fishery has been operated a various levels of vigour since 1986 through to 2009. (Funding in 2007 was not granted.)

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

The final postseason estimate of the terminal Stikine River sockeye salmon run size is approximately 157,001. Of this number, approximately 66,086 were of Tahltan Lake origin (wild & enhanced), 45,746 were of Tuya origin (fry from Tahltan broodstock stocked into Tuya Lake), and 45,169 were mainstem stocks (Table 3). These estimates are based on inseason and historical data including: otolith recovery and analysis in the U.S. Districts 106 and 108 harvests; otolith analysis, egg diameter stock-composition estimates for inriver harvests from the Canadian commercial, aboriginal, ESSR, and test fishery catches; and escapement data. The 2010 terminal run was below average and well below the preseason forecast of 274,400 fish.

## TAKU RIVER

Taku River salmon are harvested in the U.S. gillnet fishery in 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. Canadian fisheries for Taku River salmon include a commercial gillnet fishery located in the river near the Canada/U.S. border, an AF, and a sport fishery (Figure 2).

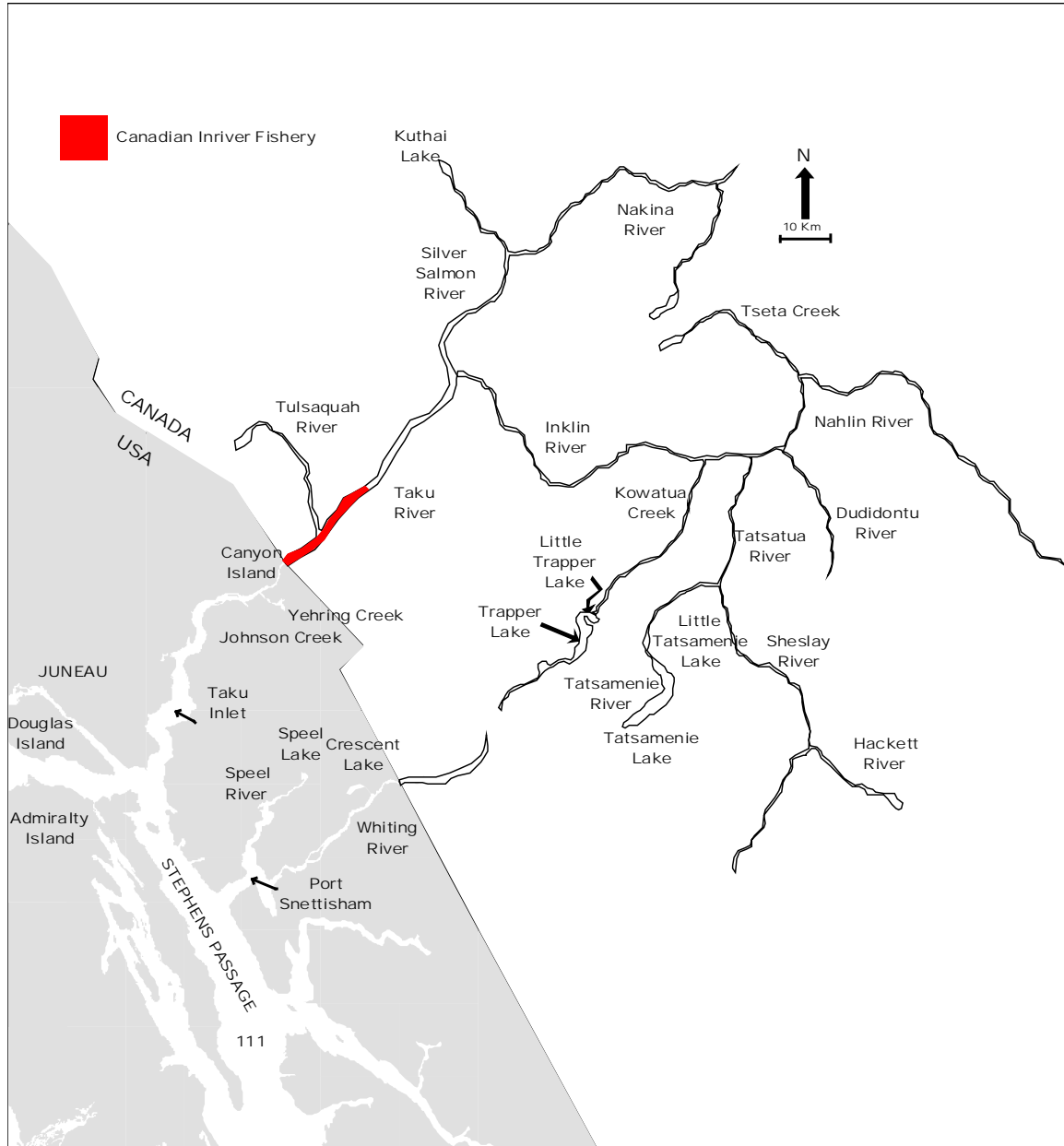


Figure 2. The Taku River and principal U.S. and Canadian fishing areas.

## *Harvest Regulations*

Fishing arrangements in place as a result of Annex IV, Chapter 1 of the PST can be found at: <http://www.psc.org/pubs/treaty.pdf>. For salmon originating in the Canadian portion of the Taku River watershed, these arrangements include the continuation of directed fisheries for Taku River Chinook salmon stocks, first implemented in 2005; continuation of coho salmon harvest shares; and, a sockeye salmon harvest sharing arrangement based on the production of enhanced fish.

## *U.S. Fisheries*

The traditional District 111 commercial drift gillnet salmon fishery was open for a total of 54 days from June 20 through October 14, 2010. The harvest totaled 1,676 Chinook, 61,947 sockeye, 62,204 coho, 132,354 pink, and 488,870 chum salmon. Harvests of coho, pink, and chum salmon were above average, and the harvest of Chinook and sockeye salmon were below average.

Hatchery stocks contributed significantly to the numbers of both sockeye and chum salmon harvested and minor numbers to the harvest of other species. The 2010 season was the eleventh year of significant numbers of adult sockeye salmon returning to the Snettisham Hatchery inside Port Snettisham. These fish contributed significantly to the harvests in Taku Inlet and Stephens Passage. The Speel Arm Special Harvest Area (SHA) inside Port Snettisham was opened to common property fishing during SW 35 and 36 to target Port Snettisham hatchery sockeye.

A bilateral review of the escapement goal for large Taku Chinook salmon completed in early 2009 resulted in a revised escapement goal range of 19,000 to 36,000 fish. This along with the 2010 pre-season terminal run estimate of 41,328 large Taku Chinook salmon allowed for directed Chinook salmon fisheries in District 111 in 2010. However, when portioned over the run timing, the allowed catch was deemed too small to provide for manageable commercial fisheries. Subsequent in-season estimates fluctuated slightly above and below the pre-season estimate, and the fifth in-season estimate of 36,071 large Chinook salmon generated in SW 25 did not provide any allowed harvest for U.S. directed fisheries. The total 2010 traditional drift gillnet large Taku River Chinook salmon harvest based on GSI analysis in District 111 was 526 fish. Personal use and sport fish harvests added another 1,020 fish for a total of 1,546 large Taku River Chinook salmon. Post-season coded wire tag (CWT) analysis indicates Alaskan hatchery Chinook salmon contributed at least 235 fish to the District 111 harvest, or 14% of the total harvest. The Taku River stock assessment program at Canyon Island provided data to estimate the above border Chinook salmon run. The final MR escapement was 28,769 large Chinook salmon within the escapement goal range of 19,000–36,000 fish.

The traditional District 111 sockeye salmon harvest was 61,947 fish; 43% of the average of 143,980 fish. Weekly sockeye salmon harvests were below average during all weeks in 2010, and sockeye CPUE was below average as well with the exception of SW 32. Domestic hatchery sockeye salmon stocks began to contribute to the traditional fishery in SW 28 and added significant numbers to the harvests in SW 29–33. Of the total

traditional District 111 sockeye salmon harvest, 13% occurred in Stephens Passage, less than half of the average of 30%. This reduction is primarily due to conservation measures taken for wild Port Snettisham sockeye stocks; including a 6 inch minimum mesh restriction and less than average opening time. The contributions of wild Taku River and Port Snettisham sockeye salmon to the traditional District 111 harvest will not be known until postseason analyses of stock identification data are available. However, the harvest of thermally marked enhanced sockeye salmon was estimated postseason from analysis of otoliths. Sockeye salmon from a joint U.S./Canada fry-stocking program at Tatsamenie and Trapper Lakes contributed an estimated 910 fish to the fishery (1.5% of the harvest; Table 4). Contributions of U.S. hatchery sockeye salmon to the traditional District 111 drift gillnet fishery totaled 6,759 fish or 11% of the harvest. These were predominately Port Snettisham hatchery sockeye salmon but also included a small number of thermally marked fish from a fry-stocking program at Sweetheart Lake in Port Snettisham. Historical stock composition estimates were applied to the remainder of the harvest to estimate contributions of Taku River and Port Snettisham wild stocks to the weekly harvests. The final estimate of stock composition of the harvest of wild Taku River sockeye salmon in the traditional district was 44,837 fish (72%). Due to lower than anticipated returns of wild and enhanced Port Snettisham sockeye salmon, Port Snettisham was not opened during the common property fishery in 2010, but the Speel Arm SHA was opened for a total of six days in SW 35 and 36.

Table 4. Taku sockeye salmon run reconstruction, 2010. Estimates do not include spawning escapements below the U.S./Canada border.

	Taku			Snettisham Stocks		
	Total	Wild	Enhanced	Total	Wild	Enhanced
Escapement	88,367	87,364	1,003			
Canadian Harvest						
Commercial	20,180	19,555	625			
Food Fishery	184	178	6			
Total	20,364	19,733	631			
Test Fishery harvest	297	287	10			
Above Border Run	109,028	107,384	1,643			
U.S. Harvest a						
District 111	45,747	44,837	910	16,150	9,390	6,759
Personal Use	1,020	987	33			
Total	46,767	45,824	943			
Test Fishery harvest	0					
Terminal Run	155,795	153,208	2,587			
	Total	Wild				
Terminal Run	155,795	153,208				
Escapement Goal	75,000	75,000				
AC	80,795	78,208				
Canada						
Harvest Share	20%	20%				
Base Allowable	16,159	15,642				
Surplus Allowable	0	0				
Canada AC	16,159	15,642				
Actual harvest	20,364	19,733				
U.S.						
Harvest Share	80%	80%				
US AC	64,636	62,567				
Actual harvest	46,767	45,824				

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

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 62,204 fish was 197% above the average of 31,540 fish. CWT analyses indicate Alaskan hatchery coho salmon contributed 5,106 fish or 8% of the traditional District 111 harvest.

The preseason terminal run forecast of 41,328 large Taku River Chinook salmon allowed for directed Chinook fisheries in District 111 beginning the first Monday in May in SW 19 with a U.S. AC of 1,781 fish in addition to the 3,500 fish BLC to be shared amongst the sport, troll, and drift gillnet fisheries. Due to the limited Chinook AC, the first possible opening of the directed gillnet season was postponed until the first inseason estimate of run strength was generated. Because the preseason forecast provided for directed U.S. Chinook fisheries, sport fishing bag limits and gear restrictions were liberalized in District 111 between April 25 and June 30. The first inseason estimate of abundance was generated in SW 21. Weekly targets were calculated based on AC and percent of the run historically present during the week. The four inseason estimates generated during SW 21–24 did provide some U.S. AC, but the calculated weekly targets were too small to allow for manageable fisheries. The inseason estimate generated in SW 25 was below the threshold that provides a U.S. AC, so no directed U.S. commercial Chinook fisheries were prosecuted in 2010. The sport harvest of 1,400 fish plus the 640 Taku large Chinook salmon incidentally harvested in the District 111 directed sockeye gillnet fisheries through SW 28 was well below the base level catch of 3,500 fish provided by the PST.

Management emphasis for the District 111 drift gillnet fishery shifted to sockeye salmon beginning in SW 26. 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 bilaterally 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 MR 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 sockeye salmon management SW 26, Section 11-B was open for 3 days; 66 boats harvested 633 Chinook salmon of which 346 were large Taku fish. The sockeye salmon harvest and CPUE were both 31% of the average.

In SW 27, Section 11-B was initially opened for two days. With effort much lighter than expected, many boats deploying 6 inch mesh and targeting chum salmon, and being near the historical end of smaller sized Kuthai Lake sockeye salmon component, Section 11-B was extended an additional day. Fifty-nine boats harvested 433 Chinook of which 288 were large Taku fish. The sockeye salmon harvest was 25% and the CPUE was 43% of average. The first weekly sockeye salmon inriver run estimate projected an inriver run of 68,655 sockeye salmon; 50% of the average (Table 5).

Fishing time for SW 28 was set for two days in Section 11B due to weak inriver indicators, below average sockeye CPUE, and anticipated increase in effort focused on enhanced summer chum salmon. A 6 inch minimum mesh restriction to conserve wild Port Snettisham sockeye salmon was imposed south of Circle Point in Stephens Passage to provide opportunity on enhanced summer chum salmon. Limestone Inlet was opened concurrent with Stephens Passage to provide access to enhanced DIPAC chum salmon returning to this remote release site. Effort increased to 114 boats and 215 Chinook

salmon were harvested, 6 of which were large Taku fish. The total gillnet harvest of Taku large Chinook salmon for the directed Chinook salmon fishery accounting period; SW 26–28 was 639 fish. Sockeye salmon harvest was 22% of average and CPUE was 31% of average. The weekly estimate projected an inriver run of 81,700 sockeye salmon.

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 2010.

SW	Inriver Run	Terminal Run <sup>a</sup>	Total TAC	U.S. TAC	Projected U.S. Harvest
27	68,655	89,523	14,523	11,618	20,868
28	81,736	104,990	29,990	23,992	23,254
29	83,444	110,906	35,906	28,725	27,462
30	116,479	157,636	82,636	66,109	41,157
31	108,433	144,638	69,638	55,710	36,205
32	105,600	154,360	79,360	63,488	48,760
33	106,835	154,034	79,034	63,227	47,199
Postseason	109,028	155,795	80,795	64,636	46,767

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

Fishing time for SW 29 was again set for two days in Taku Inlet and Stephens Passage with a 6 inch minimum mesh restriction south of Circle Point to conserve for wild Port Snettisham sockeye salmon, while providing opportunity on enhanced summer chum salmon. Effort increased to 136 boats and sockeye salmon harvest was 35% of average and CPUE was 48% of average. Analysis of otoliths revealed that 8.4% of the sockeye salmon harvest from Taku Inlet during this week was DIPAC Snettisham hatchery origin. TBR enhanced sockeye salmon harvest in Taku Inlet this week was 1.5% Tatsamenie and 1.3% Trapper lake origin. The weekly estimate projected an inriver run of 83,444 fish.

Fishing time for SW 30 was set for two days in Taku Inlet and Stephens Passage with a 6 inch minimum mesh restriction south of Circle Point to conserve for wild Port Snettisham sockeye salmon while providing opportunity on enhanced summer chum salmon. Effort remained steady at 135 boats with sockeye salmon harvest 66% of average and CPUE 97% of average. Analysis of otoliths revealed that 30% of the sockeye salmon harvest from Taku Inlet during this week was DIPAC Snettisham hatchery origin. TBR enhanced sockeye salmon harvest in Taku Inlet this week was 2.2% Tatsamenie Lake origin. The weekly estimate projected an inriver run of 116,479 fish.

Fishing time for SW 31 was set for two days in Taku Inlet and Stephens Passage with a 6 inch minimum mesh restriction south of Circle Point to conserve for wild Port Snettisham sockeye salmon while providing opportunity on enhanced summer chum salmon. Effort peaked for the season with 139 boats, and sockeye harvest was 48% of average and CPUE was 67% of average. Analysis of otoliths revealed that 4% of the sockeye salmon harvest from Taku Inlet during this week was DIPAC Snettisham hatchery origin. TBR enhanced sockeye salmon harvest in Taku Inlet this week was 2.4% Tatsamenie and 0.4% Trapper lake origin. The weekly estimate projected an inriver run of 108,433 fish.



Fishing time for SW 32 was set for two days in Taku Inlet and Stephens Passage with a 6 inch minimum mesh restriction south of Circle Point to conserve for wild Port Snettisham sockeye salmon while providing opportunity on enhanced summer chum salmon. A one day extension was granted in Taku Inlet due to low effort levels, high CPUE and Canyon Island fish wheel counts, and no allowed catch concerns. Effort was 61 boats (less than half the previous week), sockeye salmon harvest was 51% of average and CPUE was 113% of average. Analysis of otoliths revealed that 10% of the sockeye salmon harvest from Taku Inlet during this week was DIPAC Snettisham hatchery origin. TBR enhanced sockeye salmon harvest in Taku Inlet this week was 0.5% Tatsamenie Lake origin. The weekly estimate projected an inriver run of 105,600 fish.

Fishing time for SW 33 was set for two in Taku Inlet and Stephens Passage with a 6 inch minimum mesh restriction south of Circle Point to conserve for wild Port Snettisham sockeye salmon while providing opportunity on enhanced summer chum salmon. Section 11C was opened for 2 days due to adequate pink salmon runs to mainland systems. Effort was 49 boats, sockeye harvest was 15% of average, and CPUE was 44% of average. Analysis of otoliths revealed that 23% of the sockeye salmon harvest from Taku Inlet during this week was DIPAC Snettisham hatchery origin. TBR enhanced sockeye salmon harvest in Taku Inlet this week was 2.47% Tatsamenie Lake origin. The weekly estimate projected an inriver run of 80,000 fish

The fall drift gillnet season in District 111 lasted nine weeks, beginning on August 16 in SW 34, and lasting until October 14 in SW 42. During this time management focus switches from sockeye to coho salmon abundance. Fishing time in Section 11B during SW 34 was set at the average 3 days due to adequate inseason sockeye salmon estimates and strong early coho salmon performance, and the opening was delayed until Monday August 17<sup>th</sup> to accommodate the Golden North Salmon Derby taking place in Juneau area waters. Section 11C was opened for 3 days due to adequate pink salmon runs to mainland systems. The coho salmon harvest was 163%, and the CPUE was 199% of average.

Fishing time in Sections 11-B and 11-C was set for 4 days in SW 35; coho salmon harvest was 184% of average and CPUE was 108% of average. The inseason coho salmon estimate projected an inriver run of 144,000 fish, exceeding the preseason forecast of 100,000 coho salmon. With the 4,000 fish minimum of the sockeye salmon escapement goal range to Speel Lake realized, the Speel Arm SHA was opened for three days to target enhanced Snettisham Hatchery sockeye salmon. In the Speel Arm SHA, 14,655 fish were harvested by 35 boats. An otolith sample obtained and analyzed by DIPAC indicated 97% of the harvest was of Snettisham Hatchery origin.

Fishing time in Section 11-B was set for 4 days in SW 36 and coho salmon harvest was 186% of average and CPUE was 119% of average. The Speel Arm SHA was opened for three days to target enhanced Snettisham Hatchery sockeye salmon, but effort and harvest was insignificant. The inseason coho salmon estimate projected an inriver run of 149,000 fish, with 57,500 coho salmon past all fisheries, exceeding the 38,000 PST minimum escapements. Based on good coho salmon harvest in the D111 fishery, being past the peak period of wild fall chum salmon presence, and continued strong inseason coho

salmon estimates, openings of four days per week were held for the remainder of the season. The traditional District 111 sockeye salmon harvest for the SW 34–42 was 35% of average. The coho salmon harvest in SW 37–42 was 245% of average. The final inseason coho salmon estimate projected a total of 155,000 fish inriver with an escapement past all fisheries in SW 40 of 104,400 fish. The fall chum salmon harvest in SW 34–42 was 93% of average. Escapement numbers for Taku River chum salmon are unknown; however the numbers of fall chum salmon passing through the fish wheels at Canyon Island were used as an index of escapement. The index number for 2010, 94 chum salmon was 28% of average. The District 111 common property drift gillnet pink salmon harvest of 132,350 fish was 117% of average. The escapement number to the Taku River was unknown; however the number of pink salmon passing through the fish wheels at Canyon Island was used as an index of escapement. The total of 8,868 pink salmon caught in the fish wheels was 188% of the 2008 parent-year and was 74% the even-year average. The District 111 drift gillnet fishery closed on October 14 in SW 42.

Several other fisheries in the Juneau area harvested transboundary Taku River salmon stocks in 2010. Personal use permits were used to harvest an estimated 1,020 Taku River sockeye salmon. In 2010, an estimated 2,200 Chinook salmon were harvested by sport fisheries in the Juneau area during the directed fisheries period. 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. Of the Chinook salmon harvested 984 fish were estimated to be of Taku River origin based on GSI analysis.

### *Canadian Fisheries*

The Taku River commercial fishery harvest was 20,180 sockeye, 10,349 coho, 5,238 large Chinook, and 700 nonlarge Chinook salmon in 2010. An additional 297 sockeye and 4,000 coho salmon were taken in a test fishery which was conducted during the latter part of the fishing season. The sockeye salmon harvest was 20% below the average 24,899 fish. Fish originating from Taku fry stocks contributed an estimated 625 fish to the harvest, comprising 3% of the total sockeye salmon harvest. The harvest of coho salmon was more than double the average of 4,721 fish. The harvest of large Chinook salmon was above the 2005–2009 average of 4,664 fish. In 2005, as a result of the new Chinook salmon agreement which allows directed Chinook salmon fishing if abundance warrants, harvest accounting for small salmon was revised from a commercial weight-based designation (previously referred to “jacks” 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 harvests from previous years should be noted accordingly. There were 62 days of fishing; this was 13% above the average of 55 days. The seasonal fishing effort of 415 boat days was 13% above average. As in recent years, both set and drift gillnets were used with the majority of the harvest taken in drift gillnets. The maximum allowable mesh size was 20.4 cm (8.0 inches) until June 20 at which point it was reduced to 14.0 cm (5.5 inches) in order to minimize incidental harvest of Chinook salmon.

In addition to the commercial harvest 126 Chinook, 184 sockeye, and 59 coho salmon were harvested in the aboriginal fishery in 2010. All but 38 sockeye and 2 Chinook salmon were taken in the lower river – 30 sockeye salmon were harvested at Kuthai Lake and 8 were harvested at King Salmon Lake; 2 Chinook salmon were harvested at Nakina. It is estimated that of the 149 Chinook salmon caught, 126 were large fish. The harvests in the Taku Aboriginal fishery have averaged 279 large Chinook, 160 sockeye, and 323 coho salmon and two steelhead trout.

Recreational harvest was 100 large Chinook salmon. The harvests of other species are negligible.

As noted, a test fishery to capture coho salmon for stock assessment purposes took place during the latter part of the fishing season, from August 15 to October 6 (SW 34–41), and landed 4,000 coho and 292 sockeye salmon.

The bilateral preseason Chinook salmon forecast based on sibling relationships was for a terminal run of 41,328 fish; 14% below the average run of 48,100 fish. At a run size of this magnitude, factoring in the revised interim MSY escapement point target of 25,500 fish, the AC was 9,428 fish. With 6,181 fish (66% of total) allocated to Canada and 3,247 fish (34% of total) allocated to the U.S. Adding the BLCs of 1,500 fish for Canada and 3,500 fish for the U.S. meant that that the TAC was 14,428 fish.

Despite the availability of an AC, the plan was to manage the fishery to the weekly guidelines identified in Table 6 until an inseason run assessment could be made. As in previous years, reliable inseason projections were not expected until after mid-May and/or 2–3 three weeks of fishing. These guidelines incorporated a test fishery target of 1,400 large Chinook salmon, plus the AC reduced by approximately 90% to 600 fish. The AC was reduced in recognition that preseason forecasts have been biased high in recent years; Chinook salmon productivity appears to be lower than that predicted in the forecast models. Once reliable joint Canada/U.S. inseason projections were available, the fishery was to be managed to strictly test fishery guidelines, or full directed fishery guidelines with the objective of meeting escapement and agreed harvest sharing objectives. In the event the run did not return as forecast, the commercial fishery would be reduced to a strictly assessment mode and serve as the test fishery identified in the PST agreement (as occurred in 2007 and 2008).

Table 6. Weekly large Chinook salmon guideline harvest for the Canadian commercial fishery in the Taku River in 2010.

SW	Start Date	Test/assessment		Guideline
		Harvest	Directed Harvest	
18	25-Apr	93	26	119
19	2-May	185	67	252
20	9-May	277	101	378
21	16-May	270	Inseason estimate	Inseason estimate
22	23-May	171	Inseason estimate	Inseason estimate
23	30-May	168	Inseason estimate	Inseason estimate
24	6-Jun	145	Inseason estimate	Inseason estimate
25	13-Jun	91	Inseason estimate	Inseason estimate
Total		1,400		

After inseason run projections identified the availability of an AC, weekly guideline harvests were developed to guide management decisions so that: a) the harvest 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 joint Canada/U.S. run assessments using MR estimates plus D111 harvests through the previous week then the sum was expanded by historical run timing, which was assumed to be average, unless otherwise agreed to by managers of both parties. Management of the Chinook salmon fishery was predicated upon weekly guidelines in order to avoid over harvesting specific components of the run. Base level catches were not used in calculation of the guidelines; rather they were set aside for Aboriginal, recreational and directed sockeye salmon fisheries.

The management plan indicated that the commercial Chinook salmon fishery would open at a reduced directed fishery level at noon on Wednesday, April 28, SW 18, for an initial 48-hour period. Extensions to this, and subsequent weekly fishing periods would be considered if the weekly guidelines were not achieved. For both drift gillnets and set gillnets, mesh sizes would be restricted to between 100 mm (four inches) and 204 mm (8 inches) and net length would be restricted to a maximum of 36.6 m (120 ft). The use of set gillnets would not be permitted prior to May 12, in an effort to ensure that the limited harvest was equally available to all fishers, and that harvest monitoring was enhanced for increased management precision.

As in previous years, weekly fisheries typically opened at noon on Sunday in 2010. However, the initial opening was delayed until midweek in order to increase the likelihood that fishing would be possible, i.e. that there was open water.

The target harvest for SW 18 was 119 fish (Table 6). There was more effort than anticipated (six licences compared to two licences in 2009), and the river conditions were quite favourable (due to a relatively early spring and below average snow pack). Consequently, the duration of the initial posting was reduced from 48 to 20 hours, specifically, from noon on Wednesday to 8:00 am on Thursday. Once the harvest of 55 fish was tallied, another 20–

hour opening was posted, starting at noon on Thursday. The harvest was similar, resulting in a total of 104 fish, quite close to the target noted above. Based on the gauge in the canyon, the river level started at about two feet and changed little over the course of the opening.

Given a significantly higher target (252 fish plus the shortfall of 15 fish from SW 18) a posting of 48 hours was deemed appropriate for SW 19. A rise in water level, not unusual at this time, was anticipated. However, the water level actually dropped and harvests were greater than anticipated; approximately 200 fish for day 1 and 150 for day 2 resulting in a weekly harvest overage of 78 fish. The weekly average CPUE of 25 fish per boat day (fbd) was close to the 2005, 2006, and 2009 average of 29 fbd. Seven licences fished each day.

SW 20 was posted for only ten hours, from noon until 10:00 PM on Sunday. The weekly target was 379 fish, less the overage from the previous week. The harvest for this ten hour opening was 192 fish. A subsequent opening was posted for noon to 5:00 PM on Monday, resulting in a harvest of 87 fish. With a cumulative weekly harvest of 279 fish, no additional fishing time was posted. The river level remained at about two feet on the canyon gauge; the spring thaw was delayed, possibly due to below average temperatures. The CPUE had doubled from the previous week to 50 fbd which again was close to average. Nine licences fished in SW 20.

It was hoped that an inseason estimate would be possible after SW 20; however, sufficient MR data had not been generated. Consequently, SW 21 was opened using the same management framework i.e. using an assessment target (270 fish) plus a reduced AC target (115 fish). It was posted from noon to 10:00 PM on Sunday, and resulted in a harvest of 192 fish. A subsequent opening was posted from 1:00 PM to 5:00 PM on Monday, bringing the cumulative weekly harvest to 304 fish. At this point, the MR data was deemed to be sufficient data for generating an inriver abundance estimate, and the first Canada/U.S. joint inseason run size projection was made. The MR estimate of 12,201 fish was added to the U.S sport fishery through SW 20 (281 fish); this was expanded using average run timing at Canyon Island (32%), to give a terminal run size projection of 39,426 fish.

This projection was close to the preseason forecast of 41,328 and as a result, management shifted from the assessment/ reduced AC level to a normal directed level, using the full AC to calculate weekly guidelines. The new weekly guideline for SW 21 was 1,094 fish (Table 6). With a balance of 970 fish, the fishery was reopened for 24 hours on Thursday, May 20. After a hail of 120 fish the following morning, the fishery was extended another 24 hours. However, the spring freshet was finally in progress and effort dropped from six to four licences. The fishery was not extended beyond this, with relatively poor harvests in the fishery and in the canyon; there was also some uncertainty associated with the abundance estimate, given the limited data available. The total weekly harvest was 579 fish, with the CPUE of 30 fbd almost matching the average of 31 fbd. Daily fishing effort averaged 7.5 licences.

The guideline for SW 22 (starting May 23) was 813 fish, and a posting of 2 days was announced. The freshet abated somewhat during the opening. After day 1 there was a

balance of 573 fish and CPUE was close to average; the fishery was extended from 2 to 3 days. A total of 624 fish were harvested, with a CPUE of 23 fbd, slightly below the average of 26 fbd. Effort was up from the previous week, averaging 9 licences per day. The joint run projection made after closure was 42,317, up slightly from the first inseason projection but again close to the preseason projection of 41,328 fish.

Based on this, the guideline for SW 23 was 911 fish, and an initial posting of 3 days was announced. A total of 1,087 fish were harvested, with a CPUE of 36 fbd, above the average of 26 fbd. It appeared the freshet was now complete, with river levels dropping over the course of the opening. Fishing effort averaged 10 licences per day; this was the peak effort observed during the Chinook salmon fishery. The run projection made in SW 23 (42,317 fish) was similar to the previous week's projection, and the guideline for SW 24 was 798 fish. An opening of 2 days was posted. River level dropped slightly and a total of 1,025 fish were harvested. The CPUE of 60 fbd, marked the peak CPUE of the fishery, and was three times the average of 19 fbd. Daily fishing effort averaged 8.5 licences.

The SW 24 run assessment resulted in a slight decrease in the projection, to 39,131 fish. The guideline for SW 25 was 427 fish, and an opening of one day was posted. The harvest was 406 fish and the fishery closed as scheduled. River level dropped precipitously and ended up at 3.7 feet on the canyon gauge, which was a record low for this time. The CPUE of 45 fbd was again above average (26 fbd). Daily fishing effort averaged 9 licences.

SW 25 marked the end of the directed Chinook salmon fishery. A joint run projection made after closing (36,071 fish) was again slightly lower than the previous week's. The escapement to date was estimated at 23,094 fish and was projected to be 26,500 fish, assuming average run timing and that all base level catch would be taken. This was only slightly above the escapement target of 25,500 fish. Factoring in both the decline in run projections and the current escapement projection, efforts were taken to reduce Chinook salmon harvest during the directed sockeye salmon fishery by implementing a maximum mesh restriction of 5.5 inches.

Two additional run assessments were conducted during the directed sockeye salmon fishery. The first run projection was made in SW 26 (35,690 fish) and the second projection was made in SW 28 (35,873 fish). These were fairly consistent with the SW 25 projection.

The weekly guideline target noted in Table 7 sum to 4,792 fish; the actual harvest of 4,449 fish was within 7% of this. The Chinook salmon bycatch in the sockeye salmon fishery was 764 fish; plus Aboriginal harvest of 126 fish and an assumed recreational harvest of 100 fish, the actual base level catch was 990 large Chinook salmon, 34% below the BLC allocation of 1,500 fish. As noted, efforts were taken to minimise commercial bycatch in order to achieve the escapement objective of 25,500 fish.

Table 7. Forecasts of terminal run size, allowable harvest, and weekly guideline, and actual harvest of Taku River large Chinook salmon, 2010<sup>a</sup>.

SW	Terminal Run	Canada Base Line Harvest <sup>a</sup>	Weekly Guideline Target	Weekly Harvest	Cumulative Harvest
17	41,328	7,428	5,647	1	0
18	41,328	7,428	5,647	119	104
19	41,328	7,428	5,647	252	345
20	41,328	7,428	5,647	379	279
21	39,426	7,526	5,674	1,094	579
22	39,426	7,526	5,674	813	624
23	42,317	10,417	6,445	911	1,087
24	42,638	10,738	6,530	798	1,025
25	39,131	7,231	5,595	427	406

<sup>a</sup> Inseason terminal run projections are as per approximately day 3 of the previous week.

The DFO preseason forecast for the run of wild Taku sockeye salmon was based on a stock recruitment relationship, and projected a run of 205,418 fish, 12% below the average run of approximately 232,867 fish. In addition, approximately 2,900 enhanced fish (2,300 from Tatsamenie Lake and 600 from Trapper Lake) were forecast, 46% below the average enhanced run size of 5,400 fish. Based on the new treaty arrangement, an enhanced run of 1 to 5,000 fish provides Canada with a 20% share of the TAC, with management based on weekly estimates of the TAC of wild fish. Subtracting the escapement target of 75,000 wild sockeye salmon fish from the forecast of 205,418 results in a TAC of 130,418 fish; 20% of this is 26,084 fish.

The forecast for the combined run of wild and enhanced Tatsamenie fish was approximately 14,200 fish. The egg-take goal for 2010 was based on a target of 30% of an expected escapement of 3,000 fish amounting to approximately 1.5 million eggs. Consequently, it was agreed that a coordinated management would occur on Tatsamenie sockeye salmon in Taku Inlet in the U.S. drift gillnet fishery during SW 30–32 and during SW 31–33 in the Canadian fishery to meet a minimum target of 2,500 fish to the lake. It was anticipated that weekly fishing times might need to be limited to two days/week during these times. Weekly fishing plans and potential extensions of fishing time in each country's fisheries were to be discussed prior to implementation.

As with the Chinook salmon fishery and as in past years, guideline harvests were developed each week for both sockeye and coho salmon fisheries to guide management decisions so that: a) the harvest was consistent with conservation and Treaty goals; and b) management was responsive to changes in projections of abundance, i.e. abundance-based. However, there was more flexibility regarding harvest timing, with weekly guidelines generally being replaced by cumulative weekly guidelines, and no formal arrangement to concur on run estimates or projections.

The sockeye salmon fishery was opened on three days in SW 26 as identified in the management plan. The weekly guideline based on the preseason forecast was 3,291 wild fish (Table 8). River levels rose over the course of the opening but were well below

average. Due to conservation concerns for both Kuthai sockeye salmon, which had seen low escapements for the previous three years, and Chinook salmon, the fishery was not extended. CPUE was 84 fbd; average 77 fish. The weekly harvest was 2,013 fish, with a daily average of 8 licences fishing.

Table 8. Canadian inseason forecasts of terminal run size, total allowable catch, and spawning escapement of Taku sockeye salmon, 2010<sup>a</sup>.

SW	Terminal Run	Total Allowable Catch	Projected Escapement	Canadian Total Allowable Catch	Inseason Guideline	Actual Harvest
26	205,418	130,418	75,000	26,084	3,291	2,106
27	205,418	130,418	75,000	26,084	5,579	3,559
28	121,244	46,244	83,596	9,249	2,859	4,969
29	122,210	47,210	80,604	9,442	4,209	7,591
30	163,990	88,990	106,326	17,798	9,852	13,528
31	163,910	88,910	101,688	17,782	12,067	15,715
32	174,214	99,214	102,925	19,843	16,221	17,239
33	170,609	95,609	98,047	19,122	17,313	18,744

<sup>a</sup>Inseason terminal run projections are as per run assessments made in current week.

SW 27 was also opened on three days. The cumulative guideline harvest through this week based on the preseason forecast was 5,579 fish with a balance of 2,020 fish. The river dropped considerably over the course of the week from an average level to another record low, 3.4 feet. The previous record low river level for this time was 4.0 feet in 1996. However, despite the favorable fishing conditions, the CPUE of 63 fbd was lower than both the previous week's and the average of 75 fbd. The fishery was held to 3 days, harvesting a total of 1,453 fish for a cumulative of 3,559 fish. The number of licences fishing remained at a daily average of eight, however for this week through SW 29 two licences used set gillnets only and for these openings CPUE was calculated using effort adjusted for set gillnet use with 1 set gillnet = 0.5 boat/licence.

The following opening, for SW 28, was again 3 days. The cumulative guideline harvest through this week, still based on the preseason forecast, was 8,062 fish with a balance of 3,093 fish. The river level remained at a record low. The CPUE was very similar to the previous week's, amounting to 59 fbd; average 62 fish. The fishery was again held to three days. The weekly harvest was 1,410 fish, with an average of eight licences fishing again.

An inseason run assessment made after this week's fishery projected a run of 121,244 fish, well below the preseason forecast of 205,418 wild fish. This presented a new cumulative guideline of 2,859 fish; subtracting the 4,969 fish harvested to date left a negative balance of 2,110 fish. For the following week, the cumulative guideline was 4,451 with a negative balance of 518 fish.

The initial posting for SW 29 was 2 days. Water level rose slightly over day 1 to average and there was also some suggestion that the run was late; these were factored into the decision to extend one day. The river level dropped on day 2 and harvests nearly doubled. The weekly harvest was 2,622 fish bringing the cumulative harvest to 7,591 fish. Daily



fishing effort averaged ten licences. CPUE was equal to the average of 87 fbd. The run projection made after this opening, 122,210 fish; close to the previous week's projection.

The weekly guideline for SW 30 was 5,227 fish, with a cumulative harvest to date of 7,591 fish therefore showing a negative balance of 2,364 fish. An opening of 2 days was posted for SW 30. The escapement projection was 101,300 fish, significantly above the target of 75,000 fish. After a day 1 harvest of 1,197 fish, a new assessment projected a significantly increased run size. The harvests for day 2 almost doubled and were even higher on day 3, despite rising water. The weekly harvest was 5,937 fish with 11 licences fishing. CPUE of 180 fbd was double the average of 87 fbd. The run projection made after closing in SW 30 was 163,900 fish. The escapement projection was 106,326 fish, well above the upper end of the guideline range of 71,000 to 80,000 fish.

The cumulative guideline harvest for SW 31 was 12,078 fish. The cumulative harvest through SW 30 was 13,528 fish, showing a negative guideline of 1,450 fish for SW 31. Given this overage, and in keeping with the management plan which identified a conservative approach for Tatsamenie sockeye salmon for SW 31–33, SW 31 was opened on 2 days only. River levels dropped over the two days of the fishery to near record low. However, CPUE was down considerably, to 104 fbd; average 106 fbd. The weekly harvest was 2,187 fish with 11 licences fishing. The Tulsequah flood started shortly after closing, but abated by the end of the week; SW 32 began with slightly below average river level.

The run projection of 163,910 fish was almost identical to the projection made after the SW 30 fishery. There was now a cumulative guideline of 14,536 fish and an actual harvest to date of 15,715 fish showing a negative balance of 1,179 for SW 32. At 108,800 fish, however, the escapement projection was still well above target. In an attempt to eliminate the negative guideline balance and to ensure adequate escapement to Tatsamenie for the egg-take, the fishery for SW 32 was opened on one day only. A total of 1,524 fish was caught by 11 licences, amounting to a CPUE of 139 fbd; above the average 111 fbd. As noted, river levels were back down to average after the Tulsequah flood in SW 31, but were quickly on their way up again, although to a lesser degree.

The run projection of 174,214 fish was up about 10,000 fish. This was associated a cumulative guideline of 17,966 fish, through SW 33. Subtracting the harvest to date of 16,727 fish meant that the negative balance had been eliminated and there was now a positive balance of 1,239 fish for SW 33. The fishery was posted for 2 days. However, CPUE on day 1 was only about 25% above average despite dropping water levels and the canyon fish wheel CPUE was below average. A run projection made after day 1 dropped by about 5,000 fish and the fishery was not extended. The weekly harvest was 1,505 fish with 10 licences fishing. CPUE was 75 fbd, an exact match to the average.

SW 33 marked the end of the directed sockeye salmon fishery. The run projection at this time was 170,609 fish, which was associated with a guideline harvest of 17,313 fish; the actual harvest was 18,744 fish. The escapement projection was 99,500 fish, significantly

above the upper end of the escapement goal range. An additional 1,308 sockeye salmon were harvested in the directed coho fishery.

The cumulative harvest of Taku enhanced fish was 591 fish; this included harvests of 328 Tatsamenie Lake and 293 Trapper Lake fish. This harvest was 21% below the average enhanced Taku harvest of 752. In addition, 31 Stikine origin fish were harvested.

The cumulative commercial fishery sockeye salmon CPUE for the season was 876 fbd, 9% above the average of 804 fbd. The record low water levels undoubtedly had a positive influence on harvest rates. The increases in maximum net length from 30.5 m (100 feet) to 36.6 m (120 feet), which were implemented in 2008 and 2009 for drift and set gillnets respectively, were also likely a positive influence. CPUE was fairly close to average for all weeks except SW 30, when it was double the average. The peak CPUE of the season occurred this week, 2 weeks earlier than typical.

The preseason outlook for Taku River coho salmon in 2010 was for a below average run. Based on harvest rates in the Taku River CWT program, an estimated 1.96 million coho salmon smolt emigrated during the spring of 2009, with survivals to return as adults in 2010. Assuming that the marine survival rate would be similar to average (8.6%), a total run of 162,900 was expected in 2010, close to the average run size of 192,488 fish. Assuming average U.S. exploitation rates (39%), this translated to a border escapement of approximately 99,900 fish. For reference, the 2009 outmigration experienced 7.8% marine survival, and an exploitation rate of 52%.

SW 34 was opened on 2 days primarily due to sockeye salmon considerations. The river level was above average at opening time and was relatively stable over the course of the opening. Approximately 200 coho and 175 sockeye salmon were harvested on day 1. The fishery was by extended by one day. Effort was down to 5 licences, due in part to the fact that some licences were focusing on the coho salmon test fishery which also started this week. The weekly commercial harvest was 1,034 coho and 600 sockeye salmon with a coho salmon CPUE of 65 fbd, above the average of 47 fbd.

SW 35 was opened on 3 days. An assessment made early in the week projected a run greater than 100,000 coho salmon. This meant that a TAC of 10,000 fish, plus projected escapement in excess of the goal of 27,500 to 30,000 fish, was available to Canada. The fishery was extended by one day. River levels dropped over the course of the opening, ending up at yet another record low by the end of the week. The weekly coho salmon harvest was 1,262 fish. Factoring the use of a set gillnet only for one licences from now until the end of the season, the number of licences fishing was 4.5. The CPUE of 68 fbd was slightly below the average of 74 fbd.

SW 36 was opened on 3 days. A run assessment made after day one was consistent with the previous week's and the fishery was extended by one day. River level began to rise during the latter part of the opening, but only slightly. The weekly harvest was 1,671 fish with the same effort as in the previous week. The CPUE of 111 fbd was above the average of 88 fbd.

SW 37 was posted for 5 days. Fishing effort remained consistent. A total of 570 fish were caught through day 3. CPUE was 42 fbd, below a weekly average of 64 fbd, with favorable fishing conditions (the river level started at about 75% of average and dropped). The harvest rates varied little over the course of the fishery, resulting in a weekly average of 43 fbd. The weekly harvest of coho salmon was 972 fish.

SW 38 was also posted for 5 days. Two licences stopped fishing for the season; effort was down to 2.5 licences. CPUE climbed steadily for the first 3 days of the fishery, culminating in a fishery maximum of 193 fbd, and a harvest of 1,115 fish. River level continued to drop slightly over the course of the week. Fishing continued to the end of the week, resulting in a total harvest of 1,939 fish. The weekly CPUE was 111 fbd versus a weekly average of 20 fbd. The previous ten-year period there were only 2 years in which fishing occurred in SW 38.

SW 39 was posted for 7 days. The number of licences was the same as in SW 38; however effort ceased after 3 days. A total of 233 fish were harvested, resulting in a CPUE of 36 fbd; the only other year in the previous ten-year period with effort this week was 2001 which had a CPUE of 61 fbd.

This marked the end of the commercial fishing season for 2010. A total of 7,111 coho salmon had been harvested in directed fishing post SW 33. An assessment conducted at this time projected an inriver run of approximately 143,000 fish; factoring in all harvests including Aboriginal and test fishery harvests, the escapement was projected to be close to 130,000 fish, well above the goal range of 27,500 to 35,000 fish.

As noted previously, a test fishery was again conducted in 2010 in order to ensure that run assessment continued for the majority of the coho salmon run. The fishery started in SW 34 and continued to October 6 (SW 41), landing 4,000 coho and 292 sockeye salmon. It was carried out via a contract with Taku Wild, owned and operated by the Taku River Tlingit First Nation. Weekly target harvests for SW 34–41 were 300, 400, 500, 600, 700, 600, 500, and 400 fish. Target harvests were achieved in all but the first two weeks; SW 34 (305 actual) and SW 35 (395 actual).

The final postseason coho salmon MR estimate indicates that 141,238 fish reached the border. Under the new PST provisions, the Canadian allowable catch after SW 33 was 10,000 coho salmon plus surplus escapement. The actual treaty harvest, excluding the test fishery, was 7,125 fish. This includes the commercial harvest taken after SW 33 (7,066 fish) and the Aboriginal fishery harvest of 59 fish; it is assumed that the recreational harvest of coho was zero. Subtracting the total inriver harvest of 14,408 fish from the border passage translates to a spawning escapement estimate of 126,830 fish, well above the upper end of the escapement goal range of 27,500 to 35,000 fish. The cumulative commercial coho salmon CPUE through SW 35 (which is when the fishery typically ceases) was 307 fbd; 68% above the average of 183 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. MR program. Counting weirs operated by DFO at Little Trapper and Tatsamenie lakes and by the TRTFN at Kuthai and King Salmon lakes provide some information on the distribution and abundance of discrete spawning stocks within the watershed.

The sockeye salmon MR program has been operated annually since 1984 to estimate the above border run size; spawning escapement is then estimated by subtracting the inriver catch. The final postseason estimate of border escapement in 2010 is 109,028; subtracting the inriver harvest of 20,661 fish (20,180 commercial, 184 Aboriginal and 297 test fish) indicates that 88,367 sockeye salmon reached the spawning grounds. This spawning escapement is 19% below average, but above the upper end of the interim escapement goal range of 71,000 to 80,000 sockeye salmon. The Canyon Island fishwheel catch of 2,853 sockeye salmon was 47% below average; however the record low water levels observed had a significant negative impact on fishwheel effectiveness.

The sockeye salmon count through the Kuthai Lake weir was 1,626 fish; counts during the last five years have not exceeded 2,000 fish. The 2010 count was 51% below the average 3,302 fish and 73% below the primary brood year escapement of 6,004 fish. The fish were somewhat early arriving at the weir but the run midpoint (August 6) was about eight days later than average, due in part to a large pulse of fish which arrived on August 26.

A weir was again operated at King Salmon Lake in 2010. The count of 2,977 sockeye was 45% above the 2004–2009 average and 2.9 times above the primary brood year escapement of 1,046 fish. In calculating the average escapement, the 2009 figure was estimated at 1,144 fish using an aerial survey expansion of 3.1, while the 2005 count of five fish was excluded.

The Little Trapper Lake weir count was 3,347 sockeye salmon; there were an additional 40 fish holding below the weir upon demobilization and an estimated 100 fish spawning below the weir, bring the total escapement to 3,387 fish. This was a record low, slightly under the previous low in 2008. It was also 75% below the average of 13,700 fish and 78% below the primary brood year escapement of 16,009 fish. The run arrival timing was about average, however the midpoint was about five days earlier than average (August 5 versus August 10). There were no removals for artificial spawning in 2010.

The Tatsamenie Lake weir count of 3,513 fish was 61% below the average of 9,015 fish but very close to the primary brood year count of 3,372. The fish arrived at the lake a few days later than average; however the run midpoint was August 29, four days earlier than the average of September 2.

## **Chinook Salmon**

Spawning escapement of Chinook salmon in the Canadian portion of the Taku drainage was estimated from the joint Canada/U.S. MR program. Tag application took place from April 24 through July 13. Tag recovery effort consisted of the commercial Chinook salmon fishery from April 28 through June 19, the sockeye and coho salmon commercial fisheries (SW 26–38) and the coho test fishery (SW 34–41); in addition, there was spawning ground sampling in August and September on the Nakina, Tatsatua, Kowatua, Nahlin, Dudidontu rivers, as well as Tseta and Yeth creeks. The final postseason estimate of escapement is based on fishery and spawning ground data combined. The above border run is 34,238 large Chinook salmon; subtracting the harvest of 5,469 fish (5,238 commercial, 126 Aboriginal, and 105 recreational fish) leaves a spawning escapement of 28,769 fish. This is above the new interim point target of 25,500 fish (the escapement point goal,  $N_{MSY}$ ) and within the target range of 19,000 to 36,000 fish. The average is 37,748 fish.

Aerial surveys of large Chinook salmon to the six escapement index areas were: Nakina 1,730 fish (24% below average); Kowatua 716 fish (8% below); Tatsamenie 821 fish (15% below); Dudidontu 561 fish (14% above); Nahlin 1,018 fish (10% above); and Tseta Creek 128 fish (59% below). Survey conditions were good except for Tseta Creek which was a partial count only. The total count of 4,846 large Chinook salmon, excluding Tseta Creek, was 8% below average.

Carcass weirs were operated on the Nakina and Tatsatua rivers in order to obtain tag and age-length-sex data. A total of 528 large Chinook salmon were recovered on the Nakina River. On the Tatsatua River, 648 large Chinook salmon were encountered, either on the weir or through supplemental angling. Low water levels may have had a limiting influence on carcass recovery at the Nakina site.

## **Coho Salmon**

Spawning escapement of coho salmon in the Canadian portion of the Taku drainage was estimated from the joint Canada/U.S. MR program. Tag application occurred until September 27 (SW 40) and recovery occurred until October 6 (SW 41). The tag recovery effort consisted of the commercial fishery until SW 38 and a test fishery from SW 34 to October 6 as noted. The final postseason above border run is 141,238 fish; taking into account the inriver catch of 14,408 fish (10,349 commercial, 59 Aboriginal and 4,000 test), the spawning escapement estimate is 126,830 fish. The spawning escapement was 10% above average and more than three times the upper end of the interim escapement goal range (27,500 to 35,000 fish).

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

An estimated 44,837 wild Taku sockeye salmon were harvested in the traditional U.S. District 111 drift gillnet fishery. This postseason estimate was based on scale pattern analysis and otolith data. An additional 987 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 45,824 fish (Table 4).

In the Canadian commercial fishery, the final postseason harvest estimate of wild Taku sockeye salmon is 19,555 fish. An estimated 178 wild sockeye salmon were taken in the Canadian Aboriginal fishery. Therefore, the estimated Canadian treaty harvest of wild Taku sockeye salmon is 19,733 fish (Table 4). An additional 287 wild sockeye salmon were harvested in assessment/test fisheries.

The final postseason estimate of the above border run size of wild sockeye salmon, based on the joint Canada/U.S. MR program, is 107,384 fish. Deducting the Canadian inriver harvest of 20,020 wild fish from the above border run estimate resulted in an estimated escapement of 87,364 wild sockeye salmon. The terminal run of wild Taku sockeye salmon is estimated at 153,208 fish. Based on the escapement goal of 75,000 fish, the TAC was 78,208 wild sockeye salmon.

The escapement of Taku sockeye salmon originating from the fry stocking program was estimated to be 1,003 fish from broodstock otoliths collected at Tatsamenie Lake. The final enhanced terminal run estimate based on scale pattern analysis and otolith analysis was 2,587 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 may also be 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 harvest sharing of Alsek River salmon stocks between Canada and the U.S. has not yet been specified, Annex IV, Chapter 1 calls for the development and implementation of cooperative abundance-based management plans and programs for Alsek River Chinook and sockeye salmon. Interim escapement goal ranges for Alsek River Chinook salmon spawning escapement in the Klukshu River is 1,100 to 2,300 fish and sockeye salmon was initially set by the TTC at 33,000 to 58,000 fish (Klukshu: 7,500 to 15,000 fish). The principle escapement-monitoring tool for Chinook and sockeye 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. Traditional MR programs to estimate the total inriver abundance and the fraction of the escapement contributed by the Klukshu stocks were implemented for a number of years one and two decades ago and continue in the form of genetic based estimates funded through the Northern Endowment Fund in more recent years.

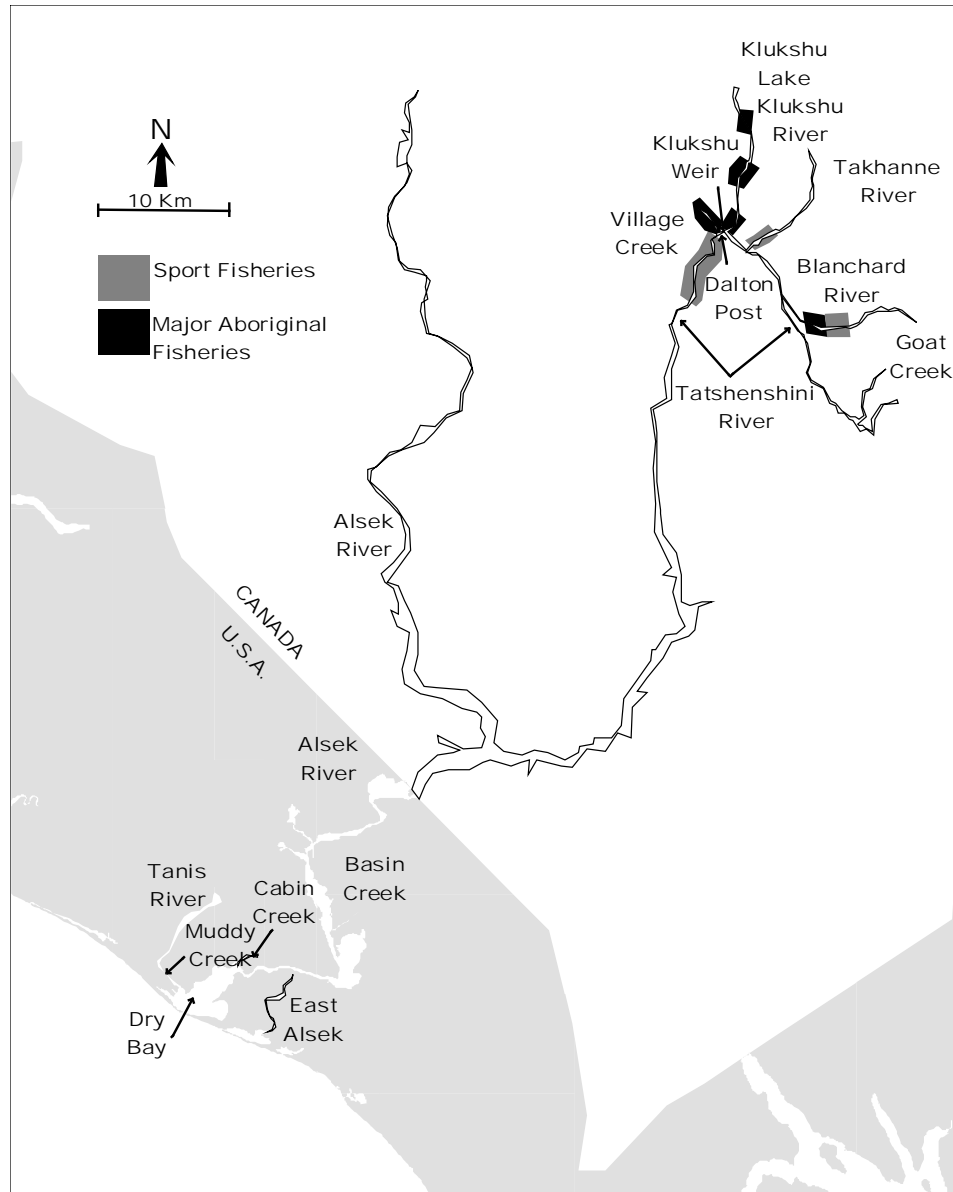


Figure 3. The Alsek River and principal U.S. and Canadian fishing areas.

### ***Preseason Forecasts***

The 2010 overall Alsek River sockeye salmon run was expected to be approximately 40,700 sockeye salmon. The outlook for 2010 was based on a predicted run of 11,000 Klukshu sockeye salmon derived from historical Klukshu stock-recruitment data and an assumed Klukshu contribution to the total run of 27%, based on radio telemetry (2001–2003) and MR (2000–2004) results. Principal contributing brood years were 2005 (Klukshu escapement of only 3,167 sockeye salmon) and 2006 (Klukshu escapement of 12,890 sockeye salmon); the 2000–2009 average Klukshu sockeye escapement was approximately 11,697 fish.

The Klukshu weir early sockeye salmon run count in 2005 was 994 and 2006 was 247 fish. The average count was approximately 2,500 sockeye salmon which was above the optimum escapement level of 1,500 as determined through separate stock-recruitment analyses of the early run conducted by DFO. The early run to the weir was expected to be near this level in 2010.

The Klukshu Chinook salmon escapement in 2004 was 2,445 and 2005 was 963 fish. For comparison the average was approximately 1,350 Chinook salmon. Based on these primary brood year escapements, the outlook for 2010 was 2,800 Klukshu Chinook salmon, well above the average run size of approximately 1,600 Chinook salmon.

### *U.S. Fisheries*

Preseason expectations were for below average runs of sockeye salmon and above average runs of Chinook salmon. These expectations were based on parent-year escapements to the Klukshu River. Prior to the start of the 2010 season it was agreed that no matter what CPUE each week revealed, no extensions of fishing time would be given in any week during the sockeye salmon season because the escapement goal for sockeye salmon was not attained at the Klukshu weir in 2008 and 2009. Emphasis was thus placed on attaining the sockeye salmon escapement goal. The Alsek River commercial fishery opened on the first Sunday in June, SW 24. All fishing periods for the first ten weeks of the season remained at one 24 hour period per week. Effort started to decline by SW 34 and management strategies switched to coho salmon. Coho salmon are targeted starting in mid-August and effort becomes minimal. Fishing times remained at three days per week through SW 40. The final two periods of the season were two and four days respectively. The Alsek River remained open through the second week in October, and the river was not fished during the last two weeks of the season.

The 2010 Dry Bay commercial set gillnet fishery harvested 273 Chinook, 12,668 sockeye, and 1,884 coho salmon (Table 9). No pink and 9 chum salmon were harvested. No Chinook salmon test fishery was conducted on the Alsek River in 2010. The Chinook salmon escapement goal measure at the Klukshu River was not attained for Chinook salmon in 2007 and 2008, and the test fishery was dropped to facilitate escapement. The Chinook salmon harvest was well below average and was undoubtedly affected by conservation methods adopted for sockeye salmon. The sockeye salmon harvest was below average, although it did equal the 2009 harvest. The coho salmon harvest was below average. Very little effort was recorded during the coho salmon season due to market conditions. The number of fishing days was 37. The total effort expended in the fishery was 192 boat days, which was below average.

### *Canadian Fisheries*

Due to the elimination of the harvest monitor position in 2005, harvests from the food fishery are not precisely known. The only harvest information for 2010 was the fish taken from the Klukshu River weir (elders only) and an estimate of harvests above/below the weir (based on the past relationship with the weir count and harvest) which was 197



Chinook, 1,704 sockeye, and 4 coho salmon. The average harvests were 70 Chinook, 1,267 sockeye, and 11 coho salmon.

Table 9. Final harvest and Klukshu index escapement data for Alsek River sockeye, Chinook, and coho salmon for 2010.

	Sockeye Salmon	Chinook Salmon	Coho Salmon
Escapement Index <sup>a</sup>			
Klukshu Weir Count	18,960	2,356	2,365
Klukshu Escapement	18,546	2,257	2,361
Harvest <sup>b</sup>			
U.S. Commercial	12,668	273	1,884
U.S. Subsistence	259	70	0
U.S. Test	0	0	0
Canadian Recreational	12	97	3
Canadian Aboriginal	1,704	197	4
Total	14,643	637	1,891

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

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

Final harvest estimates for the Tatshenshini recreational fishery were near average for Chinook salmon, with an estimated 97 fish retained (200 released), and below average for sockeye salmon with 12 retained (108 released), and 3 coho salmon were retained (8 released). These were 28% above average for Chinook salmon, 29% of average for sockeye salmon, and 4% of average for coho salmon. Despite increasing daily and possession limits for sockeye salmon to 4 and 8 on August 31, the recreational harvests remained low due to poor fishing conditions and a weaker than expected tail end of the run.

The 2010 Alsek-Tatshenshini Management Plan, adopted by CAFN, YSC, and DFO. For Chinook salmon and early run sockeye salmon management, the status of the Klukshu River 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 in paragraphs below.

The center of Aboriginal fishing activity in the Alsek River drainage occurs at the CAFN village of Klukshu, on the Haines Highway, 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 and adjacent areas allowed for fishing by any means (as established in the communal license) 7 days a week. Conservation thresholds that might invoke restrictions in the Aboriginal fishery were projected Klukshu River 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 harvests of Chinook salmon at Goat Creek, Stanley Creek, and the Parton River for elders only.

The majority of the recreational fishing effort on the Alsek drainage occurs in 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 greater than 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 in the vicinity 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 less than 1,300 Chinook salmon and less than 10,500 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 2010. 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 2010 are shown in Table 9.

## **Sockeye Salmon**

The final Klukshu River sockeye salmon weir count was 18,960 fish and escapement was 18,546 fish (Table 8). The total escapement of 18,546 fish was well above the upper end of the recommended escapement goal range of 7,500 to 15,000 fish. The sockeye salmon escapement to Village Creek was only partially enumerated in 2010 due to repairs being made to the electronic counter. A total of 2,302 sockeye salmon were counted and an over flight of Nesketaheen Lake in late July indicated that approximately 2,500 sockeye salmon spawners had reached the lake (average count at Village Creek is 2,755).

## **Chinook Salmon**

The final Chinook salmon weir count was 2,358 fish and escapement was 2,259 fish (Table 9), and were both nearly 70% above the averages (1,319 and 1,270). The most reliable comparative Chinook salmon escapement index for the Alsek River drainage is the Klukshu River weir count. The 2010 escapement was near the upper end of the escapement goal range of 1,100 to 2,300 Klukshu Chinook salmon.

## **Coho Salmon**

The Klukshu River coho weir count was 2,365 fish. As in past years, the weir count cannot serve as a reliable run strength indicator as the weir is normally removed well before the end of the coho salmon run to the Klukshu River.

## **ENHANCEMENT ACTIVITIES**

### *Egg Collection*

In 2010, sockeye salmon eggs were collected at Tahltan Lake on the Stikine River for the twenty-second year, and in the Tatsamenie Lake system on the Taku River, for the twenty-first year of this program.

### **Tahltan Lake**

The egg collection was contracted to Arc Environmental Ltd. for the fifteenth consecutive year. The egg-take goal at Tahltan Lake is 6.0 million eggs; and 6.0 million eggs were collected. Methods were modified in 2010. Fish were captured with a beach seine at the major spawning site as well as at other locations on the lake, captured fish were held until ripe. Egg takes were scheduled less frequently in 2010 and for some of the larger takes transport was planned for the following day. While this resulted in some delays; it also provided more time for the egg take and a larger load on the transport. Helicopters were used for a number of transports for safety consideration. Brood year 2010 egg takes were initiated on August 31 at Tahltan Lake and were completed on September 30th; there were 13 egg collections. The receipt of four lots of Tahltan eggs was delayed by 1 day. Eggs were collected from 2,164 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 sixteenth year at an adult enumeration weir located at the outlet of Tatsamenie Lake. Egg takes were initiated September 19th at Tatsamenie Lake. An estimated 2.1 million eggs were collected from 540 females and milt was collected from a like number of males. Tatsamenie Lake egg takes were completed on October 1st. The receipt of 3 lots of Tatsamenie eggs was delayed by 1 day for safety reasons due to short day length.

## **Trapper Lake**

While an enhancement project at Little Trapper Lake was included in the TEPP, no eggs were collected due to the low adult escapement into Little Trapper Lake and no eggs were stocked in Tunjony Creek, a tributary of Big Trapper Lake. This project was operated with Northern Endowment Fund, but will be reported in TBR reports.

### ***Incubation, Thermal Marking, and Fry Plants***

The egg incubation and thermal-marking program at Snettisham Hatchery went smoothly in year 2009/2010. Snettisham hatchery is operated by DIPAC, a private aquaculture organization in Juneau. A cooperative agreement between ADF&G and DIPAC provides for Snettisham hatchery to serve the needs of the joint TBR enhancement projects.

Incubation of 2009 brood eggs took place at Snettisham Hatchery and the resultant fry were transported to the appropriate systems from May 30 to June 14, 2010. There were two incubators lost to IHN this year from each of the Tatsamenie and Tahltan Lake egg collections.

## **Tahltan Lake**

A total of 2.61 million fry from the 2009 Tahltan Lake sockeye salmon egg take was stocked back into that lake in 2010. Survival from green-egg to outplanted fry was 70%. Fry outplanting took place on May 18 and 19.

## **Tuya Lake**

There were 977 thousand fry stocked in Tuya Lake on June 2. These fish were from eggs collected at Tahltan Lake in the fall of 2009. Survival from green-egg to outplanted fry was 52%. (Lower survival was primarily due to the IHN loss reported above).

## **Tatsamenie Lake**

A total of 717 thousand fry from the 2009 egg take was released into Tatsamenie Lake in 2010. There were two treatment groups: one group was released directly in the lake, and one group held for extended rearing; transport from Snettisham took place from May 22 to June 10. Survival from green-egg to outplanted-fry was 59%. (Lower survival was

primarily due to the IHNV loss reported above). The extended rearing group of fry were reared with water from an upland fish free water source and held in aluminum raceways. After approximately 8 weeks of rearing they were transported to net pens, held for an additional 7 days and release at approximately 2 grams. The expectation is that the additional growth will provide significantly greater survival than direct releases. Somewhat surprisingly, most of these fish left the lake within two weeks of release in a condition indicating that there were smolts and headed to sea. Full evaluation of the success of this study will not be available until these fish return as adults.

### ***Sockeye Supplementation 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 2010 season the ADFG thermal mark lab processed 18,600 sockeye otoliths collected by ADFG and DFO staff as part of the U.S./Canada fry-stocking evaluation program. These collections came from commercial and test fisheries in both U.S. and Canadian waters on the Taku and Stikine Rivers over a 10-week period. In addition, several escapement samples were examined. The laboratory provided estimates on hatchery contributions for 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.

Estimates of stocked fish contribution to Alaskan harvest were 19,054 enhanced Stikine River fish to District 106 and 108 and inriver subsistence fisheries, and 943 enhanced Taku River fish to District 111 and inriver personal use fisheries. Estimates of stocked fish contributions to Canadian fisheries included 28,088 enhanced fish to Stikine River fisheries and 640 enhanced fish to the Taku River fisheries.

#### **Canadian Thermal Mark Laboratory**

Subsamples of juvenile and adult otolith samples collected at the study lakes during the 2010 season were analyzed at the DFO thermal mark lab in Whitehorse. Results from otoliths collected from Tatsamenie broodstock result in an estimate of 1,003 thermally marked fish in that escapement. Other results will be used to estimate the number of marked fish in other escapement and in smolt projects.

## APPENDICES

### *Standards*

Large Chinook salmon are MEF length  $\geq 660$

Unless otherwise stated Chinook salmon are large

Test fisheries for Chinook salmon became commercial assessment test fisheries starting in 2004

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.

### **Bold numbers are incomplete numbers**

*Italicized numbers indicate GSI estimates do not meet accuracy and precision guidelines established by the TTC: estimating the proportion of mixtures within 10% of the true mixture 90% of the time.*

Appendix A. 1. Weekly harvest of Chinook salmon in the U.S. gillnet, troll, recreational, and subsistence and estimates of Stikine River bound Chinook salmon in District 108, 2010.

SW	Subsistence	D108 sport harvest			D108 gillnet harvest				D108 troll harvest			US total large
	Large Stikine	Large total	Large non-Stikine	Large Stikine	Nonlarge	Large total	Large non-Stikine	Large Stikine	Large total	Large non-Stikine	Large Stikine	Stikine harvest
18		24	0	24				0			0	24
19		24	0	24				0	12	0	12	36
20		117	50	67				0	9	0	9	76
21		159	4	155				0	35	13	22	177
22	4	248	13	235				0	125	10	115	354
23	0	230	40	190				0	70	44	26	216
24	1	47	0	47				0	155	57	98	146
25	6	106	0	106				0	365	259	106	218
26	11	39	0	39	190	210	63	147	123	88	35	232
27	10	49	0	49	476	645	550	95	52	48	4	158
28	8	19	0	19	178	145	47	98	0	0	0	125
29	13	10	0	10	134	107	99	8	0	0	0	31
Total	53	1,072	107	965	978	1,107	759	348	946	519	427	1,793

Appendix A. 2. Weekly harvest of Chinook salmon in the Canadian commercial, Telegraph Aboriginal, and recreational fishery in the Stikine River, 2010.

SW	LRCF													Canada total
	Kept		Released		Estimated mortality (50%)		URCF		Aboriginal Telegraph		Tahltan sport fishery			large Stikine
	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Retained	Released	Total	harvest
20														0
21										10	0			10
22										49	1			49
23										23	2			23
24										102	12			102
25										83	36			83
26		460	339	5	14	3	7			118	74			581
27		476	182	27	20	14	10	14	26	29	26	16	16	549
28		144	96	9	8	5	4	2	14	33	55	30	30	213
29		101	64	16	11	8	6	0	7	43	17	4	4	156
30		10	14	3	2	2	1	0	1	8	8			20
31		13	4	4	1	2	1			14	1			29
32		3	0							1	0			4
33		1	0							0	0			1
34		0	0											0
35		0	0											0
36		0	0											0
37		0	0											0
Total kept		1,209	698	64	56	32	28	16	48	512	232		50	1,819
Total harvest		1,273	754											1,769
Total harvest + mortality		1,241	726											

### Appendix A. 3. Weekly harvest of Chinook salmon in the Canadian test fisheries 2010.

SW	Drift		Set		Commercial license						Tuya		Total	
	Large	Nonlarge	Large	Nonlarge	Kept		Released		Estimated mortality (50%)		Large	Nonlarge	Large	Nonlarge
					Large	Non-large	Large	Nonlarge	Large	Nonlarge				
19					60	4							60	4
20					170	8							170	8
21					203	9							203	9
22					216	20							216	20
23					176	13							176	13
24					328	42		3	0	2	2	5	330	47
25					211	44		1	0	0	6	3	217	47
26													0	0
27													0	0
28													0	0
29	1	0	2	0									3	0
30	1	0	0	0									1	0
31	0	0	0	1									0	1
32	0	0	0	0									0	0
33	0	0	1	0									1	0
34	0	0	0	0									0	0
35	0	0	0	0									0	0
36	0	0											0	0
37	0	0											0	0
38	0	0											0	0
39	0	0											0	0
40	0	0											0	0
41	0	0											0	0
42	0	0											0	0
Total	2	0	3	1	1,364	140	0	4	0	2	8	8	1,377	149

### Appendix A. 4. Weekly harvest of sockeye salmon in the Alaskan District 106 and 108 fisheries, 2010.

SW	Subsistence	D106 Total	D106-30	D106-41/42	D108
24	1				
25	23	2,220	504	1,716	
26	154	6,566	1,057	5,509	3,803
27	504	11,193	4,218	6,975	10,888
28	420	17,713	6,129	11,584	7,196
29	398	15,348	8,331	7,017	4,854
30	97	16,454	6,994	9,460	3,013
31	22	16,528	11,115	5,413	1,590
32	0	9,105	4,993	4,112	691
33	2	9,199	5,561	3,638	329
34	29	5,494	3071	2423	254
35	0	1,666	817	849	81
36	3	605	412	193	25
37		317	121	196	9
38		35	17	18	4
39		7	5	2	0
40		0	0	0	0
41		0	0	0	0
42		0	0	0	0
Total	1,653	112,450	53,345	59,105	32,737



Appendix A. 5. Weekly stock proportions of sockeye salmon harvested in the Alaskan D106 commercial drift gillnet fishery, 2010.

Estimates based on scale pattern analysis and ololith data.

SW	Stikine							
	Alaska	Canada	All Tahltan	Tuya	Mainstem	Total	Tahltan Enhance	WildTahltan
25	0.534	0.176	0.161	0.104	0.025	0.290	0.060	0.101
26	0.441	0.202	0.129	0.220	0.007	0.356	0.077	0.052
27	0.537	0.167	0.110	0.177	0.008	0.295	0.062	0.048
28	0.622	0.161	0.102	0.072	0.043	0.217	0.027	0.075
29	0.751	0.163	0.032	0.011	0.044	0.086	0.014	0.018
30	0.821	0.102	0.030	0.024	0.022	0.077	0.005	0.025
31	0.806	0.185	0.000	0.002	0.007	0.009	0.000	0.000
32	0.725	0.247	0.000	0.018	0.010	0.028	0.003	-0.003
33	0.674	0.293	0.000	0.007	0.025	0.032	0.000	0.000
34	0.671	0.271	0.000	0.003	0.055	0.057	0.000	0.000
35	0.665	0.272	0.000	0.003	0.060	0.063	0.000	0.000
36	0.683	0.270	0.000	0.002	0.045	0.048	0.000	0.000
37	0.655	0.273	0.000	0.004	0.068	0.072	0.000	0.000
38	0.665	0.272	0.000	0.003	0.060	0.063	0.000	0.000
39	0.686	0.270	0.000	0.002	0.043	0.045	0.000	0.000
40								
Total	0.691	0.185	0.047	0.051	0.026	0.123	0.019	0.027
25	1,185	391	357	231	56	644	134	224
26	2,897	1,329	848	1,443	49	2,340	506	342
27	6,015	1,873	1,235	1,986	84	3,305	698	536
28	11,023	2,854	1,804	1,273	759	3,836	481	1,323
29	11,523	2,502	492	162	668	1,322	211	282
30	13,506	1,685	495	399	369	1,263	87	408
31	13,321	3,053	0	33	121	154	0	0
32	6,603	2,251	0	161	90	251	25	-25
33	6,202	2,700	0	63	234	297	0	0
34	3,689	1,490	0	16	300	315	0	0
35	1,108	453	0	6	99	105	0	0
36	413	163	0	1	27	29	0	0
37	208	87	0	1	21	23	0	0
38	23	10	0	0	2	2	0	0
39	5	2	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0
Total	77,721	20,842	5,231	5,775	2,882	13,887	2,140	3,091

Appendix A. 6. Weekly stock proportions of sockeye salmon harvested in the Alaskan Subdistrict 106-41/42 (Sumner Strait) commercial drift gillnet fishery, 2010.

Estimates based on scale pattern analysis and ololith data.								
SW	Stikine							
	Alaska	Canada	All Tahltan	Tuya	Mainstem	Total	Tahltan Enhance	WildTahltan
25	0.467	0.171	0.207	0.124	0.031	0.363	0.077	0.130
26	0.384	0.199	0.154	0.254	0.009	0.417	0.092	0.062
27	0.365	0.205	0.145	0.276	0.010	0.430	0.091	0.054
28	0.471	0.214	0.154	0.098	0.063	0.315	0.039	0.114
29	0.623	0.233	0.070	0.023	0.051	0.144	0.030	0.040
30	0.802	0.093	0.051	0.019	0.034	0.104	0.008	0.043
31	0.786	0.204	0.000	0.006	0.004	0.010	0.000	0.000
32	0.664	0.306	0.000	0.024	0.006	0.030	0.006	-0.006
33	0.671	0.288	0.000	0.008	0.033	0.041	0.000	0.000
34	0.620	0.277	0.000	0.006	0.096	0.103	0.000	0.000
35	0.620	0.277	0.000	0.006	0.096	0.103	0.000	0.000
36	0.620	0.277	0.000	0.006	0.096	0.103	0.000	0.000
37	0.620	0.277	0.000	0.006	0.096	0.103	0.000	0.000
38	0.620	0.277	0.000	0.006	0.096	0.103	0.000	0.000
39	0.620	0.277	0.000	0.006	0.096	0.103	0.000	0.000
40	0.620	0.277	0.000	0.006	0.096	0.103	0.000	0.000
Total	0.585	0.207	0.084	0.088	0.036	0.208	0.034	0.049
25	801	293	355	214	53	622	132	224
26	2,116	1,097	848	1,399	49	2,296	506	342
27	2,543	1,430	1,009	1,927	66	3,003	636	374
28	5,452	2,481	1,778	1,140	732	3,651	455	1,323
29	4,369	1,638	489	162	359	1,010	211	278
30	7,590	884	480	182	325	987	71	408
31	4,254	1,104	0	33	22	55	0	0
32	2,729	1,258	0	100	25	125	25	-25
33	2,440	1,049	0	30	119	148	0	0
34	1,503	671	0	16	233	249	0	0
35	527	235	0	6	82	87	0	0
36	120	53	0	1	19	20	0	0
37	122	54	0	1	19	20	0	0
38	11	5	0	0	2	2	0	0
39	1	1	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0
Total	34,578	12,253	4,959	5,210	2,105	12,274	2,035	2,924

Appendix A. 7. Weekly stock proportions of sockeye salmon harvested in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 2010.

Estimates based on scale pattern analysis and otolith data.

SW	Alaska	Canada	Stikine					
			All Tahltan	Tuya	Mainstem	Total	Tahltan Enhance	WildTahltan
25	0.763	0.194	0.004	0.035	0.004	0.043	0.004	0.000
26	0.739	0.220	0.000	0.041	0.000	0.041	0.000	0.000
27	0.823	0.105	0.053	0.014	0.004	0.072	0.015	0.039
28	0.909	0.061	0.004	0.022	0.004	0.030	0.004	0.000
29	0.859	0.104	0.000	0.000	0.037	0.037	0.000	0.000
30	0.846	0.115	0.002	0.031	0.006	0.040	0.002	0.000
31	0.816	0.175	0.000	0.000	0.009	0.009	0.000	0.000
32	0.776	0.199	0.000	0.012	0.013	0.025	0.000	0.000
33	0.676	0.297	0.000	0.006	0.021	0.027	0.000	0.000
34	0.712	0.267	0.000	0.000	0.022	0.022	0.000	0.000
35	0.712	0.267	0.000	0.000	0.022	0.022	0.000	0.000
36	0.712	0.267	0.000	0.000	0.022	0.022	0.000	0.000
37	0.712	0.267	0.000	0.000	0.022	0.022	0.000	0.000
38	0.712	0.267	0.000	0.000	0.022	0.022	0.000	0.000
39	0.712	0.267	0.000	0.000	0.022	0.022	0.000	0.000
40	0.712	0.267	0.000	0.000	0.022	0.022	0.000	0.000
Total	0.809	0.161	0.005	0.011	0.015	0.030	0.002	0.003
25	385	98	2	18	2	22	2	0
26	781	232	0	44	0	44	0	0
27	3,472	443	225	59	18	302	62	163
28	5,571	373	25	133	27	185	25	0
29	7,154	864	4	0	309	312	0	4
30	5,916	801	16	217	44	277	16	0
31	9,066	1,949	0	0	99	99	0	0
32	3,874	993	0	61	65	126	0	0
33	3,762	1,650	0	33	116	149	0	0
34	2,185	819	0	0	67	67	0	0
35	581	218	0	0	18	18	0	0
36	293	110	0	0	9	9	0	0
37	86	32	0	0	3	3	0	0
38	12	5	0	0	0	0	0	0
39	4	1	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0
Total	43,143	8,588	272	565	776	1,613	105	167

Appendix A. 8. Weekly stock proportions sockeye salmon harvested in the Alaskan District 108 commercial drift gillnet fishery, 2010.

Estimates based on scale pattern analysis and otolith data.

SW	Stikine							
	Alaska	Canada	All Tahltan	Tuya	Mainstem	Total	Tahltan Enhance	WildTahltan
25	0.000	0.000	0.000	0.000	0.000	0.000		0.000
26	0.152	0.100	0.512	0.132	0.103	0.747	0.228	0.284
27	0.110	0.046	0.495	0.229	0.120	0.845	0.183	0.313
28	0.124	0.183	0.278	0.233	0.181	0.693	0.168	0.110
29	0.166	0.042	0.299	0.147	0.345	0.791	0.084	0.215
30	0.236	0.033	0.219	0.121	0.391	0.731	0.045	0.174
31	0.220	0.058	0.096	0.028	0.598	0.722	0.026	0.070
32	0.237	0.089	0.042	0.005	0.627	0.674	0.014	0.028
33	0.299	0.089	0.016	0.004	0.592	0.612	0.009	0.007
34	0.292	0.111	0.016	0.010	0.570	0.596	0.016	0.000
35	0.292	0.111	0.016	0.010	0.570	0.596	0.016	0.000
36	0.292	0.111	0.016	0.010	0.570	0.596	0.016	0.000
37	0.292	0.111	0.016	0.010	0.570	0.596	0.000	0.016
38	0.292	0.111	0.016	0.010	0.570	0.596	0.000	0.016
39	0.292	0.111	0.016	0.010	0.570	0.596	0.000	0.016
40	0.292	0.111	0.016	0.010	0.570	0.596	0.000	0.016
Total	0.150	0.083	0.356	0.178	0.234	0.767	0.143	0.213
25								
26	580	381	1,948	502	392	2,842	867	1,081
27	1,194	497	5,394	2,494	1,309	9,196	1,991	3,403
28	892	1,319	2,001	1,679	1,305	4,985	1,207	795
29	807	206	1,451	716	1,675	3,841	407	1,044
30	712	98	658	366	1,179	2,203	135	524
31	349	92	152	45	951	1,148	41	111
32	164	61	29	4	433	466	9	20
33	98	29	5	1	195	201	3	2
34	74	28	4	2	145	151	4	0
35	24	9	1	1	46	48	1	0
36	7	3	0	0	14	15	0	0
37	3	1	0	0	5	5	0	0
38	1	0	0	0	2	2	0	0
39	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0
Total	4,906	2,725	11,645	5,811	7,651	25,106	4,665	6,980

Appendix A. 9. Weekly sockeye salmon harvest and effort in the Canadian commercial and assessment fisheries in the lower Stikine River, 2010.

SW	LRCF				URCF	Telegraph	Drift Net Test		Set Net Test		Commercial License		Test	Commercial
	Harvest	Permits	Days	Permit days		Aboriginal	harvest	# drifts	harvest	hours	harvest	permits	Total	Total
19				0.0							0	12	0	0
20				0.0							0	12	0	0
21				0.0		0					0	12	0	0
22				0.0		2					0	12	0	2
23				0.0		0					0	12	0	0
24				0.0		7					0	12	0	7
25				0.0		13					3	12	3	13
26	1,835	12.0	2.0	24.0		96							0	1931
27	11,479	12.0	4.0	48.0	12	269							0	11760
28	9,175	12.0	3.0	36.0	273	1,896							0	11344
29	10,324	12.0	4.0	48.0	204	2,887	73	28	299	36			372	13415
30	4,744	12.0	2.0	24.0	726	1,014	77	42	397	84			474	6484
31	1,855	12.0	2.0	24.0		907	80	41	415	72			495	2762
32	1,554	12.0	2.0	24.0		130	20	42	53	60			73	1684
33	727	12.0	1.3	15.0		55	31	42	184	72			215	782
34	168	12.0	1.0	12.0			15	56	51	72			66	168
35	123	12.0	2.0	24.0			4	56	51	72			55	123
36	60	5.0	7.0	35.0			4	70					4	60
37	5	5.0	7.0	35.0			0	84					0	5
38							0	77					0	0
39							0	84					0	0
40							0	84					0	0
41							0	84					0	0
42							0	70					0	0
Total	42,049		37	349	1,215	7,276	304	860	1,450	468	3	84	1,757	50,540

## Appendix A. 10. Weekly sockeye salmon stock proportions and harvest by stock in the Canadian commercial fishery in the lower Stikine River, 2010.

Sexspecific age compositions were calculated and the stock composition of the females sampled for egg diameters was expanded to the harvest by age.

SW	Porportion					Harvest				
	Small Egg	AllTahltan	Tuya	Mainstem	TahltanEnhance	AllTahltan	Tuya	Mainstem	WildTahltan	TahltanEnhance
19										
20										
21										
22										
23										
24										
25	0.944	0.625	0.306	0.069	0.219	0	0	0	0	0
26	0.944	0.625	0.306	0.069	0.254	1,147	562	126	681	467
27	0.972	0.559	0.400	0.042	0.237	6,412	4,588	479	3,686	2,726
28	0.982	0.549	0.425	0.026	0.102	5,039	3,895	241	4,102	937
29	0.891	0.492	0.393	0.115	0.070	5,081	4,059	1,184	4,356	725
30	0.525	0.202	0.307	0.491	0.040	958	1,456	2,331	766	192
31	0.453	0.206	0.178	0.615	0.019	383	331	1,141	347	36
32	0.078	0.048	0.039	0.913	0.019	74	61	1,419	44	30
33	0.096	0.087	0.012	0.901	0.020	63	9	655	49	14
34	0.128	0.087	0.014	0.899	0.000	15	2	151	15	0
35	0.119	0.087	0.014	0.899	0.000	11	2	111	11	0
36	0.050	0.037	0.006	0.958	0.000	2	0	57	2	0
37	0.000	0.000	0.000	1.000	0.000	0	0	5	0	0
Total						19,185	14,965	7,899	14,059	5,126
Proportion						0.456	0.356	0.188	0.334	0.122
	Harvest/Effort below Porcupine					CPUE				
Week	Small Egg	Permit Day	Total	Small Egg	AllTahltan	Tuya	Mainstem	WildTahltan	TahltanEnhance	
19										
20										
21										
22										
23										
24										
25										
26	1,835	24.0	76.458	72.211	47.797	23.420	5.241	28.354	19.443	
27	11,479	48.0	239.146	232.441	133.583	95.583	9.979	76.788	56.796	
28	9,175	36.0	254.861	250.337	139.972	108.194	6.694	113.953	26.019	
29	10,324	48.0	215.083	191.620	105.854	84.563	24.667	90.760	15.094	
30	4,744	24.0	197.667	103.859	39.908	60.654	97.105	31.916	7.992	
31	1,855	24.0	77.292	35.012	15.958	13.792	47.542	14.465	1.493	
32	1,554	24.0	64.750	5.059	3.085	2.543	59.121	1.838	1.247	
33	727	15.0	48.467	4.671	4.200	0.600	43.667	3.247	0.953	
34	168	12.0	14.000	1.787	1.219	0.197	12.584	1.219	0.000	
35	123	24.0	5.125	0.610	0.446	0.072	4.607	0.446	0.000	
36	60	35.0	1.714	0.086	0.063	0.010	1.641	0.063	0.000	
37	5	35.0	0.143	0.000	0.000	0.000	0.143	0.000	0.000	
Total	42,049	349	1194.71	897.69	492.09	389.63	312.99	363.05	129.04	
Proportion				0.751	0.412	0.326	0.262	0.304	0.108	

Appendix A. 11. Harvest by stock and week for sockeye salmon in the Canadian upper river commercial and Aboriginal fisheries in the Stikine River, 2010.

If no fishery, commercial harvest from comparable week was used.					
Stock					
SW	All Tahltan	Tuya	Mainstem	WildTahltan	TahltanEnhance
Proportion by stock for upper river fisheries					
22	0.512	0.238	0.250	0.369	0.143
23	0.512	0.238	0.250	0.369	0.143
24	0.512	0.238	0.250	0.369	0.143
25	0.512	0.238	0.250	0.369	0.143
26	0.512	0.238	0.250	0.369	0.143
27	0.598	0.362	0.040	0.339	0.259
28	0.510	0.469	0.021	0.335	0.175
29	0.588	0.400	0.012	0.321	0.267
30	0.579	0.421	0.000	0.355	0.224
31	0.655	0.345	0.000	0.420	0.235
32	0.454	0.471	0.075	0.297	0.157
33	0.343	0.612	0.045	0.261	0.082
34	0.343	0.612	0.045	-0.739	1.082
<b>Total</b>					
Harvest by stock for upper river commercial fishery					
27	7	4	0	4	3
28	139	128	6	91	48
29	120	82	2	65	54
30	420	306	0	258	163
<b>Total</b>	<b>687</b>	<b>520</b>	<b>9</b>	<b>419</b>	<b>268</b>
Harvest by stock for Telegraph Aboriginal fishery					
22	1	0	1	1	0
23	0	0	0	0	0
24	4	2	2	3	1
25	7	3	3	5	2
26	49	23	24	35	14
27	161	97	11	91	70
28	967	889	40	635	332
29	1,698	1,155	35	927	771
30	587	427	0	360	227
31	594	313	0	381	213
32	59	61	10	39	20
33	19	34	2	14	5
34	0	0	0	0	0
35	0	0	0	0	0
<b>Total</b>	<b>4,145</b>	<b>3,004</b>	<b>127</b>	<b>2,490</b>	<b>1,654</b>

## Appendix A. 12. Weekly harvest, CPUE, and migratory timing of Tahltan, Tuya, and mainstem sockeye salmon stocks in the Stikine test fishery, 2010.

Sex specific age compositions were and the stock composition of the females sampled for egg diameters was expanded to the harvest by age.  
 If no fishery, a proxy in SW 25-27 was based on the rate of change from the LRCF.

Week	small egg	Proportions				Harvest				CPUE				Migratory Timing		
		AllTahltan	Tuya	Mainstem	TahltanEnhance	AllTahltan	Tuya	Mainstem	TahltanEnhance	AllTahltan	Tuya	Mainstem	Total	AllTahltan	Tuya	Mainstem
Drift gillnet																
25		0.625	0.306	0.069						0.283	0.138	0.031	0.452	0.018	0.009	0.002
26		0.625	0.306	0.069						0.579	0.284	0.064	0.927	0.038	0.018	0.004
27		0.559	0.400	0.042						1.619	1.159	0.121	2.899	0.105	0.075	0.008
28		0.549	0.425	0.026						1.697	1.311	0.081	3.089	0.110	0.085	0.005
29	0.630	0.473	0.210	0.317	0.194	36	16	24	15	1.233	0.548	0.826	2.607	0.080	0.036	0.054
30	0.569	0.365	0.122	0.513	0.110	28	9	40	8	0.669	0.224	0.941	1.833	0.044	0.015	0.061
31	0.195	0.183	0.079	0.738	0.077	15	6	59	6	0.357	0.154	1.440	1.951	0.023	0.010	0.094
32	0.189	0.041	0.082	0.877	0.000	1	2	18	0	0.020	0.039	0.418	0.476	0.001	0.003	0.027
33	0.047	0.042	0.028	0.930	0.000	1	1	29	0	0.031	0.021	0.686	0.738	0.002	0.001	0.045
34	0.119	0.000	0.031	0.969	0.000	0	0	15	0	0.000	0.008	0.260	0.268	0.000	0.001	0.017
35	0.070	0.000	0.000	1.000	0.000	0	0	4	0	0.000	0.000	0.071	0.071	0.000	0.000	0.005
36		0.000	0.000	1.000	0.000	0	0	4	0	0.000	0.000	0.057	0.057	0.000	0.000	0.004
Total						81	35	192	29	6.488	3.886	4.996	15.369			
Proportion						0.263	0.113	0.624						0.422	0.253	0.325
Set gillnet																
28																
29		0.473	0.210	0.317	0.000	141	63	95	0	3.929	1.744	2.633	8.306	0.166	0.074	0.111
30		0.365	0.122	0.513	0.110	145	48	204	44	1.725	0.577	2.425	4.726	0.073	0.024	0.103
31		0.183	0.079	0.738	0.077	76	33	306	32	1.055	0.455	4.254	5.764	0.045	0.019	0.180
32		0.041	0.082	0.877	0.000	2	4	46	0	0.036	0.072	0.775	0.883	0.002	0.003	0.033
33		0.042	0.028	0.930	0.000	8	5	171	0	0.107	0.072	2.377	2.556	0.005	0.003	0.100
34		0.000	0.031	0.969	0.000	0	2	49	0	0.000	0.022	0.686	0.708	0.000	0.001	0.029
35		0.000	0.000	1.000	0.000	0	0	51	0	0.000	0.000	0.708	0.708	0.000	0.000	0.030
36		0.000	0.000	1.000	0.000	0	0	0	0							
Total						372	155	923	75	6.852	2.942	13.857	23.651			
Proportion						0.257	0.107	0.636						0.290	0.124	0.586
Total Test Fishery Harvest																
28																
29		0.473	0.210	0.317	0.000	177	79	119	15							
30		0.365	0.122	0.513	0.110	173	58	243	52							
31		0.183	0.079	0.738	0.077	91	39	365	38							
32		0.041	0.082	0.877	0.000	3	6	64	0							
33		0.042	0.028	0.930	0.000	9	6	200	0							
34		0.000	0.031	0.969	0.000	0	2	64	0							
35		0.000	0.000	1.000	0.000	0	0	55	0							
36		0.000	0.000	1.000	0.000	0	0	4	0							
Total						453	190	1,114	105							
Proportion						0.258	0.108	0.634	0.060							
AllTahltan harvest																
24																
25		0.625		0.000	0.625											
26		0.625		0.000	0.625											
27		0.559		0.000	0.559											
28		0.549		0.000	0.549											
29		0.473		0.194	0.279											
30		0.365		0.110	0.255											
31		0.183		0.077	0.106											
32		0.041		0.000	0.041											
33		0.042		0.000	0.042											
34		0.000		0.000	0.000											
35		0.000		0.000	0.000											
36		0.000		0.000	0.000											

## Appendix A. 13. Daily test harvest taken from the Tuya Assessment Fishery located above the Tahltan River, July 2010.

Date	Harvest	Proportions				Stock specific harvest			
		All Tahltan	Tuya	Mainstem	TahltanEnhance	All Tahltan	Tuya	Mainstem	TahltanEnhance
7/21	266	0.409	0.551	0.041	0.145	109	146	11	38
7/22	372	0.575	0.425	0.000	0.210	214	158	0	78
7/23	337	0.290	0.653	0.057	0.120	98	220	19	40
7/24	253	0.350	0.590	0.060	0.130	89	149	15	33
7/25	203	0.274	0.665	0.061	0.110	56	135	12	22
7/26	317	0.317	0.563	0.120	0.218	101	179	38	69
7/27	362	0.541	0.379	0.080	0.280	196	137	29	101
7/28	337	0.427	0.496	0.077	0.235	144	167	26	79
7/29	345	0.542	0.397	0.061	0.198	187	137	21	68
Total	2,792	0.427	0.512	0.061	0.190	1,192	1,429	171	530



Appendix A. 14. Weekly coho salmon harvest in the Alaskan District 106 and 108 fisheries, 2010.

SW	D106					D108			Subsistence harvest
	Hatchery	Wild	Total	106-41/42	106-30	Hatchery	Wild	Total	
25	4,110	2,285	6,395	4,951	1,444	1,701	-354	1,347	0
26	9,809	4,118	13,927	8,634	5,293	1,718	945	2,663	0
27	12,357	9,853	22,210	7,921	14,289	742	381	1,123	0
28	10,466	2,819	13,285	6,912	6,373	608	614	1,222	0
29	4,295	4,515	8,810	2,913	5,897	310	737	1,047	11
30	1,909	4,108	6,017	2,840	3,177	131	449	580	2
31	882	5,738	6,620	2,821	3,799	44	913	957	0
32	898	8,440	9,338	5,384	3,954	126	1,374	1,500	0
33	563	11,589	12,152	6,037	6,115	83	2,298	2,381	14
34	1,565	10,660	12,225	5,782	6,473	171	2,857	3,028	15
35	2,460	8,417	10,877	7,151	3,726	115	3,645	3,760	0
36	8,033	11,902	19,935	13,089	6,846	73	5,880	5,953	6
37	13,504	18,800	32,304	15,780	16,524	3,630	3,344	6,974	30
38	19,347	13,364	32,711	15,461	17,250	5,651	1,770	7,421	52
39	5,761	7,109	12,870	5,560	7,310	2,055	322	2,377	5
40-42	4,449	1,395	5,844	5,434	410	263	176	439	0
Total	100,408	125,112	225,520	116,670	108,880	17,421	25,351	42,772	135

Appendix A. 15. Weekly harvest of coho salmon in the Canadian lower river commercial fishery and test fisheries 2010.

	LRCF	Assesment/Test			Total
		Drift	Set	Additional	
19	0				
20	0				
21	0				
22	0				
23	0				
24	0				
25	0				
26	0				
27	0				
28	1				1
29	1	0	0		1
30	3	0	6		9
31	12	1	9		22
32	26	1	6		33
33	109	16	54		179
34	197	32	89		318
35	750	53	89		892
36	2,013	41			
37	2,189	111			
38		84			
39		64			
40		52			
41		24			
42		9			
Total	5,301	488	253	0	1,455

Appendix A. 16. Weekly salmon effort in the Alaskan District 106 and 108 fisheries, 2010.

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.

SW	Start Date	D106			106-41/42			106-30			D108			Subsistence Permits
		Permits	Days	Permit Days	Permits	Days	Permit Days	Permits	Days	Permit Days	Permits	Days	Permit Days	
25	13-Jun	73	2.0	146	57	2	114	16	2.0	32				0
26	20-Jun	65	3.0	195	52	3	156	15	3.0	45	40	3.0	120	
27	27-Jun	88	3.0	264	49	3	147	42	3.0	126	69	4.0	173	
28	4-Jul	48	3.0	144	27	3	81	21	3.0	63	32	3.0	96	
29	11-Jul	55	2.0	110	30	2	60	30	2.0	60	54	3.0	86	
30	18-Jul	58	2.0	116	34	2	68	25	2.0	50	41	2.0	82	
31	25-Jul	64	2.0	128	36	2	72	30	2.0	60	41	2.0	82	
32	1-Aug	78	2.0	156	38	2	76	42	2.0	84	23	2.0	46	
33	8-Aug	105	3.0	315	53	3	159	62	3.0	186	25	3.0	75	
34	15-Aug	88	3.0	264	48	3	144	48	3.0	144	23	3.0	69	
35	22-Aug	80	3.0	240	50	3	150	33	3.0	99	35	3.0	105	
36	29-Aug	85	3.0	255	59	3	177	27	3.0	81	33	3.0	99	
37	5-Sep	103	3.0	309	59	3	177	45	3.0	135	35	3.0	105	
38	12-Sep	97	3.0	291	51	3	153	49	3.0	147	33	3.0	99	
39	19-Sep	69	2.0	138	38	2	76	31	2.0	62	30	2.0	60	
40	26-Sep	16	3.0	48	14	3	42	2	3.0	6	20	3.0	60	
41	3-Oct	13	3.0	39	10	3	30	3	3.0	9	7	3.0	21	
42	10-Oct	2	2.0	4	2	2	4	0	2.0	0		2.0	0	
Total			47	3,162		47	1,886		47	1,389		47	1,378	107

Appendix A. 17. Weekly salmon effort in the Canadian fisheries in the Stikine River, 2010.

SW	Start Date	Lower Stikine			Upper Stikine			Telegraph Aboriginal			Test	
		Permits	Days	Permit Days	Permits	Days	Permit Days	Permits	Days	Permit Days	# Drifts	Set hours
19	2-May	12.00	0.5	6								
20	9-May	12.00	2.2	26								
21	16-May	12.00	2.0	24				2.00	4.0	8		
22	23-May	12.00	1.0	12				4.00	7.0	28		
23	30-May	12.00	1.0	12				1.86	7.0	13		
24	6-Jun	12.00	0.6	7				4.71	7.0	33		
25	13-Jun	12.00	0.6	7				4.57	7.0	32		
26	20-Jun	12.00	2.0	24				5.00	7.0	35		
27	27-Jun	12.00	4.0	48	1	2	2	3.29	7.0	23		
28	4-Jul	12.00	3.0	36	1.0	3.0	3	13.14	7.0	92		
29	11-Jul	12.00	4.0	48	1.0	3.0	3	14.29	7.0	100	28	36
30	18-Jul	12.00	2.0	24	1.8	4.0	7	7.29	7.0	51	42	84
31	25-Jul	12.00	2.0	24				7.14	7.0	50	41	72
32	1-Aug	12.00	2.0	24				2.33	3.0	7	42	60
33	8-Aug	12.00	1.3	16				1.00	4.0	4	42	72
34	15-Aug	12.00	1.0	12							56	72
35	22-Aug	12.00	2.0	24							56	72
36	29-Aug	5.00	7.0	35							70	
37	5-Sep	5.00	7.0	35							84	
38	12-Sep			0							77	
39	19-Sep			0							84	
40	26-Sep			0							84	
41	3-Oct			0							84	
42	10-Oct			0							70	
Total			45.2	444.4		12.0	15.2		81.0	476.0	860	468

Appendix A. 18. Tuya assessment fishery, 2010.

<u>Date</u>	<u>Total nets</u>
7/21	266
7/22	372
7/23	337
7/24	253
7/25	203
7/26	317
7/27	362
7/28	337
7/29	345
<u>Total</u>	<u>2,792</u>

Appendix A. 19. Daily counts of adult sockeye salmon passing through Tahltan Lake weir, 2010.

Date	Count <sup>a</sup>	Cumulative		Date	Count	Cumulative	
		Count	Percent			Count	Percent
7-Jul	Installed			13-Aug	286	21,064	92.14%
8-Jul	0	0	0.00%	14-Aug	217	21,281	93.09%
9-Jul	0	0	0.00%	15-Aug	178	21,459	93.87%
10-Jul	1,399	1,399	6.12%	16-Aug	87	21,546	94.25%
11-Jul	1,008	2,407	10.53%	17-Aug	56	21,602	94.50%
12-Jul	869	3,276	14.33%	18-Aug	55	21,657	94.74%
13-Jul	486	3,762	16.46%	19-Aug	27	21,684	94.86%
14-Jul	1,087	4,849	21.21%	20-Aug	40	21,724	95.03%
15-Jul	519	5,368	23.48%	21-Aug	19	21,743	95.11%
16-Jul	12	5,380	23.53%	22-Aug	72	21,815	95.43%
17-Jul	1,104	6,484	28.36%	23-Aug	99	21,914	95.86%
18-Jul	558	7,042	30.80%	24-Aug	84	21,998	96.23%
19-Jul	111	7,153	31.29%	25-Aug	370	22,368	97.85%
20-Jul	217	7,370	32.24%	26-Aug	308	22,676	99.20%
21-Jul	121	7,491	32.77%	27-Aug	137	22,813	99.79%
22-Jul	516	8,007	35.03%	28-Aug	24	22,837	99.90%
23-Jul	81	8,088	35.38%	29-Aug	4	22,841	99.92%
24-Jul	711	8,799	38.49%	30-Aug	8	22,849	99.95%
25-Jul	921	9,720	42.52%	31-Aug	0	22,849	99.95%
26-Jul	379	10,099	44.18%	1-Sep	0	22,849	99.95%
27-Jul	850	10,949	47.90%	2-Sep	2	22,851	99.96%
28-Jul	293	11,242	49.18%	3-Sep	1	22,852	99.97%
29-Jul	1,058	12,300	53.81%	4-Sep	3	22,855	99.98%
30-Jul	2,593	14,893	65.15%	5-Sep	0	22,855	99.98%
31-Jul	1,556	16,449	71.96%	6-Sep	5	22,860	100.00%
1-Aug	933	17,382	76.04%	7-Sep	0		
2-Aug	141	17,523	76.65%	8-Sep	0		
3-Aug	133	17,656	77.24%	9-Sep	0		
4-Aug	918	18,574	81.25%	10-Sep	0		
5-Aug	1,041	19,615	85.80%	11-Sep	0		
6-Aug	329	19,944	87.24%	12-Sep	0		
7-Aug	119	20,063	87.76%	13-Sep	0		
8-Aug	105	20,168	88.22%	14-Sep	0		
9-Aug	173	20,341	88.98%	15-Sep	Pulled		
10-Aug	24	20,365	89.09%				
11-Aug	23	20,388	89.19%				
12-Aug	390	20,778	90.89%				
		% hatchery contr		Hatchery <sup>a</sup>		Wild	Total
Total Counted				9,670		13,190	22,860
Fish removed for broodstock		0.403		1,807		2,677	4,484
Fish removed for otolith samples		0.468		74		84	158
Total Spawners				7,789		10,429	

<sup>a</sup> Thermal mark contribution from pooled brood stock and weir sample otolith results for total count 42.3%; actual otoliths result used for broodstock 40.3% and fish removal from weir 46.8%.

Appendix A. 20. Daily counts of sockeye salmon smolt migrating through Tahltan Lake smolt weir, 2010.

Date	Count	Cumulative		Date	Count	Cumulative	
		Count	Percent			Count	Percent
6-May	0	0	0.00%	6-Jun	5,577	499,808	89.65%
7-May	0	0	0.00%	7-Jun	6,062	505,870	90.73%
8-May	0	0	0.00%	8-Jun	762	506,632	90.87%
9-May	0	0	0.00%	9-Jun	7,335	513,967	92.19%
10-May	575	575	0.10%	10-Jun	38,075	552,042	99.02%
11-May	1,176	1,751	0.31%	11-Jun	3,011	555,053	99.56%
12-May	2,171	3,922	0.70%	12-Jun	1,616	556,669	99.85%
13-May	12,849	16,771	3.01%	13-Jun	411	557,080	99.92%
14-May	318	17,089	3.07%	14-Jun	181	557,261	99.95%
15-May	165	17,254	3.09%	15-Jun	271	557,532	100.00%
16-May	3,692	20,946	3.76%				
17-May	162,249	183,195	32.86%				
18-May	863	184,058	33.01%				
19-May	615	184,673	33.12%				
20-May	274	184,947	33.17%				
21-May	56,564	241,511	43.32%				
22-May	358	241,869	43.38%				
23-May	67,178	309,047	55.43%				
24-May	43,986	353,033	63.32%				
25-May	1,471	354,504	63.58%				
26-May	34,578	389,082	69.79%				
27-May	3,910	392,992	70.49%				
28-May	779	393,771	70.63%				
29-May	918	394,689	70.79%				
30-May	32,976	427,665	76.71%				
31-May	2,118	429,783	77.09%				
1-Jun	30,228	460,011	82.51%				
2-Jun	2,882	462,893	83.03%				
3-Jun	13,755	476,648	85.49%				
4-Jun	16,384	493,032	88.43%	Wild	306,344		
5-Jun	1,199	494,231	88.65%	Hatchery	251,188		
Total					557,532		

Appendix A. 21. Daily counts of adult Chinook salmon passing through Little Tahltan weir, 2010.

Date	Large Chinook			nonlarge Chinook		
	Count	Cumulative		Count	Cumulative	
		Count	Percent		Count	Percent
19-Jun	Installed					
20-Jun	0	0	0.00%	0	0	0.00%
21-Jun	0	0	0.00%	0	0	0.00%
22-Jun	3	3	0.28%	0	0	0.00%
23-Jun	0	3	0.28%	0	0	0.00%
24-Jun	0	3	0.28%	0	0	0.00%
25-Jun	19	22	2.08%	0	0	0.00%
26-Jun	11	33	3.12%	0	0	0.00%
27-Jun	7	40	3.78%	0	0	0.00%
28-Jun	0	40	3.78%	0	0	0.00%
29-Jun	0	40	3.78%	0	0	0.00%
30-Jun	0	40	3.78%	0	0	0.00%
1-Jul	0	40	3.78%	0	0	0.00%
2-Jul	0	40	3.78%	0	0	0.00%
3-Jul	0	40	3.78%	0	0	0.00%
4-Jul	0	40	3.78%	0	0	0.00%
5-Jul	0	40	3.78%	0	0	0.00%
6-Jul	0	40	3.78%	0	0	0.00%
7-Jul	86	126	11.92%	7	7	0.66%
8-Jul	4	130	12.30%	2	9	0.85%
9-Jul	3	133	12.58%	0	9	0.85%
10-Jul	12	145	13.72%	2	11	1.04%
11-Jul	6	151	14.29%	0	11	1.04%
12-Jul	0	151	14.29%	0	11	1.04%
13-Jul	1	152	14.38%	0	11	1.04%
14-Jul	1	153	14.47%	0	11	1.04%
15-Jul	2	155	14.66%	0	11	1.04%
16-Jul	3	158	14.95%	2	13	1.23%
17-Jul	0	158	14.95%	0	13	1.23%
18-Jul	23	181	17.12%	7	20	1.89%
19-Jul	106	287	27.15%	18	38	3.60%
20-Jul	86	373	35.29%	7	45	4.26%
21-Jul	93	466	44.09%	9	54	5.11%
22-Jul	19	485	45.88%	4	58	5.49%
23-Jul	43	528	49.95%	13	71	6.72%
24-Jul	113	641	60.64%	16	87	8.23%
25-Jul	50	691	65.37%	14	101	9.56%
26-Jul	22	713	67.46%	10	111	10.50%
27-Jul	8	721	68.21%	12	123	11.64%
28-Jul	54	775	73.32%	25	148	14.00%
29-Jul	29	804	76.06%	9	157	14.85%
30-Jul	62	866	81.93%	9	166	15.70%
31-Jul	14	880	83.25%	9	175	16.56%
1-Aug	54	934	88.36%	13	188	17.79%
2-Aug	17	951	89.97%	5	193	18.26%
3-Aug	2	953	90.16%	2	195	18.45%
4-Aug	52	1,005	95.08%	11	206	19.49%
5-Aug	14	1,019	96.40%	3	209	19.77%
6-Aug	5	1,024	96.88%	4	213	20.15%
7-Aug	26	1,050	99.34%	5	218	20.62%
8-Aug	7	1,057	100.00%	3	221	20.91%
Total Counted	1,057			221		
Broodstock	0			0		
Escapement	1,057			221		

Appendix B. 1. Historic salmon harvest and effort in the Alaskan District 106 commercial gillnet fishery, 1960–2010.

Year	Harvest					Boats	Days		Effort
	Chinook	Sockeye	Coho	Pink	Chum		Open	Permit	Days
1960	46	10,354	336	1,246	502				
1961	416	20,614	14,934	124,236	64,479				
1962	1,308	47,033	42,276	256,620	59,119				
1963	1,560	80,767	52,103	514,596	90,103				
1964	2,082	76,541	64,654	443,086	44,218				
1965	1,802	87,749	75,728	625,848	27,658				
1966	1,665	89,847	62,823	400,932	40,756				
1967	1,318	86,385	17,670	91,609	26,370				
1968	1,316	64,671	67,151	169,107	61,366				
1969	877	70,484	10,305	198,785	10,930	613	31.0	2,111	
1970	782	42,809	35,188	95,173	32,245	586	41.0	1,863	
1971	1,336	53,262	48,085	528,737	37,682	897	50.0	2,773	
1972	2,548	101,958	92,283	89,510	72,389	1,090	42.0	3,320	
1973	1,961	72,025	38,447	304,536	87,704	1,244	26.0	3,299	
1974	1,929	57,498	45,595	104,596	50,402	1,216	28.0	2,178	
1975	2,587	32,099	30,962	203,031	24,047	856	17.0	1,648	
1976	386	15,493	19,126	139,641	6,868	375	22.0	827	
1977	671	67,394	8,389	422,955	13,311	449	28.0	1,381	
1978	2,682	41,574	55,578	224,715	16,545	791	26.5	1,509	
1979	2,720	66,373	31,454	648,212	35,507	1,162	25.0	2,702	
1980	580	107,422	16,666	45,662	26,291	591	25.0	1,324	
1981	1,565	182,001	22,614	437,573	34,296	1,160	26.0	2,925	
1982	1,648	193,801	31,584	25,533	18,646	831	23.0	1,699	
1983	567	48,842	62,442	208,290	20,144	728	32.0	1,452	
1984	892	91,653	41,359	343,255	70,303	763	32.0	1,814	
1985	1,687	264,987	91,188	584,953	69,673	1,196	32.0	2,672	
1986	1,704	145,709	194,912	308,484	82,289	1,530	32.0	3,509	
1987	836	136,427	34,534	243,482	42,025	982	20.0	1,766	
1988	1,104	92,529	13,103	69,559	69,620	830	19.0	1,494	
1989	1,544	192,734	92,385	1,101,194	67,351	1,253	34.0	3,221	
1990	2,108	185,805	164,235	319,186	73,232	1,476	34.0	3,501	
1991	2,055	144,104	198,160	133,566	124,630	1,554	39.0	3,620	
1992	1,355	203,155	298,935	94,248	140,468	1,543	40.0	4,229	
1993	992	205,955	231,038	537,960	134,601	1,772	38.0	4,352	
1994	754	211,048	267,862	179,994	176,026	1,593	43.0	4,467	
1995	951	207,298	170,561	448,163	300,078	1,517	34.0	3,656	
1996	644	311,100	223,640	188,035	283,290	1,661	46.0	5,289	
1997	1,075	168,518	77,550	789,051	186,456	1,357	39.0	3,667	
1998	518	113,435	273,197	502,655	332,022	1,586	43.0	4,397	
1999	518	104,835	203,301	491,179	448,409	1,609	49.0	4,854	
2000	1,220	90,076	96,207	156,619	199,836	1,016	33.0	2,408	
2001	1,138	164,013	188,465	825,447	283,462	1,291	50.0	3,853	
2002	446	56,135	226,560	82,951	112,541	1,009	47.0	2,683	
2003	422	116,904	212,057	470,697	300,253	1,095	59.0	3,803	
2004	2,735	116,259	138,631	245,237	110,574	848	55.0	2,735	
2005	1,572	110,192	114,440	461,187	198,564	947	53.0	2,963	
2006	1,948	91,980	69,015	149,907	268,436	728	45.0	2,035	
2007	2,144	92,481	80,573	383,355	297,998	913	49.0	2,740	
2008	1,619	30,533	116,074	90,217	102,156	734	46.0	2,195	
2009	2,138	111,984	144,569	143,589	287,707	1,122	45.0	3,252	
2010	2,473	112,450	225,550	309,795	97,948	1,187	47.0	3,161	
60-09	1,369	109,537	98,179	312,968	113,272		37	2,834	
00-09	1,538	98,056	138,659	300,921	216,153		48	2,867	

Appendix B. 2 Historic salmon harvest and effort in the Alaskan District 108 commercial gillnet fishery, 1962–2010.

Year	Harvest					Boats	Days Open	Effort
	Chinook	Sockeye	Coho	Pink	Chum			Permit Days
1962	618	4,430	3,921	2,889	2,035			
1963	1,431	9,979	11,612	10,198	11,024			
1964	2,911	20,299	29,388	114,555	10,771			
1965	3,106	21,419	8,301	4,729	2,480			
1966	4,516	36,710	16,493	61,908	17,730			
1967	6,372	29,226	6,747	4,713	5,955			
1968	4,604	14,594	36,407	91,028	14,537			
1969	5,021	19,211	5,791	11,962	2,318	359	55	1,084
1970	3,199	15,121	18,529	20,523	12,304	418	54	1,222
1971	3,717	18,143	14,876	22,216	4,665	363	57	1,061
1972	9,342	51,725	38,440	17,197	17,442	695	64	2,094
1973	9,254	21,393	5,837	6,585	6,680	584	39	1,519
1974	8,199	2,428	16,021	4,188	2,107	564	31	1,240
1975	1,529	0	0	0	1	172	8	257
1976	1,123	18	6,074	722	124	210	20	372
1977	1,443	48,385	14,424	16,318	4,233	321	23	742
1978	531	56	32,650	1,157	1,001	255	12	565
1979	91	2,158	234	13,478	1,064	37	5	94
1980	631	14,053	2,946	7,224	6,910	161	22	327
1981	283	8,833	1,403	1,466	3,594	110	11	217
1982	1,052	7,136	20,003	16,174	734	250	21	494
1983	47	178	15,369	4,171	675	101	17	260
1984	14	1,290	5,141	4,960	1,892	28	16	88
1985	20	1,060	1,926	5,325	1,892	25	13	45
1986	102	4,185	7,439	4,901	5,928	83	25	216
1987	149	1,620	1,015	3,331	949	45	13	81
1988	206	1,246	12	144	3,109	30	8	60
1989	310	10,083	4,261	27,640	3,375	90	29	223
1990	557	11,574	8,218	13,822	9,382	157	34	359
1991	1,366	17,987	15,629	6,406	5,977	264	49	846
1992	967	52,717	22,127	66,742	15,458	445	51	1,812
1993	1,628	76,874	14,307	39,661	22,504	556	48	2,220
1994	1,996	97,224	44,891	35,405	27,658	721	58	3,011
1995	1,702	76,756	17,834	37,788	54,296	593	50	2,581
1996	1,717	154,150	19,059	37,651	135,623	694	57	3,228
1997	2,566	93,039	2,140	65,745	38,913	582	44	2,537
1998	460	22,031	19,206	39,246	41,057	355	45	1,073
1999	1,049	36,601	28,437	48,552	117,196	630	54	2,209
2000	1,671	15,833	5,651	9,497	40,337	265	35	714
2001	7	610	10,731	11,012	5,397	112	34	377
2002	25	208	21,131	4,578	2,017	100	30	323
2003	312	42,158	38,795	76,113	51,701	364	56	1,454
2004	7,410	103,392	26,617	20,439	37,996	529	53	2,058
2005	26,970	99,465	42,203	106,395	150,121	1,318	78	4,591
2006	30,033	61,298	34,430	56,810	343,827	1,374	64	4,032
2007	17,463	70,580	19,880	39,872	177,573	1,120	56	2,722
2008	14,599	35,679	34,479	18,105	81,876	1,207	58	3,083
2009	2,830	36,680	30,860	27,010	190,800	693	47	2,287
2010	2,359	32,737	42,772	58,610	51,005	541	45	1,557
60-09	3,857	30,622	16,289	25,845	35,317		38	1,312
00-09	10,132	46,590	26,478	36,983	108,165		51	2,164



Appendix B. 3. Annual harvest of large Stikine Chinook salmon in the U.S. gillnet, troll, recreational, and subsistence and estimates of Stikine River bound Chinook salmon in District 108, 2005–2010.

GSI used for sport and gillnet. Troll is based on GSI 2005-2008 and CWT 2009-present  
 For detailed GSI stock comp estimates see Appendix G. 1 and G2.

Year	D108 Large Stikine Chinook				Total Large
	Subsistence	Sport	Gillnet	Troll	Stikine Chinook
2005	15	3,665	21,233	2,969	27,882
2006	37	3,346	17,259	1,418	22,060
2007	36	2,218	7,057	1,574	10,885
2008	26	1,453	4,905	951	7,335
2009	31	887	244	188	1,350
2010	53	586	238	427	1,303

Appendix B. 4. Chinook salmon harvest in the Alaskan District 106 and 108 test fisheries, 1984–2010.

Table only includes years when test fisheries were operated.

Year	Large Chinook			
	Total 106	106-41/42	106-30	108
1984	13	13		37
1985	16	16		33
1986	47	23	24	79
1987	25	24	1	30
1988	21	11	10	65
1989	15	11	4	15
1990	13	13		19
1991				21
1992				26
1993				30
1994	0	0		
---				
1998				0
1999				29
2000				21
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2009				113

Appendix B. 5. Chinook salmon harvest in the Canadian commercial and recreational fisheries in the Stikine River, 1979–2010.

Year	LRCF				URCF		Telegraph aboriginal		Tahltan sport fishery		Total			
	Large		Non-Large		Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge		
	Released	morts	Released	morts										
1972												0		
1973								200				200	0	
1974								100				100	0	
1975						178		1,024				1,202	0	
1976						236		924				1,160	0	
1977						62		100				162	0	
1978						100		400				500	0	
1979	712	63						850		74	10	1,636	73	
1980	1,488					156		587		136	18	2,367	18	
1981	664					154		586		213	28	1,617	28	
1982	1,693					76		618		181	24	2,568	24	
1983	492	430				75		851	215	38	5	1,456	650	
1984								643	59	83	11	726	70	
1985	256	91				62		793	94	92	12	1,203	197	
1986	806	365				104	41	1,026	569	93	12	2,029	987	
1987	909	242				109	19	1,183	183	138	18	2,339	462	
1988	1,007	201				175	46	1,178	197	204	27	2,564	471	
1989	1,537	157				54	17	1,078	115	132	18	2,801	307	
1990	1,569	680				48	20	633	259	129	17	2,379	976	
1991	641	318				117	32	753	310	129	17	1,640	677	
1992	873	89				56	19	911	131	181	24	2,021	263	
1993	830	164				44	2	929	142	386	52	2,189	360	
1994	1,016	158				76	1	698	191	218	29	2,008	379	
1995	1,067	599				9	17	570	244	107	14	1,753	874	
1996	1,708	221				41	44	722	156	162	22	2,633	443	
1997	3,283	186				45	6	1,155	94	188	25	4,671	311	
1998	1,614	328				12	0	538	95	165	22	2,329	445	
1999	2,127	789				24	12	765	463	166	22	3,082	1,286	
2000	1,970	240				7	2	1,109	386	226	30	3,312	658	
2001	826	59				0	0	665	44	190	12	1,681	115	
2002	433	209				2	3	927	366	420	46	1,782	624	
2003	695	672				19	12	682	373	167	46	1,563	1,103	
2004	2,481	2,070				0	1	1,425	497	91	18	3,997	2,586	
2005	19,070	1,181				28	1	800	94	118		20,016	1,276	
2006	15,098	1,955				22	1	616	122	40		15,776	2,078	
2007	10,131	1,469				10	25	364	233	0		10,505	1,727	
2008	7,051	908				40	9	769	150	46		7,906	1,067	
2009	1,587	498	339	170	153	77	11	26	496	136	20	2,284	737	
2010	1,209	698	64	32	56	28	16	48	512	232	50	1,819	1,006	
Averages														
85-09	3,143	554					45	15	831	226	152		4,179	816
00-09	5,934	926					14	8	785	240	132		6,882	1,197

Appendix B. 6. Chinook salmon harvest in inriver test fisheries in the Stikine River, 1985–2010.

Year	Drift		Set		Additional drift		Commercial license		Tuya		Total	
	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge
1985											0	0
1986	27	12									27	12
1987	128		61								189	0
1988	168	14	101	15							269	29
1989	116	4	101	20							217	24
1990	167	6	64	12							231	18
1991	90	1	77	15							167	16
1992	135	27	62	21	417	134					614	182
1993	94	11	85	11	389	65					568	87
1994	43	4	74	34	178	40					295	78
1995	18	13	61	35	169	136					248	184
1996	42	5	64	40	192	31					298	76
1997	30	7									30	7
1998	25	11									25	11
1999	53	43	49	16	751	38					853	97
2000	59	4	87	0	787	14					933	18
2001	128	3	56	7	1,652	49					1,836	59
2002	63	50	48	56	1,545	217					1,656	323
2003	64	62	14	91	1,225	617					1,303	770
2004	29	41	22	39	0	0					51	80
2005	14	8	19	13	0	0					33	21
2006	0	0	0	0	0	0					0	0
2007	2	0	3	0	0	0					5	0
2008	7	2	6	8	0	0			13		26	10
2009	3	0	0	0	0	0			29		32	0
2010	2	0	3	1	0	0	1,364	140	8	8	1,377	149
Averages												
85-09	63	14	50	22	430	84					413	88
00-09	37	17	26	21	521	90					588	128

## Appendix B. 7. Index counts of Stikine large Chinook salmon escapements, 1979–2010.

Inriver run and escapement generated from mark-recapture studies, inriver and marine harvest as reported in ADF&G fisheries data series report: Total run from jointly accepted US and Canadian harvest estimates. Terminal run includes only harvest in the Stikine River and District 108.

Year	Inriver		Marine harvest	Terminal Run	% to Little Tahltan	Little Tahltan		Tahltan Aerial	Beatty Aerial	Andrew Creek	Andrew Comments	
	Run	harvest				Escapement	Weir					Aerial
1979							1,166	2,118		327	Weir inc. broodstock	
1980							2,137	960	122	282	Weir inc. broodstock	
1981							3,334	1,852	558	536	Weir inc. broodstock	
1982							2,830	1,690	567	672	Weir inc. broodstock	
1983							594	453	83	366	Weir inc. broodstock	
1984							1,294		126	389	Weir inc. broodstock	
1985							3,114	1,598	1,490	147	624	Foot
1986							2,891	1,201	1,400	183	1,381	Foot
1987							4,783	2,706	1,390	312	1,537	Heli
1988							7,292	3,796	4,384	593	1,100	Foot
1989							4,715	2,527		362	1,034	Aerial
1990							4,392	1,755	2,134	271	1,295	Foot
1991							4,506	1,768	2,445	193	780	Aerial
1992							6,627	3,607	1,891	362	1,517	Heli
1993							11,437	4,010	2,249	757	2,067	Foot
1994							6,373	2,422		184	1,115	Heli
1995							3,072	1,117	696	152	669	Foot
1996	31,718	2,931	28,787		0.167		4,821	1,920	772	218	653	Heli
1997	31,509	4,701	26,808		0.207		5,547	1,907	260	218	571	Foot
1998	28,133	2,354	25,779		0.189		4,873	1,385	587	125	950	Foot
1999	23,716	3,935	19,781		0.239		4,733	1,379			1,180	Aerial
2000	30,301	4,245	26,056		0.254		6,631	2,720			1,346	Aerial
2001	66,646	3,517	63,129		0.154		9,730	4,258			2,055	Aerial
2002	53,893	3,438	50,455	3,587	57,480	0.148	7,476	Missed peak survey time--weat		1,708	Aerial	
2003	49,881	2,866	47,015	3,895	53,776	0.138	6,492	1,903		1,160	Foot	
2004	52,538	4,048	48,490	9,599	62,137	0.338	16,381	6,014		2,991	Foot	
2005	59,885	20,049	39,836	27,882	87,767	0.182	7,253			1,979	Foot	
2006	40,181	15,776	24,405	22,060	62,241	0.158	3,860			2,124	Foot	
2007	25,069	10,510	14,559	10,885	35,954	0.039	562			1,736	Aerial	
2008	26,284	7,932	18,352	7,335	33,619	0.145	2,663			981	Heli	
2009	15,118	2,316	12,803	1,350	16,468	0.175	2,245			628	Aerial	
2010	18,312	3,196	15,116	1,303	19,615	0.070	1,057			1,205	Heli	
Averages												
96-09	38,205	6,330	31,875		0.181		5,948			1,153		
00-09	41,980	7,470	34,510		0.173		6,329			1,671		

Appendix B. 8. General stock proportions and harvest of sockeye salmon in the Alaskan commercial gillnet fishery; District 106 & 108, 1982–2010.

Year	D106			D106-41/42			D106-30			D108		
	Alaska	Canada	Total Stikine	Alaska	Canada	Total Stikine	Alaska	Canada	Total Stikine	Alaska	Canada	Total Stikine
1982	0.486	0.319	0.194									
1983	0.668	0.217	0.116									
1984	0.658	0.269	0.074									
1985	0.479	0.419	0.102	0.480	0.401	0.119	0.477	0.453	0.070	0.064	0.000	0.936
1986	0.689	0.293	0.018	0.662	0.308	0.030	0.726	0.272	0.002	0.206	0.017	0.777
1987	0.827	0.155	0.017	0.816	0.166	0.018	0.844	0.140	0.016	0.125	0.000	0.875
1988	0.874	0.106	0.020	0.868	0.112	0.020	0.883	0.095	0.021	0.213	0.039	0.749
1989	0.657	0.311	0.032	0.653	0.303	0.044	0.662	0.322	0.016	0.117	0.054	0.829
1990	0.608	0.371	0.021	0.579	0.395	0.026	0.645	0.340	0.015	0.395	0.128	0.477
1991	0.545	0.331	0.124	0.460	0.377	0.163	0.683	0.257	0.060	0.173	0.118	0.709
1992	0.595	0.232	0.172	0.582	0.241	0.177	0.630	0.211	0.159	0.163	0.051	0.786
1993	0.400	0.338	0.262	0.369	0.327	0.304	0.451	0.357	0.192	0.231	0.114	0.655
1994	0.579	0.254	0.167	0.531	0.271	0.198	0.718	0.207	0.075	0.326	0.208	0.466
1995	0.316	0.560	0.124	0.287	0.565	0.149	0.370	0.551	0.079	0.135	0.204	0.661
1996	0.531	0.268	0.201	0.479	0.245	0.276	0.665	0.326	0.010	0.102	0.082	0.816
1997	0.576	0.271	0.153	0.538	0.269	0.193	0.668	0.276	0.056	0.058	0.131	0.812
1998	0.598	0.307	0.095	0.550	0.337	0.113	0.710	0.237	0.053	0.115	0.108	0.777
1999	0.671	0.092	0.237	0.618	0.101	0.281	0.795	0.072	0.133	0.144	0.036	0.820
2000	0.643	0.233	0.124	0.611	0.223	0.167	0.702	0.252	0.046	0.204	0.128	0.669
2001	0.525	0.332	0.143	0.493	0.336	0.171	0.574	0.327	0.099	0.775	0.098	0.126
2002	0.758	0.098	0.144	0.730	0.101	0.169	0.824	0.091	0.085	0.875	0.120	0.005
2003	0.742	0.096	0.162	0.700	0.095	0.204	0.872	0.100	0.029	0.227	0.118	0.655
2004	0.499	0.222	0.279	0.413	0.227	0.359	0.741	0.206	0.053	0.100	0.030	0.869
2005	0.474	0.317	0.209	0.405	0.338	0.256	0.689	0.250	0.061	0.128	0.178	0.694
2006	0.364	0.362	0.274	0.270	0.332	0.398	0.527	0.415	0.059	0.067	0.130	0.803
2007	0.471	0.120	0.409	0.367	0.126	0.507	0.846	0.098	0.057	0.179	0.133	0.688
2008	0.281	0.164	0.555	0.177	0.151	0.672	0.500	0.190	0.309	0.089	0.110	0.801
2009	0.402	0.215	0.382	0.326	0.214	0.460	0.613	0.219	0.168	0.073	0.110	0.817
2010	0.691	0.185	0.123	0.585	0.207	0.208	0.809	0.161	0.030	0.150	0.083	0.767
Averages												
83-09	0.568	0.260	0.172	0.519	0.262	0.219	0.672	0.251	0.077	0.211	0.098	0.691
00-09	0.516	0.216	0.268	0.449	0.214	0.336	0.689	0.215	0.097	0.272	0.115	0.613
1982	94,276	61,854	37,671									
1983	32,603	10,589	5,650									
1984	60,278	24,624	6,751									
1985	126,914	111,015	27,058	82,563	68,962	20,563	44,351	42,053	6,495	68	0	992
1986	100,337	42,685	2,687	56,462	26,214	2,571	43,875	16,471	116	862	71	3,252
1987	112,893	21,190	2,344	64,582	13,170	1,413	48,311	8,020	931	203	0	1,418
1988	80,868	9,784	1,877	49,776	6,426	1,135	31,092	3,358	742	265	48	933
1989	126,603	59,959	6,172	70,436	32,663	4,787	56,167	27,296	1,385	1,180	545	8,358
1990	112,983	68,921	3,901	60,795	41,415	2,712	52,188	27,506	1,189	4,576	1,479	5,519
1991	78,533	47,707	17,864	41,123	33,644	14,588	37,410	14,063	3,277	3,116	2,117	12,754
1992	120,977	47,207	34,971	85,364	35,277	25,967	35,613	11,930	9,004	8,604	2,696	41,417
1993	82,300	69,617	54,037	47,970	42,450	39,438	34,330	27,167	14,599	17,758	8,742	50,374
1994	122,118	53,683	35,247	83,692	42,620	31,214	38,426	11,063	4,033	31,715	20,250	45,259
1995	65,544	116,075	25,679	38,343	75,505	19,865	27,201	40,570	5,814	10,374	15,641	50,741
1996	165,221	83,271	62,608	107,193	54,823	61,768	58,028	28,448	840	15,755	12,618	125,777
1997	97,101	45,665	25,752	63,827	31,892	22,956	33,274	13,773	2,796	5,381	12,152	75,506
1998	67,890	34,811	10,734	43,479	26,661	8,912	24,411	8,150	1,822	2,541	2,376	17,114
1999	70,334	9,692	24,809	45,302	7,415	20,608	25,036	2,277	4,197	5,263	1,315	30,023
2000	57,935	20,996	11,145	35,327	12,875	9,661	22,608	8,121	1,484	3,226	2,019	10,588
2001	86,078	54,512	23,423	48,906	33,309	17,004	37,172	21,203	6,419	473	60	77
2002	42,573	5,487	8,075	28,487	3,928	6,615	14,086	1,559	1,460	182	25	1
2003	86,720	11,264	18,920	62,037	8,446	18,112	24,683	2,818	808	9,568	4,958	27,632
2004	58,006	25,787	32,467	35,521	19,534	30,874	22,485	6,253	1,593	10,375	3,136	89,882
2005	52,192	34,952	23,048	33,909	28,312	21,426	18,283	6,640	1,622	12,742	17,661	69,062
2006	33,454	33,337	25,189	15,750	19,394	23,215	17,704	13,943	1,975	4,088	7,973	49,237
2007	43,523	11,102	37,855	26,549	9,142	36,720	16,974	1,960	1,136	12,653	9,374	48,554
2008	8,593	4,997	16,943	3,649	3,117	13,886	4,944	1,880	3,057	3,189	3,919	28,571
2009	45,047	24,132	42,805	26,817	17,614	37,795	18,231	6,518	5,009	2,674	4,038	29,968
2010	77,721	20,842	13,887	34,578	12,253	12,274	43,143	8,588	1,613	4,906	2,725	25,106
Averages												
83-09	79,710	40,890	22,346	50,314	27,792	19,752	31,475	14,122	3,272	6,673	5,329	32,920
00-09	51,412	22,657	23,987	31,695	15,567	21,531	19,717	7,090	2,456	5,917	5,316	35,357

Appendix B. 9. Stikine stock proportions and harvest of sockeye salmon in the Alaskan commercial gillnet fishery; Districts 106 & 108, 1982–2010.

Year	D106			D106-41/42			D106-30			D108		
	All Tahltan	Tuya	Mainstem	All Tahltan	Tuya	Mainstem	All Tahltan	Tuya	Mainstem	All Tahltan	Tuya	Mainstem
1982												
1983	0.103		0.013									
1984	0.029		0.044									
1985	0.091		0.011	0.109		0.010	0.056		0.013	0.292		0.644
1986	0.014		0.004	0.024		0.006	0.000		0.002	0.094		0.683
1987	0.010		0.007	0.015		0.003	0.004		0.012	0.438		0.437
1988	0.020		0.001	0.019		0.001	0.021		0.000	0.178		0.571
1989	0.006		0.026	0.009		0.036	0.002		0.015	0.034		0.795
1990	0.005		0.016	0.008		0.018	0.001		0.013	0.111		0.366
1991	0.100		0.024	0.129		0.034	0.052		0.008	0.395		0.314
1992	0.070		0.102	0.088		0.089	0.022		0.138	0.258		0.528
1993	0.098		0.164	0.134		0.169	0.036		0.156	0.256		0.399
1994	0.142		0.025	0.166		0.032	0.069		0.006	0.362		0.103
1995	0.081	0.001	0.043	0.099	0.001	0.048	0.047	0.000	0.032	0.455	0.006	0.200
1996	0.166	0.028	0.007	0.228	0.039	0.009	0.008	0.001	0.001	0.622	0.069	0.125
1997	0.058	0.079	0.016	0.079	0.101	0.014	0.009	0.026	0.021	0.362	0.261	0.189
1998	0.015	0.080	0.000	0.017	0.096	0.000	0.010	0.043	0.000	0.189	0.244	0.343
1999	0.057	0.061	0.118	0.074	0.079	0.128	0.018	0.020	0.095	0.414	0.201	0.205
2000	0.020	0.085	0.019	0.028	0.116	0.023	0.007	0.027	0.012	0.132	0.261	0.275
2001	0.039	0.079	0.025	0.032	0.112	0.028	0.049	0.029	0.021	0.000	0.005	0.121
2002	0.037	0.072	0.035	0.049	0.087	0.034	0.009	0.039	0.037	0.000	0.000	0.005
2003	0.075	0.053	0.035	0.097	0.068	0.040	0.005	0.005	0.019	0.179	0.062	0.414
2004	0.241	0.020	0.018	0.315	0.026	0.018	0.031	0.005	0.017	0.613	0.018	0.239
2005	0.182	0.000	0.027	0.227	0.000	0.029	0.041	0.000	0.020	0.437	0.000	0.257
2006	0.203	0.056	0.016	0.304	0.078	0.016	0.027	0.017	0.015	0.588	0.081	0.135
2007	0.322	0.082	0.005	0.403	0.099	0.005	0.028	0.021	0.007	0.474	0.147	0.067
2008	0.165	0.238	0.152	0.168	0.336	0.169	0.158	0.033	0.118	0.352	0.291	0.159
2009	0.215	0.090	0.077	0.287	0.104	0.068	0.016	0.050	0.103	0.360	0.225	0.232
2010	0.047	0.051	0.026	0.084	0.088	0.036	0.005	0.011	0.015	0.356	0.178	0.234
Averages												
83-09	0.095		0.038	0.124		0.041	0.029		0.035	0.304		0.312
00-09	0.150	0.077	0.041	0.191	0.103	0.043	0.037	0.023	0.037	0.313	0.109	0.190
1982												
1983	5,020		631									
1984	2,673		4,078									
1985	24,045		3,013	18,801		1,762	5,244		1,251	310		683
1986	2,081		606	2,070		501	11		105	393		2,858
1987	1,376		968	1,155		258	221		710	710		708
1988	1,813		64	1,071		64	742		0	222		711
1989	1,111		5,061	957		3,830	154		1,231	341		8,017
1990	915		2,986	801		1,911	114		1,075	1,280		4,239
1991	14,364		3,501	11,541		3,048	2,823		453	7,112		5,642
1992	14,187		20,784	12,961		13,005	1,226		7,778	13,599		27,818
1993	20,204		33,833	17,446		21,992	2,758		11,841	19,688		30,686
1994	29,876		5,371	26,164		5,050	3,712		321	35,222		10,037
1995	16,715	125	8,839	13,292	125	6,448	3,423	0	2,391	34,950	461	15,330
1996	51,598	8,821	2,189	50,924	8,731	2,113	674	90	76	95,837	10,621	19,319
1997	9,764	13,232	2,756	9,327	11,937	1,692	437	1,295	1,064	33,644	24,288	17,574
1998	1,678	9,020	36	1,326	7,555	31	352	1,465	5	4,170	5,383	7,561
1999	5,986	6,424	12,399	5,421	5,782	9,405	563	641	2,993	15,156	7,360	7,497
2000	1,827	7,612	1,706	1,617	6,727	1,317	210	885	389	2,097	4,138	4,353
2001	6,339	12,965	4,119	3,164	11,063	2,777	3,175	1,902	1,342	0	3	74
2002	2,055	4,058	1,962	1,896	3,394	1,325	159	664	637	0	0	1
2003	8,736	6,145	4,039	8,595	6,016	3,501	141	129	538	7,562	2,615	17,455
2004	28,027	2,382	2,058	27,098	2,244	1,532	929	138	526	63,347	1,869	24,666
2005	20,080	0	2,968	18,979	0	2,447	1,101	0	521	43,467	0	25,595
2006	18,640	5,122	1,427	17,729	4,553	933	911	569	494	36,021	4,944	8,272
2007	29,759	7,612	484	29,196	7,182	342	563	430	142	33,439	10,398	4,716
2008	5,031	7,261	4,651	3,467	6,936	3,483	1,564	325	1,168	12,547	10,365	5,659
2009	24,085	10,080	8,640	23,623	8,589	5,583	462	1,491	3,057	13,188	8,271	8,508
2010	5,231	5,775	2,882	4,959	5,210	2,105	272	565	776	11,645	5,811	7,651
Averages												
83-09	12,888		5,154	12,345		3,774	1,267		1,604	18,972		10,319
00-09	14,458	6,324	3,205	13,536	5,670	2,324	921	653	881	21,167	4,260	9,930

Appendix B. 10. Tahltan sockeye salmon stock proportions and harvest of in the Alaskan commercial gillnet fishery; Districts 106 & 108, 1994–2010.

Year	D106			D106-41/42			D106-30			D108		
	All Tahltan	TahltanEnhance	WildTahltan	All Tahltan	TahltanEnhance	WildTahltan	All Tahltan	TahltanEnhance	WildTahltan	All Tahltan	TahltanEnhance	WildTahltan
1994	0.142	0.033	0.108	0.166	0.040	0.127	0.069	0.015	0.055	0.362	0.116	0.246
1995	0.081	0.036	0.044	0.099	0.051	0.049	0.047	0.010	0.036	0.455	0.257	0.198
1996	0.166	0.019	0.147	0.228	0.025	0.203	0.008	0.002	0.006	0.622	0.070	0.552
1997	0.058	0.021	0.037	0.079	0.023	0.056	0.009	0.015	-0.006	0.362	0.102	0.260
1998	0.015	0.002	0.013	0.017	0.003	0.014	0.010	0.000	0.010	0.189	0.008	0.182
1999	0.057	0.003	0.054	0.074	0.004	0.070	0.018	0.001	0.017	0.414	0.024	0.390
2000	0.020	0.003	0.017	0.028	0.004	0.024	0.007	0.000	0.007	0.132	0.032	0.100
2001	0.039	0.010	0.029	0.032	0.015	0.017	0.049	0.002	0.047	0.000	0.000	0.000
2002	0.037	0.012	0.024	0.049	0.017	0.031	0.009	0.000	0.009	0.000	0.000	0.000
2003	0.075	0.036	0.039	0.097	0.047	0.050	0.005	0.001	0.004	0.179	0.087	0.092
2004	0.241	0.097	0.144	0.315	0.125	0.191	0.031	0.020	0.011	0.613	0.252	0.361
2005	0.182	0.094	0.088	0.227	0.123	0.104	0.041	0.002	0.039	0.437	0.258	0.179
2006	0.203	0.113	0.090	0.304	0.174	0.130	0.027	0.007	0.020	0.588	0.331	0.257
2007	0.322	0.200	0.122	0.403	0.251	0.152	0.028	0.015	0.013	0.474	0.324	0.150
2008	0.165	0.073	0.091	0.168	0.106	0.062	0.158	0.004	0.154	0.352	0.165	0.186
2009	0.215	0.063	0.152	0.287	0.084	0.203	0.016	0.004	0.012	0.360	0.097	0.262
2010	0.047	0.019	0.027	0.084	0.034	0.049	0.005	0.002	0.003	0.356	0.143	0.213
Averages												
94-09	0.126	0.051	0.075	0.161	0.068	0.093	0.033	0.006	0.027	0.346	0.133	0.214
00-09	0.150	0.070	0.080	0.191	0.095	0.096	0.037	0.006	0.031	0.313	0.155	0.159
1994	29,876	7,019	22,857	26,164	6,230	19,934	3,712	789	2,923	35,222	11,286	23,936
1995	16,715	7,533	9,182	13,292	6,778	6,514	3,423	755	2,668	34,950	19,726	15,224
1996	51,598	5,772	45,826	50,924	5,584	45,340	674	188	486	95,837	10,796	85,041
1997	9,764	3,483	6,281	9,327	2,733	6,594	437	750	-313	33,644	9,500	24,144
1998	1,678	201	1,477	1,326	201	1,125	352	0	352	4,170	170	4,000
1999	5,986	288	5,698	5,421	266	5,155	563	22	541	15,156	877	14,279
2000	1,827	254	1,573	1,617	254	1,363	210	0	210	2,097	506	1,591
2001	6,339	1,592	4,747	3,164	1,441	1,723	3,175	151	3,024	0	0	0
2002	2,055	680	1,375	1,896	680	1,216	159	0	159	0	0	0
2003	8,736	4,186	4,550	8,595	4,161	4,434	141	25	116	7,562	3,666	3,896
2004	28,027	11,306	16,721	27,098	10,713	16,385	929	593	336	63,347	26,073	37,274
2005	20,080	10,356	9,724	18,979	10,292	8,687	1,101	64	1,037	43,467	25,614	17,853
2006	18,640	10,363	8,277	17,729	10,126	7,603	911	237	674	36,021	20,259	15,762
2007	29,759	18,506	11,253	29,196	18,198	10,998	563	308	255	33,439	22,867	10,572
2008	5,031	2,240	2,791	3,467	2,196	1,271	1,564	44	1,520	12,547	5,899	6,648
2009	24,085	7,053	17,032	23,623	6,938	16,685	462	115	346	13,188	3,560	9,628
2010	5,231	2,140	3,091	4,959	2,035	2,924	272	105	167	11,645	4,665	6,980
Averages												
94-09	16,262	5,677	10,585	15,114	5,424	9,689	1,148	253	896	26,915	10,050	16,865
00-09	14,458	6,654	7,804	13,536	6,500	7,037	921	154	768	21,167	10,844	10,322

Appendix B. 11. Stikine River sockeye salmon harvest in the U.S. Subsistence fishery, 2004–2010.

Stocks were proportioned based on using inriver stock comps

Year	Stikine				
	All Tahltan	Tuya	Mainstem	Total	WildTahltan
2004	0.664	0.026	0.311	243	96
2005	0.662	0.020	0.318	252	90
2006	0.672	0.144	0.185	390	116
2007	0.541	0.165	0.294	244	65
2008	0.385	0.326	0.289	428	85
2009	0.541	0.244	0.215	723	290
2010	0.417	0.289	0.294	1,653	505

## Appendix B. 12. Stock proportions of sockeye salmon in the Alaskan District 106 and 108 test fisheries, 1984–2010.

Table only includes years when test fisheries were operated and data based on SPA  
Stikine

Year	Alaska	Canada	All Tahltan	Tuya	Mainstem	Total	TahltanEnhance	WildTahltan
Sub-district 106-41 (Summer 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	0.083	0.167
Sub-district 106-41 (Summer Strait) harvest								
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		
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		
Subdistrict 106-30 (Clarence Strait) harvest								
1986	263	99	0		1	1		
1987	758	126	3		11	15		
1988	12	4	0		0	0		
1989	19	18	0		0	0		
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	0.000	0.250
District 106 harvest								
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	0	3
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	0.016	0.336
1999	0.162	0.019	0.481	0.298	0.041	0.820	0.028	0.453
2000	0.110	0.116	0.302	0.321	0.150	0.774	0.062	0.240
District 108 harvest								
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	57	1,181
1999	776	89	2,309	1,430	197	3,936	135	2,174
2000	516	544	1,416	1,505	705	3,626	291	1,125



Appendix B. 13. All harvest in of sockeye salmon in Canadian commercial and assessment fisheries, 1972–2010.

All Tuva Area fish considered to be Tuva fish.														
Year	Commercial/FN				Test					Tahltan Area		Tuva Area		
	LRCF	URCF	Telegraph aboriginal	Total Canadian treaty harvest	Drift Net	Set Net	Commercial License	Additional Drifts	Tuva Assesment	Test total	ESSR	Oto samples	ESSR	Oto samples
1972			4,373	4,373										
1973			3,670	3,670										
1974			3,500	3,500										
1975		270	1,982	2,252										
1976		733	2,911	3,644										
1977		1,975	4,335	6,310										
1978		1,500	3,500	5,000										
1979a	10,534		3,000	13,534										
1980	18,119	700	2,100	20,919										
1981	21,551	769	4,697	27,017										
1982	15,397	195	4,948	20,540										
1983	15,857	614	4,649	21,120										
1984			5,327	5,327										
1985	17,093	1,084	7,287	25,464		1,340				1,340				
1986	12,411	815	4,208	17,434	412					412				
1987	6,138	498	2,979	9,615	385	1,283				1,668				
1988	12,766	348	2,177	15,291	325	922				1,247				
1989	17,179	493	2,360	20,032	364	1,243				1,607				
1990	14,530	472	3,022	18,024	447	1,493				1,940				
1991	17,563	761	4,439	22,763	503	1,872				2,375				
1992	21,031	822	4,431	26,284	393	1,971		594		2,958				
1993	38,464	1,692	7,041	47,197	440	1,384		1,925		3,749	1,752		0	
1994	38,462	2,466	4,167	45,095	179	414		840		1,433	6,852		0	
1995	45,622	2,355	5,490	53,467	297	850		1,423		2,570	10,740		0	
1996	66,262	1,101	6,918	74,281	262	338		712		1,312	14,339		216	
1997	56,995	2,199	6,365	65,559	245					245		378	2,015	
1998	37,310	907	5,586	43,803	190					190		390	6,103	
1999	32,556	625	4,874	38,055	410	803		4,683		5,896		429	2,822	
2000	20,472	889	6,107	27,468	374	1,015		989		2,378		406	1,283	
2001	19,872	487	5,241	25,600	967	2,223		91		3,281		50	0	410
2002	10,420	484	6,390	17,294	744	3,540		128		4,412		400	0	501
2003	51,735	454	6,595	58,784	997	2,173		186		3,356		400	7,031	
2004	77,530	626	6,862	85,018	420	918		0		1,338		420	1,675	
2005	79,952	605	5,333	85,890	339	1,312		0		1,651		400	0	148
2006	95,791	520	5,094	101,405	299	629		0		928		400	0	0
2007	56,913	912	2,188	60,013	435	673		0		1,108		200	0	151
2008	28,636	505	4,510	33,651	241	870		0	1,955	3,066		100	0	280
2009	39,409	2,476	5,148	47,033	250	1,092		0	2,144	3,486		349	0	214
2010	42,049	1,215	7,276	50,540	304	1,450	3	0	2,792	4,549		158	0	224
Averages														
85-09	36,604	984	4,992	42,581	413	1,289				2,158		332	0	243
00-09	48,073	796	5,347	54,216	507	1,445				2,500		313	0	243

<sup>a</sup> The lower river commercial Harvest in 1979 includes the upper river commercial harvest

## Appendix B. 14. Sockeye salmon stock proportions and harvest by stock in the Canadian commercial and assessment fishery in the Stikine River, 1979–2010.

Stock compositions based on: scale circuli counts 1970-1983; SPA in 1985; average of SPA and GPA 1986; SPA in 1987 and 1988; and egg diameter and otolith thermal marks in 1989-2011. stock comp comes from sampling at this terminal fishing site, except in 2010; used 2012 as a proxy.

Year	LRCP			URCP			Telegraph Abongmal			LRTF			Tuya Assessment		
	All Tahltan	Tuya	Mainstem	All Tahltan	Tuya	Mainstem	All Tahltan	Tuya	Mainstem	All Tahltan	Tuya	Mainstem	All Tahltan	Tuya	Mainstem
1972							0.900	0.000	0.100						
1973							0.900	0.000	0.100						
1974							0.900	0.000	0.100						
1975				0.900	0.000	0.100	0.900	0.000	0.100						
1976				0.900	0.000	0.100	0.900	0.000	0.100						
1977				0.900	0.000	0.100	0.900	0.000	0.100						
1978				0.900	0.000	0.100	0.900	0.000	0.100						
1979	0.433		0.567				0.900	0.000	0.100						
1980	0.309		0.691	0.900	0.000	0.100	0.900	0.000	0.100						
1981	0.476		0.524	0.900	0.000	0.100	0.900	0.000	0.100						
1982	0.624		0.376	0.900	0.000	0.100	0.900	0.000	0.100						
1983	0.422		0.578	0.900	0.000	0.100	0.900	0.000	0.100						
1984				0.900	0.000	0.100	0.900	0.000	0.100						
1985	0.623		0.377	0.900	0.000	0.100	0.900	0.000	0.100	0.372				0.628	
1986	0.489		0.511	0.900	0.000	0.100	0.900	0.000	0.100	0.352				0.648	
1987	0.225		0.775	0.900	0.000	0.100	0.900	0.000	0.100	0.273				0.727	
1988	0.161		0.839	0.900	0.000	0.100	0.900	0.000	0.100	0.282				0.718	
1989	0.164		0.836	0.900	0.000	0.100	0.900	0.000	0.100	0.258				0.742	
1990	0.346		0.654	0.900	0.000	0.100	0.900	0.000	0.100	0.454				0.546	
1991	0.634		0.366	0.900	0.000	0.100	0.900	0.000	0.100	0.608				0.392	
1992	0.482		0.518	0.900	0.000	0.100	0.900	0.000	0.100	0.646				0.354	
1993	0.537		0.463	0.900	0.000	0.100	0.900	0.000	0.100	0.583				0.417	
1994	0.616		0.384	0.900	0.000	0.100	0.900	0.000	0.100	0.857				0.143	
1995	0.676	0.020	0.304	0.900	0.025	0.075	0.900	0.025	0.075	0.803	0.008			0.189	
1996	0.537	0.113	0.350	0.858	0.136	0.005	0.839	0.141	0.021	0.667	0.088			0.245	
1997	0.356	0.272	0.372	0.524	0.379	0.097	0.521	0.378	0.101	0.396	0.220			0.384	
1998	0.335	0.352	0.313	0.400	0.570	0.030	0.421	0.555	0.023	0.368	0.268			0.363	
1999	0.576	0.241	0.183	0.574	0.330	0.096	0.623	0.292	0.085	0.514	0.265			0.221	
2000	0.252	0.397	0.350	0.252	0.654	0.094	0.284	0.653	0.063	0.254	0.413			0.333	
2001	0.175	0.226	0.599	0.437	0.470	0.092	0.342	0.561	0.097	0.208	0.282			0.510	
2002	0.320	0.128	0.552	0.376	0.496	0.128	0.422	0.494	0.084	0.391	0.157			0.451	
2003	0.427	0.161	0.412	0.696	0.220	0.084	0.605	0.238	0.157	0.448	0.128			0.424	
2004	0.707	0.016	0.276	0.861	0.067	0.072	0.909	0.089	0.002	0.512	0.033			0.455	
2005	0.761	0.018	0.221	0.962	0.021	0.017	0.956	0.013	0.031	0.542	0.005			0.453	
2006	0.747	0.178	0.075	0.852	0.133	0.015	0.780	0.131	0.089	0.355	0.014			0.631	
2007	0.635	0.191	0.173	0.658	0.043	0.299	0.643	0.042	0.316	0.262	0.076			0.662	
2008	0.470	0.389	0.141	0.719	0.186	0.095	0.729	0.183	0.088	0.385	0.266	0.348	0.278	0.489	0.233
2009	0.601	0.250	0.149	0.668	0.303	0.029	0.686	0.281	0.033	0.323	0.187	0.490	0.220	0.714	0.067
2010	0.456	0.356	0.188	0.565	0.428	0.007	0.570	0.413	0.017	0.258	0.108	0.634	0.427	0.512	0.061
Averages															
79-09	0.471		0.431	0.770	0.139	0.091	0.776	0.131	0.092	0.445		0.459			
00-09	0.510	0.196	0.295	0.648	0.259	0.093	0.636	0.268	0.096	0.368	0.156	0.476			

-continued-

Appendix B. 14. Continued.

Year	URCF			URCF			Telegraph Aboriginal			LRTF			Tuya Assessment		
	All Tahltan	Tuya	Mainstem	All Tahltan	Tuya	Mainstem	All Tahltan	Tuya	Mainstem	All Tahltan	Tuya	Mainstem	All Tahltan	Tuya	Mainstem
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	4,561		5,973				2,700		300						
1980	5,599		12,520	630		70	1,890		210						
1981	10,258		11,293	692		77	4,227		470						
1982	9,608		5,789	176		20	4,453		495						
1983	6,692		9,165	553		61	4,184		465						
1984							4,794		533						
1985	10,649		6,444	976		108	6,558		729	499		841			
1986	6,069		6,342	734		82	3,787		421	145		267			
1987	1,380		4,758	448		50	2,681		298	455		1,213			
1988	2,062		10,704	313		35	1,959		218	352		895			
1989	2,813		14,366	444		49	2,124		236	415		1,192			
1990	5,029		9,501	425		47	2,720		302	881		1,059			
1991	11,136		6,427	685		76	3,995		444	1,443		932			
1992	10,134		10,897	740		82	3,988		443	1,912		1,046			
1993	20,662		17,802	1,523		169	6,337		704	2,184		1,565			
1994	23,678		14,784	2,219		247	3,750		417	1,228		205			
1995	30,848	893	13,881	2,120	60	176	4,941	139	410	2,064	20	486			
1996	35,584	7,465	23,213	945	150	6	5,802	972	144	875	116	321			
1997	20,269	15,513	21,213	1,152	834	213	3,318	2,403	644	97	54	94			
1998	12,498	13,137	11,675	363	517	27	2,352	3,103	131	70	51	69			
1999	18,742	7,862	5,952	359	206	60	3,038	1,423	413	3,031	1,564	1,301			
2000	5,165	8,136	7,171	224	581	84	1,733	3,989	385	605	982	791			
2001	3,482	4,483	11,907	213	229	45	1,795	2,939	507	684	924	1,673			
2002	3,335	1,335	5,750	182	240	62	2,697	3,155	538	1,726	694	1,992			
2003	22,067	8,335	21,333	316	100	38	3,987	1,571	1,037	1,505	428	1,423			
2004	54,841	1,276	21,415	539	42	45	6,240	608	14	686	44	608			
2005	60,881	1,437	17,634	582	13	10	5,099	71	163	895	8	748			
2006	71,573	17,079	7,139	443	69	8	3,974	668	452	329	13	586			
2007	36,167	10,891	9,855	600	39	273	1,406	91	691	290	84	734			
2008	13,455	11,153	4,028	363	94	48	3,287	825	398	428	296	387	543	956	455
2009	23,666	9,852	5,891	1,654	749	73	3,530	1,449	169	434	251	657	471	1,530	144
2010	19,185	14,965	7,899	687	520	9	4,145	3,004	127	453	190	1,114	1,192	1,429	171
Averages															
79-09	18,097		11,161	711		81	3,656		412	929		843			
00-09	29,463	7,398	11,212	512	216	69	3,375	1,537	435	758	372	960			

Appendix B. 15. Tahltan sockeye salmon stock proportions and harvest by stock in the Canadian commercial and assessment fishery in the Stikine River, 1979–2010.

Year	URCF			URCF			Telegraph Aboriginal			LRTF			Tuya Assessment		
	All Tahltan	TahltanEnhance	WildTahltan	All Tahltan	TahltanEnhance	WildTahltan	All Tahltan	TahltanEnhance	WildTahltan	All Tahltan	TahltanEnhance	WildTahltan	All Tahltan	TahltanEnhance	WildTahltan
1994	0.616	0.000	0.000	0.616	0.000	0.128	0.772	0.900	0.128	0.772	0.857	0.000	0.857		
1995	0.676	0.195	0.481	0.900	0.260	0.640	0.900	0.260	0.640	0.803	0.284	0.519			
1996	0.537	0.066	0.471	0.858	0.110	0.748	0.839	0.126	0.713	0.667	0.082	0.585			
1997	0.356	0.072	0.284	0.524	0.108	0.416	0.521	0.108	0.413	0.396	0.082	0.314			
1998	0.335	0.020	0.315	0.400	0.030	0.370	0.421	0.022	0.399	0.368	0.021	0.347			
1999	0.576	0.021	0.554	0.574	0.005	0.570	0.623	0.028	0.596	0.514	0.019	0.495			
2000	0.252	0.039	0.213	0.252	0.000	0.252	0.284	0.009	0.275	0.254	0.040	0.215			
2001	0.175	0.032	0.143	0.437	0.133	0.304	0.342	0.065	0.277	0.208	0.038	0.171			
2002	0.320	0.074	0.246	0.376	0.087	0.289	0.422	0.095	0.327	0.391	0.091	0.300			
2003	0.427	0.131	0.296	0.696	0.214	0.482	0.605	0.201	0.403	0.448	0.111	0.337			
2004	0.707	0.285	0.422	0.861	0.380	0.481	0.909	0.371	0.538	0.512	0.207	0.305			
2005	0.761	0.352	0.409	0.962	0.240	0.722	0.956	0.235	0.721	0.542	0.198	0.344			
2006	0.747	0.416	0.331	0.852	0.421	0.431	0.780	0.382	0.398	0.355	0.197	0.158			
2007	0.635	0.321	0.315	0.658	0.235	0.423	0.643	0.237	0.406	0.262	0.105	0.157			
2008	0.470	0.228	0.242	0.719	0.121	0.598	0.729	0.121	0.608	0.385	0.183	0.203	0.278	0.122	0.156
2009	0.601	0.155	0.445	0.668	0.158	0.511	0.686	0.143	0.542	0.323	0.093	0.230	0.220	0.038	0.182
2010	0.456	0.122	0.334	0.565	0.221	0.345	0.570	0.227	0.342	0.258	0.060	0.198	0.427	0.190	0.237
Averages															
00-09	0.510	0.203	0.306	0.648	0.199	0.449	0.636	0.186	0.450	0.368	0.126	0.242			
1994	23,678			2,219	315	1,904	3,750	533	3,217	1,228					
1995	30,848	8,912	21,936	2,120	612	1,508	4,941	1,427	3,514	2,064	729	1,335			
1996	35,584	4,387	31,197	945	121	824	5,802	871	4,931	875	108	767			
1997	20,269	4,094	16,175	1,152	238	914	3,318	687	2,631	97	20	77			
1998	12,498	747	11,751	363	27	336	2,352	125	2,227	70	4	66			
1999	18,742	696	18,046	359	3	356	3,038	135	2,903	3,031	113	2,918			
2000	5,165	801	4,364	224	0	224	1,733	52	1,681	605	94	511			
2001	3,482	632	2,850	213	60	148	1,795	341	1,454	684	124	560			
2002	3,335	776	2,559	182	42	140	2,697	605	2,092	1,726	402	1,324			
2003	22,067	6,763	15,304	316	97	219	3,987	1,328	2,659	1,505	374	1,131			
2004	54,841	22,124	32,717	539	238	301	6,240	2,549	3,691	686	277	409			
2005	60,881	28,174	32,707	582	145	437	5,099	1,254	3,845	895	327	568			
2006	71,573	39,888	31,685	443	219	224	3,974	1,946	2,028	329	183	146			
2007	36,167	18,266	17,901	600	214	386	1,406	518	888	290	116	174			
2008	13,455	6,533	6,922	363	61	302	3,287	547	2,740	428	203	225	543	239	304
2009	23,666	6,124	17,542	1,654	390	1,264	3,530	738	2,791	434	125	309	471	81	390
2010	19,185	5,126	14,059	687	268	419	4,145	1,654	2,490	453	105	348	1,192	530	662
Averages															
00-09	29,463	13,008	16,455	512	147	365	3,375	988	2,387	758	222	536			

Appendix B. 16. Tahltan Lake weir data with enhanced and wild Tahltan fish, 1979–2010.

Year	Weir count			Actual escapement			Broodstock taken			Sockeye otolith samples			Total spawners		
	Total Count	TahltanEnhance	WildTahltan	TotalEscapement	TahltanEnhance	WildTahltan	Total	TahltanEnhance	WildTahltan	Total	TahltanEnhance	WildTahltan	Total	TahltanEnhance	WildTahltan
1979	10,211			10,211											
1980	11,018			11,018											
1981	50,790			50,790											
1982	28,257			28,257											
1983	21,256			21,256											
1984	32,777			32,777											
1985	67,326			67,326											
1986	20,280			20,280											
1987	6,958			6,958											
1988	2,536			2,536											
1989	8,316			8,316			2,210								
1990	14,927			14,927			3,302								
1991	50,135			50,135			3,552								
1992	59,907			59,907			3,694								
1993	53,362	1,167	52,195	51,610	1,129	50,481	4,506	99	4,407			47,104	1,030	46,074	
1994	46,363	7,919	38,444	39,511	6,749	32,762	3,578	577	2,801			36,133	6,172	29,961	
1995	42,317	15,997	26,320	31,577	11,937	19,640	4,902	1,853	3,049			26,675	10,084	16,591	
1996	52,500	6,121	46,379	38,161	4,449	33,712	4,402	513	3,889			33,259	3,936	29,323	
1997	12,483	2,445	9,660	12,105	2,445	9,660	2,294	463	1,831	378	76	302	9,811	1,982	7,829
1998	12,658	691	11,577	12,268	691	11,577	3,099	75	3,024	390	26	364	9,169	616	8,553
1999	10,748	719	10,029	10,319	690	9,629	2,870	193	2,677	429	29	400	7,449	497	6,952
2000	6,076	1,230	4,846	5,670	1,148	4,522	1,717	347	1,370	406	82	324	3,953	801	3,152
2001	14,811	5,865	8,946	14,761	5,845	8,916	2,386	945	1,441	50	20	30	12,375	4,900	7,475
2002	17,740	5,212	9,408	14,220	5,097	9,123	3,051	1,298	1,753	400	115	285	11,169	3,799	7,370
2003	53,933	23,595	30,338	53,533	23,420	30,113	3,946	1,726	2,220	400	175	225	49,587	21,694	27,893
2004	63,372	31,439	31,933	62,952	31,244	31,708	4,243	1,250	2,993	420	195	225	58,709	29,994	28,715
2005	43,446	17,928	25,518	43,046	17,770	25,276	3,424	1,350	2,074	400	158	242	39,622	16,420	23,202
2006	53,855	25,966	27,889	53,455	25,772	27,683	3,403	1,646	1,757	400	194	206	50,052	24,126	25,926
2007	21,074	8,966	12,108	20,874	8,881	11,993	2,839	1,208	1,631	200	85	115	18,035	7,673	10,362
2008	10,516	5,344	5,172	10,416	5,295	5,121	2,364	1,152	1,212	100	49	51	8,052	4,143	3,909
2009	30,673	5,030	25,643	30,324	4,971	25,353	3,011	930	2,081	349	59	290	27,313	4,041	23,272
2010	22,860	9,670	13,190	22,702	9,596	13,106	4,484	1,807	2,677	158	74	84	18,218	7,789	10,429
Averages 00-09	31,550	13,058	18,180	30,925	12,944	17,981	3,038	1,185	1,853	313	113	199	27,887	11,759	16,128

Appendix B. 17. Sockeye salmon harvest by stock in the Stikine River under Canadian ESSR licenses, 1992–2010.

Year	Tahltan Area ESSR License			Tuya Area ESSR		Total	otolith samples
	All Tahltan	TahltanEnhance	WildTahltan	Tuya			
1993	1,752	38	1,714			0	
1994	6,852	1,170	5,682			0	
1995	10,740	4,060	6,680			0	
1996	14,339	1,672	12,667	216		216	
1997				2,015		2,015	
1998				6,103		6,103	
1999				2,822		2,822	
2000				1,283		1,283	
2001						0	410
2002	3,120	1,061	2,059			0	501
2003				7,031		7,031	
2004				1,675		1,675	
2005						0	148
2006						0	0
2007						0	151
2008							280
2009							214
2010							224

## Appendix B. 18. Estimated proportion of inriver run comprised of Tahltan, Tuya, and mainstem sockeye salmon, 1979–2010

In 1979-1988, there were US estimates and 1983-1988, they overlapped with estimates from Canada and the All Tahltan estimate was often averaged. The estimates are from the LRCC, test, or average of LRCC and Test.

Year	All Tahltan	Tuya	Mainstem	Type
1979	0.433		0.567	
1980	0.305		0.695	
1981	0.475		0.525	
1982	0.618		0.382	
1983	0.456		0.544	
1984	0.493		0.507	
1985	0.466		0.534	
1986	0.449		0.551	
1987	0.304		0.696	
1988	0.172		0.828	
1989	0.188		0.812	
1990	0.417		0.583	
1991	0.561		0.439	
1992	0.496		0.504	
1993	0.477		0.523	
1994	0.606		0.394	LRCF
1995	0.578	0.016	0.406	LRCF
1996	0.519	0.104	0.377	LRCF
1997	0.297	0.229	0.474	LRCF
1998	0.309	0.348	0.344	LRCF
1999	0.545	0.245	0.209	LRCF
2000	0.260	0.391	0.349	LRCF
2001	0.202	0.268	0.530	test
2002	0.360	0.141	0.498	test
2003	0.421	0.158	0.421	test
2004	0.664	0.026	0.311	LRCF
2005	0.662	0.020	0.318	LRCF
2006	0.672	0.144	0.185	LRCF
2007	0.541	0.165	0.294	LRCF
2008	0.385	0.326	0.289	average
2009	0.541	0.244	0.215	average
2010	0.417	0.289	0.294	average
Averages				
79-09	0.447		0.461	
00-09	0.471	0.188	0.341	

Appendix B. 19. Aerial survey counts of Mainstem sockeye salmon stocks in the Stikine River drainage, 1984–2010.

The index represents the combined counts from eight spawning areas.

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	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	0	916
2003	240	71	239			0	54	0	604
2004	245	262	56			0	85	0	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
2008	83	41	33	0		0	15	231	403
2009	51	45	0			0	17	0	113
2010	103	300	187	0		0	310	217	1,117
Averages									
84-09	152	348	80			37	160	90	864
00-09	185	319	98			23	108	83	816

## Appendix B. 20. Stikine River sockeye salmon run size, 1979–2010.

Harvest includes test and assessment fisheries and otolith samples and escapement includes fish later captured for broodstock

Year	Stikine River					All Tahltan				
	Inriver Run	Inriver Harvest	Escapement	Marine Harvest	Terminal Run	Inriver Run	Inriver Harvest	Escapement	Marine Harvest	Terminal Run
1979	40,353	13,534	26,819	8,299	48,652	17,472	7,261	10,211	5,076	22,548
1980	62,743	20,919	41,824	23,206	85,949	19,137	8,119	11,018	11,239	30,376
1981	138,879	27,017	111,862	27,538	166,417	65,968	15,178	50,790	16,189	82,157
1982	68,761	20,540	48,221	42,482	111,243	42,493	14,236	28,257	20,981	63,474
1983	71,683	21,120	50,563	5,774	77,457	32,684	11,428	21,256	5,075	37,759
1984	76,211	5,327	70,884	7,750	83,961	37,571	4,794	32,777	3,114	40,685
1985	184,747	26,804	157,943	29,747	214,494	86,008	18,682	67,326	25,197	111,205
1986	69,036	17,846	51,190	6,420	75,456	31,015	10,735	20,280	2,757	33,771
1987	39,264	11,283	27,981	4,077	43,342	11,923	4,965	6,958	2,255	14,178
1988	41,915	16,538	25,377	3,181	45,096	7,222	4,686	2,536	2,129	9,351
1989	75,058	21,639	53,419	15,492	90,550	14,111	5,795	8,316	1,561	15,672
1990	57,529	19,964	37,565	9,856	67,385	23,982	9,055	14,927	2,307	26,289
1991	120,153	25,138	95,015	31,284	151,437	67,394	17,259	50,135	21,916	89,311
1992	154,541	29,242	125,299	77,394	231,935	76,680	16,773	59,907	28,218	104,899
1993	176,100	52,698	123,402	104,630	280,730	84,068	32,458	51,610	40,036	124,104
1994	127,527	53,380	74,147	80,509	208,036	77,239	37,728	39,511	65,101	142,340
1995	142,308	66,777	75,531	76,420	218,728	82,290	50,713	31,577	51,665	133,955
1996	184,400	90,148	94,252	188,385	372,785	95,706	57,545	38,161	147,435	243,141
1997	125,657	68,197	57,460	101,258	226,915	37,319	25,214	12,105	43,408	80,727
1998	90,459	50,486	39,973	30,989	121,448	27,941	15,673	12,268	7,086	35,027
1999	65,879	47,202	18,677	58,765	124,644	35,918	25,599	10,319	23,449	59,367
2000	53,145	31,535	21,610	25,359	78,504	13,803	8,133	5,670	5,340	19,143
2001	103,755	29,341	74,414	23,500	127,255	20,985	6,224	14,761	6,339	27,324
2002	71,253	22,607	48,646	8,076	79,329	25,680	11,460	14,220	2,055	27,735
2003	194,425	69,571	124,854	46,552	240,977	81,808	28,275	53,533	16,298	98,106
2004	189,395	88,451	100,944	122,592	311,987	125,677	62,725	62,952	91,535	217,213
2005	167,570	88,089	79,482	92,362	259,932	110,903	67,857	43,046	63,714	174,617
2006	193,768	102,733	91,035	74,817	268,585	130,174	76,719	53,455	54,923	185,097
2007	110,132	61,472	48,660	86,654	196,786	59,537	38,663	20,874	63,330	122,867
2008	74,267	37,097	37,170	45,942	120,209	28,592	18,176	10,416	17,743	46,335
2009	111,780	51,082	60,699	73,495	185,275	60,428	30,104	30,324	37,664	98,092
2010	116,354	55,471	60,883	40,647	157,001	48,521	25,819	22,702	17,565	66,086
Averages										
79-09	109,119	41,541	67,578	49,445	158,565	52,636	23,943	28,693	28,553	81,189
00-09	126,949	58,198	68,751	59,935	186,884	65,759	34,834	30,925	35,894	101,653

-continued-

Appendix B. 20. Continued.

Year	Stikine Mainstem					Tuya				
	Inriver Run	Inriver Harvest	Escapement	Marine Harvest	Terminal Run	Inriver Run	Inriver Harvest	Escapement	Marine Harvest	Terminal Run
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	21,501	47,768					
1983	38,999	9,692	29,307	699	39,698					
1984	38,640	533	38,107	4,636	43,276					
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	1,822	29,164					
1988	34,693	11,852	22,841	1,052	35,745					
1989	60,947	15,844	45,103	13,931	74,878					
1990	33,547	10,909	22,638	7,549	41,096					
1991	52,759	7,879	44,880	9,368	62,126					
1992	77,861	12,469	65,392	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	2,216	1,112	1,104	586	2,802
1996	69,536	23,684	45,852	21,508	91,044	19,158	8,919	10,239	19,442	38,600
1997	59,600	22,164	37,436	20,330	79,930	28,738	20,819	7,919	37,520	66,258
1998	31,077	11,902	19,175	7,962	39,039	31,442	22,911	8,531	15,941	47,383
1999	13,797	7,726	6,071	20,103	33,900	16,165	13,877	2,288	15,213	31,378
2000	18,563	8,431	10,132	6,764	25,327	20,779	14,971	5,808	13,255	34,034
2001	54,987	14,132	40,855	4,193	59,180	27,783	8,985	18,798	12,968	40,751
2002	35,496	5,222	30,274	1,963	37,459	10,078	5,925	4,153	4,058	14,136
2003	81,803	23,831	57,972	21,494	103,297	30,814	17,465	13,349	8,760	39,574
2004	58,809	22,080	36,728	26,799	85,608	4,909	3,645	1,264	4,257	9,166
2005	53,343	18,555	34,788	28,517	81,860	3,325	1,677	1,648	131	3,456
2006	35,788	8,185	27,603	9,772	45,560	27,806	17,829	9,977	10,122	37,928
2007	32,418	11,553	20,865	5,274	37,692	18,176	11,256	6,920	18,050	36,227
2008	21,494	5,316	16,178	10,434	31,928	24,180	13,604	10,576	17,765	41,945
2009	24,082	6,933	17,148	17,304	41,385	27,271	14,044	13,226	18,527	45,798
2010	34,152	9,320	24,831	11,018	45,169	33,682	20,332	13,350	12,064	45,746
Averages										
79-09	47,036	11,887	35,149	14,551	61,587					
00-09	41,678	12,424	29,254	13,251	54,930	19,512	10,940	8,572	10,789	30,302

Appendix B. 21. Coho salmon harvest in the Alaskan District 106 and 108 test fisheries, 1984–2010.

Table only includes years when test fisheries were operated.

Year	106-41/42	106-30	Total 106	108
1984	101		1,370	11
1985	301		4,345	11
1986	177		1,345	3
1987	799	95	3,558	13
1988	89	589	1,036	9
1989	275	412	2,080	45
1990	432	464	2,256	45
1991				18
1992				23
1993				0
1994			12	
---				142
1998				217
1999				140
2000				
---				
2009				0



Appendix B. 22. Annual harvest of coho salmon in the Canadian lower and upper river commercial, Telegraph Aboriginal and the Canadian test fisheries, 1979–2010.

Year	Telegraph			Canada total	Test				All
	LRCF	URCF	Aboriginal	Stikine harvest	drift	set	additional	test total	harvest total
1972			0	0				0	0
1973			0	0				0	0
1974			0	0				0	0
1975		45	5	50				0	50
1976		13	0	13				0	13
1977		0	0	0				0	0
1978		0	0	0				0	0
1979	10,720		0	10,720				0	10,720
1980	6,629	40	100	6,769				0	6,769
1981	2,667	0	200	2,867				0	2,867
1982	15,904	0	40	15,944				0	15,944
1983	6,170	0	3	6,173				0	6,173
1984			1	1				0	1
1985	2,172	0	3	2,175				0	2,175
1986	2,278	0	2	2,280	226			226	2,506
1987	5,728	0	3	5,731	162	620		782	6,513
1988	2,112	0	5	2,117	75	130		205	2,322
1989	6,092	0	6	6,098	242	502		744	6,842
1990	4,020	0	17	4,037	134	271		405	4,442
1991	2,638	0	10	2,648	118	127		245	2,893
1992	1,850	0	5	1,855	75	193	0	268	2,123
1993	2,616	0	0	2,616	37	136	2	175	2,791
1994	3,377	0	4	3,381	71	0	0	71	3,452
1995	3,418	0	0	3,418	35	166	26	227	3,645
1996	1,402	0	2	1,404	55	0	0	55	1,459
1997	401	0	0	401	11			11	412
1998	726	0	0	726	207			207	933
1999	181	0	0	181	312	64	16	392	573
2000	298	0	3	301	60	181	195	436	737
2001	233	0	0	233	257	1,078	426	1,761	1,994
2002	82	0	0	82	306	1,323	1,116	2,745	2,827
2003	190	0	0	190	291	525	883	1,699	1,889
2004	271	0	4	275	352	135	0	487	762
2005	276	0	0	276	444	271	0	715	991
2006	72	0	0	72	343	181	0	524	596
2007	50	0	2	52	89	99	0	188	240
2008	2,398	0	0	2,398	321	216	0	537	2,935
2009	5,981	0	0	5,981	348	146	0	494	6,475
2010	5,301	0	0	5,301	488	253	0	741	6,042
Averages									
85-09	1,954	0	3	1,957	190	303	167	544	2,501
00-09	985	0	1	986	281	416	262	959	1,945

### Appendix B. 23. Index counts of Stikine coho salmon escapements, 1984–2010.

Missing data due to poor survey conditions.

Year	Date	Katete		Craig	Verrett	Bronson	Scud	Porcupine	Christina	Total
		West	Katete			Slough	Slough			
1984	10/30	147	313	0	15	42				517
1985	10/25	590	1,217	735	39	0	924	365		3,870
1988	10/28	32	227		175		97	53	0	584
1989	10/29	336	896	992	848	120	707	90	55	4,044
1990	10/30	94	548	810	494		664	430		3,040
1991	10/29	302	878	985	218		221	352		2,956
1992	10/29	295	1,346	949	320		462	316		3,688
1993	10/30						206	324		
1994	11/1-2	28	652	1,026	466		448	1,105		3,725
1995	10/30	211	208	1,419	574		621	719		3,752
1996	10/30	163	232	205	549		630	1,466		3,245
1997	11/01	2	0	19	116		272	648		1,057
1998	10/30	14	63	141	282		143	450		1,093
1999	11/05	163	773	891	490		661	894		3,872
2000	11/2-3				5		95	206		306
2001	11/2-3	207	1,401	3,121	708		1,571	397		7,405
2002	11/05	806	2,642	4,488	1,695		1,389	1,626		12,646
2003										
2004 <sup>a</sup>	11/03	78	762	19	959		173	1,009		3,000
2005	10/31	300	1,195	444	353		218	689		3,199
2006	11/02	350	543	675	403		95	147		2,213
2007	11/10	66	190	567	240		153	341		1,557
2008 <sup>b</sup>	11/01-05			535	501		86	25		1,147
2009	11/02	212	698	475	257		16	617		2,275
2010	11/03a	37	237	31	363		130	953		1,751
Average										
84-09		224	762	973	462		448	558		3,270
00-09		288	1,062	1,291	569		422	562		3,750

<sup>a</sup> Viewing conditions at the Craig River site were poor in 2004 and 2010.

<sup>b</sup> West Katete and Katete not survey due to inclement weather

<sup>c</sup> aborted to due ice condtions and inclement weather

Appendix B. 24. Effort in the Canadian fisheries, including assessment fisheries in the Stikine River, 1979–2010.

Year	LRCF		URCF		Test Fisheries			
	Days	Permit Days	Days	Permit Days	standard test fisheries		Chinook assessment a	
					# of Drift	Set hours	Days	Permit Days
1979	42.0	756						
1980	41.0	668						
1981	32.0	522	5.0	11.0				
1982	71.0	1,063	4.0	8.0				
1983	54.0	434	8.0	10.0				
1984		no fisheries						
1985	22.5	146	6.0	14.0				
1986	13.5	239	7.0	19.0	405			
1987	20.0	287	7.0	20.0	845	1,456		
1988	26.5	320	6.5	21.5	720	1,380		
1989	23.0	325	7.0	14.0	870	1,392		
1990	29.0	328	7.0	15.0	673	1,212		
1991	39.0	282	6.0	13.0	509	1,668		
1992	55.0	235	13.0	28.0	312	1,249		
1993	58.0	484	22.0	48.0	304	1,224		
1994	74.0	430	50.0	68.0	175	456		
1995	59.0	534	25.0	54.0	285	888		
1996	81.0	439	59.0	75.0	245	312		
1997	89.0	569	29.0	42.0	210			
1998	46.5	374	19.0	19.0	820			
1999	31.0	261	18.0	19.0	1,006	1,577		
2000	23.3	227	9.3	19.8	694	3,715		
2001	23.0	173	4.0	6.0	883	2,688		
2002	21.0	169	9.0	12.0	898	2,845		
2003	28.8	275	10.0	10.0	660	1,116		
2004	43.0	431	11.0	11.0	778	524		
2005	72.0	803	13.0	13.0	780	396		
2006	68.7	775	15.0	15.0	720	312		
2007	67.5	767	17.0	17.0	224	336		
2008	55.0	566	13.0	13.0	730	396		
2009	57.5	563	27.0	28.0	771	342		
2010	37.2	348	12.0	15.2	860	468	8	95
Averages								
85-09	45	398	16	24	615	1,180		
03-09	54	566	15	15	690	486		

<sup>a</sup> denotes an assessment/test fishery prosecuted with the commercial fleet

Appendix B. 25. Counts of adult sockeye salmon migrating through Tahltan Lake weir, 1959–2010.

Year	Weir Installed	Date of Arrival			Weir Pulled	Total Count	Total scapement	Broodstock	Samples or ESSR	Otolith Samples	Spawners		
		First	50%	90%							Total	Enhanced	Wild
1959	30-Jun	2-Aug	12-Aug	16-Aug		4,311	4,311						
1960	15-Jul	2-Aug	24-Aug	27-Aug		6,387	6,387						
1961	20-Jul	9-Aug	11-Aug	15-Aug		16,619	16,619						
1962	1-Aug	2-Aug	5-Aug	8-Aug		14,508	14,508						
1962	3-Aug					1,780	1,780						
1963	23-Jul	26-Jul	14-Aug	25-Aug		18,353	18,353						
1963	19-Jul	18-Jul	2-Sep	7-Sep		1,471	1,471						
1964	12-Jul	3-Aug	13-Aug	21-Aug		21,580	21,580						
1965	11-Jul	14-Jul	21-Jul	28-Jul		38,801	38,801						
1968	11-Jul	21-Jul	25-Jul	8-Aug		19,726	19,726						
1969	7-Jul	11-Jul	18-Jul	31-Jul		11,805	11,805						
1970	5-Jul	25-Jul	1-Aug	11-Aug		8,419	8,419						
1971	12-Jul	19-Jul	28-Jul	12-Aug		18,523	18,523						
1972	13-Jul	13-Jul	19-Jul	31-Aug	21-Aug	52,545	52,545						
1973	10-Jul	24-Jul	30-Jul	7-Aug	1-Sep	2,877	2,877						
1974	3-Jul	28-Jul	3-Aug	17-Aug	13-Sep	8,101	8,101						
1975	10-Jul	25-Jul	8-Aug	17-Aug	28-Aug	8,159	8,159						
1976	16-Jul	29-Jul	1-Aug	6-Aug	24-Aug	24,111	24,111						
1977	6-Jul	11-Jul	16-Jul	10-Aug	25-Aug	42,960	42,960						
1978	10-Jul	10-Jul	20-Jul	29-Jul	26-Aug	22,788	22,788						
1979	9-Jul	23-Jul	1-Aug	11-Aug	31-Aug	10,211	10,211						
1980	4-Jul	15-Jul	22-Jul	12-Aug	3-Sep	11,018	11,018						
1981	30-Jun	16-Jul	26-Jul	3-Aug	8-Sep	50,790	50,790						
1982	2-Jul	10-Jul	19-Jul	29-Jul	4-Sep	28,257	28,257						
1983	27-Jun	5-Jul	22-Jul	5-Aug	7-Sep	21,256	21,256						
1984	20-Jun	19-Jul	24-Jul	3-Aug	29-Aug	32,777	32,777						
1985	28-Jun	18-Jul	31-Jul	6-Aug	5-Sep	67,326	67,326						
1986	10-Jul	26-Jul	4-Aug	11-Aug	4-Sep	20,280	20,280						
1987	14-Jul	21-Jul	4-Aug	13-Aug	27-Aug	6,958	6,958						
1988	16-Jul	16-Jul	6-Aug	14-Aug	29-Aug	2,536	2,536						
1989	7-Jul	9-Jul	1-Aug	14-Aug	4-Sep	8,316	8,316	2,210			6,106		
1990	6-Jul	15-Jul	26-Jul	3-Aug	28-Aug	14,927	14,927	3,302			11,625		
1991	30-Jun	17-Jul	25-Jul	7-Aug	5-Sep	50,135	50,135	3,552			46,583		
1992	9-Jul	18-Jul	25-Jul	3-Aug	2-Sep	59,907	59,907	3,694			56,213		
1993	7-Jul	10-Jul	28-Jul	10-Aug	11-Sep	53,362	51,610	4,506	1,752		47,104	1,030	46,074
1994	7-Jul	14-Jul	30-Jul	9-Aug	7-Sep	46,363	39,511	3,378	6,852		36,133	6,172	29,961
1995	8-Jul	9-Jul	24-Jul	12-Aug	16-Sep	42,317	31,577	4,902	10,740		26,675	10,084	16,591
1996	6-Jul	14-Jul	22-Jul	04-Aug	10-Sep	52,500	38,161	4,402	14,339		33,759	3,936	29,823
1997	9-Jul	15-Jul	25-Jul	26-Aug	26-Sep	12,483	12,105	2,294		378	9,811	1,982	7,829
1998	9-Jul	11-Jul	25-Jul	26-Aug	17-Sep	12,658	12,268	3,099		390	9,169	616	8,553
1999	10-Jul	19-Jul	31-Jul	13-Aug	15-Sep	10,748	10,319	2,870		429	7,449	497	6,952
2000	9-Jul	21-Jul	25-Jul	03-Aug	4-Sep	6,076	5,670	1,717		406	3,953	801	3,152
2001	08-Jul	19-Jul	31-Jul	09-Aug	14-Sep	14,811	14,761	2,386		50	12,375	4,900	7,475
2002	07-Jul	12-Jul	25-Jul	08-Aug	14-Sep	17,740	17,340	3,051		400	11,169	3,799	7,370
2003	07-Jul	11-Jul	29-Jul	08-Aug	18-Sep	53,933	53,533	3,946		400	49,587	21,694	27,893
2004	07-Jul	12-Jul	25-Jul	10-Aug	15-Sep	63,372	62,952	4,243		420	58,709	29,994	28,715
2005	07-Jul	11-Jul	04-Aug	25-Aug	15-Sep	43,446	43,046	3,424		400	39,622	16,420	23,202
2006	09-Jul	12-Jul	27-Jul	20-Aug	13-Sep	53,855	53,455	3,403		400	50,052	24,126	25,926
2007	09-Jul	20-Jul	08-Aug	19-Aug	15-Sep	21,074	20,874	2,839		200	18,035	7,673	10,362
2008	13-Jul	21-Jul	30-Jul	10-Aug	18-Sep	10,516	10,416	2,364		100	8,052	4,143	3,909
2009	09-Jul	13-Jul	18-Jul	04-Aug	14-Sep	30,673	30,324	3,011		349	27,313	4,041	23,272
2010	07-Jul	10-Jul	29-Jul	12-Aug	15-Sep	22,860	22,702	4,484		158	18,218	7,789	10,429
Averages													
59-09	09-Jul	18-Jul	30-Jul	11-Aug	06-Sep	24,989	24,244						
00-09	08-Jul	15-Jul	28-Jul	11-Aug	14-Sep	31,550	31,237	3,038		313	27,887	16,128	11,759

Appendix B. 26. Estimates of sockeye salmon smolt migrating through Tahltan Lake smolt weir, 1984–2010.

Year	Weir Installed	Date of Arrival			Total Count	Total Estimate	Date and Expansion	Smolt	
		First	50%	90%				Natural	Hatchery
1984	10-May	11-May	23-May	06-Jun		218,702			
1985	25-Apr	23-May	31-May	28-May		613,531			
1986	08-May	10-May	31-May	07-Jun		244,330			
1987 <sup>a</sup>	07-May	15-May	23-May	24-May		810,432			
1988	01-May	08-May	20-May	06-Jun		1,170,136			
1989	05-May	08-May	22-May	06-Jun		580,574			
1990 <sup>b</sup>		15-May	29-May	05-Jun	595,147	610,407	6/14 97.5%		
1991 <sup>c</sup>	05-May	14-May	21-May	30-May	1,439,676	1,487,265	6/13 96.8%	1,220,397	266,868
1992 <sup>d</sup>	07-May	13-May	21-May	27-May	1,516,150	1,555,026	6/14 97.5%	750,702	804,324
1993	07-May	11-May	17-May	22-May		3,255,045		2,855,562	399,483
1994	08-May	08-May	16-May	12-Jun		915,119		620,809	294,310
1995	05-May	06-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	07-May	11-May	23-May	30-May		518,202		348,685	169,517
1998	07-May	08-May	25-May	05-Jun		540,866		326,420	214,446
1999	06-May	10-May	09-Jun	15-Jun		762,033		468,488	293,545
2000	07-May	09-May	22-May	17-Jun		619,274		355,618	263,656
2001	06-May	07-May	24-May	18-Jun		1,495,642		841,268	654,374
2002	06-May	14-May	27-May	12-Jun		1,873,598		1,042,435	831,163
2003	06-May	11-May	29-May	06-Jun		1,960,480		979,442	981,038
2004	06-May	10-May	21-May	25-May		2,116,701		825,513	1,291,188
2005	06-May	07-May	17-May	25-May		1,843,804		943,929	899,875
2006	06-May	10-May	25-May	02-Jun		2,195,266		1,773,062	422,204
2007	06-May	16-May	21-May	28-May		1,055,114		644,987	410,127
2008	06-May	12-May	23-May	02-Jun		1,402,995		870,295	532,700
2009	06-May	14-May	26-May	01-Jun		746,045		484,801	261,244
2010	06-May	10-May	23-May	07-Jun		557,532		306,344	251,188
Averages									
84-09	06-May	11-May	23-May	03-Jun		1,191,235		922,498	484,028
00-09	06-May	11-May	23-May	04-Jun		1,530,892		876,135	654,757

<sup>a</sup> Estimate includes approximately 30,000 mortalities from overcrowding on May 22, 1987.

<sup>b</sup> Estimate of 595,147 on June 14 expanded by average % of outmigration by date (97.5%) from historical data.

<sup>c</sup> Estimate of 1,439,673 on June 13 expanded by average % of outmigration by date (96.8%) from historical data.

<sup>d</sup> Estimate of 1,516,150 on June 14 expanded by average % of outmigration by date (97.5%) from historical data.

## Appendix B. 27. Weir counts of Chinook salmon at Little Tahltan River, 1985–2010.

Year	Weir	Date of Arrival			Total Broodstock Count	Broodstock and Other	Natural Spawners
	Installed	First	50%	90%			
Large Chinook							
1985	03-Jul	04-Jul	30-Jul	06-Aug	3,114		3,114
1986	28-Jun	29-Jun	21-Jul	05-Aug	2,891		2,891
1987	28-Jun	04-Jul	24-Jul	02-Aug	4,783		4,783
1988	26-Jun	27-Jun	18-Jul	03-Aug	7,292		7,292
1989	25-Jun	26-Jun	23-Jul	02-Aug	4,715		4,715
1990	22-Jun	29-Jun	23-Jul	04-Aug	4,392		4,392
1991	23-Jun	25-Jun	20-Jul	03-Aug	4,506		4,506
1992	24-Jun	04-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	02-Aug	6,387	-14	6,373
1995	17-Jun	20-Jun	17-Jul	04-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
2008	19-Jun	6-Jul	26-Jul	4-Aug	2,663	0	2,663
2009	19-Jun	3-Jul	19-Jul	4-Aug	2,245	0	2,245
2010	19-Jun	22-Jun	23-Jul	2-Aug	1,057	0	1,057
Averages							
85-09	21-Jun	26-Jun	20-Jul	01-Aug	5,707	-5	5,704
00-09	20-Jun	26-Jun	21-Jul	02-Aug	6,346	-3	6,343
nonlarge Chinook							
1985	03-Jul	04-Jul	31-Jul	10-Aug	316		
1986	28-Jun	03-Jul	25-Jul	06-Aug	572		
1987	28-Jun	03-Jul	26-Jul	06-Aug	365		
1988	26-Jun	27-Jun	17-Jul	02-Aug	327		
1989	25-Jun	26-Jun	23-Jul	02-Aug	199		
1990	22-Jun	05-Jul	22-Jul	30-Jul	417		
1991	23-Jun	03-Jul	24-Jul	07-Aug	313		
1992	24-Jun	12-Jul	22-Jul	30-Jul	131		
1993	20-Jun	30-Jun	14-Jul	01-Aug	60		
1994	18-Jun	02-Jul	22-Jul	05-Aug	121		
1995	17-Jun	22-Jun	28-Jul	10-Aug	135		
1996	17-Jun	12-Jul	25-Jul	05-Aug	22		
1997	14-Jun	26-Jun	21-Jul	1-Aug	54		
1998	13-Jun	26-Jun	20-Jul	7-Aug	37		
1999	18-Jun	1-Jul	23-Jul	6-Aug	202		
2000	19-Jun	23-Jun	20-Jul	5-Aug	108		
2001	20-Jun	23-Jun	27-Jul	3-Aug	269		
2002	20-Jun	26-Jun	21-Jul	7-Aug	618		
2003	20-Jun	30-Jun	21-Jul	5-Aug	334		
2004	18-Jun	21-Jun	19-Jul	31-Jul	250		
2005	19-Jun	29-Jun	23-Jul	4-Aug	231		
2006	20-Jun	7-Jul	23-Jul	5-Aug	93		
2007	04-Jul	15-Jul	29-Jul	1-Aug	12		
2008	19-Jun	14-Jul	25-Jul	29-Jul	139		
2009	19-Jun	9-Jul	19-Jul	4-Aug	99		
2010	19-Jun	7-Jul	26-Jul	4-Aug	221		
Averages							
85-09	21-Jun	01-Jul	22-Jul	03-Aug	217		
00-09	20-Jun	01-Jul	22-Jul	03-Aug	215		

Appendix B. 28. Historical pink and chum salmon harvest in the Canadian fisheries, 1979–2010.

Year	LSCF		USCF		FSC		Assesment/Test	
	Pink	Chum	Pink	Chum	Pink	Chum	Pink	Chum
1972					0	0		
1973					0	0		
1974					0	0		
1975			0	0	0	0		
1976			0	0	0	0		
1977			0	0	0	0		
1978			0	0	0	0		
1979	1,994	424			0	0	1,994	424
1980	736	771	20	0	0	0	756	771
1981	3,713	1,128	0	0	144	0	3,857	1,128
1982	1,782	722	0	0	60	0	1,842	722
1983	1,043	274	0	4	77	26	1,120	304
1984					62	0	62	0
1985	2,321	532	0	0	35	4	2,356	536
1986	107	295	0	0	0	12	107	307
1987	646	432	0	19	0	8	646	459
1988	418	730	0	0	0	3	418	733
1989	825	674	0	0	0	0	825	674
1990	496	499	0	0	0	0	496	499
1991	394	208	0	0	0	0	394	208
1992	122	231	0	0	0	0	122	231
1993	29	395	0	0	0	0	29	395
1994	89	173	1	0	0	0	90	173
1995	48	256	0	0	0	7	48	263
1996	25	229	0	0	0	3	25	232
1997	269	222	0	0	0	0	269	222
1998	55	13	0	0	0	0	55	13
1999	11	8	0	0	0	0	11	8
2000	181	144	0	0	0	0	181	144
2001	78	56	0	0	0	0	78	56
2002	19	33	0	0	0	0	19	33
2003	850	112	0	0	0	0	850	112
2004	8	134	0	0	0	0	8	134
2005	0	39	0	0	0	0	0	39
2006	0	14	0	0	4	0	4	14
2007	0	2	0	0	0	0	0	2
2008	88	90	0	0	0	0	88	90
2009	362	193	0	0	0	0	362	193
2010	209	122	0	0	0	0	209	122

### Appendix C. 1. Weekly Chinook salmon harvest in the U.S. fisheries in D111, 2010.

ONLY inseason reference see the historical Appendix D2 for final postseason estimate. All inseason estimates are based on CWT for sport, gillnet, and troll harvest.

SW	PU		D111 sport		D111 gillnet		D111 troll		US total large D111 seine					
	Large	Taku	Large total	Large hatchery	Large Taku	Nonlarge	Large total	Large hatchery	Large Taku	Large total	Large hatchery	Large Taku	Taku	non-Taku
18			106		106								106	
19			96		96								96	
20			79		79								79	
21			195		195								195	
22			248		248								248	
23			336	131	205								205	
24			110	0	110								110	
25			222	281	-59			0					-59	
26			247	165	82	155	482	116	366				448	
27	20	370	223	147	83	348	348						515	9
28	7	165	49	116	70	145	119	26	14	0	0	0	149	21
Total	27	2,173	849	1,324	308	975	235	740	14	0	0	0	2,091	30

### Appendix C. 2. Weekly Chinook salmon abundance estimates of above border run and harvest in the Canadian fisheries in the Taku River 2010.

SW	Above	Commercial		Test fishery		Aboriginal		Rec	Harvest	Above Border Escapement
	Border Run	Large	nonlarge	Large	nonlarge	Large	nonlarge			
18		104	11						104	
19	584	356	21						356	
20	5,214	273	26						273	
21	13,563	619	75						619	
22	17,484	608	70						608	
23	23,745	1087	125						1,087	
24	23,122	1025	102						1,025	
25	28,361	405	46						405	
26	32,247	335	92						335	
27	32,813	239	67						239	
28	32,163	106	35						106	
29	32,185	63	23						63	
30	32,065	12	6						12	
31	32,065	5	1						5	
32	32,065	1	0						1	
Postseason estimate										
	34,938	5,238	700	0		126		105	5,469	28,769



Appendix C. 3. Weekly sockeye salmon harvest of Alaskan D111 traditional and terminal common property commercial drift gillnet fishery, 2010.

Week	D11 Total	Traditional StatArea specific harvests				Terminal
		111-32	111-31/90	111-20	111-34	111-(33-35)
25						
26	2,398	2,290	108			
27	3,016	2,811	205			
28	3,725	3,164	561			
29	7,186	6,305	881			
30	14,330	11,157	3,173			
31	12,672	10,380	2,292			
32	12,612	11,870	742			
33	2,364	2,005	41	318		
34	1,596	893	210	493		
35	16,445	1,539	73	178		14,655
36	190	165	20			5
37	56	56	3			
38	11	8	0			
39	5	5				
40	1	1				
41	0	0				
<b>Total</b>	<b>76,607</b>	<b>52,649</b>	<b>8,309</b>	<b>989</b>	<b>0</b>	<b>14,660</b>

Appendix C. 4. Weekly stock proportions of sockeye salmon harvested in the Alaskan District 111 traditional commercial drift gillnet fishery, 2010.

SW	Taku harvest proportions												Total Taku	Total wild	
	Kuthai	King Salmon	Mainstem	Little Trapper		Tatsamenie		Wild			U.S. Enhanced	Stikine Enhanced			Total Enhanced
				Wild	Enhanced	Wild	Enhanced	Crescent	Speel	Snett.					
25														0.000	0.000
26	0.370	0.042	0.186		0.000	0.365	0.000	0.964	0.005	0.025	0.029	0.000	0.007	0.007	0.993
27	0.318	0.035	0.340		0.000	0.262	0.003	0.958	0.008	0.027	0.034	0.000	0.008	0.011	0.989
28	0.144	0.022	0.603		0.006	0.191	0.004	0.969	0.006	0.011	0.017	0.010	0.004	0.023	0.977
29	0.000	0.022	0.522		0.012	0.194	0.013	0.762	0.056	0.081	0.137	0.098	0.003	0.126	0.874
30	0.000	0.000	0.504		0.000	0.133	0.018	0.655	0.056	0.083	0.139	0.206	0.000	0.223	0.777
31	0.000	0.000	0.618		0.004	0.135	0.022	0.779	0.048	0.121	0.169	0.052	0.000	0.077	0.923
32	0.000	0.000	0.527		0.000	0.109	0.005	0.641	0.000	0.255	0.255	0.104	0.000	0.109	0.891
33	0.000	0.000	0.421		0.000	0.108	0.023	0.552	0.018	0.198	0.216	0.233	0.000	0.255	0.745
34	0.000	0.000	0.605		0.000	0.159	0.000	0.764	0.016	0.067	0.083	0.153	0.000	0.153	0.847
35	0.000	0.000	0.605		0.000	0.159	0.000	0.764	0.016	0.067	0.083	0.153	0.000	0.153	0.847
36	0.000	0.000	0.605		0.000	0.159	0.000	0.764	0.016	0.067	0.083	0.153	0.000	0.153	0.847
37	0.000	0.000	0.605		0.000	0.159	0.000	0.764	0.016	0.067	0.083	0.153	0.000	0.153	0.847
38	0.000	0.000	0.605		0.000	0.159	0.000	0.764	0.016	0.067	0.083	0.153	0.000	0.153	0.847
39	0.000	0.000	0.605		0.000	0.159	0.000	0.764	0.016	0.067	0.083	0.153	0.000	0.153	0.847
40	0.000	0.000	0.605		0.000	0.159	0.000	0.764	0.016	0.067	0.083	0.153	0.000	0.153	0.847
41	0.000	0.000	0.605		0.000	0.159	0.000	0.764	0.016	0.067	0.083	0.153	0.000	0.153	0.847
Total	0.038	0.007	0.523	0.000	0.002	0.155	0.012	0.738	0.032	0.120	0.152	0.109	0.001	0.125	0.875
25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	886	102	447	0	0	876	0	2,311	11	59	70	0	17	17	2,381
27	959	106	1,027	0	0	789	8	2,889	23	80	103	0	24	32	2,984
28	537	82	2,246	21	0	711	14	3,610	24	39	63	38	14	86	3,639
29	0	156	3,751	84	0	1,393	96	5,479	401	581	981	702	24	905	6,281
30	0	4	7,224	0	0	1,906	252	9,387	801	1,193	1,994	2,949	0	3,201	11,129
31	0	0	7,834	45	0	1,716	273	9,869	607	1,538	2,146	658	0	976	11,696
32	0	0	6,644	0	0	1,378	64	8,086	0	3,218	3,218	1,308	0	1,372	11,240
33	0	0	996	0	0	254	53	1,304	42	468	510	550	0	603	1,761
34	0	0	965	0	0	254	0	1,219	26	107	133	243	0	243	1,353
35	0	0	1,083	0	0	285	0	1,368	29	120	149	273	0	273	1,517
36	0	0	112	0	0	29	0	141	3	12	15	28	0	28	157
37	0	0	36	0	0	9	0	45	1	4	5	9	0	9	50
38	0	0	5	0	0	1	0	6	0	1	1	1	0	1	7
39	0	0	3	0	0	1	0	4	0	0	0	1	0	1	4
40	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1
41	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2,382	450	32,373	150	0	9,604	760	45,719	1,968	7,422	9,390	6,759	79	7,748	54,199

Appendix C. 5. Weekly sockeye salmon abundance estimates of above border run and harvest in the Canadian fisheries in the Taku River, 2010.

SW	Above Border	Commercial		Test	Above Border	
	Run	All	Taku		Aboriginal	Escapement
22						
23						
24		15	15			
25		73	73			
26	10,748	2,054	2,054			
27	15,481	1,453	1,422			
28	26,283	1,475	1,475			
29	37,165	2,622	2,622			
30	66,025	5,786	5,786			
31	79,523	2,197	2,197			
32	89,540	1,724	1,724			
33	102,259	1,513	1,513			
34	111,966	642	642	186		
35	NA	443	443	87		
36	107,628	171	171	24		
37	107,510	39	39	0		
38	107,951	4	4	0		
39		0		0		
40				0		
41				0		
Postse	103,257	20,211	20,180	297	184	82,596
Expand	109,028	20,211	20,180	297	184	88,367

Appendix C. 6. Estimates of wild and enhanced sockeye salmon stock harvested in the Canadian commercial fishery in the Taku River by week, 2010.

Taku wild stock composition estimates are historical averages.

Enhanced estimates based on harvest expanations of thermally marked fish. Does not include Port Snettisham harvests.

SW	Kuthai	King Salmon	Mainstem	Little Trapper		Tatsamenie		Stikine	US	Taku
				Wild	Enhanced	Wild	Enhanced	Enhanced	Enhanced	Wild
22-24	0.775	0.035	0.190		0.000	0.000	0.000	0.000	0.000	1.000
25	0.775	0.035	0.190		0.000	0.000	0.000	0.000	0.000	1.000
26	0.775	0.035	0.190		0.000	0.000	0.000	0.000	0.000	1.000
27	0.734	0.088	0.156		0.000	0.000	0.000	0.022	0.000	0.978
28	0.371	0.123	0.484		0.021	0.000	0.000	0.000	0.000	0.979
29	0.000	0.092	0.641		0.000	0.257	0.011	0.000	0.000	0.989
30	0.000	0.009	0.759		0.042	0.170	0.021	0.000	0.000	0.938
31	0.000	0.000	0.728		0.000	0.250	0.021	0.000	0.000	0.979
32	0.000	0.000	0.704		0.011	0.243	0.043	0.000	0.000	0.947
33	0.000	0.000	0.701		0.000	0.255	0.043	0.000	0.000	0.957
34	0.000	0.000	0.726		0.000	0.274	0.000	0.000	0.000	1.000
35	0.000	0.000	0.726		0.000	0.274	0.000	0.000	0.000	1.000
36	0.000	0.000	0.726		0.000	0.274	0.000	0.000	0.000	1.000
37	0.000	0.000	0.726		0.000	0.274	0.000	0.000	0.000	1.000
38	0.000	0.000	0.726		0.000	0.274	0.000	0.000	0.000	1.000
Total	0.162	0.033	0.605		0.014	0.167	0.017	0.002	0.000	0.968
22-24	12	1	3		0	0	0	0	0	15
25	57	3	14		0	0	0	0	0	73
26	1,592	73	389		0	0	0	0	0	2,054
27	1,066	128	227		0	0	0	31	0	1,422
28	548	182	715		31	0	0	0	0	1,444
29	0	242	1,680		0	673	28	0	0	2,594
30	0	49	4,389		241	986	121	0	0	5,424
31	0	0	1,600		0	550	47	0	0	2,150
32	0	0	1,214		18	419	73	0	0	1,632
33	0	0	1,061		0	386	66	0	0	1,447
34	0	0	466		0	176	0	0	0	642
35	0	0	322		0	121	0	0	0	443
36	0	0	124		0	47	0	0	0	171
37	0	0	28		0	11	0	0	0	39
38	0	0	3		0	1	0	0	0	4
Total	3,274	676	12,235		290	3,369	334	31	0	19,555

Appendix C. 7. Weekly coho salmon harvest in the traditional Alaskan District 111 and StatArea 111-32 (Taku Inlet), commercial drift gillnet fishery, 2010.

SW	D111			111-32
	Total	Hatchery	Wild	
25				
26	42	0	42	40
27	123	0	123	108
28	516	0	516	337
29	1,224	0	1,224	735
30	2,336	0	2,336	1,528
31	2,608	0	2,608	2,085
32	2,988	188	2,800	2,704
33	1,663	0	1,663	1,332
34	3,704	316	3,388	2,630
35	6,846	694	6,152	6,436
36	10,782	485	10,297	10,403
37	12,497	1,157	11,340	12,497
38	10,543	1,270	9,273	9,897
39	5,699	963	4,736	5,325
40	588	33	555	588
41	45	0	45	45
Total	62,204	5,106	57,098	56,690

Appendix C. 8. Weekly coho salmon abundance estimates of above border run and harvest in the Canadian fisheries in the Taku River, 2010.

SW	Above border	Harvest				Above border
	Run	Commercial	Aboriginal	Recreational	Test	Escapement
25						
26		3				
27		11				
28		37				
29		255				
30		665				
31		622				
32		681				
33		1,009				
34		1,007			305	
35		1,262			395	
36		1,671			500	
37		954			600	
38		1,939			700	
39		233			600	
40					500	
41	117,846				400	
Before SW34		3,283				
SW34 to end		7,066				
Postseason Estimate	141,238	10,349	59	0	4,000	126,830

Appendix C. 9. Weekly effort in the Alaskan traditional District 111 and StatArea 111-32 (Taku Inlet), commercial drift gillnet fishery, 2010.

SW	Start Date	D111			D111-32		
		Boats	Days Open	Boat Days	Boats	Days Open	Boat Days
25	13-Jun						
26	20-Jun	65	3.0	195	63	3	189
27	27-Jun	59	3.0	177	58	3	174
28	4-Jul	115	2.0	230	93	2	186
29	11-Jul	136	2.0	272	107	2	214
30	18-Jul	134	2.0	268	96	2	192
31	25-Jul	139	2.0	278	97	2	194
32	1-Aug	61	3.0	183	54	3	162
33	8-Aug	49	2.0	98	39	2	78
34	15-Aug	41	3.0	123	32	3	96
35	22-Aug	51	4.0	204	47	4	188
36	29-Aug	44	4.0	176	43	4	172
37	5-Sep	50	4.0	200	50	4	200
38	12-Sep	42	4.0	168	41	4	164
39	19-Sep	25	4.0	100	24	4	96
40	26-Sep	12	4.0	48	12	4	48
41	3-Oct	1	4.0	4	1	4	4
Total			50.0	2,724		50.0	2,357

Appendix C. 10. Weekly effort in the Canadian commercial and assessment fisheries in the Taku River, 2010.

Week	Start Date	Commercial			Test		
		Average Permits	Days Fished	Permit Days	Average Permits	Days Fished	Permit Days
18	25-Apr	6.50	1.67	10.86			
19	2-May	7.00	2.00	14.00			
20	9-May	8.50	0.63	5.36			
21	16-May	7.00	2.58	18.06			
22	23-May	7.67	3.00	23.01			
23	30-May	10.00	3.00	30.00			
24	6-Jun	9.00	2.00	18.00			
25	13-Jun	9.00	1.00	9.00			
26	20-Jun	8.00	3.00	24.00			
27	27-Jun	7.33	3.00	21.99			
28	4-Jul	8.33	3.00	24.99			
29	11-Jul	10.67	3.00	32.01			
30	18-Jul	10.67	3.00	32.01			
31	25-Jul	11.00	2.00	22.00			
32	1-Aug	11.00	1.00	11.00			
33	8-Aug	10.00	2.00	20.00			
34	15-Aug	4.00	3.00	12.00			4
35	22-Aug	4.25	4.00	17.00			4
36	29-Aug	3.25	4.00	13.00			4
37	5-Sep	3.80	5.00	19.00			4
38	12-Sep	2.00	7.00	14.00			4
39	19-Sep	1.67	3.00	5.01			5
40	26-Sep						5
41	3-Oct						4
Total			62	396			

## Appendix C. 11. Daily counts of adult sockeye salmon passing through Tatsamenie weir, 2010.

Tatsamenie			
Cumulative			
Date	Count	Count	Percent
6-Aug	Weir installed	August 6	
7-Aug		0	0.0
8-Aug		0	0.0
9-Aug		0	0.0
10-Aug		0	0.0
11-Aug		0	0.0
12-Aug		0	0.0
13-Aug		0	0.0
14-Aug		0	0.0
15-Aug		0	0.0
16-Aug	11	11	0.3
17-Aug	25	36	1.0
18-Aug	11	47	1.3
19-Aug	27	74	2.1
20-Aug	61	135	3.8
21-Aug	42	177	5.0
22-Aug	33	210	6.0
23-Aug	29	239	6.8
24-Aug	234	473	13.5
25-Aug	161	634	18.0
26-Aug	323	957	27.2
27-Aug	388	1,345	38.3
28-Aug	323	1,668	47.5
29-Aug	92	1,760	50.1
30-Aug	316	2,076	59.1
31-Aug	238	2,314	65.9
1-Sep	101	2,415	68.7
2-Sep	52	2,467	70.2
3-Sep	103	2,570	73.2
4-Sep	59	2,629	74.8
5-Sep	48	2,677	76.2
6-Sep	92	2,769	78.8
7-Sep	50	2,819	80.2
8-Sep	53	2,872	81.8
9-Sep	74	2,946	83.9
10-Sep	5	2,951	84.0
11-Sep	56	3,007	85.6
12-Sep	47	3,054	86.9
13-Sep	48	3,102	88.3
14-Sep	37	3,139	89.4
15-Sep	49	3,188	90.7
16-Sep	12	3,200	91.1
17-Sep	43	3,243	92.3
18-Sep	20	3,263	92.9
19-Sep	1	3,264	92.9
20-Sep	28	3,292	93.7
21-Sep	0	3,292	93.7
22-Sep	37	3,329	94.8
23-Sep	2	3,331	94.8
24-Sep	102	3,433	97.7
25-Sep	12	3,445	98.1
26-Sep	7	3,452	98.3
27-Sep	9	3,461	98.5
28-Sep	21	3,482	99.1
29-Sep	0	3,482	99.1
30-Sep	14	3,496	99.5
1-Oct	0	3,496	99.5
2-Oct	15	3,511	99.9
3-Oct	0	3,511	99.9
4-Oct	2	3,513	100.0
		Total	Wild TMR
Holding below weir			
Escapement to lake	3,513	2,812	701
Outlet spawners	<15		
otolith samples	396	317	79
Broodstock a	-1,400	-1,121	-279
Spawners	2,113		

a Broodstock included 539 females and 490 males from which gametes were collected, 18 females and 12 male mortalities, and 243 females and 98 males which were held and released unspawned. The spawning success of the released fish is not known.

Appendix C. 12. Daily counts of adult sockeye salmon passing through Little Trapper Lake weir, 2010.

Date	Cumulative		
	Count <sup>a</sup>	Count	Percent
22-Jul	Weir installed July 22		
23-Jul		0	0.0
24-Jul		0	0.0
25-Jul		0	0.0
26-Jul		0	0.0
27-Jul		0	0.0
28-Jul		0	0.0
29-Jul		0	0.0
30-Jul	58	58	1.7
31-Jul	47	105	3.1
1-Aug	50	155	4.6
2-Aug	250	405	12.1
3-Aug	274	679	20.3
4-Aug	730	1,409	42.1
5-Aug	271	1,680	50.2
6-Aug	83	1,763	52.7
7-Aug	69	1,832	54.7
8-Aug	54	1,886	56.3
9-Aug	54	1,940	58.0
10-Aug	134	2,074	62.0
11-Aug	79	2,153	64.3
12-Aug	15	2,168	64.8
13-Aug	68	2,236	66.8
14-Aug	55	2,291	68.4
15-Aug	52	2,343	70.0
16-Aug	19	2,362	70.6
17-Aug	203	2,565	76.6
18-Aug	144	2,709	80.9
19-Aug	134	2,843	84.9
20-Aug	67	2,910	86.9
21-Aug	48	2,958	88.4
22-Aug	98	3,056	91.3
23-Aug	13	3,069	91.7
24-Aug	53	3,122	93.3
25-Aug	14	3,136	93.7
26-Aug	41	3,177	94.9
27-Aug	12	3,189	95.3
28-Aug	12	3,201	95.6
29-Aug	5	3,206	95.8
30-Aug	35	3,241	96.8
31-Aug	11	3,252	97.2
1-Sep	11	3,263	97.5
2-Sep	31	3,294	98.4
3-Sep	32	3,326	99.4
4-Sep	12	3,338	99.7
5-Sep	7	3,345	99.9
6-Sep	1	3,346	100.0
7-Sep	0	3,346	100.0
8-Sep	1	3,347	100.0
9-Sep	0	3,347	100.0
10-Sep	Weir removed		
		Total	Wild TMR
Holding below weir		40	
Escapement to lake		3,347	
Outlet spawners		100	
otolith samples		0	
Broodstock a		0	
Spawners		3,387	



Appendix C. 13. Daily counts of adult sockeye salmon passing through the King Salmon Lake weir, 2010.

Date	Count	Cumulative	
		Count	Percent
4-Jul			
5-Jul		0	0.0
6-Jul		0	0.0
7-Jul	0	0	0.0
8-Jul	0	0	0.0
9-Jul	0	0	0.0
10-Jul	0	0	0.0
11-Jul	0	0	0.0
12-Jul	0	0	0.0
13-Jul	0	0	0.0
14-Jul	0	0	0.0
15-Jul	144	144	4.8
16-Jul	328	472	15.9
17-Jul	92	564	18.9
18-Jul	0	564	18.9
19-Jul	56	620	20.8
20-Jul	55	675	22.7
21-Jul	5	680	22.8
22-Jul	85	765	25.7
23-Jul	56	821	27.6
24-Jul	41	862	29.0
25-Jul	164	1,026	34.5
26-Jul	232	1,258	42.3
27-Jul	50	1,308	43.9
28-Jul	90	1,398	47.0
29-Jul	143	1,541	51.8
30-Jul	199	1,740	58.4
31-Jul	160	1,900	63.8
1-Aug	166	2,066	69.4
2-Aug	19	2,085	70.0
3-Aug	42	2,127	71.4
4-Aug	159	2,286	76.8
5-Aug	55	2,341	78.6
6-Aug	51	2,392	80.3
7-Aug	36	2,428	81.6
8-Aug	21	2,449	82.3
9-Aug	27	2,476	83.2
10-Aug	40	2,516	84.5
11-Aug	109	2,625	88.2
12-Aug	22	2,647	88.9
13-Aug	57	2,704	90.8
14-Aug	15	2,719	91.3
15-Aug	13	2,732	91.8
16-Aug	8	2,740	92.0
17-Aug	5	2,745	92.2
18-Aug	177	2,922	98.2
19-Aug	5	2,927	98.3
20-Aug	1	2,928	98.4
21-Aug	14	2,942	98.8
22-Aug	0	2,942	98.8
23-Aug	24	2,966	99.6
24-Aug	11	2,977	100.0
25-Aug	0	2,977	100.0
26-Aug	0	2,977	100.0
27-Aug	0	2,977	100.0
28-Aug	0	2,977	100.0
29-Aug	0	2,977	100.0
30-Aug	0	2,977	100.0
31-Aug	0	2,977	100.0
1-Sep	0	2,977	100.0
2-Sep	0	2,977	100.0
3-Sep	0	2,977	100.0
4-Sep	0	2,977	100.0
5-Sep	0	2,977	100.0
6-Sep	0	2,977	100.0
7-Sep	Weir removed		
Total	2,977		

Appendix C. 14. Daily counts of adult sockeye salmon passing through the Kuthai Lake weir, 2010.

Date	Cumulative		Percent
	Count	Count	
3-Jul	0	0	0.0
4-Jul	0	0	0.0
5-Jul	0	0	0.0
6-Jul	0	0	0.0
7-Jul	0	0	0.0
8-Jul	5	5	0.3
9-Jul	0	0	0.0
10-Jul	15	15	0.9
11-Jul	16	16	1.0
12-Jul	1	1	0.1
13-Jul	1	1	0.1
14-Jul	45	46	2.8
15-Jul	24	70	4.3
16-Jul	2	72	4.4
17-Jul	1	73	4.5
18-Jul	58	131	8.1
19-Jul	0	131	8.1
20-Jul	122	253	15.6
21-Jul	0	253	15.6
22-Jul	0	253	15.6
23-Jul	2	255	15.7
24-Jul	0	255	15.7
25-Jul	0	255	15.7
26-Jul	37	292	18.0
27-Jul	114	406	25.0
28-Jul	39	445	27.4
29-Jul	68	513	31.5
30-Jul	79	592	36.4
31-Jul	2	594	36.5
1-Aug	31	625	38.4
2-Aug	37	662	40.7
3-Aug	42	704	43.3
4-Aug	45	749	46.1
5-Aug	51	800	49.2
6-Aug	27	827	50.9
7-Aug	6	833	51.2
8-Aug	61	894	55.0
9-Aug	6	900	55.4
10-Aug	17	917	56.4
11-Aug	4	921	56.6
12-Aug	2	923	56.8
13-Aug	41	964	59.3
14-Aug	4	968	59.5
15-Aug	17	985	60.6
16-Aug	31	1,016	62.5
17-Aug	33	1,049	64.5
18-Aug	18	1,067	65.6
19-Aug	2	1,069	65.7
20-Aug	0	1,069	65.7
21-Aug	0	1,069	65.7
22-Aug	2	1,071	65.9
23-Aug	0	1,071	65.9
24-Aug	0	1,071	65.9
25-Aug	13	1,084	66.7
26-Aug	364	1,448	89.1
27-Aug	88	1,536	94.5
28-Aug	50	1,586	97.5
29-Aug	0	1,586	97.5
30-Aug	3	1,589	97.7
31-Aug	Weir removed		
Total count		1,626	
Harvest above weir		0	
Escapement		1,626	

19-Sept Helicopter survey was 482

Appendix C. 15. Daily counts of large Chinook salmon carcasses at the Nakina River weir, 2010.

Date	Count (all sizes)			Cumulative Count		Size (sex combined)			
	Female	Male	Unknown	Combined	Count	Percent	Large	nonlarge	unknown
2-Aug	1	0	0	1	1	0.2	1	0	0
3-Aug	0	2	0	2	3	0.7	1	1	0
4-Aug	0	3	0	3	6	1.4	2	1	0
5-Aug	0	4	0	4	10	2.4	3	1	0
6-Aug	1	1	0	2	12	2.9	2	0	0
7-Aug	1	10	0	11	23	5.5	6	2	3
8-Aug	3	5	0	8	31	7.4	6	2	0
9-Aug	5	21	0	26	57	13.6	10	14	2
10-Aug	6	25	0	31	88	21.0	7	15	9
11-Aug	8	43	0	51	139	33.1	9	33	9
12-Aug	9	41	0	50	189	45.0	16	26	8
13-Aug	6	46	0	52	241	57.4	13	34	5
14-Aug	4	24	0	28	269	64.0	5	12	11
15-Aug	7	21	0	28	297	70.7	6	10	12
16-Aug	4	28	1	33	330	78.6	2	12	19
17-Aug	2	18	0	20	350	83.3	3	6	11
18-Aug	2	12	0	14	364	86.7	4	9	1
19-Aug	3	16	0	19	383	91.2	8	9	2
20-Aug	2	10	0	12	395	94.0	4	7	1
21-Aug	0	3	0	3	398	94.8	1	2	0
22-Aug	3	11	1	15	413	98.3	6	6	3
23-Aug	0	7	0	7	420	100.0	0	2	5
Total	67	351	2	420			115	204	101

Appendix D. 1. All historic harvest and effort of salmon in the D111 gillnet fishery, 1960–2010.

These estimates include traditional and common property terminal harvest in D111

Year	Chinook	Sockeye	Coho	Pink	Chum	Boat Days	Days open
1960	8,810	42,819	22,374	33,155	41,852		60
1961	7,434	45,981	15,486	41,455	24,433		62
1962	5,931	36,745	15,661	17,280	20,635		52
1963	2,652	24,119	10,855	21,692	20,114		54
1964	2,509	34,140	29,315	26,593	12,853		56
1965	4,170	27,569	32,667	2,768	11,533		63
1966	4,829	33,925	26,065	23,833	35,133		64
1967	5,417	17,735	40,391	12,372	22,834		53
1968	4,904	19,501	39,103	67,365	21,890		60
1969	6,986	41,222	10,802	74,178	15,046	1,518	42
1970	3,357	50,862	44,569	196,237	110,621	2,688	53
1971	6,945	66,261	41,588	31,296	90,964	3,053	55
1972	10,949	80,911	49,609	144,237	148,432	3,103	51
1973	9,799	85,402	35,453	58,186	109,245	3,286	41
1974	2,908	38,726	38,667	57,820	86,692	2,315	30
1975	2,182	32,550	1,185	9,567	2,678	1,084	16
1976	1,757	62,174	41,664	14,977	81,972	1,914	25
1977	1,068	72,030	54,929	88,904	60,964	2,258	27
1978	1,926	55,398	31,944	51,385	36,254	2,174	26
1979	3,701	122,148	16,194	152,836	61,194	2,269	29
1980	2,251	123,451	41,677	296,622	192,793	4,123	31
1981	1,721	49,942	26,711	254,856	76,438	2,687	30
1982	3,014	83,722	29,073	109,270	37,584	2,433	36
1983	888	31,821	21,455	66,239	15,264	1,274	33
1984	1,773	77,233	33,836	145,971	86,764	2,757	53
1985	2,632	88,093	55,518	311,305	106,900	3,264	48
1986	2,584	73,061	30,512	16,568	58,792	2,129	33
1987	2,076	75,212	35,219	363,439	121,660	2,514	35
1988	1,777	38,901	44,818	157,732	140,038	2,135	32
1989	1,811	74,019	51,812	180,639	36,979	2,333	41
1990	3,480	126,884	67,530	153,126	145,799	3,188	38
1991	3,214	109,471	126,576	74,170	160,422	4,145	57
1992	2,341	135,411	172,662	314,445	112,527	4,550	50
1993	7,159	171,427	65,539	29,216	167,902	3,827	43
1994	5,047	106,318	188,682	410,467	214,243	5,078	66
1995	4,660	104,064	83,609	41,513	350,033	4,034	49
1996	2,659	201,853	33,650	12,675	365,813	3,229	46
1997	2,805	143,009	32,364	51,483	176,913	2,107	33
1998	794	101,702	28,713	168,738	296,121	3,070	48
1999	1,961	93,368	17,309	59,368	429,405	2,841	59
2000	2,019	290,165	7,828	58,699	669,998	2,919	40
2001	1,698	293,657	22,646	123,026	241,370	4,731	54
2002	1,850	240,439	40,464	78,624	231,936	4,095	62
2003	1,467	313,725	24,338	114,184	170,901	3,977	78
2004	2,345	428,745	59,868	154,775	131,856	3,342	63
2005	23,301	222,156	21,289	182,778	97,588	3,427	68
2006	11,261	313,982	60,145	192,140	383,000	3,517	89
2007	1,452	184,810	22,394	100,375	590,169	3,505	64
2008	2,193	116,693	37,349	90,162	774,095	3,116	49
2009	6,800	62,070	36,615	56,801	918,350	3,438	62
2010	1,685	76,607	62,241	132,785	488,898	2,831	54
average							
60-12	4,145	109,312	42,374	109,911	170,340	3,011	48
03-12	5,439	246,644	33,294	115,156	420,926	3,607	63

Appendix D. 2. Annual harvest estimates of Taku River large Chinook salmon in the D111 fisheries, 2005–2010.

Estimates based on GSI for gillnet and sport; troll is CWT.

For detailed GSI stock comp estimates see Appendix G. 3 and G4.

Year	PU	Sport	Gillnet	Troll	Total large Taku
2005	32	2,476	16,490	21	19,019
2006	18	2,048	9,257	11	11,334
2007	22	1,034	303	0	1,359
2008	46	632	445	0	1,123
2009	25	673	4,609	2	5,309
2010	36	984	526	0	1,546
Average					
05-10	29	1,373	6,221	7	7,629

Appendix D. 3. Annual Chinook Salmon harvest in the Canadian fisheries in the Taku River, 1979–2010.

Year	Commerical		Aboriginal		Test			Rec Large	Total All Large
	Large	nonlarge	Large	nonlarge	Large	nonlarge	released large		
1979	97							300	397
1980	225		85					300	610
1981	159							300	459
1982	54							300	354
1983	156	400	9					300	465
1984	294	221	0					300	594
1985	326	24	4					300	630
1986	275	77	10					300	585
1987	127	106	0					300	427
1988	555	186	27		72			300	954
1989	895	139	6		31			300	1,232
1990	1,258	128	0		48			300	1,606
1991	1,177	432	0		0			300	1,477
1992	1,445	147	121		0			300	1,866
1993	1,619	171	25		0			300	1,944
1994	2,065	235	119		There was no Canadian coho test fishery			300	2,484
1995	1,577	298	70		There was no Canadian coho test fishery			105	1,752
1996	3,331	144	63		There was no Canadian coho test fishery			105	3,499
1997	2,731	84	103					105	2,939
1998	1,107	227	60		There was no Canadian coho test fishery			105	1,272
1999	908	257	50		577	2	181	105	1,640
2000	1,576	87	50		1,312	87	439	105	3,043
2001	1,458	118	125		1,175	229	871	105	2,863
2002	1,561	291	37		1,311	355	1,132	105	3,014
2003	1,894	547	277	237	1,403	397		105	3,679
2004	2,082	335	277	116	1,489	294		105	3,953
2005	7,399	821	212		0	0		105	7,716
2006	7,377	207	222		630	9		105	8,334
2007	874	426	167	16	1,396	302		105	2,542
2008	913	330	1		1,399	139		105	2,418
2009	6,759	1,137	172	0	0	0		105	7,036
2010	5,238	700	126	0	0	0		105	5,469
Averages									
85-10	2,052	278	88	92				183	2,756
00-09	3,189	430	154	92	1,011	181		105	4,460

#### Appendix D. 4. Taku River large Chinook salmon run size, 1979–2010.

Run estimate does not include spawning escapements below the U.S./Canada border. US harvest estimates after 2004 are based on GSI (gillnet and sport fish) and CWT (troll) and harvest in the fisheries between SW 18-28.

Year	Above Border M-R		Above Border					
	Spawning		CI		Canadian	Run	U.S.	Terminal
	Escapement	Method	Lower	Upper	Harvest <sup>a</sup>	Estimate	Harvest	Run
1989	40,329	Mark-recapture	29,263	51,395	1,232	41,561		
1990	52,142	Mark-recapture	33,863	70,421	1,606	53,748		
1991	51,645	Aerial expansion	17,072	86,218	1,477	53,122		
1992	55,889	Aerial expansion	18,475	93,303	1,866	57,755		
1993	66,125	Aerial expansion	21,858	110,392	1,944	68,069		
1994	48,368	Aerial expansion	15,989	80,747	2,484	50,852		
1995	33,805	Medium expansion	23,887	43,723	1,752	35,557	6,263	41,820
1996	79,019	Mark-recapture	61,285	96,753	3,499	82,518	6,280	88,798
1997	114,938	Mark-recapture	79,878	149,998	2,939	117,877	8,325	126,202
1998	31,039	Aerial expansion	10,255	51,823	1,272	32,311	2,605	34,916
1999	16,786	Mark-recapture	10,571	23,001	1,640	18,426	4,019	22,445
2000	34,997	Mark-recapture	24,407	45,587	3,043	38,040	3,472	41,512
2001	46,644	Mark-recapture	33,383	59,905	2,863	49,507	3,883	53,390
2002	55,044	Mark-recapture	33,313	76,775	3,014	58,058	3,282	61,340
2003	36,435	Mark-recapture	23,293	49,577	3,679	40,114	2,768	42,882
2004	75,032	Mark-recapture	54,883	95,181	3,953	78,985	3,696	82,681
2005	38,599	Mark-recapture	28,980	48,219	7,716	46,315	19,019	65,334
2006	42,191	Mark-recapture	31,343	53,040	8,334	50,525	11,334	61,859
2007	14,749	Mark-recapture	8,326	21,172	2,542	17,291	1,359	18,650
2008	26,645	Mark-recapture	20,744	32,545	2,418	29,063	1,123	30,186
2009	22,761	Mark-recapture	17,134	28,388	7,036	29,797	5,309	35,106
2010	28,769	Mark-recapture	23,840	33,698	5,469	34,238	1,546	35,784
Averages								
95-09	44,579				3,713	48,292	5,516	53,808
00-09	39,310				4,460	43,770	5,525	49,294

<sup>a</sup> In years when sample size data is available (1999-present in the commercial and test fisheries, and 2003-2004 in the Aboriginal fishery) it was used to determine the number of large fish in the Canadian harvest. In years when sample data is not available, the average % large in the commercial fishery from 1999-2004 (75%) was applied to all harvest except the recreational harvest which is assumed to be 100% large.

Appendix D. 5. Aerial survey index escapement counts of large (3-ocean and older) Taku River Chinook salmon, 1975–2010.

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>at</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
2008	690	1,083	480	497	1,437	1,121	4,811
2009	408	633	272	145	1,698	1,033	4,044
2010	716	821	561	128	1,730	1,018	4,846
Averages							
85-10	768	1,023	615	369	3,795	1,589	7,620
00-09	775	968	494	315	2,332	927	5,263

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

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

<sup>c</sup> Stopped flying index area 4 on the Nakina after 2009.



Appendix D. 6. Annual sockeye salmon harvest in the Alaskan District 111 fisheries, includes estimates of Taku wild and enhanced fish in the gillnet, seine, and personal use fisheries, 1967–2010.

Personal Use wild/enhanced estimates are based on the Canadian lower river commercial fishery.

Year	D111 gillnet harvest				PU Taku harvest		
	All	D11 without snet for stock comp		All Taku	Wild Taku	EnhancedTaku	
	D111	harvest	Wild Taku				enhancedTaku
1967	17,735	15,282		103			
1968	19,501	17,721		41			
1969	41,169	40,053		122			
1970	50,922	49,951		304			
1971	66,181	62,593		512			
1972	80,404	76,478		554			
1973	85,317	81,149		1,227			
1974	38,670	33,934		1,431			
1975	32,513	32,271		170			
1976	61,749	54,456		351			
1977	70,097	66,844					
1978	55,398	54,305					
1979	122,148	115,192					
1980	123,451	116,861					
1981	49,942	48,912					
1982	83,625	80,161					
1983	31,821	31,073					
1984	77,233	76,015					
1985	88,077	87,550		920			
1986	73,061	72,713					
1987	75,212	76,377					
1988	38,923	38,885					
1989	74,019	73,991		562			
1990	126,884	126,876		793			
1991	109,877	111,002		800			
1992	135,411	132,669		1,217			
1993	171,556	171,373		1,201			
1994	105,861	105,758		1,111			
1995	103,377	103,361	86,929	4,065	990	950	40
1996	199,014	198,303	181,776	4,762	1,189	1,168	21
1997	94,745	94,486	76,043	2,031	1,053	1,024	29
1998	69,677	68,462	47,824	806	1,202	1,165	37
1999	79,425	77,515	61,205	599	1,254	1,236	18
2000	168,272	166,248	128,567	1,561	1,134	1,116	18
2001	290,450	284,786	194,091	8,880	1,462	1,405	57
2002	178,488	176,042	114,461	651	1,289	1,287	2
2003	205,433	177,903	133,509	767	1,218	1,208	10
2004	241,254	177,830	75,186	676	1,150	1,135	15
2005	87,254	71,472	44,361	579	1,150	1,136	14
2006	134,781	99,622	62,814	2,210	804	773	31
2007	112,241	107,129	60,879	3,684	566	508	58
2008	116,693	116,693	63,002	11,680	1,010	903	107
2009	62,070	62,070	35,121	240	871	863	8
2010	61,947	61,947	44,837	910	1,020	987	33
Averages							
95-09	142,878	132,128	91,051	2,879	1,089	1,058	31
00-09	159,694	143,980	91,199	3,093	1,065	1,033	32

## Appendix D. 7. Stock proportions and harvest of sockeye salmon in the traditional Alaska District 111 commercial drift gillnet fishery, 1983–2010.

Week	King		Little Trapper		Tatsamenie		Taku	Total	Snettisham Total Wild			U.S.	Stikine	
	Kuthai	Salmon	Mainstem	Wild	Enhanced	Wild	Enhanced	Wild	Taku	Crescent	Speel	Snett.	Enhanced	Enhanced
1983								0.755	0.755			0.245		
1984								0.758	0.758			0.242		
1985								0.838	0.838			0.162		
1986	0.061		0.303	0.266		0.204		0.834	0.834	0.090	0.076	0.166		
1987	0.078		0.376	0.234		0.031		0.720	0.720	0.157	0.123	0.280		
1988	0.118		0.305	0.158		0.082		0.663	0.663	0.266	0.071	0.337		
1989 <sup>a</sup>	0.077					0.156		0.849	0.849	0.051	0.100	0.152		
1990	0.036		0.336	0.197		0.286		0.855	0.855	0.112	0.033	0.145		
1991	0.039		0.373	0.297		0.232		0.941	0.941	0.059	0.000	0.059		
1992	0.048		0.445	0.220		0.191		0.904	0.904	0.036	0.060	0.096		
1993	0.062		0.308	0.328		0.123		0.822	0.822	0.069	0.109	0.178		
1994	0.110		0.361	0.356		0.091		0.917	0.917	0.036	0.022	0.058	0.025	
1995	0.046		0.428	0.214	0.010	0.153	0.029	0.841	0.880	0.018	0.075	0.093	0.026	
1996	0.069		0.499	0.117	0.010	0.232	0.014	0.917	0.941	0.013	0.032	0.045	0.014	
1997	0.067		0.282	0.170	0.011	0.286	0.011	0.805	0.826	0.027	0.026	0.053	0.120	
1998	0.087		0.209	0.158	0.008	0.245	0.004	0.699	0.710	0.026	0.007	0.033	0.257	
1999	0.176		0.235	0.259	0.003	0.119	0.005	0.790	0.797	0.049	0.023	0.072	0.131	
2000	0.139		0.211	0.273	0.002	0.151	0.008	0.773	0.783	0.004	0.054	0.058	0.160	
2001	0.076		0.268	0.130	0.000	0.207	0.031	0.682	0.713	0.014	0.032	0.046	0.241	
2002	0.098		0.173	0.254	0.000	0.126	0.004	0.650	0.654	0.014	0.032	0.047	0.299	
2003	0.087	0.016	0.398	0.225	0.000	0.033	0.004	0.750	0.755	0.009	0.047	0.056	0.181	
2004	0.064	0.043	0.233	0.041	0.000	0.042	0.004	0.423	0.427	0.011	0.040	0.051	0.522	
2005	0.021	0.024	0.456	0.080	0.000	0.040	0.008	0.621	0.629	0.048	0.097	0.145	0.226	
2006	0.019	0.025	0.361	0.067	0.000	0.159	0.022	0.631	0.653	0.015	0.044	0.060	0.288	
2007	0.066	0.000	0.355	0.058	0.000	0.089	0.034	0.568	0.603	0.083	0.023	0.106	0.291	
2008	0.092	0.011	0.267	0.016	0.000	0.154	0.100	0.540	0.640	0.034	0.048	0.082	0.278	
2009	0.026	0.000	0.343	0.087	0.000	0.109	0.004	0.566	0.570	0.051	0.088	0.140	0.288	0.002
2010	0.038	0.007	0.523	0.000	0.002	0.155	0.012	0.724	0.738	0.031	0.120	0.151	0.109	0.001
Averages														
86-09	0.073		0.327	0.183	0.003	0.147	0.019	0.740	0.754	0.054	0.053	0.107	0.209	
00-09	0.069	0.017	0.306	0.123	0.000	0.111	0.022	0.620	0.642	0.028	0.051	0.079	0.277	0.002
1983								23,460	23,460			7,613		
1984								57,619	57,619			18,396		
1985								73,367	73,367			14,183		
1986	4,468		21,999	19,348		14,829		60,644	60,644	6,579	5,490	12,069		
1987	5,984		28,724	17,867		2,388		54,963	54,963	11,997	9,417	21,414		
1988	4,594		11,854	6,147		3,191		25,785	25,785	10,355	2,745	13,100		
1989 <sup>a</sup>	5,694					11,532		62,804	62,804	3,788	7,422	11,210		
1990	4,539		42,673	24,950		36,330		108,492	108,492	14,241	4,143	18,384		
1991	4,339		41,376	33,020		25,736		104,471	104,471	6,531	0	6,531		
1992	6,411		59,004	29,214		25,329		119,959	119,959	4,813	7,897	12,709		
1993	10,662		52,820	56,290		21,116		140,888	140,888	11,864	18,621	30,485		
1994	11,627		38,142	37,607		9,576		96,952	96,952	3,855	2,317	6,172	2,634	
1995	4,787		44,271	22,106	1,017	15,765	3,049	86,929	90,994	1,901	7,740	9,641	2,727	
1996	13,693		98,876	23,224	1,913	45,983	2,849	181,776	186,538	2,535	6,393	8,928	2,838	
1997	6,328		26,621	16,061	1,028	27,033	1,003	76,043	78,074	2,551	2,503	5,054	11,358	
1998	5,949		14,306	10,826	560	16,743	246	47,824	48,630	1,753	491	2,244	17,588	
1999	13,679		18,231	20,101	241	9,194	358	61,205	61,804	3,786	1,770	5,556	10,155	
2000	23,076		35,025	45,424	276	25,042	1,285	128,567	130,128	614	8,979	9,592	26,528	
2001	21,612		76,418	37,124	0	58,937	8,880	194,091	202,971	4,017	9,149	13,166	68,649	
2002	17,235		30,397	44,687	0	22,141	651	114,461	115,112	2,524	5,700	8,224	52,708	
2003	15,462	2,829	70,801	39,989	0	5,876	767	133,509	134,276	1,622	8,361	9,983	32,196	
2004	11,420	7,583	41,366	7,311	0	7,505	676	75,186	75,862	2,029	7,128	9,157	92,810	
2005	1,495	1,715	32,591	5,699	0	2,860	579	44,361	44,940	3,418	6,953	10,371	16,161	
2006	1,863	2,441	35,993	6,691	0	15,825	2,210	62,814	65,024	1,531	4,409	5,940	28,659	
2007	7,087	0	38,084	6,224	0	9,484	3,684	60,879	64,563	8,878	2,475	11,353	31,213	
2008	10,709	1,308	31,170	1,816	0	17,999	11,680	63,002	74,682	3,939	5,605	9,544	32,467	
2009	1,636	0	21,275	5,414	0	6,796	240	35,121	35,361	3,182	5,492	8,674	17,888	148
2010	2,381	452	32,407	0	150	9,597	760	44,837	45,747	1,940	7,422	9,362	6,759	79
Average <sup>a</sup>														
86-09	8,931		39,653	22,484		18,217		89,197	90,996	4,929	5,883	10,813	27,911	
00-09	11,159	2,268	41,312	20,038	28	17,247	3,065	91,199	94,292	3,175	6,425	9,600	39,928	

<sup>a</sup> The Trapper and Mainstem groups were combined in the 1989 and 2011 analyses.

Appendix D. 8. Proportion of wild Taku River sockeye salmon in the Alaskan District  
111 commercial drift gillnet harvest by week, 1983–2010.

Data based on scale patterns and incidence of brain parasites. Does not include enhanced fish.

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
2008	0.975	0.900	0.695	0.632	0.589	0.470	0.424	0.488	0.489	0.489	0.868
2009	0.902	0.902	0.715	0.683	0.552	0.542	0.528	0.416	0.382	0.382	0.566
2010		0.964	0.955	0.960	0.737	0.637	0.754	0.636	0.529	0.764	0.723
Average											
83-09		0.967	0.916	0.886	0.838	0.796	0.804	0.798	0.754	0.740	0.857
00-09		0.964	0.902	0.867	0.830	0.816	0.779	0.778	0.720	0.709	0.880

Appendix D. 9. Annual sockeye salmon harvest estimates of wild and enhanced fish in the Canadian fisheries in the Taku River, 1979–2010.

Year	All harvest				Wild Taku			EnhancedTaku			
	Commercial		Aboriginal	Test	test released	Commercial	Aboriginal	Test	Commercial	Aboriginal	Test
	All harvest	Taku									
1979	13,578					13,578					
1980	22,602		150			22,602	150				
1981	10,922					10,922					
1982	3,144					3,144					
1983	17,056		0			17,056	0				
1984	27,242		50			27,242	50				
1985	14,244		167			14,244	167				
1986	14,739		200			14,739	200				
1987	13,554		96	237		13,554	96	237			
1988	12,014		245	708		12,014	245	708			
1989	18,545		53	207		18,545	53	207			
1990	21,100		89	285		21,100	89	285			
1991	25,067		150	163		25,067	150	163			
1992	29,472		352	38		29,472	352	38			
1993	33,217		140	166		33,217	140	166			
1994	28,762		239			28,762	239				
1995	32,640		71			31,306	68		1,334	3	0
1996	41,665		360			40,933	354		732	6	0
1997	24,003		349		1	23,346	339		657	10	0
1998	19,038		239			18,449	232		589	7	0
1999	20,681		382	88		20,384	377	87	297	5	1
2000	28,009		140	319		27,573	138	314	436	2	5
2001	47,660		210	247	82	45,792	202	237	1,868	8	10
2002	31,053		155	518	161	31,004	155	517	49	0	1
2003	32,730		267	27	197	32,463	265	27	267	2	0
2004	20,148		120	91		19,882	118	90	266	2	1
2005	21,697		161	244		21,440	159	241	257	2	3
2006	21,099		85	262		20,294	82	252	805	3	10
2007	16,714		159	376		14,987	143	337	1,727	16	39
2008	19,284		215	10	32	17,242	192	9	2,042	23	1
2009	10,980		106	174		10,875	105	172	105	1	2
2010	20,211	20,180	184	297		19,555	178	287	625	6	10
Averages											
86-09	24,328		191			23,852	187				
00-09	24,937		162	227	118	24,155	156	220	782	6	7

## Appendix D. 10. Annual sockeye salmon stock proportions and harvest by stock in the Canadian commercial fishery on the Taku River, 1986–2010.

Data based on scale pattern, brain parasite, and thermal mark analyses.

Year	King		Little Trapper		Tatsamenie		Taku		Stikine	US
	Kuthai	Salmon	Mainstem	Wild	Enhance	Wild	Enhance	Wild	Enhance	Enhance
1986	0.111		0.350	0.397		0.143		1.000		
1987	0.062		0.649	0.201		0.088		1.000		
1988	0.143		0.343	0.417		0.098		1.000		
1989 <sup>a</sup>	0.053		<sup>a</sup>	<sup>a</sup>		0.203		1.000		
1990	0.112		0.338	0.388		0.163		1.000		
1991	0.064		0.452	0.308		0.176		1.000		
1992	0.092		0.569	0.240		0.099		1.000		
1993	0.126		0.432	0.392		0.049		1.000		
1994	0.158		0.302	0.482		0.058		1.000		
1995	0.047		0.373	0.427	0.010	0.112	0.031	0.959	0.041	
1996	0.105		0.442	0.221	0.008	0.215	0.010	0.982	0.018	
1997	0.120		0.277	0.282	0.019	0.294	0.008	0.973	0.027	
1998	0.225		0.254	0.207	0.028	0.283	0.003	0.969	0.031	
1999	0.389		0.145	0.305	0.008	0.147	0.006	0.986	0.014	
2000	0.172		0.326	0.205	0.000	0.282	0.016	0.984	0.016	
2001	0.184		0.364	0.168	0.000	0.246	0.039	0.961	0.039	
2002	0.316		0.192	0.428	0.000	0.062	0.002	0.998	0.002	
2003	0.231	0.023	0.271	0.378	0.000	0.089	0.008	0.992	0.008	
2004	0.168	0.071	0.586	0.132	0.000	0.031	0.013	0.987	0.013	
2005	0.098	0.038	0.505	0.204	0.000	0.143	0.012	0.988	0.012	
2006	0.055	0.028	0.474	0.176	0.000	0.229	0.038	0.962	0.038	
2007	0.102	0.000	0.524	0.101	0.000	0.170	0.096	0.897	0.096	0.007
2008	0.308	0.007	0.222	0.058	0.000	0.299	0.099	0.894	0.099	0.007
2009	0.155	0.000	0.276	0.414	0.000	0.145	0.007	0.990	0.007	0.002
2010	0.162	0.033	0.605	0.000	0.014	0.167	0.017	0.968	0.031	0.002
										0.000
Averages										
86-09	0.150		0.377	0.284		0.159		0.980		
00-09	0.179	0.024	0.374	0.226	0.000	0.169	0.033	0.965	0.033	0.006
1986	1,629		5,152	5,855		2,103		14,739		
1987	834		8,793	2,728		1,199		13,554		
1988	1,715		4,122	5,005		1,172		12,014		
1989 <sup>a</sup>	990					3,763		18,545		
1990	2,355		7,131	8,183		3,431		21,100		
1991	1,601		11,327	7,721		4,418		25,067		
1992	2,699		16,764	7,085		2,924		29,472		
1993	4,192		14,347	13,036		1,641		33,217		
1994	4,544		8,684	13,858		1,676		28,762	0	
1995	1,528		12,185	13,934	331	3,659	1,003	31,306	1,334	
1996	4,357		18,422	9,195	331	8,959	401	40,933	732	
1997	2,891		6,637	6,758	456	7,060	201	23,346	657	
1998	4,279		4,829	3,944	533	5,397	56	18,449	589	
1999	8,044		2,992	6,314	171	3,034	126	20,384	297	
2000	4,809		9,122	5,745	0	7,897	436	27,573	436	
2001	8,748		17,330	8,005	0	11,709	1,868	45,792	1,868	
2002	9,826		5,948	13,305	0	1,925	49	31,004	49	
2003	7,568	755	8,855	12,383	0	2,902	267	32,463	267	
2004	3,381	1,430	11,799	2,653	0	620	266	19,882	266	
2005	2,120	829	10,950	4,433	0	3,108	257	21,440	257	
2006	1,168	589	9,993	3,704	0	4,840	805	20,294	805	
2007	1,697	0	8,759	1,694	0	2,838	1,602	14,987	1,602	125
2008	5,949	139	4,276	1,114	0	5,763	1,905	17,242	1,905	137
2009	1,703	0	3,035	4,549	0	1,588	80	10,875	80	25
2010	3,274	676	12,235		290	3,369	334	19,555	625	31
										0
Averages										
86-09	3,810		9,194	7,009		3,907		24,082	697	
00-09	4,697	535	9,007	5,759	0	4,319	754	24,155	754	

<sup>a</sup>The Trapper and Mainstem groups were combined in the 1989 and 2010 analyses.

Appendix D. 11. Annual sockeye salmon weir counts, escapements, and samples at the Tatsamenie weir, 1984–2010.

Otolith samples are a proportion of the broodstock samples.

Year	Weir Count	Actual Spawners	Spawning Escapement		Broodstock					
			wild	enhanced	otolith samples			broodstock taken		Total
					wild	enhanced	All samples	wild	enhanced	
1984										
1985 <sup>a</sup>										
1986										
1987 <sup>a</sup>		25								
1988										
1989										
1990										
1991										
1992										
1993										
1994										
1995	5,780	4,387	3,443	944				1,093	300	1,393
1996	10,381	8,026	7,682	344				2,254	101	2,355
1997	8,363	5,981	5,815	166				2,316	66	2,382
1998	5,997	4,735	4,628	107	389	9	398	1,233	29	1,262
1999	2,104	1,888	1,855	33	167	3	170	212	4	216
2000	7,575	5,570	4,835	735	342	52	394	1,740	265	2,005
2001	22,575	19,579	16,324	3,255	336	67	403	2,498	498	2,996
2002	<b>5,495</b>	<b>4,379</b>	3,854	525	345	47	392	982	134	1,116
2003	4,515	2,965	2,085	880	256	108	364	1,090	460	1,550
2004	1,951	1,357	860	497	220	127	347	377	217	594
2005	3,372	2,445	1,960	485	311	77	388	743	184	927
2006	22,475	19,820	17,623	2,197	369	46	415	2,361	294	2,655
2007	11,187	8,384	6,082	2,302	140	53	193	2,033	770	2,803
2008	8,976	6,176	3,309	2,867	210	182	392	1,500	1,300	2,800
2009	2,032	1,292	1,071	221	329	68	397	613	127	740
2010	3,513	2,113	1,688	425	318	80	398	1,119	281	1,400
Averages										
00-09	9,015	7,197	5,800	1,396	286	83	369	1,394	425	1,819

<sup>a</sup> Weir count plus spawning ground survey; Trapper 1983, 1985, 1987

Appendix D. 12. Annual sockeye salmon weir counts, escapements, and samples at the Little Trapper weir, 1983–2010.

Broodstock estimate is based on commercial ratio with tats weir data							
Year	Weir	Actual	Trapper spawning esc		Broodstock		
	Count	Spawners	wild	enhanced	Total	wild	enhanced
1983	7,402	7,402			0		
1984	13,084	13,084			0		
1985	14,889	14,889			0		
1986	13,820	13,820			0		
1987	12,007	12,007			0		
1988	10,637	10,637			0		
1989	9,606	9,606			0		
1990	9,443	7,777			1,666	1,666	
1991	22,942	21,001			1,941	1,941	
1992	14,372	12,732			1,640	1,640	
1993	17,432	16,685			747	747	
1994	13,438	12,691			747	747	
1995	11,524	11,524	11,076	448	0		
1996	5,483	5,483	5,296	187	0		
1997	5,924	5,924	5,551	373	0		
1998	8,717	8,717	7,698	1019	0		
1999	11,805	11,805	11,760	45	0		
2000	11,551	11,551	11,551	0	0		
2001	16,860	16,860	16,860	0	0		
2002	7,973	7,973	7,973	0	0		
2003	31,227	31,227	31,227	0	0		
2004	9,613	9,613	9,613	0	0		
2005	16,009	16,009	16,009	0	0		
2006	25,265	24,557	24,557	0	708	708	
2007	7,153	6,340	6,340	0	813	813	
2008	3,831	2,791	2,791	0	1,040	1,040	
2009	5,552	5,443	5,443	0	109	109	
2010	3,347	3,387	3,090	297			
Averages							
83-10	12,502	12,154					
00-09	13,503	13,236					

## Appendix D. 13. Taku River sockeye salmon run size, 1984–2010.

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						Total	
	Run	Start	Expansion		Above Boarde	Canadian	U.S.	Terminal		
	Estimate	Date	Method	Factor	Run Estimate	harvest	Escape.	Harvest	Run	Exploitation Rate
1984	133,414	17-Jun	Ave.(88-90&95-96) FW CPUE	0.056	141,254	27,292	113,962	57,619	198,873	43%
1985	118,160	16-Jun	Ave.(88-90&95-96) FW CPUE	0.047	123,974	14,411	109,563	74,287	198,261	45%
1986	104,162	22-Jun	Ave.(88-90&95-96) FW CPUE	0.095	115,045	14,939	100,106	60,644	175,689	43%
1987	87,554	21-Jun	Ave.(88-90&95-96) FW CPUE	0.088	96,023	13,887	82,136	54,963	150,986	46%
1988	86,629	19-Jun	1988 FW CPUE	0.065	92,641	12,967	79,674	25,785	118,427	33%
1989	99,467	18-Jun	1989 FW CPUE	0.128	114,068	18,805	95,263	63,366	177,434	46%
1990	117,385	10-Jun	1990 CPUE	0.002	117,573	21,474	96,099	109,285	226,858	58%
1991	153,773	9-Jun	Ave.(88-90&95-96) FW CPUE	0.007	154,873	25,380	129,493	105,271	260,143	50%
1992	162,003	21-Jun	Ave.(88-90&95-96) FW CPUE	0.032	167,376	29,862	137,514	121,176	288,551	52%
1993	138,523	13-Jun	Ave.(88-90&95-96) FW CPUE	0.026	142,148	33,523	108,625	142,089	284,236	62%
1994	129,119	12-Jun	Ave.(88-90&95-96) FW CPUE	0.019	131,580	29,001	102,579	98,063	229,642	55%
1995	145,264	11-Jun	1995 FW CPUE	0.008	146,450	32,711	113,739	91,984	238,434	52%
1996	132,322	9-Jun	1996 FW CPUE	0.017	134,651	42,025	92,626	187,727	322,379	71%
1997	93,816	3-May	1997 FW CPUE	0.017	95,438	24,352	71,086	79,127	174,565	59%
1998	89,992	2-May	No Expansion		89,992	19,277	70,715	49,832	139,824	49%
1999	113,706	14-May	No Expansion		113,706	21,151	92,555	63,058	176,764	48%
2000	115,693	14-May	No Expansion		115,693	28,468	87,225	131,262	246,954	65%
2001	192,245	27-May	No Expansion		192,245	48,117	144,128	204,433	396,678	64%
2002	135,233	19-May	No Expansion		135,233	31,726	103,507	116,401	251,634	59%
2003	193,390	20-May	No Expansion		193,390	33,024	160,366	135,494	328,884	51%
2004	127,047	12-May	No Expansion		127,047	20,359	106,688	77,012	204,059	48%
2005	142,155	5-May	No Expansion		142,155	22,102	120,053	46,090	188,245	36%
2006	167,597	20-May	No Expansion		167,597	21,446	146,151	65,828	233,425	37%
2007	104,815	19-May	FW CPUE	0.002	105,012	17,249	87,763	65,129	170,141	48%
2008	84,073	17-May	FW CPUE after week 34	0.040	87,568	19,509	68,059	75,692	163,260	58%
2009	83,028	12-May	FW CPUE after week 34	0.001	83,097	11,260	71,837	36,380	119,477	40%
2010	103,257	19-May	FW CPUE	0.053	109,028	20,661	88,367	46,767	155,795	43%
Averages										
84-09	125,022	30-May		0.038	127,916	24,397	103,520	89,923	217,839	51%
00-09	134,528	16-May		0.014	134,904	25,326	109,578	95,372	230,276	51%



Appendix D. 14. The terminal run reconstruction of Taku wild and enhanced sockeye salmon, 1984–2010.

Year	Wild Total Run				Enhanced Total Run			
	Canadian harvest	U.S. escapement	U.S. harvest	Terminal Run	Canadian harvest	U.S. escapement	U.S. harvest	Terminal Run
1984	27,292	113,962	58,543	199,796				
1985	14,411	109,563	73,809	197,783				
1986	14,939	100,106	60,934	175,980				
1987	13,887	82,136	54,124	150,148				
1988	12,967	79,674	25,811	118,452				
1989	18,805	95,263	62,828	176,895				
1990	21,474	96,099	108,499	226,072				
1991	25,380	129,493	103,412	258,285				
1992	29,862	137,514	122,438	289,814				
1993	33,523	108,625	141,038	283,186				
1994	29,001	102,579	97,046	228,626				
1995	31,374	112,048	87,878	231,300	1,337	1,691	4,106	7,134
1996	41,287	91,994	182,944	316,225	738	632	4,783	6,153
1997	23,685	70,481	77,067	171,233	667	605	2,060	3,332
1998	18,681	69,560	48,989	137,230	596	1,155	843	2,594
1999	20,847	92,473	62,441	175,761	304	82	617	1,003
2000	28,025	86,225	129,683	243,933	443	1,000	1,579	3,022
2001	46,231	140,375	195,496	382,101	1,886	3,753	8,938	14,577
2002	31,676	102,848	115,748	250,272	50	659	653	1,362
2003	32,755	159,026	134,717	326,498	269	1,340	777	2,386
2004	20,090	105,974	76,321	202,385	269	714	692	1,674
2005	21,840	119,384	45,497	186,721	262	669	593	1,524
2006	20,628	143,660	63,587	227,875	818	2,491	2,241	5,550
2007	15,467	84,691	61,387	161,544	1,782	3,072	3,742	8,597
2008	17,443	63,892	63,905	145,240	2,066	4,167	11,787	18,020
2009	11,152	71,489	35,984	118,625	108	348	248	704
2010	20,020	87,364	45,824	153,208	640	1,003	943	2,587
Averages								
84-09	23,951	102,659	88,082	214,692				
00-09	24,531	107,756	92,232	224,519	795	1,821	3,125	5,742

Appendix D. 15. Annual sockeye salmon escapement estimates of Taku River and Port Snettisham sockeye salmon stocks, 1979–2010.

Spawners equals escapement to the weir minus fish collected for brood stock.

Year	Little Trapper		Little Tatsamenie		Tatsamenie		King Salmon	Kuthai Lake	Nahlin River	Crescent Lake		Speel Lake	
	Count	Escape.	Count	Escape.	Count	Escape.	Weir	Weir	Weir	Count	Escape.	Count	Escape.
1980								1,658					
1981								2,299					
1982													
1983	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	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	12,007	12,007	2,794	2,794		25				7,839	7,839	9,319	9,319
1988	10,637	10,637	2,063	2,063					138	1,199	1,199	969	710
1989	9,606	9,606	3,039	3,039						1,109	775	12,229	10,114
1990	9,443	7,777	5,736	4,929					2,515	1,262	757	18,064	16,867
1991	22,942	21,001	8,381	7,585						9,208	8,666	299	299
1992	14,372	12,732	6,576	5,681				1,457	297	22,674	21,849	9,439	8,136
1993	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	11,524	11,524			5,780	4,387		3,310	3,711			16,208	14,260
1996	5,483	5,483			10,381	8,026		4,243	2,538			20,000	18,610
1997	5,924	5,924			8,363	5,981		5,746	1,857			4,999	
1998	8,717	8,717			5,997	4,735		1,934	345			13,358	
1999	11,805	11,805			2,104	1,888		10,042				10,277	
2000	11,551	11,551			7,575	5,570		4,096				6,764	
2001	16,860	16,860			22,575	19,579		1,663	935			8,060	
2002	7,973	7,973			5,495	4,379		7,697				5,016	
2003	31,227	31,227			4,515	2,965		7,769				7,014	
2004	9,613	9,613			1,951	1,357	5,005	1,578		na	na	7,813	
2005	16,009	16,009			3,372	2,445	1,046	6,004		na	na	7,538	
2006	25,265	24,557			22,475	19,820	2,177	1,015		na	na	4,163	
2007	7,153	6,340			11,187	8,384	5	204		na	na	3,099	
2008	3,831	2,791			8,976	6,176	888	1,547		na	na	1,763	
2009	5,552	5,443			2,032	1,292	55	1,442		na	na	3,689	3,689
2010	3,347	3,387			3,513	2,113	2,977	1,626		na	na	5,570	5,570
Averages													
83-09	12,502	12,154										8,130	
00-09	13,503	13,236			9,015	7,197	1,529	3,302	935			5,492	

Appendix D. 16. Historical Taku River coho salmon harvested in D111 terminal fisheries, 1992–2010.

Sportfish estimate is based on all landings made in Juneau (not just D11)						
Year	D11 Gillnet		Juneau Sport Fish		PU	Total
	Harvest	SE	Harvest	SE		
1992	74,226	23,030	431	380	88	74,745
1993	32,456	8,515	3,222	3,048	25	35,703
1994	82,181	14,117	19,018	8,674	93	101,292
1995	51,286	7,263	7,857	2,920	97	59,240
1996	14,491	2,762	2,461	1,162	67	17,019
1997	1,489	412	4,963	1,674	27	6,479
1998	12,972	2,015	3,984	1,084	86	17,042
1999	5,572	913	3,393	997	44	9,009
2000	7,352	1,355	4,137	1,148	31	11,520
2001	9,212	1,523	2,505	813	22	11,739
2002	26,981	4,257	6,189	1,346	68	33,238
2003	19,659	6,937	5,421	1,727	59	25,139
2004	13,058	2,937	12,720	3,528	120	25,898
2005	18,011	5,679	3,573	1,830	134	21,718
2006	32,051	4,020	3,985	1,017	134	36,170
2007	15,753	2,416	804	488	60	16,617
2008	23,806	5,028	493	362	91	24,390
2009	36,757	5,033	5,949	2,445	240	42,946
2010	41,695	8,703	13,301	4,491	258	55,254
average						
00-09	20,264		4,578		96	24,938

Appendix D. 17. Historical coho salmon in the Canadian fisheries in the Taku River,  
1987–2010.

Year	Commercial		Total	Aboriginal	Assesment/test	test released
	Before SW34	After SW34				
1979			6,006			
1980			6,405	0		
1981			3,607			
1982			51			
1983			8,390	0		
1984			5,357	15		
1985			1,770	22		
1986			1,783	50		
1987			5,599	113	807	
1988			3,123	98	422	
1989			2,876	146	1,011	
1990			3,207	6	472	
1991			3,415	20	2,004	
1992			4,077	187	1,277	
1993			3,033	8	1,593	
1994			14,531	162		
1995			13,629	109		
1996			5,028	24		39
1997			2,594	96		
1998			5,090	0		
1999			4,416	471	688	
2000			4,395	342	710	
2001			2,568	500	31	2,976
2002			3,082	688	32	3,767
2003			3,168	416	59	4,031
2004	2,387	3,579	5,966	450	3,268	
2005	1,412	3,512	4,924	162	3,173	
2006	4,947	3,620	8,567	300	2,802	
2007	2,229	3,015	5,244	155	2,674	
2008	2,802	1,104	3,906	67	0	1,012
2009	2,379	3,270	5,649	154	3,963	
2010	3,283	7,066	10,349	59	4,000	
Averages						
83-09			5,014	176		
00-09			4,747	323	1,671	

### Appendix D. 18. Historic Taku River coho salmon terminal run size, 1987–2010.

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

Year	Above Border M-R		Expansion		Expanded Estimate	Canadian Harvest	Escape.	U.S. Harvest	Terminal Run	Total exploitation Rate
	Run Estimate	End Date	Method	Factor						
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	49,928	5-Sep	District 111-32 CPUE	1.79	89,270	5,541	83,729	74,745	164,015	0.490
1993	67,448	11-Sep	District 111-32 CPUE	1.84	123,964	4,634	119,330	35,703	159,667	0.253
1994	98,643	24-Sep	District 111-32 CPUE	1.13	111,036	14,693	96,343	101,292	212,328	0.546
1995	61,738	30-Sep	District 111-32 CPUE	1.12	69,448	13,738	55,710	59,240	128,688	0.567
1996	44,172	28-Sep	District 111-32 CPUE	1.12	49,687	5,052	44,635	17,019	66,706	0.331
1997	35,035	27-Sep	District 111-32 CPUE	1.00	35,035	2,690	32,345	6,479	41,514	0.221
1998	49,290	26-Sep	District 111-32 CPUE	1.35	66,472	5,090	61,382	17,042	83,514	0.265
1999	59,052	3-Oct	Troll CPUE	1.12	66,343	5,575	60,768	9,009	75,352	0.194
2000	70,147	2-Oct	no expansion	1.00	70,147	5,447	64,700	11,520	81,667	0.208
2001	107,493	5-Oct	no expansion	1.00	107,493	3,099	104,394	11,739	119,232	0.124
2002	223,162	7-Oct	no expansion	1.00	223,162	3,802	219,360	33,238	256,400	0.144
2003	186,755	8-Oct	no expansion	1.00	186,755	3,643	183,112	25,139	211,894	0.136
2004	139,011	8-Oct	no expansion	1.00	139,011	9,684	129,327	25,898	164,909	0.216
2005	143,817	8-Oct	no expansion	1.00	143,817	8,259	135,558	21,718	165,535	0.181
2006	134,053	8-Oct	no expansion	1.00	134,053	11,669	122,384	36,170	170,223	0.281
2007	82,319	8-Oct	no expansion	1.00	82,319	8,073	74,246	16,617	98,936	0.250
2008	99,199	8-Oct	no expansion	1.00	99,199	3,973	95,226	24,390	123,589	0.229
2009	113,716	8-Oct	no expansion	1.00	113,716	9,766	103,950	42,946	156,662	0.336
2010	141,238	8-Oct	no expansion	1.00	141,238	14,408	126,830	55,254	196,492	0.355
Averages										
87-09	92,238	274		1.12	101,120	6,756	94,364	32,903	140,912	0.280
00-09	129,967	281		1.00	129,967	6,742	123,226	24,938	154,905	0.211

### Appendix D. 19. Escapement counts of Taku River coho salmon. Counts are for age-.1 fish and do not include jacks, 1984–2010.

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.

Appendix D. 20. Historical effort in the Alaskan District 111 and Subdistrict 111-32  
(Taku Inlet) commercial drift gillnet fishery, 1960–2010.

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

Year	D111		D111-32		PU
	Boat Days	Days Open	Boat Days	Days Open	
1960		60.00	1,680	60.00	
1961		62.00	2,901	62.00	
1962		52.00	1,568	52.00	
1963		54.00	1,519	51.00	
1964		56.00	1,491	56.00	
1965		63.00	1,332	60.00	
1966		64.00	1,535	58.00	
1967		53.00	1,663	50.00	
1968		60.00	2,420	60.00	
1969	1,518	41.50	1,413	42.00	
1970	2,688	53.00	2,425	53.00	
1971	3,053	55.00	2,849	55.00	
1972	3,103	51.00	2,797	51.00	
1973	3,286	41.00	3,135	41.00	
1974	2,315	29.50	1,741	30.00	
1975	1,084	15.50	986	15.00	
1976	1,914	25.00	1,582	23.00	
1977	2,258	27.00	1,879	27.00	
1978	2,174	26.00	1,738	24.00	
1979	2,269	28.83	2,011	29.00	
1980	4,123	30.92	3,634	31.00	
1981	2,687	30.00	1,740	22.00	
1982	2,433	35.50	2,130	36.00	
1983	1,274	33.00	1,065	31.00	
1984	2,757	52.50	2,120	39.00	
1985	3,264	48.00	2,116	37.00	54
1986	2,129	32.83	1,413	30.00	
1987	2,514	34.75	1,517	30.00	
1988	2,135	32.00	1,213	29.00	
1989	2,333	41.00	1,909	36.00	75
1990	3,188	38.33	2,879	38.00	95
1991	4,145	57.00	3,324	52.00	88
1992	4,550	50.00	3,407	43.00	125
1993	3,827	43.00	3,372	43.00	128
1994	5,078	66.00	3,960	60.00	116
1995	4,034	49.00	3,061	45.00	106
1996	3,229	46.00	2,685	41.00	130
1997	2,107	33.00	1,761	30.00	123
1998	3,070	48.00	2,007	39.00	130
1999	2,841	59.00	2,563	58.00	147
2000	2,919	40.00	2,325	38.00	128
2001	4,731	54.00	3,635	55.00	163
2002	4,095	62.00	2,792	54.00	136
2003	3,977	73.50	2,685	64.50	133
2004	3,342	59.00	1,627	50.00	131
2005	3,427	68.00	2,947	65.00	132
2006	3,517	89.00	2,470	81.00	105
2007	3,505	64.00	2,941	64.00	91
2008	3,116	49.00	2,223	46.00	125
2009	3,438	62.00	2,600	57.00	113
2010	2,724	50.00	2,357	50.00	120
Averages					
60-10	3,011	48	2,256	45	
00-09	3,607	62	2,624	57	126

Appendix D. 21. Historical effort in the Canadian commercial fishery in the Taku River, 1979–2010.

Year	Commercial	
	Boat Days	Days Open
1979	599	50
1980	476	39
1981	243	31
1982	38	13
1983	390	64
1984	288	30
1985	178	16
1986	148	17
1987	280	26
1988	185	15
1989	271	25
1990	295	28
1991	284	25
1992	291	27
1993	363	34
1994	497	74
1995	428	51
1996	415	65
1997	394	47
1998	299	42
1999	300	34
2000	351	39
2001	382	42
2002	286	33
2003	275	44
2004	294	40
2005	561	68
2006	518	77
2007	313	55
2008	245	33
2009	459	98
2010	396	62
Averages		
79-09	334	41
00-09	368	53

Appendix D. 22. Canyon Island fish wheel salmon counts and periods of operation on the Taku River, 1984–2010.

Total counts from both fishwheels and suppentmental gillnets when water is low									
Year	Period of Operation	Catch							Steelhead
		Chinook	Sockeye	Coho	Pink	Chum	Pink		
							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	34
1988	5/11-9/19	1,436	3,292	2,168	3,982	1,089	3,982		34
1989	5/05-10/01	1,811	5,650	2,243	31,189	645		31,189	38
1990	5/03-9/23	1,972	6,091	1,860	13,358	748	13,358		43
1991	6/08-10/15	680	5,102	4,922	23,553	1,063		23,553	138
1992	6/20-9/24	212	6,279	2,103	9,252	189	9,252		22
1993	6/12-9/29	562	8,975	2,552	1,625	345		1,625	16
1994	6/10-9/21	906	6,485	4,792	27,100	367	27,100		107
1995	5/4-9/27	1,535	6,228	2,535	1,712	218		1,712	61
1996	5/3-9/20	1,904	5,919	1,895	21,583	388	21,583		68
1997	5/3-10/1	1,321	5,708	1,665	4,962	485		4,962	103
1998	5/2-9/15	894	4,230	1,777	23,347	179	23,347		119
1999	5/3-10/3	440	4,636	1,848	23,503	164		23,503	119
2000	4/23-10/3	1,211	5,865	1,877	6,529	423	6,529		160
2001	4/23-10/5	1,262	6,201	2,380	9,134	250		9,134	125
2002	4/24-10/7	1,578	5,812	3,766	5,672	205	5,672		87
2003	4/20-10/08	1,351	5,970	3,002	15,492	268		15,492	93
2004	4/30-10/06	2,234	6,255	3,163	8,464	414	8,464		63
2005	4/25-10/05	517	3,953	1,476	15,839	258		15,839	79
2006	4/27-10/03	544	5,296	2,811	21,725	466	21,725		47
2007	4/27-10/01	430	7,698	2,117	12,405	482		12,405	57
2008	4/23-10/03	1,298	3,736	2,213	4,704	350	4,704		
2009	4/24-9/27	688	3,489	3,051	9,234	231		9,225	52
2010	4/24-9/27	778	3,244	2,123	8,868	94	8,868		176
Averages									
84-09		999	5,343	2,358	15,109	482	13,363	16,853	76
00-09		1,111	5,428	2,586	10,920	335	9,419	12,419	85



Appendix E. 1. Weekly salmon harvest and effort in the lower Alsek River fisheries, 2010.

SW	Chinook	Sockeye	Coho	Pink	Chum	Boats	Effort	
							Days Open	Boat Days
No Test fishery in 2010								
Commercial Fishery								
23								0.0
24	133	690	0	0	0	15	1.0	15.0
25	79	753	0	0	0	13	1.0	13.0
26	48	1,103	0	0	0	14	1.0	14.0
27	7	1,303	0	0	0	13	1.0	13.0
28	4	1,696	0	0	0	13	1.0	13.0
29	0	2,269	0	0	0	12	1.0	12.0
30	0	1,522	0	0	1	12	1.0	12.0
31	0	2,336	0	0	2	12	1.0	12.0
32	0	735	1	0	0	11	1.0	11.0
33	2	147	1	0	0	5	1.0	5.0
34	0	64	31	0	0	4	3.0	12.0
35	0	41	246	0	2	3	3.0	9.0
36	0	9	255	0	0	2	3.0	6.0
37	0	0	305	0	0	4	3.0	12.0
38	0	0	308	0	0	3	3.0	9.0
39	0	0	397	0	0	4	3.0	12.0
40	0	0	340	0	4	4	3.0	12.0
41						0	2.0	0.0
42						0	4.0	0.0
<b>Total</b>	<b>273</b>	<b>12,668</b>	<b>1,884</b>	<b>0</b>	<b>9</b>		<b>37.0</b>	<b>192.0</b>

## Appendix E. 2. Weekly salmon harvest and effort in the Canadian Aboriginal and sport fisheries in the Alsek River, 2010.

Aboriginal includes estimates of sport catch (kept and released) in Takhanne and Blanchard rivers; estimates based on salmon catch card information.

SW	Chinook				Sockeye				Coho			
	Recreational		Aboriginal	Total harvest	Recreational		Aboriginal	Total harvest	Recreational		Aboriginal	Total harvest
	Kept	Released			Kept	Released			Kept	Released		
24	0	0			0	0			0	0		
25	0	0			0	0			0	0		
26	0	0			0	7			0	0		
27	2	2			0	33			0	0		
28	15	3	Weekly		0	40	Weekly		0	0	Weekly	
29	50	55	Data		0	25	Data		0	0	Data	
30	22	78	Not		0	2	Not		0	0	Not	
31	7	62	Available		0	0	Available		0	0	Available	
32	2	0			2	0			0	0		
33	0	0			0	0			0	0		
34	0	0			3	0			0	0		
35	0	0			5	0			0	0		
36	0	0			2	0			0	0		
37	0	0			0	0			0	0		
38	0	0			0	2			0	8		
39	0	0			0	0			3	0		
40	0	0			0	0			0	0		
41	0	0			0	0			0	0		
42	0	0			0	0			0	0		
43	0	0			0	0			0	0		
44	0	0			0	0			0	0		
45	0	0			0	0			0	0		
46	0	0			0	0			0	0		
<b>Total</b>	97	200	197	294	12	108	1,704	1,716	3	8	4	7
Village Creek food fish			NA				NA				NA	
Harvest at Kluksu River Weir			0				91				4	
Food fish above Kluksu Weir			99				323				0	

### Appendix E. 3. Daily counts of salmon passing through Klukshu River weir, 2010.

Jack Chinook salmon included in the Chinook salmon counts.

Date	Chinook			Sockeye			Coho		
	Daily	Cumulative		Daily	Cumulative		Daily	Cumulative	
		Daily	Prop.		Daily	Prop.		Daily	Prop.
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	0	0	0.000	0	0	0.000	0	0	0.000
15-Jun	0	0	0.000	0	0	0.000	0	0	0.000
16-Jun	1	1	0.000	0	0	0.000	0	0	0.000
17-Jun	0	1	0.000	0	0	0.000	0	0	0.000
18-Jun	0	1	0.000	0	0	0.000	0	0	0.000
19-Jun	1	2	0.001	0	0	0.000	0	0	0.000
20-Jun	3	5	0.002	0	0	0.000	0	0	0.000
21-Jun	0	5	0.002	0	0	0.000	0	0	0.000
22-Jun	0	5	0.002	1	1	0.000	0	0	0.000
23-Jun	0	5	0.002	0	1	0.000	0	0	0.000
24-Jun	0	5	0.002	0	1	0.000	0	0	0.000
25-Jun	1	6	0.003	0	1	0.000	0	0	0.000
26-Jun	0	6	0.003	0	1	0.000	0	0	0.000
27-Jun	1	7	0.003	0	1	0.000	0	0	0.000
28-Jun	0	7	0.003	0	1	0.000	0	0	0.000
29-Jun	3	10	0.004	0	1	0.000	0	0	0.000
30-Jun	2	12	0.005	0	1	0.000	0	0	0.000
1-Jul	2	14	0.006	5	6	0.000	0	0	0.000
2-Jul	7	21	0.009	6	12	0.001	0	0	0.000
3-Jul	1	22	0.009	2	14	0.001	0	0	0.000
4-Jul	2	24	0.010	4	18	0.001	0	0	0.000
5-Jul	4	28	0.012	1	19	0.001	0	0	0.000
6-Jul	1	29	0.012	1	20	0.001	0	0	0.000
7-Jul	5	34	0.014	3	23	0.001	0	0	0.000
8-Jul	8	42	0.018	19	42	0.002	0	0	0.000
9-Jul	30	72	0.031	17	59	0.003	0	0	0.000
10-Jul	7	79	0.034	5	64	0.003	0	0	0.000
11-Jul	3	82	0.035	39	103	0.005	0	0	0.000
12-Jul	8	90	0.038	4	107	0.006	0	0	0.000
13-Jul	19	109	0.046	1	108	0.006	0	0	0.000
14-Jul	31	140	0.059	22	130	0.007	0	0	0.000
15-Jul	100	240	0.102	107	237	0.013	0	0	0.000
16-Jul	183	423	0.180	232	469	0.025	0	0	0.000
17-Jul	120	543	0.230	44	513	0.027	0	0	0.000
18-Jul	221	764	0.324	46	559	0.029	0	0	0.000
19-Jul	103	867	0.368	236	795	0.042	0	0	0.000
20-Jul	224	1,091	0.463	18	813	0.043	0	0	0.000
21-Jul	57	1,148	0.487	35	848	0.045	0	0	0.000
22-Jul	104	1,252	0.531	16	864	0.046	0	0	0.000
23-Jul	208	1,460	0.620	23	887	0.047	0	0	0.000
24-Jul	23	1,483	0.629	21	908	0.048	0	0	0.000
25-Jul	90	1,573	0.668	15	923	0.049	0	0	0.000
26-Jul	123	1,696	0.720	36	959	0.051	0	0	0.000
27-Jul	113	1,809	0.768	64	1,023	0.054	0	0	0.000
28-Jul	149	1,958	0.831	301	1,324	0.070	0	0	0.000
29-Jul	60	2,018	0.857	22	1,346	0.071	0	0	0.000
30-Jul	36	2,054	0.872	61	1,407	0.074	0	0	0.000
31-Jul	98	2,152	0.913	9	1,416	0.075	0	0	0.000
1-Aug	26	2,178	0.924	9	1,425	0.075	0	0	0.000
2-Aug	41	2,219	0.942	519	1,944	0.103	0	0	0.000
3-Aug	38	2,257	0.958	72	2,016	0.106	0	0	0.000
4-Aug	20	2,277	0.966	434	2,450	0.129	0	0	0.000

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Appendix E.3. Page 2 of 2.

Date	Chinook			Sockeye			Coho		
	Daily	Cumulative		Daily	Cumulative		Daily	Cumulative	
		Daily	Prop.		Daily	Prop.		Daily	Prop.
5-Aug	8	2,285	0.970	107	2,557	0.135	0	0	0.000
6-Aug	20	2,305	0.978	376	2,933	0.155	0	0	0.000
7-Aug	11	2,316	0.983	117	3,050	0.161	0	0	0.000
8-Aug	6	2,322	0.986	18	3,068	0.162	0	0	0.000
9-Aug	5	2,327	0.988	11	3,079	0.162	0	0	0.000
10-Aug	2	2,329	0.989	57	3,136	0.165	0	0	0.000
11-Aug	3	2,332	0.990	177	3,313	0.175	0	0	0.000
12-Aug	5	2,337	0.992	317	3,630	0.191	0	0	0.000
13-Aug	1	2,338	0.992	760	4,390	0.232	0	0	0.000
14-Aug	6	2,344	0.995	599	4,989	0.263	0	0	0.000
15-Aug	1	2,345	0.995	84	5,073	0.268	0	0	0.000
16-Aug	1	2,346	0.996	99	5,172	0.273	0	0	0.000
17-Aug	4	2,350	0.997	820	5,992	0.316	0	0	0.000
18-Aug	0	2,350	0.997	60	6,052	0.319	0	0	0.000
19-Aug	2	2,352	0.998	173	6,225	0.328	0	0	0.000
20-Aug	1	2,353	0.999	274	6,499	0.343	0	0	0.000
21-Aug	0	2,353	0.999	197	6,696	0.353	0	0	0.000
22-Aug	0	2,353	0.999	60	6,756	0.356	0	0	0.000
23-Aug	1	2,354	0.999	93	6,849	0.361	0	0	0.000
24-Aug	0	2,354	0.999	651	7,500	0.396	0	0	0.000
25-Aug	1	2,355	1.000	480	7,980	0.421	0	0	0.000
26-Aug	1	2,356	1.000	924	8,904	0.470	0	0	0.000
27-Aug	0	2,356	1.000	1,198	10,102	0.533	0	0	0.000
28-Aug	0	2,356	1.000	224	10,326	0.545	0	0	0.000
29-Aug	0	2,356	1.000	1,197	11,523	0.608	0	0	0.000
30-Aug	0	2,356	1.000	986	12,509	0.660	0	0	0.000
31-Aug	0	2,356	1.000	914	13,423	0.708	0	0	0.000
1-Sep	0	2,356	1.000	1,097	14,520	0.766	0	0	0.000
2-Sep	0	2,356	1.000	765	15,285	0.806	0	0	0.000
3-Sep	0	2,356	1.000	912	16,197	0.854	0	0	0.000
4-Sep	0	2,356	1.000	465	16,662	0.879	0	0	0.000
5-Sep	0	2,356	1.000	312	16,974	0.895	0	0	0.000
6-Sep	0	2,356	1.000	331	17,305	0.913	0	0	0.000
7-Sep	0	2,356	1.000	79	17,384	0.917	0	0	0.000
8-Sep	0	2,356	1.000	273	17,657	0.931	0	0	0.000
9-Sep	0	2,356	1.000	194	17,851	0.942	0	0	0.000
10-Sep	0	2,356	1.000	11	17,862	0.942	0	0	0.000
11-Sep	0	2,356	1.000	49	17,911	0.945	0	0	0.000
12-Sep	0	2,356	1.000	21	17,932	0.946	0	0	0.000
13-Sep	0	2,356	1.000	7	17,939	0.946	1	1	0.000
14-Sep	0	2,356	1.000	79	18,018	0.950	0	1	0.000
15-Sep	0	2,356	1.000	129	18,147	0.957	1	2	0.001
16-Sep	0	2,356	1.000	472	18,619	0.982	2	4	0.002
17-Sep	0	2,356	1.000	52	18,671	0.985	1	5	0.002
18-Sep	0	2,356	1.000	35	18,706	0.987	1	6	0.003
19-Sep	0	2,356	1.000	1	18,707	0.987	1	7	0.003
20-Sep	0	2,356	1.000	1	18,708	0.987	0	7	0.003
21-Sep	0	2,356	1.000	5	18,713	0.987	0	7	0.003
22-Sep	0	2,356	1.000	2	18,715	0.987	0	7	0.003
23-Sep	0	2,356	1.000	7	18,722	0.987	1	8	0.003
24-Sep	0	2,356	1.000	1	18,723	0.988	0	8	0.003
25-Sep	0	2,356	1.000	5	18,728	0.988	0	8	0.003
26-Sep	0	2,356	1.000	12	18,740	0.988	0	8	0.003
27-Sep	0	2,356	1.000	29	18,769	0.990	1	9	0.004
28-Sep	0	2,356	1.000	11	18,780	0.991	0	9	0.004
29-Sep	0	2,356	1.000	27	18,807	0.992	161	170	0.072
30-Sep	0	2,356	1.000	35	18,842	0.994	390	560	0.237
1-Oct	0	2,356	1.000	58	18,900	0.997	420	980	0.414
2-Oct	0	2,356	1.000	8	18,908	0.997	344	1,324	0.560
3-Oct	0	2,356	1.000	8	18,916	0.998	158	1,482	0.627
4-Oct	0	2,356	1.000	9	18,925	0.998	258	1,740	0.736
5-Oct	0	2,356	1.000	9	18,934	0.999	236	1,976	0.836
6-Oct	0	2,356	1.000	20	18,954	1.000	309	2,285	0.966
7-Oct	0	2,356	1.000	6	18,960	1.000	80	2,365	1.000
Total Count		2,356			18,960			2,365	
Adjustments		0			0			0	
Harvest at weir		0			91			4	
Harvest above weir		99			323			0	
Total Escapement		2,257			18,546			2,361	

Appendix E. 4. Salmon harvest and effort in the U.S. Commercial fishery in the Alsek River, 1960 to 2010.

Year	Chinook	Sockeye	Coho	Pink	Chum	Effort	
						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	286	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
2008	128	2,815	2,668	0	0	177	34.0
2009	602	12,906	3,454	0	20	200	44.0
2010	273	12,668	1,884	0	9	192	37.0
Averages							
61-09	738	20,020	5,597	36	298	540	51
00-09	546	15,109	2,821	2	17	236	51

Appendix E. 5. Salmon harvest in the U.S. Chinook salmon test fishery in the Alsek River, 2005–2010.

<u>Year</u>	<u>Chinook</u>	<u>Sockeye</u>
2005	423	222
2006	135	224
2007	347	367
2008	465	55
2010	no test fishery	

Appendix E. 6. Salmon harvest in the U.S. subsistence and personal use fisheries in the  
Alsek River, 1976–2010.

Year	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
2008	34	200	28
2009	57	245	17
2010	70	259	0
Averages			
76-09	43	136	32
00-09	48	193	32

Appendix E. 7. Salmon catches in the Canadian Aboriginal and recreational fisheries in the Alsek River, 1976 to 2010.

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
2008	0	7	7	0	0	0	26	8	34
2009	105	20	125	715	2	717	3	0	3
2010	197	97	294	1,704	12	1,716	4	3	7
Averages									
76-09	223	258	482	2,300	298	2,597	11	106	118
00-09	70	76	146	1,267	40	1,307	11	76	87



Appendix E. 8. Annual Klukshu River weir counts of Chinook, sockeye, and coho salmon, 1976 to 2010.

The escapement count equals the weir count minus the aboriginal fishery harvest above the weir and brood stock taken. The remainder of the food fishery harvest occurred below the weir, at Village Creek, and Blanchard and Takhanne River. Jack Chinook salmon are included in Chinook counts.

Coho counts are partial counts; weir is removed prior to the end of the run.

Year	Chinook		Sockeye				Coho	
	Count	Escape	Early (to August 16)	Late	Total	Escape	Count	Escape
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
2008	466	466	43	2,698	2,741	2,741	4,275	4,249
2009	1,571	1,518	1,247	4,484	5,731	5,528	424	421
2010	2,358	2,259	5,073	13,887	18,960	18,546	2,365	2,361
Averages								
76-09	2,267	2,081	2,905	13,126	16,031	14,078	1,878	
00-09	1,404	1,349	2,485	10,067	12,552	11,682	2,604	2,595

### Appendix E. 9. Alsek River sockeye salmon escapement 2000 to 2010.

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

Year	Inriver Run		CI		Canadian Harvest	Spawning Escapement	U.S. Harvest	Total Run	Percent Klukshu
	Estimate	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	18,254	101,957	18.3%
2005	57,817	21,907	93,727		594	57,223	7,857	65,674	5.8%
2006	48,901	41,234	56,569		1,327	47,574	10,338	59,239	27.5%
----									
Averages									
00-06	65,487	39,929	91,045		1,574	63,913	16,744	82,231	0

Appendix E. 10. Alek River sockeye salmon counts from U.S. and Canadian aerial surveys and from the electronic counter at Village Creek, 1985–2010.

Surveys not made every year at each tributary. Canadian surveys include several streams from Lo-Fog to Goat Creek. Village Creek counter 1986-2013 conductivity counter; 2014 video counter

Year	U.S. Aerial Surveys				Canada Aerial Surveys		
	Basin Creek	Cabin Creek	Muddy Creek	Tanis River	Tatshenshini River	Neskataheen Lake	Village Creek Counter
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 <sup>a</sup>	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
2008 <sup>a</sup>	No surveys flown						1,000
2009	No surveys flown						4,500
2010	No surveys flown						2,500
<b>Averages</b>							
86-09							2,989
00-09							2,755

<sup>a</sup>No counts due to malfunction of the counter

Appendix E. 11. Aerial survey index counts of Alsek River Chinook salmon escapements, 1984 to 2010.

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	<sup>a</sup>	158	34
1990	<sup>a</sup>	325	32
1991	121	86	63
1992	86	77	16
1993	326	351	50
1994	349	342	67
1995	338	260	<sup>b</sup>
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
2008	65	41	11
2009	No surveys conducted		
2010	No surveys conducted		

<sup>a</sup> Not surveyed due to poor visibility. 89,90 Blanchard

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

Appendix E. 12. Alsek River run of large 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 the Klukshu River; the program was discontinued in 2005.

Year	Inriver Run			U.S. Harvest		Total Inriver Run	Canadian Harvest		
	Past Dry Bay	CI		Dry Bay			Aboriginal	Sport	Escapement
		Lower	Upper	Commercial	Subsistence				
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	6,993	14,133	639	45	9,851	147	158	8,863

Klukshu weir count of large Chinook salmon as a percent of the Alsek 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. 13. Alsek River Chinook salmon escapement, 2007.

Estimates was based on GSI analysis and the expansion of the Klukshu River weir count.

Year	Inriver Run Estimate	CI Lower	Upper	Canadian Harvest	Spawning Escapement	U.S. Harvest	Total Run	Percent Klukshu
2007	1,770	1,373	2,166	41	1,729	826	2,596	40.6%

Appendix E. 14. Aerial survey counts of coho salmon from U.S. lower Alsek 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 <sup>a</sup>	500
1992 <sup>a</sup>	1,010
1993 <sup>a</sup>	800
1994 <sup>a</sup>	975
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

<sup>a</sup> Few systems surveyed.

Appendix F. 1. Tahltan Lake egg collection, fry plants, and survivals, 1989–2010.

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		Designatec Tahltan	Fry Planted	Percent Fertilized	Survival		Thermal Mark Pattern
	Target	Collected				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
2008	6.000	3.159	1.895	1.395	0.848	0.868	0.736	1,4H
2009	6.000	4.469	2.609	1.826	0.774	0.906	0.701	5,2H
2010	6.000	6.000	3.097					
Averages								
89-09	5.733	4.427	2.488	1.878	0.866	0.895	0.769	
00-09	6.000	4.167	2.508	1.899	0.847	0.920	0.760	

## Appendix F. 2. Tuya Lake fry plants and survivals, 1991–2010.

Numbers for eggs and fry are millions

Brood Year	Egg Take		Percent Fertilized	Survival		Thermal Mark Pattern
	Designated	Fry Planted		Fertilized	Green	
	Tuya			Egg to Fry	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
2008	0.988	0.832	0.854	0.986	0.842	6H
2009	1.860	0.977	0.794	0.661	0.525	3,4H
2010	2.852					
Averages						
91-09	2.143	1.686	0.897	0.880	0.788	
00-09	1.659	1.346	0.885	0.912	0.807	

Appendix F. 3. Tatsamenie Lake egg collection, fry plants, and survivals, 1989–2010

Brood Year	Egg Take			Fry Planted	Survival <sup>b</sup>			Thermal Mark Pattern	Last Date Released
	Target	Collected <sup>a</sup>	Transport		Fertilized	Percent Fertilized Egg to Fry	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
2008	5.000	4.902	4.373	3.873	0.892	0.993	0.886	3,2H & 3,3H	3-Jun
2009	5.000	1.224	0.718	0.718	0.852	0.688	0.586	6,2H & 3n,2H	22-May
Averages									
90-09	3.703	2.528	1.809	1.787	0.870	0.837	0.731		19-Jun
00-09	4.580	2.949	2.056	2.012	0.900	0.826	0.747		7-Jun
2010	~1.500	2.090							

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 - IHNV 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	1:1.2,2,1,3,2	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					
2008	3,3H	extended rearing	0.115			lake rear			
2009	6,2H	unfed early north	0.506	22-May	3n,2H	extended rearing	0.210	12-Aug	
Averages									
98-09			1.106				0.759		
2010									

<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 IHNV



Appendix G. 1. Annual stock proportion estimates (mean) of large Chinook salmon harvested in the Alaskan District 108 commercial drift gillnet fishery, 2010.

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CI05 is the lower credibility interval and CI95 is the upper credibility interval.

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Year	Sample Size	Statistic	5 Reporting Groups				
			Taku	Andrew	Stikine	SSEAK	Other
2005	254	Mean	0.310	0.068	0.577	0.033	0.012
		SD	0.051	0.022	0.055	0.015	0.007
		CI05	0.227	0.035	0.486	0.011	0.003
		CI95	0.396	0.107	0.666	0.060	0.025
2006	350	Mean	0.286	0.308	0.357	0.044	0.006
		SD	0.042	0.034	0.046	0.017	0.004
		CI05	0.217	0.254	0.281	0.018	0.001
		CI95	0.357	0.365	0.432	0.074	0.015
2007	292	Mean	0.187	0.463	0.302	0.041	0.007
		SD	0.037	0.036	0.042	0.014	0.006
		CI05	0.129	0.404	0.234	0.020	0.001
		CI95	0.249	0.522	0.373	0.066	0.019
2008	293	Mean	0.211	0.522	0.175	0.082	0.009
		SD	0.033	0.035	0.036	0.020	0.007
		CI05	0.158	0.464	0.120	0.051	0.001
		CI95	0.266	0.580	0.238	0.118	0.022
2009	177	Mean	0.014	0.738	0.114	0.126	0.008
		SD	0.020	0.040	0.033	0.029	0.007
		CI05	0.000	0.671	0.063	0.082	0.000
		CI95	0.057	0.801	0.171	0.176	0.022
2010	72	Mean	0.093	0.648	0.122	0.110	0.028
		SD	0.050	0.070	0.065	0.043	0.022
		CI05	0.020	0.531	0.026	0.047	0.002
		CI95	0.182	0.760	0.237	0.187	0.070

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Appendix G. 2. Annual estimates of large Chinook salmon harvested in the Alaskan District 108 commercial drift gillnet fishery, 2010.

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CI05 is the lower credibility interval and CI95 is the upper credibility interval.

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Year	Sample Size	Statistic	5 Reporting Groups				
			Taku	Andrew	Stikine	SSEAK	Other
2010	72	Estimate	103	717	135	122	31
		SD	55	77	72	48	24
		CI05	22	587	28	52	2
		CI95	202	842	263	207	78

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Appendix G. 3. Annual stock proportion estimates (mean) of large Chinook salmon harvested in the Alaskan District 108 sport fisheries, 2010.

CI05 is the lower credibility interval and CI95 is the upper credibility interval.

Year	Sample Size	Statistic	5 Reporting Groups				
			Taku	Andrew	Stikine	SSEAK	Other
2005	226	Mean	0.220	0.134	0.518	0.082	0.045
		SD	0.052	0.032	0.059	0.025	0.015
		CI05	0.136	0.084	0.421	0.043	0.024
		CI95	0.308	0.190	0.615	0.125	0.072
2006	201	Mean	0.156	0.177	0.561	0.086	0.019
		SD	0.043	0.038	0.055	0.028	0.011
		CI05	0.089	0.118	0.471	0.045	0.005
		CI95	0.230	0.241	0.651	0.135	0.041
2007	200	Mean	0.221	0.296	0.383	0.053	0.048
		SD	0.047	0.040	0.054	0.021	0.017
		CI05	0.145	0.232	0.295	0.023	0.024
		CI95	0.301	0.362	0.473	0.090	0.079
2008	200	Mean	0.284	0.251	0.330	0.089	0.046
		SD	0.048	0.039	0.055	0.029	0.015
		CI05	0.206	0.189	0.242	0.047	0.024
		CI95	0.365	0.316	0.422	0.142	0.074
2009	190	Mean	0.321	0.166	0.195	0.094	0.222
		SD	0.047	0.033	0.046	0.035	0.035
		CI05	0.245	0.114	0.122	0.048	0.166
		CI95	0.400	0.224	0.275	0.164	0.280
2010	201	Mean	0.206	0.257	0.340	0.116	0.080
		SD	0.044	0.038	0.053	0.030	0.020
		CI05	0.136	0.197	0.254	0.070	0.050
		CI95	0.281	0.321	0.429	0.168	0.115

Appendix G. 4. Annual estimates of large Chinook salmon harvested in the Alaskan District 108 sport fisheries, 2010.

CI05 is the lower credibility interval and CI95 is the upper credibility interval.

Year	Sample Size	Statistic	5 Reporting Groups				
			Taku	Andrew	Stikine	SSEAK	Other
2010	72	Estimate	221	275	364	125	86
		SD	47	41	57	32	21
		CI05	146	211	272	76	54
		CI95	301	344	460	180	124

Appendix G. 5. Annual stock proportion estimates (mean) of large Chinook salmon harvested in the Alaskan District 111 commercial drift gillnet fishery, 2010.

CI05 is the lower credibility interval and CI95 is the upper credibility interval.

Year	Sample Size	Statistic	5 Reporting Groups				
			Taku	Andrew	Stikine	SSEAK	Other
2005	247	Mean	0.914	0.073	0.005	0.000	0.008
		SD	0.023	0.020	0.011	0.001	0.006
		CI05	0.874	0.043	0.000	0.000	0.001
		CI95	0.947	0.109	0.028	0.000	0.020
2006	209	Mean	0.878	0.085	0.027	0.010	0.000
		SD	0.026	0.023	0.015	0.008	0.002
		CI05	0.833	0.051	0.005	0.001	0.000
		CI95	0.918	0.125	0.055	0.025	0.002
2007	96	Mean	0.491	0.490	0.001	0.015	0.003
		SD	0.054	0.054	0.007	0.015	0.007
		CI05	0.402	0.402	0.000	0.000	0.000
		CI95	0.580	0.579	0.005	0.045	0.016
2008	104	Mean	0.482	0.360	0.001	0.071	0.086
		SD	0.053	0.051	0.007	0.028	0.028
		CI05	0.395	0.278	0.000	0.030	0.046
		CI95	0.569	0.446	0.001	0.121	0.136
2009	257	Mean	0.809	0.185	0.004	0.001	0.001
		SD	0.031	0.027	0.015	0.006	0.003
		CI05	0.755	0.143	0.000	0.000	0.000
		CI95	0.854	0.231	0.034	0.011	0.005
2010	152	Mean	0.537	0.448	0.002	0.000	0.013
		SD	0.043	0.042	0.008	0.001	0.009
		CI05	0.466	0.378	0.000	0.000	0.002
		CI95	0.607	0.518	0.011	0.000	0.031

Appendix G. 6. Annual estimates of large Chinook salmon harvested in the Alaskan District 111 commercial drift gillnet fishery, 2010.

CI05 is the lower credibility interval and CI95 is the upper credibility interval.

Year	Sample Size	Statistic	5 Reporting Groups				
			Taku	Andrew	Stikine	SSEAK	Other
2010	72	Estimate	524	436	2	0	13
		SD	42	41	7	1	9
		CI05	454	369	0	0	2
		CI95	592	505	11	0	31

Appendix G. 7. Annual stock proportion estimates (mean) of large Chinook salmon harvested in the Alaskan District 111 sport fishery, 2010.

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CI05 is the lower credibility interval and CI95 is the upper credibility interval.

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Year	Sample Size	Statistic	5 Reporting Groups				
			Taku	Andrew	Stikine	SSEAK	Other
2005	264	Mean	0.563	0.376	0.015	0.028	0.018
		SD	0.041	0.034	0.029	0.016	0.009
		CI05	0.491	0.320	0.000	0.009	0.006
		CI95	0.626	0.433	0.081	0.059	0.035
2006	269	Mean	0.600	0.312	0.052	0.008	0.027
		SD	0.036	0.031	0.022	0.008	0.010
		CI05	0.540	0.262	0.020	0.000	0.013
		CI95	0.659	0.365	0.092	0.025	0.045
2007	237	Mean	0.424	0.523	0.027	0.000	0.025
		SD	0.043	0.035	0.032	0.003	0.011
		CI05	0.352	0.466	0.000	0.000	0.010
		CI95	0.493	0.581	0.089	0.000	0.044
2008	218	Mean	0.224	0.763	0.002	0.000	0.010
		SD	0.031	0.032	0.006	0.001	0.007
		CI05	0.174	0.709	0.000	0.000	0.002
		CI95	0.278	0.814	0.016	0.000	0.024
2009	239	Mean	0.254	0.726	0.001	0.000	0.018
		SD	0.031	0.031	0.006	0.001	0.009
		CI05	0.205	0.674	0.000	0.000	0.006
		CI95	0.306	0.776	0.002	0.000	0.035
2010	200	Mean	0.453	0.501	0.001	0.000	0.045
		SD	0.038	0.038	0.004	0.001	0.015
		CI05	0.390	0.439	0.000	0.000	0.024
		CI95	0.515	0.564	0.000	0.000	0.072

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Appendix G. 8. Annual estimates of large Chinook salmon harvested in the Alaskan District 111 sport fishery, 2010.

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CI05 is the lower credibility interval and CI95 is the upper credibility interval.

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Year	Sample Size	Statistic	5 Reporting Groups				
			Taku	Andrew	Stikine	SSEAK	Other
2010	72	Estimate	983	1,089	1	0	99
		SD	83	83	8	2	32
		CI05	848	953	0	0	52
		CI95	1,120	1,225	1	0	157

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