PACIFIC SALMON COMMISSION
JOINT TRANSBOUNDARY TECHNICAL COMMITTEE

ESTIMATES OF TRANSBOUNDARY RIVER SALMON PRODUCTION, HARVEST AND ESCAPEMENT AND A REVIEW OF JOINT ENHANCEMENT ACTIVITIES IN 2012

REPORT TCTR (15)-4

April 2015

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

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

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

EXECUTIVE SUMMARY

Final postseason estimates of harvests and escapements of Pacific salmon returning to the transboundary Stikine, Taku, and Alsek rivers for 2012 are presented and compared with historical patterns. Average, unless defined otherwise, refers to the most recent 10-year average; 2002–2011. 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 2012 Stikine River sockeye salmon terminal run was estimated at 124,300 fish, of which 63,600 fish were harvested in various fisheries including test fisheries. An estimated 47,300 Stikine River fish escaped to spawn and an additional 13,600 fish migrated to the Tuya River block and were not harvested. The run was below average and the harvest was below average. The Tahltan Lake sockeye salmon escapement of 13,600 fish was below the escapement goal range (18,000 to 30,000 fish). The estimated U.S. commercial fishery harvest (Districts 106 and 108) and the Stikine River U.S. subsistence fishery of Stikine River sockeye salmon was 28,700 fish. The Canadian inriver commercial harvest was 26,400 fish and aboriginal fishery harvests was 4,000 fish. The inriver test fisheries harvested 4,100 sockeye salmon and there was no marine test fishery for sockeye salmon in 2012. Weekly inseason run predictions from the Stikine Management Model (SMM) ranged from 118,600 to 152,300 sockeye salmon; the final inseason model prediction was 120,600 fish, with a TAC of 43,600 fish. Weekly inseason run projections using other methods ranged from 111,600 to 166,700 sockeye salmon. The final postseason terminal run size based was 124,300 fish with a TAC of 41,500 fish. Based on the final postseason run size estimate the TAC estimate for each country was 20,800 Stikine River fish, Canada harvested 146% and the U.S. harvested 138% of their respective TACs. Broodstock collection removed 4,000 fish and otolith sampling removed 200 fish from the escapement to Tahltan Lake leaving a natural spawning escapement of 9,500 fish. The estimated spawning escapement of 33,800 mainstem Stikine River sockeye salmon was within the goal range of 20,000 to 40,000 fish for this stock group.

The 2012 Stikine River large Chinook salmon terminal run was estimated at 29,900 fish using postseason CWT and GSI analyses to separate non-Stikine fish in the District 108 terminal area fisheries, of which 7,600 fish were harvested in various fisheries. An estimated 22,300 Stikine River fish escaped to spawn, above the escapement target 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 700 fish was below the Canadian escapement target of 3,300 fish and below the lower bound of the Canadian target range of 2,700 to 5,300 Chinook salmon. The estimated U.S. harvest of Stikine River large Chinook salmon in Districts 108 gillnet, test, troll, subsistence, and sport fisheries was 2,400 fish. The estimated Canadian commercial, aboriginal, test, and sport fisheries harvest was 5,200

fish. Managers used harvest in the MR, model, and other assessment estimates to generate inseason run sizes after SW 22. The inseason run projections were consistent throughout the course of the fishery in predicting a terminal run size that was less than the preseason forecast of 40,800 fish. Weekly inseason run projections ranged from 21,000 to 33,600 Chinook salmon.

The 2012 run size of Stikine River coho salmon cannot be quantified. The U.S. marine harvest of Stikine River coho salmon is also unknown since there is no stock identification program for this species. Mixed stock coho salmon harvest in Districts 106 was 121,400 (55% Alaska hatchery) and District 108 was and 19,900 (24% Alaska hatchery) fish; both below average. The Canadian inriver coho salmon harvest of 6,200 fish was above average. The annual stream surveys conducted by Canada were aborted due to inclement weather. The cumulative CPUE observed in the coho salmon test fishery was slightly below average.

Taku River

The final postseason estimate of the 2012 Taku River sockeye salmon terminal run is 207,600 fish; 193,600 wild fish and 14,000 hatchery fish. The U.S. harvested 46,600 wild fish and Canada harvested 27,000 wild fish and the estimated above border spawning escapement was 120,000 wild fish. The run size was above average as was the escapement which was well above the escapement goal range of 71,000 to 80,000 fish. The U.S. harvested an estimated 48% of the U.S. AC and Canada harvested an estimated 55% of the Canadian AC.

Estimates for Taku River large Chinook salmon are 19,540 spawning escapement, 22,500 above border run, and 23,870 terminal run using postseason CWT and GSI analyses to separate out non-Taku River fish in the District 111 terminal area fisheries. The harvest of large Chinook salmon in Canadian commercial, aboriginal, and recreational fisheries in the Taku River was 2,100 fish. An additional 860 large Chinook salmon were taken in a test fishery. The District 111 traditional gillnet fishery harvest of 1,290 large Chinook salmon was below average and approximately 23% of the harvest was estimated to be of Alaska hatchery origin. In the Juneau area recreational fishery around 1,500 large Chinook salmon were harvested, one-third of which were Alaska hatchery origin.

The estimated above border run of Taku River coho salmon in 2012 is 61,800 fish, which is below average. The Canadian inriver commercial and test fishery harvest of 14,100 coho salmon was above average. After Canadian harvests are subtracted from the above border run, the above border spawning escapement is estimated at 70,800 coho salmon which exceeds the minimum above border inriver run of 38,000 fish stipulated in the Treaty. The U.S. harvest of 23,700 coho salmon in the District 111 traditional fishery was below average. Alaskan hatcheries contributed an estimated 600 fish or 2% of the District 111 harvest.

Alsek River

The Alsek River harvest of 18,200 sockeye salmon in the U.S. commercial fishery was above average. The Canadian inriver harvest was 500 sockeye salmon for the Klukshu River, 1,700 sockeye salmon for aboriginal harvest, and no harvest reported for Village Creek. The Klukshu River weir count of 17,700 sockeye salmon was above average and the escapement goal range of 7,500 to 15,000 fish.

The Chinook salmon run to the Alsek River appeared to be well below average. The U.S. Dry Bay harvest of 510 large Chinook salmon was average. The Canadian recreational fishery harvest of 85 fish was near average and the Aboriginal harvest was thought to have been minimal due to the poor return to the Klukshu River. The 700 Chinook salmon counted through the Klukshu River weir was below average and below 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 harvest of 500 coho salmon was below average. There was no recorded harvest in the Canadian recreational and aboriginal fisheries. 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 2012 sockeye salmon escapements at Tahltan and Tatsamenie lakes. A total of 5.2 million eggs were collected at Tahltan Lake, and 2.0 million at Tatsamenie Lake. The egg-take goal of 6 million at Tahltan Lake was not achieved due to a low escapement.

Outplants of 2011 brood year sockeye salmon fry in May and June 2012 were as follows: 2.126 million fry into Tahltan Lake; 1.596 million fry into Tuya Lake; and 1.891 million fry into Tatsamenie Lake. Green-egg to planted-fry survivals were 63%, 52%, and 86% for the Tahltan, Tuya, and Tatsamenie, respectively. Survivals were lower for the Tahltan Lake stock due to loss of 7 of 26 incubators due to IHN (27% of the eggs collected).

IHN losses were the second highest in the programs history and the cumulative losses since 1989, at 9%, are slightly higher than average for sockeye salmon culture in Alaska. The 2012 disease history samples for Tahltan were the highest in the programs history with 97% positive. The enhancement subcommittee will be continuing to assess these losses and any future ones with regard to any changes in techniques that may be necessary to safeguard against this pathogen.

The egg incubation and thermal marking program was continued at Snettisham Hatchery in 2011 and 2012. 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 weekly contribution of fish from U.S./Canada TBR fry stocking programs to Districts 106, 108, and 111 gillnet fisheries and to Canadian commercial fisheries in the Stikine and Taku rivers. Estimates of contributions of stocked fish to Alaskan commercial harvests were 10,500 stocked Stikine River fish to District 106 and 108, and 4,400 stocked Taku River fish to District 111. Estimates of contributions to Canadian fisheries included 11,900 stocked fish to Stikine River fisheries and 3,100 stocked fish to the Taku River fisheries.

INTRODUCTION

This report presents preliminary estimates of the 2014 catch 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: PSC TTC, TCTR (12)-1 *Salmon Management and Enhancement Plans for the Stikine, Taku and Alsek Rivers, 2012. May 2012.*

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 harvest are made for Alaskan fisheries outside of District 106 and 108 for Stikine River stocks, District 111 for Taku River stocks and subdistrict 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 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 harvests were reported in this fishery in 1995 through 2000, 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.

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.

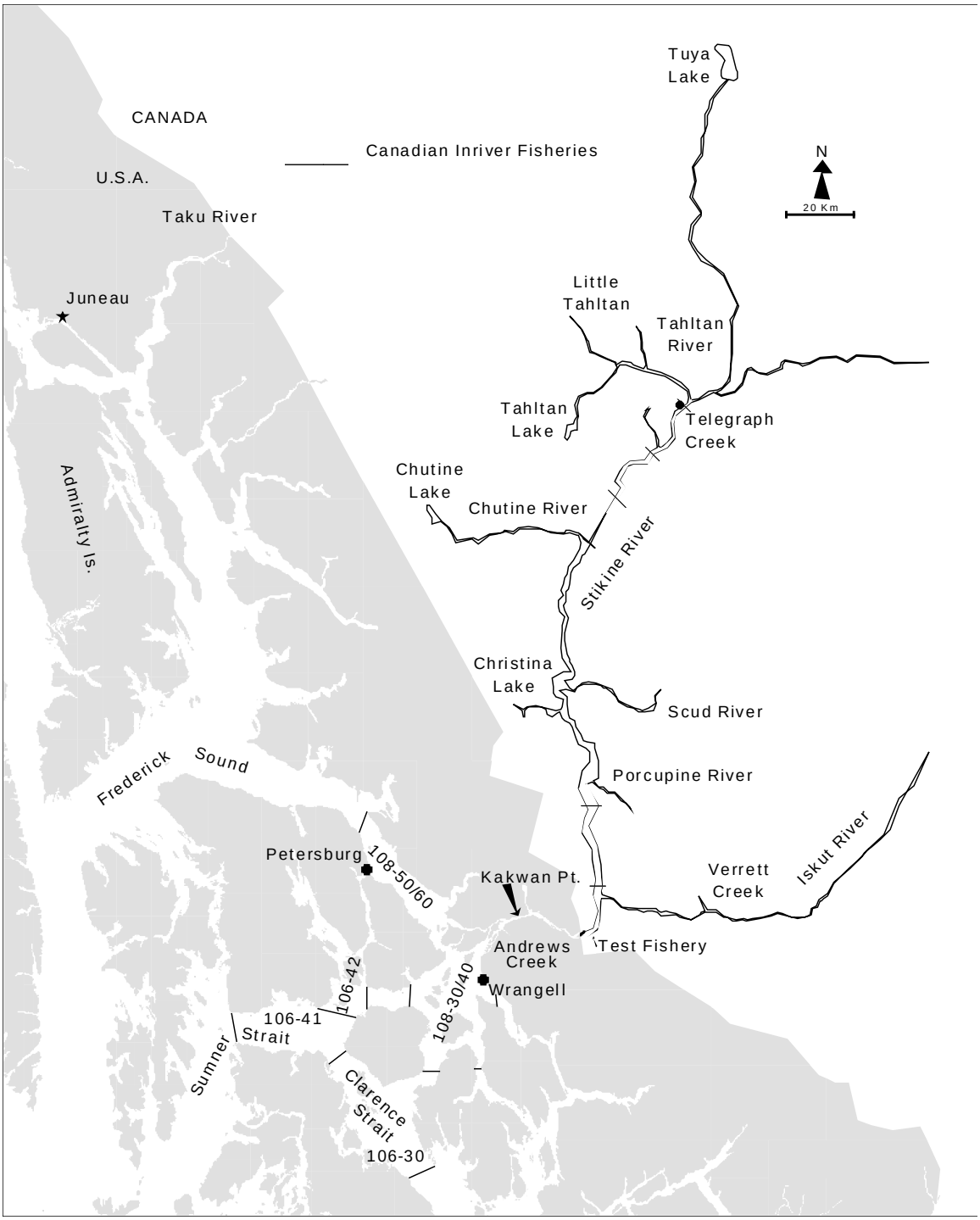

Figure 1. The Stikine River and principal U.S. and Canadian fishing areas.

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 harvest shares; and, a sockeye salmon harvest 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 terminal run size based on MR studies conducted in 1996–2011. Most of the CPUE and run size data sets (CPUE versus run size) are significantly correlated. Inseason model estimates were available commencing in SW 22 (Table 1). Mark-recapture estimates based on the cumulative ratio of tagged-to-untagged fish observed in the inriver commercial fishery were generated commencing in SW 24. In order to abide by Annex IV, Chapter1, 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 40,300 large Chinook salmon was above the threshold run size limit of 28,100 fish. 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 test fishery harvest (1,400). Both countries are permitted to harvest their BLC taken in the course of the targeted sockeye salmon fisheries for run sizes forecasted to be below 28,100 fish. Moreover, a test fishery continued to be implemented on the Canadian side of the border and was designed to provide inseason run estimates with a maximum harvest goal of 1,400 large Chinook salmon.

Table 1. Stikine River large Chinook salmon run size based on the Stikine Chinook Management Model and mark-recapture estimates, and other methods, and weekly inseason harvest estimates from the District 108 gillnet, sport, and troll fisheries and the inriver assessment/test, Canadian gillnet, and sport fisheries, 2012.

SW	Start Date	Terminal Run Estimate	Terminal Run Method	TAC Total	TAC Weekly	TAC Cumulative	Estimated Harvest Cumulative
Canada Estimates[a]							
19	06-May	40,800	Preseason	10,190	206	110	110
20	13-May	40,800	Preseason	10,190	365	295	406
21	20-May	40,800	Preseason	10,190	461	231	636
22	27-May	29,300	SCMM	6,620	553	362	998
23	03-June	20,950	SCMM	2,300	228	491	1,489
24	10-Jun	31,100	Average[a]	7,280	627	722	2,211
25	17-Jun	29,249	Average[a]	6,575	716	712	2,923
26	24-Jun	33,629	Average[a]	8,039	1,015	394	3,317
27	01-Jul	25,331	Average[a]	3,047	600	997	4,313
28	08-Jul	26,244	Average[a]	3,866	249	399	4,712
29	15-Jul	27,300	Average[a]	4,820	230	290	5,002
30	22-Jul	27,300	Average[a]	4,820	40	115	5,118
31	29-Jul	27,300	Average[a]	4,820	32	34	5,151
32	05-Aug	27,300	Average[a]	4,820	24	6	5,158
33	10-Aug	27,300	Average[a]	4,820	18		5,158
Postseason Final		29,912		7,643			5,146
U.S. Estimates[a]							
19	06-May	40,800	Preseason	5,890	368	554	94
20	13-May	40,800	Preseason	5,890	453	1,007	433
21	20-May	29,275	Preseason	5,890	674	1,681	912
22	27-May	20,950	SCMM	478	74	210	1,093
23	03-June	31,102	SCMM	0	0	0	1,078
24	10-Jun	29,249	Average[a]	1,620	279	1,311	1,838
25	17-Jun	33,629	Average[a]	475	47	432	2,536
26	24-Jun	25,331	Average[a]	3,391	163	3,243	3,373
27	01-Jul	25,331	Average[a]	83	2	81	3,413
28	08-Jul	25,331	Average[a]	83	1	82	3,830
29	15-Jul	25,331	Average[a]	83	1	83	3,804
Postseason Final		29,912					3,685

[a] Average of mark-recapture and Stikine Chinook Management Model

[b] TAC includes the base level catch for U.S. and Canada plus an assessment/test fish allocation of 910 Chinook salmon for Canada

Plus an allowable catch for the first four weeks of the fishery. The assessment/test fish allocation of 910 fish was distributed over a three week period (SW 20–22).

The preseason forecast for the Stikine River large Chinook salmon terminal run was 40,800 fish (Table 1) which indicated a run size characterized as below average. Joint Canadian and U.S. inseason predictions of terminal run size ranged from 21,000 to 33,700 Chinook salmon (Table 1). Managers used the daily catch and effort data transmitted from the Kakwan Point tagging site to make weekly 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

SCMM for SW 22–23 and an average of the model and MR estimates were used SW 24–34. All inseason projections indicated a run size that was less than the preseason expectation and well below the average run size. Based on MR data from the inriver commercial fishery tag recoveries and tag recoveries from Verrett and Little Tahltan river escapement sampling, the postseason estimated terminal run size of Stikine Chinook salmon was 29,912 large Chinook salmon, above the final preliminary inseason estimate of 25,300 large Chinook salmon (Table 1). The 2012 Little Tahltan escapement of 720 fish represents 3% of the total inriver escapement of 22,500 fish, compared to the average of 15%.

Sockeye Salmon

The preseason forecast for the Stikine River sockeye salmon terminal run was 134,000 fish (Table 2); characterized as an average run. The forecast included 35,500 natural Tahltan sockeye salmon, 16,200 stocked Tahltan fish, 32,600 stocked Tuya sockeye salmon, and 49,700 mainstem sockeye salmon. The preseason forecast was used through SW 26 for the inriver fishery. After SW 26, 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 harvest, 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 harvests, 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 (greater than 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 2011 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 and in 1996–1999 and 2005–2009 two nets per license were permitted. Only one net was permitted in the 2012 fishing season and the model was adjusted accordingly. An additional seven commercial licences were fished in 2012. These licences were leased from inactive commercial licence holders. The model was not adjusted to account for the additional licenses fished.

Table 2. Weekly forecasts of run size and total allowable catch for Stikine River sockeye salmon as estimated inseason by the Stikine Management Model, 2012.

	Start	Terminal Run		TAC			Cumulative Harvest	
SW	Date	Estimate	Method	Total	U.S.	Canada	U.S.	Canada
Model runs generated by Canada								
25	17-Jun	134,000	Preseason	63,000	31,500	31,500		421
26	24-Jun	134,000	Preseason	92,400	46,200	46,200		1,399
27	29-Jun	166,700	Model (test and com)	73,400	36,700	36,700		8,091
28	8-Jul	148,100	Model (test com) & inriver reg	90,200	45,100	45,100		15,145
29	15-Jul	166,000	Model (test com) & inriver reg	66,200	33,100	33,100		19,735
30	22-Jul	140,400	Model (test com) & inriver reg	69,200	34,600	34,600		24,143
31	27-Jul	143,000	Model (test com) & inriver reg	72,800	36,400	36,400		28,029
32	5-Aug	146,600	Model (test com) & inriver reg	46,400	23,200	23,200		29,883
33	12-Aug	123,000	Run reconstruction	34,400	17,200	17,200		30,244
34	19-Aug	111,600	Run reconstruction	34,400	17,200	17,200		30,770
35	26-Aug	111,600	Run reconstruction	34,400	17,200	17,200		30,887
36	2-Sep	111,600	Run reconstruction	34,400	17,200	17,200		30,887
Model runs generated by the U.S.								
25	17-Jun	134,000	Preseason	68,155	34,078	34,078	4,403	
26	24-Jun	134,000	Preseason	68,155	34,078	34,078	7,756	
27	29-Jun	140,278	Model	75,337	37,669	37,669	16,890	
28	8-Jul	152,281	Model	85,458	42,729	42,729	21,621	
29	15-Jul	134,528	Model	66,955	33,478	33,478	20,701	
30	22-Jul	123,373	Model	51,597	25,799	25,799	20,160	
31	27-Jul	118,782	Model	40,656	20,328	20,328	23,703	
32	5-Aug	122,391	Model	45,577	72,788	45,187	22,594	
33	12-Aug	120,625	Model	43,569	21,785	21,785		
Final postseason estimate			110,242	31,124	15,562	15,562	20,228	32,713

[a] 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 r2 of 0.67 in SW 28 to an r2 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 r2 of 0.31 in SW 28 to an r2 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 total terminal run ranged from 123,000 to 166,700 fish and U.S. forecasts ranged from 118,800 to 188,800 fish (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.

Table 3. Terminal run reconstruction for Stikine River sockeye salmon, 2012.

	All Tahltan	Tuya	Mainstem	Total Stikine	Tahltan	
					EnhacedTahltan	WildTahltan
Escapementa	13,463	13,643	33,812	60,918	5,764	7,699
ESSR Harvestb	0			0		
Broodstock	3,949			3,949	1,836	2,113
Natural Spawning	9,514		33,812	43,326	3,928	5,586
Excessc		13,643		13,643		
Biological Samples	224	189		413	87	137
Canadian Harvest						
Aboriginal	1,901	1,966	133	4,000	692	1,209
Upper Commercial	215	248	5	468	71	144
Lower Commercial	7,102	6,485	12,352	25,939	2,498	4,604
Total	9,218	8,698	12,491	30,407	3,261	5,958
% Harvest	59.8%	51.6%	46.5%	51.4%	58.3%	60.7%
Test Fishery Harvest	434	566	796	1,796	206	228
Tuya Test	210	2,036	60	2,306	86	124
All Inriver harvest	9,863	11,300	13,347	34,509	3,552	6,310
(harvest + samples)	10,087	11,489	13,347	34,922		
Inriver Run	23,326	25,132	47,158	95,840	9,316	14,009
U.S. Harvesta						
106-41&42	2,079	3,292	2,718	8,090	824	1,255
106-30	29	46	541	615	28	1
108	3,760	4,492	10,443	18,696	1,372	2,388
Subsistence	320	341	641	1,302	113	207
Total	6,188	8,172	14,343	28,703	2,337	3,851
% Harvest	40.2%	48.4%	53.5%	48.6%	41.7%	39.3%
Test Fishery Harvest	0	0	0	0	0	0
Terminal Run	29,514	33,304	61,501	124,319	11,653	17,861
Escapement Goal	24,000	0	30,000			
Terminal Excessd		27,572				
Total TAC	5,080	5,732	30,705	41,517		
Total Harveste	15,841	17,436	27,629	60,906		
Canada TAC	2,540	2,866	15,353	20,759		
Actual Harvestfg	9,218	8,698	12,491	30,407		
% of total TAC	363%	303%	81%	146%		
U.S. TAC	2,540	2,866	15,353	20,759		
Actual Harvest fg	6,188	8,172	14,343	28,703		
% of total TAC	244%	285%	93%	138%		
U.S. overage/underage						
Canada overage/underage						

[a] Escapement into terminal and spawning areas from traditional fisheries.

[b] Harvest allowed in terminal areas under the Excess Salmon to Spawning Requirement license.

[c] Fish returning to the Tuya system are not able to access the lake where they originated due to velocity barriers.

[d] 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.

[e] Includes traditional, ESSR, and test fishery Harvestes.

[f] Does not include ESSR or test fishery Harvestes.

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

U.S. Fisheries

The 2012 gillnet harvest in District 106 was 1,853 Chinook, 45,466 sockeye, 121,418 coho, 129,646 pink, and 104,307 chum salmon. Salmon harvests were average for Chinook salmon and below average for sockeye, coho, pink, and chum salmon. Based on GSI/otolith analysis, the postseason estimate of Stikine River sockeye salmon harvested in District 106 was 8,705 fish or 19% of the harvest. Enhanced sockeye salmon from local releases (mostly Neck Lake and Burnett Inlet) contributed 2,977 sockeye salmon (6.5%) to the District 106 harvest. An estimated 901 Chinook salmon in the District 106 harvest (49%) were of Alaska hatchery origin. An estimated 66,219 coho salmon in the District 106 harvest were of Alaska hatchery origin, 55% of the total coho salmon harvest. The District 106 drift gillnet fishery was open for 40 days from June 18 through September 25. Total fishing time was below the average of 48.9 days. Sections 6-A, 6-B, and 6-C were open simultaneously each week throughout the season. Weekly fishing effort in number of vessels fishing in District 106 was below average for every week except for SW 36 when the fishing effort was near average. The greatest effort of vessels fishing occurred in SW 37 (September 9–15) with 70 boats fishing. The total season effort was below average with 1930 boat days in 2012.

Based on postseason GIS/otolith analysis, the Sumner Strait fishery (Subdistricts 106-41) harvested an estimated 8,090 Stikine River sockeye salmon, 27% of the total sockeye salmon harvest in that subdistrict. Based on postseason GSI/otolith analysis, the Clarence Strait fishery (Subdistrict 106-30) harvested an estimated 615 Stikine River sockeye salmon, 4% of the total sockeye salmon harvest in that subdistrict.

The District 108 total season gillnet harvest was 8,027 Chinook 21,997 sockeye, 20,100 coho, 16,374 pink, and 240,569 chum salmon. Chum salmon harvests were above average, and Chinook, sockeye, coho, and pink salmon harvests were below average. Based on postseason GSI/otolith analysis, the District 108 fishery harvested an estimated 18,693 Stikine River sockeye salmon, 85% of the District 108 sockeye salmon harvest. An estimated 31% (4,808 fish) of the District 108 coho salmon harvest was of Alaskan hatchery origin. The District 108 fishery started on May 7 and included three weeks of directed Chinook salmon fishing before a sockeye salmon opening occurred in SW 25 (June 18). District 108 closed concurrently with District 106 on September 27. The 40 days the district was open is near average, excluding periods in years when a directed Chinook salmon fishery occurred. The weekly fishing effort in number of vessels fishing in District 108 was variable with about half the weekly fishing periods receiving higher than average effort and was mainly concentrated in Chichagof Pass and Zimovia Strait targeting hatchery produced chum salmon.

In 2012, U.S. Federal subsistence Chinook, sockeye, and coho salmon fisheries were conducted on the Stikine River. The subsistence fisheries are managed by the United States Forest Service. A permit issued by the USFS to federally qualified users is required for subsistence fishing in the Stikine River and takes place from marine waters to the U.S./Canadian border. Subsistence fishing in “clearwater” tributaries or side channels and at stock assessment sites is prohibited. The annual guideline harvest levels

were 125 Chinook, 600 sockeye, and 400 coho salmon in 2012. The fishery was open from May 15 to June 20 for Chinook salmon, June 21 to July 31 for sockeye salmon, and August 1 to October 1 for coho salmon. The allowable gear for the fishery includes: dipnets, spears, gaffs, rod and reel, beach seine, and gillnets not exceeding 15 fathoms in length with mesh size no larger than 5½ inches, except during the Chinook salmon fishery when nets with mesh up to 8 inches are allowed. In 2012, a total of 129 permits were issued and the estimated harvests included 46 large Chinook, 1,302 sockeye, and 60 coho salmon. Inseason management actions in response to low inseason forecasts of Stikine Chinook salmon included increased reporting intervals and a request to tend nets more closely.

The final postseason estimate of the terminal run size was 29,912 large Chinook and was based upon MR information. The final U.S. harvest of large Stikine Chinook salmon through SW 29, including the Federal Stikine subsistence fishery, was 2,370 fish. Based upon that final postseason estimate of the run size, the U.S. AC, including BLC, was 5,100 large Stikine Chinook salmon. The gillnet fleet harvested the bulk of the large Stikine Chinook salmon in District 108 with an estimated 1,209 fish through SW 29. The sport fishery harvested an estimated 608 large Stikine Chinook salmon during this time period. The troll fishery opened for a total of 36 days throughout most of the open fishing areas in District 108 from SW 19 through 29. The troll fishery accounted for 506 Stikine Chinook salmon in District 108.

On May 1, sport fish regulations were liberalized in the marine waters of District 8 due to an allowable harvest of Stikine River Chinook salmon. Liberalized regulations for sport fish anglers included the use of two rods each with a resident bag limit of three Chinook salmon, 28 inches or greater in length, and a possession limit of six king salmon, a nonresident bag limit of two king salmon 28 inches or greater in length, and a possession limit of two king salmon with an annual limit of six king salmon. On June 4, the liberalized sport fish regulations were rescinded due to declining run size estimates that resulted in no available U.S. AC. On June 23, sport fish regulations were again liberalized for the remainder of the season due to inseason estimates that were large enough to produce a U.S. AC. The 2012 estimated sport fish harvest of 608 Stikine Chinook salmon was below the average harvest of 1,917 fish since directed fisheries were reinstated in 2005.

The preseason forecast produced a U.S. AC large enough to allow for a limited directed commercial gillnet and troll fisheries to begin the first Monday in May. The U.S. TAC based on the forecast was 5,900 large Stikine Chinook salmon. The Stikine River flats remained closed to gillnet throughout the directed Chinook salmon fishery. Small area closures occurred to reduce conflicts between commercial and sport fishermen and for steelhead conservation. Another steelhead conservation tool that was implemented in 2006 and continued in 2012 was a minimum mesh size of 7 inches for gillnetters throughout the directed Stikine Chinook salmon fishery.

The District 108 directed Stikine Chinook gillnet fishery began at 8:00 a.m. on Monday, May 7, (SW 19) for a 24-hour period. There were 11 gillnetters that made landings in District 108 during the initial opener, with several more boats fishing with no harvest.

The majority of boats fished in Section 8-B, and this trend would remain throughout the directed Stikine Chinook salmon gillnet fishery. The average gillnet harvest rate in the initial opening was lower than years with a similar forecast. The first inseason run estimate was not released until SW 21; therefore the preseason forecast was used for the first three weeks of the directed Stikine Chinook salmon fishery. The District 108 gillnet harvest during SW 19 was 29 large Chinook salmon. The U.S. weekly AC guideline, based on historical run timing and the preseason forecast, was 368 Stikine Chinook salmon. After factoring in the troll and sport fish harvests, and deducting the hatchery component, the total U.S. harvest of 181 Stikine Chinook salmon was well below the weekly guideline.

During SW 20 (May 13–May 19) and SW 21 (May 20–May 26) District 108 was opened with the same area and time as the previous week. Gillnet effort increased steadily as the season progressed with 23 boats making landings in SW 20 and 39 boats in SW 21. The overall effort remained below the 2005–2008 average (years with directed gillnet fisheries). The cumulative harvest of large Stikine Chinook salmon by the U.S. fisheries was estimated to be 900 fish, well below the allowable cumulative harvest guideline of 1,681. The average harvest rate in SW 21 showed a minimal increase from the previous week, but continued to be well below expectations. Inseason forecasts starting in SW 21 produced U.S. ACs too low to prosecute further directed commercial fisheries. As a result, the District 108 gillnet fishery was closed until the sockeye salmon season began in SW 25. The directed Stikine Chinook salmon gillnet fishery was open for a total of 3 days and an estimated 363 large Stikine Chinook salmon were harvested.

The District 106 and 108 sockeye salmon gillnet season began at 12:00 noon on Monday, June 18 (SW 25), for an initial two-day period. By regulation, Monday openings occurred during the first two sockeye salmon management periods. The first sockeye salmon opening is normally two days based on the preseason forecasts. Extending fishing time is based primarily on the preseason forecast and on fishery performance estimated by management biologists monitoring the fishery on the grounds. Sockeye salmon harvests showed mixed results and the fishery closed after two days. For this initial opening, 10 boats fished in Clarence Strait (106-30), 39 boats fished in Sumner Strait (106-41), and 53 boats fished in District 108. The preseason forecast for a total Stikine River TAC of 62,629 sockeye salmon (Table 2). This run size would allow the U.S. fisheries to harvest a total of 31,300 Stikine River sockeye salmon which includes 13,503 Tahltan fish. The preseason forecast was used for SW 25–27. Inriver run estimates were produced weekly starting in SW 27 and used throughout the remainder of the season.

During SW 26 (June 24–June 30) there were 41 boats fishing in Sumner Strait, 9 boats fishing in Clarence Strait, and 48 boats fishing in District 108. Due to poor harvest rates in District 6 and low Tahltan sockeye salmon return expectations, no extra time occurred and fishing time remained at 2 days. Otolith readings for subdistrict 106-41 indicated that 7% of the harvest was comprised of thermally marked Tahltan fish and 33% were Tuya fish. In District 108, 13% were thermally marked Tahltan fish and 43% were Tuya fish.

During SW 27 (July 1–July 7) there were 24 boats fishing in Sumner Strait, 23 boats fishing in Clarence Strait, and 37 boats fishing in District 108. Both districts were again opened for an initial two days. Inseason fishery monitoring indicated that sockeye salmon abundance in Districts 106 and 108 were above average. With chum salmon returning to Anita Bay showing early, a good portion of the effort in District 108 shifted to targeting Anita Bay chum salmon. With low effort in District 108 on sockeye salmon and average harvest rates in both districts, extra time was granted; however, extra fishing time was limite4d to a 24-hour extension due to a below average preseason forecast. The first inseason terminal run estimate produced later in the week resulted in a higher estimated run size with an increase in the Tahltan and mainstem components. The otolith readings for subdistrict 106-41 for SW 27 indicated that 2% of the harvest was comprised of thermally marked Tahltan fish and 18% were Tuya fish. The District 108 otolith reading indicated 7% thermally marked Tahltan fish and 34% Tuya fish.

During SW 28 (July 8–July 14) Districts 106 and 108 were opened for an initial two days. There were 18 boats fishing in Clarence Strait, 16 boats in Sumner Strait, and a total of 53 boats fishing in District 108 for the week. Surveys on the fishing grounds indicated that sockeye salmon harvest rates remained average in both districts. With average sockeye salmon harvest rates and low effort in both districts targeting sockeye salmon, a 24-hour extension was announced. Otolith readings for SW 28 indicated that marked Tahltan fish contributed 1% of the 106-41 harvest and 9% of the District 108 harvest. Marked Tuya fish contributed to 7% of the 106-41 harvest and 11% of the District 108 harvest. The second inseason Stikine run size estimate decreased from the prior week to 134,528 fish. The U.S. AC was 33,478 fish. The cumulative U.S. harvest of Stikine sockeye salmon through this SW was 21,621, including 7,516 Tahltan fish.

During SW 29 (July 15–July 21) 17 boats fished in Clarence Strait, 12 boats fished in Sumner Strait, and 61 boats fished in District 108. Harvest rates improved for both districts with more than twice the average CPUE in Sumner Strait. Good harvest rates and low efforts prompted a 24-hr extension for both districts for a total of 3 days for the week. The estimate produced near the end of the week resulted in another decrease in the Stikine sockeye salmon run size. The estimate of Tahltan returning fish decreased from the prior week, whereas the mainstem estimate increased. The U.S. AC of Stikine sockeye salmon was estimated to be 25,798 fish. The estimated U.S. cumulative harvest through this week was 20,701 fish. SW 29 otolith readings indicated that marked Tahltan fish contributed 0.7% of the 106-41 harvest and 0.6% of the District 108 harvest. Marked Tuya fish contributed to 2% of the 106-41 catch and 4% of the District 108 harvest.

Effort increased by 16 boats during SW 30 (July 22–July 28) with 20 boats in Clarence Strait, 23 boats in Sumner Strait, and 63 boats in District 108. The majority of boats fishing in District 108 continued to target enhanced chum salmon run to Anita Bay. Both districts were open for an initial two days with an additional 24-hour extension. The additional time was based on low expected sockeye salmon harvest due to low effort targeting sockeye salmon and continued above average sockeye salmon harvest rates for both districts. This week's SMM again produced a lower Stikine sockeye salmon run size estimate with an estimated terminal run size of 118,782 fish. The resultant U.S. AC was

20,328 fish. The estimated mainstem run size continued to increase as the Tahltan estimated run size continued to decrease. The U.S. harvest of Stikine sockeye salmon through SW 30 was 23,327 fish with a harvest of 3,745 Tahltan fish. Otolith readings for SW 30 indicated that marked Tahltan fish contributed 0% of the 106-41 harvest and 0% of the District 108 harvest.

Overall, effort did not change during SW 31 (July 29–August 4) with 23 boats fishing in Clarence Strait, 21 boats in Sumner Strait, and 65 boats in District 108. Both districts were open for an initial three days. Sockeye salmon harvest rates continued to be above average in both districts for boats targeting sockeye salmon. Estimates produced by the SMM this week and during the next few weeks continued to indicate a below average Stikine River sockeye salmon terminal run size.

During SW 32 through 35 (August 5–August 11) both Districts 106 and 108 were managed for pink salmon. That portion of Section 6-D in District 106 along the Etolin Island shoreline was closed to gillnet fishing from SW 32 through SW 35 by regulation. In Districts 106 and 108, three day openings occurred in SW 32 and 33 based on above average pink salmon harvest rates in SW 31 and good parent year escapements. Harvest rates were below average for SW 33 through 35 for both districts and fishing time was restricted to two day openers in SW 34 and 35. During the 2012 season, the fishing effort was generally near average effort in both districts throughout the pink salmon management period.

Beginning in SW 36 (September 2–September 8) the management emphasis changed from pink salmon to wild coho salmon. Coho salmon harvest rates were generally above average during the pink salmon management period. Prior to the switch to coho salmon management, the District 106 fishery harvested 71,804 coho salmon, 59% of the total District 106 coho salmon harvest. The Neck Lake/Burnett Inlet enhanced summer coho salmon runs comprised the majority of this early coho salmon harvest with an estimated contribution of 27,800 fish in the District 106 fishery prior to SW 36. The average weekly Alaska hatchery coho salmon harvest rates in the District 106 fishery were above average for most of 2012. The coho salmon harvests were below average in both Districts 106 and 108. The weekly wild coho salmon component of the harvest remained below average with a peak during SW 35, one week earlier than average. During the coho salmon management period both districts had three-day openings except for the last week of the fishery which was a two day opener. The 2012 gillnet season in both districts ended at noon on Tuesday, September 25.

Canadian Fisheries

Harvest from the combined Canadian commercial and Aboriginal gillnet fisheries, and sport fishery in the Stikine River in 2012 included: 4,642 large Chinook (includes 5 release mortalities), 1,240 nonlarge Chinook (includes 27 release mortalities), 30,407 sockeye, 6,188 coho, 0 pink, and 363 chum salmon. In addition 411 pink and 625 chum salmon were released; all of the 365 steelhead 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 2,306 sockeye, 44 large Chinook, and 5 nonlarge Chinook salmon. A total of 467 large Chinook and 49 nonlarge Chinook salmon were harvested by the commercial fleet under the auspices of a test fishery. The PST test fishery quota was 1,400 large Chinook salmon; however, because the test fishery was only conducted during SW 23 (03–09 June; 16% of the run), the guideline test fish harvest was adjusted to reflect this proportion resulting in a guideline level of only 228 large Chinook salmon.

The harvest of large Chinook salmon was below average and the fourth lowest harvest recorded since the targeted Chinook salmon fishery started in 2005. Harvests of nonlarge Chinook salmon were close to average. The sockeye salmon harvest was 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 11,958 fish, 39% of the harvest. The harvest of 6,188 coho salmon was above average.

A sockeye salmon test fishery was conducted for stock assessment purposes in the lower Stikine River from 20 June to 01 September, 2012. The test fishery was located immediately upstream from the Canada/U.S. border. Test fishery harvests totaled 62 large Chinook, 39 nonlarge Chinook, 1,777 sockeye, 96 coho, 38 pink, 131 chum salmon, and 23 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 identification, 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.

A coho salmon test fishery was conducted in the lower Stikine River from 05 September to 13 October, 2012. The test fishery was located immediately upstream from the Canada/U.S. border. Test fishery harvests totaled 340 coho, 4 chum salmon, and 29 steelhead trout that were released. The objective of this test fishery was to provide an index catch expressed in cumulative weekly CPUE to complement and compare with the existing test fishery historical data set (1986–2011) which provides an interannual measure of the relative run strength of Stikine coho salmon.

Lower Stikine River Commercial Fishery

Canadian lower Stikine River commercial fishery in the harvested 4,054 large Chinook, 1,043 nonlarge Chinook, 25,939 sockeye, 6,188 coho, 0 pink, and 363 chum salmon. A total of 365 steelhead trout, 411 pink and 625 chum salmon were released. For the

Chinook salmon harvest 4,054 fish were harvested in a directed Chinook salmon fishery (SW 19–22) and incidentally in a directed sockeye salmon fishery (SW 24–32). An additional harvest of 467 large Chinook salmon was accounted against the assessment/test fish allocation of 1,400 large Chinook salmon. The harvest of Chinook salmon excludes an estimated released fish mortality of 6 large and 27 nonlarge fish. The harvests of sockeye, large and nonlarge Chinook salmon were below average and the harvest of coho salmon was above average. The commercial fleet targeted large Chinook salmon from SW 19–21; based on a preseason run size of 40,800 large Chinook salmon. Due to a major drop in the inseason run size estimate in SW22 projection, the SW 23 commercial fishery was closed. In SW 23, an assessment/test fishery was prosecuted in order to collect tagged to untagged fish ratio metrics used in generating inseason run size estimates. Post SW 23, the run size prediction warranted a return to a targeted Chinook salmon fishery which was prosecuted through to SW 25.

The fleet targeted Chinook salmon for a total of 11 days; below the average of 18 days. Sockeye salmon were targeted for a total of 19 days; below the average of 31 days. The coho salmon fishery was opened for a total of 8 days; below the average of 9 days.

Based on final estimates (Table 3) the stock composition of the lower river commercial fishery sockeye salmon harvest was 2,498 stocked Tahltan fish which accounted for 11% of the sockeye salmon harvest; 4,914 wild Tahltan fish accounting for 18% of the harvest; 11,840 mainstem fish accounting for 48% of the harvest; and 7,340 stocked Tuya fish which accounted for 25% of the harvest.

Precise stock compositions of the commercial Chinook salmon harvest are not available. However, assuming that the Chinook salmon harvest 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 121 large Chinook salmon (3% of escapement) and the harvest of large Chinook salmon originating from ‘other’ stocks was 4,521 fish.

Weekly Chinook and sockeye salmon guideline harvests based on SCMM, SMM, MR and other forecasts of the TAC apportioned by average run timing and domestic and international allocation agreements were developed each week to guide management decisions during the Chinook and sockeye salmon seasons. For purposes of managing the lower river harvest 800 large Chinook salmon were allocated to the upper Stikine fisheries after SW 25 (17–23 June). The large Chinook salmon allocation consisted of 100 sport, 20 upper commercial, and 680 Aboriginal fisheries. 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 (12–18 June) was focused primarily on the harvest of large Chinook salmon (the commercial fishery was closed in SW 23, so test fishery was deployed to collect tag ratio information). From SW 26 through SW 29 (24 June–21 July) 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 salmon fishery in SW 34 (19–25 August). As in 2010 and 2011, the management of mainstem sockeye salmon was advanced from SW 31 (29 July–04 August) to SW 30 (22–28 July) in 2012 in an attempt to avert the downward trending escapement of this stock. The coho salmon management regime commenced on SW 35 (26 August–01 September).

The preseason estimate of 40,800 large Chinook salmon was above the treaty agreed to threshold run size of 28,100 fish that triggers a directed fishery. Targeted commercial fisheries, therefore, could be prosecuted by both Canada and the U.S. The TTC agreed to Canada conducting a test fishery using the Canadian commercial fleet should the inriver run size estimate be under the threshold limit of 24,500 large Chinook salmon. The fleet, however, would be under a tightly controlled fishing regime. This was done in order to collect inseason CPUE and tag recovery data required to generate weekly run size estimates. The test fishery catch was capped at 1,400 large Chinook salmon.

The Canadian guideline harvests in a directed Chinook salmon fishery were based on an overall AC of 6,810. This AC was apportioned through SW 19 to SW 25 (06 May–23 June). The weekly guideline harvests were derived from historical run timing data from the 2005–2009 inriver commercial fisheries and the 2000–2003, 2010–2011 inriver test fisheries. The same metrics were used to generate weekly guideline harvests under an assessment/test fishery scenario which occurred only in SW 23 (03–09 June). During the early component of the directed sockeye salmon fishery when incidental Chinook salmon harvests occurred weekly guidelines of the Chinook salmon BLC (defined in the PST) were generated using the same run timing as articulated above.

The directed Chinook salmon fishery regime commenced at 1200 hours 06 May (SW 19). The Chinook salmon assessment/test fishery regime commenced at 0800 hours 04 June (SW 23). The sockeye salmon fishery regime that incidentally harvested Chinook salmon allocated under the base level allocation commenced at 1200 hours 24 June (SW 26). Fishers were limited to one net with a maximum length of 135 m (445 feet). The maximum mesh size was 203 mm (8 inches) when targeting Chinook or coho salmon, and 140 mm (5.5 inches) when targeting sockeye salmon. An additional seven licences were fished again in 2012 as occurred in the 2011 fishing season. These licences were leased by active commercial fishers from licence holders that have not participated in the fishery for over a decade. The fishing zone extended from the Canada/U.S. boundary to a point near the confluence of the Porcupine and Stikine rivers.

In a response to five consecutive years of under escapement of Little Tahltan Chinook salmon the TAC allocated to the Canadian fishery was reduced 30% until an inseason run size was generated.

Note: some of the catch figures listed in the following narrative may not match the final catch records shown in the appendix tables. This is due to slight changes in the catches as a result of a postseason check of the catch slips and assessment of the nonlarge Chinook versus large Chinook ratio.

The first directed Chinook salmon fishery opening was posted for two days commencing at 1200 hours 06 May, SW 19. The guideline harvest was 206 large Chinook salmon. Fishing conditions were very good; however, the catch per boat day (CPUE) of only 7 fish after 24 hours of fishing was only average. The fishery was held at two days and yielded a total harvest of only 110 large and 5 nonlarge Chinook salmon. The weekly CPUE adjusted (specifically, expanded by 30% to reflect what the CPUE would have been with the standard two nets) was 5.16 fish; the recent 7-year average was 7.0 large Chinook salmon. The cumulative catch per hour (CPUE) at the Kakwan tagging site was 57% of average and the harvest to date taken by the District 108 recreational fishery was 54% of average. The harvest in District 108 directed drift gillnet Chinook salmon fishery followed suit with a catch per boat day (CPUE) of only 2.8 fish; average was 4.9 large Chinook salmon or 49% of average.

The fishery was posted for and initial two day opening in SW 20 (13–19 May) with a weekly guideline harvest of 365 large Chinook salmon. The CPUE after 24 hours was slightly above average; day one harvest was 144 large Chinook salmon. The projected total harvest of 300 Chinook prompted a decision to hold the fishery to two days this week. The final harvest was 292 large and 11 nonlarge Chinook salmon taken under very good fishing conditions. The CPUE of 13 large Chinook salmon was slightly above the recent 7-year average of 12 large Chinook salmon. The CPUE at the Kakwan tagging site, however, was only 57 % of average and the harvest to date taken by the District 108 recreational fishery was 23 % of average. The CPUE in District 108 directed drift gillnet Chinook salmon fishery was only 5.5 fish; the average was 6.5 fish or 85% of average. This week's low catch rates at Kakwan and in District 108's sport and drift gillnet fishery showed early signs of a relatively weak return of Stikine bound Chinook salmon; anticipated to be below the preseason forecast of 40,800 fish.

The fishery was posted for an initial one day period in SW 21 (20–26 May) with a weekly guideline harvest of 461 large Chinook salmon. The estimated harvest of 130 large Chinook salmon after 8 hours and a projected harvest of 400 fish in 24 hours resulted in a decision to hold the fishery at one day. The total weekly harvest was 245 large and 17 nonlarge Chinook salmon. The CPUE of 22 large Chinook salmon was above the recent 7-year average of 16 large Chinook; taken under relatively good fishing conditions. The cumulative CPUE at the Kakwan tagging site however was only 58% of average and the harvest to date taken by the District 108 recreational fishery was 62% of average. The District 108 drift gillnet CPUE was also substandard reporting a CPUE of only 4.9; the average was 11.5 fish or 43% of average. The first inseason run size estimate of 29,300 large Chinook was generated on Thursday of this week. The Stikine Chinook management model (SCMM) was the sole tool used to generate a run size versus the use of a MR estimate. This was due to the fact that only nine tags were recovered to date which was of little utility in generating a run size estimate of adequate precision. As suspected earlier in the fishery, the preseason was size estimate of 40,800 fish was probably optimistic.

As a result of the new inseason run size estimate of 29,300 fish, the fishery was only posted for an initial one day period in SW 22 (27 May–02 June) with a weekly guideline

harvest of 552 large Chinook salmon. The estimated harvest of 76 large Chinook salmon after 8 hours and a projected harvest of 230 fish in 24 hours resulted in a decision to extend the fishery for 24 hours. This week's two day fishery yield a harvest of 331 large and 15 nonlarge Chinook salmon. The CPUE of 14.5 large Chinook salmon was close to recent 7-year average of 14.6 large Chinook salmon, taken under very good fishing conditions. The cumulative CPUE at the Kakwan tagging site was only 46% of average, while the catch to date taken by the District 108 recreational fishery was 45% of average. The District 108 Chinook drift gillnet was closed this week due to projected low returns and minimal AC. An inseason run size estimate of 20,950 large Chinook salmon was generated on Thursday of this week. As in SW 21, the Stikine Chinook management model (SCMM) was the sole tool used to generate a run size versus the use of a MR estimate. This was again due to the low number of tags recovered to date. The new run size of only 20,950 large Chinook salmon was well below the trigger of 24,500 fish above which a commercial fishery may be prosecuted under the terms of the PST. As a result, the directed commercial fishery was closed. A test/assessment fishery, utilizing the commercial fleet, was announced for the following week, SW 23 (03–09 June).

In SW 23 (29 May–04 June) the assessment/test fishery commenced with the objective of providing a measure (tag recoveries and CPUE) of weekly and total run size estimates required to govern fisheries management decisions. The weekly guideline harvest was based on Chinook salmon run timing as discussed above. The fishery was posted for an initial 12 hour period starting at 0800 hours 03 June (Monday) with a weekly guideline harvest of 228 large Chinook salmon. The unexpectedly high harvest of nearly 200 fish after 6 hours of fishing resulted in holding the fishery to 12 hours. The final harvest was 495 large and 21 nonlarge Chinook salmon which were harvested under good fishing conditions. The CPUE of 44 large Chinook salmon was well above the recent 7-year average of 21 large Chinook salmon. The CPUE at the Kakwan tagging site did not see a similar improvement; this week's CPUE was only 65% of average. The harvest to date taken by the District 108 recreational fishery was only 51% of average. A new run size estimated of 31,100 large Chinook salmon generated by combining a MR and SCMM estimate showed a major improvement in run strength which resulted in triggering a directed commercial fishery on the merit of the new run size exceeding the threshold size of 24,500 large Chinook salmon. As such, a directed commercial fishery was announced for the following week, SW 24 (10–16 June).

As a result of the new inseason run size estimate of 31,100 large Chinook salmon the commercial fishery was reinstated for an initial one day period in SW 24 (10–16 June), with a weekly guideline harvest of 602 large Chinook salmon. The estimated harvest of 50 large Chinook salmon after 6 hours and a projected harvest of 200 fish in 24 hours resulted in a decision to extend the fishery for one day. A similar harvest estimate of 200 fish after 6 hours of fishing in day two prompted a second one day extension. The day three harvest of 339 large Chinook salmon was well above expectations which resulted in a slight overage above our weekly goal of 602 large fish. In total, this week's three day fishery yielded a harvest of 764 large and 36 nonlarge Chinook salmon. The CPUE of 23 large Chinook salmon was well below recent 7-year average of 41 large Chinook salmon; taken under relatively poor fishing conditions. The cumulative CPUE at the Kakwan

tagging site was 45% of average and the harvest to date taken by the District 108 recreational fishery was 87% of average. The run size estimate generated late this week based on averaging the SCMM and MR indicated a slight drop in run size with an estimate of 29,300 large Chinook salmon. Further anecdotal evidence of a weak return was the reported with a harvest of only 52 large Chinook salmon taken in the upper Stikine Aboriginal fishery, when on average over 125 large Chinook salmon are harvested by this week.

In SW 25 (17–23 June) the commercial fishery was opened for an initial one day period with a weekly adjusted guideline harvest of 563 large Chinook salmon. The actual guideline harvest estimate of 804 fish based on the latest run size estimate was reduced by 30% due to an uncertainty in MR component of the estimate. It was surmised that the MR estimate was unreasonably high. The precision around the estimate was weak based on a small tag recovery of only 23 tags. The estimated harvest of 200 large Chinook salmon after 8 hours and a projected harvest of 600 fish in 24 hours resulted in a decision to hold the fishery to one day. In total, this week's one day fishery yielded a harvest of 670 large, 47 nonlarge Chinook and 341 sockeye salmon. The CPUE of 60 large Chinook salmon was well above the recent 7-year average of 39 large Chinook salmon; taken under relatively favourable fishing conditions. The sockeye salmon harvest was an all-time seasonal high and it should be noted that this harvest was taken using exclusively Chinook salmon gear (204 mm/8.0 inch mesh). Based on this unprecedented sockeye salmon harvest there was an early anticipation of a strong return of sockeye salmon; the preseason estimated run size was only 134,000 fish which well below average. The cumulative CPUE at the Kakwan tagging site was 40% of average and the harvest to date taken by the District 108 recreational fishery was 93% of average. This week's new run size estimate of 33,600 large Chinook salmon based on averaging the SCMM and MR estimate indicated a stronger run (a measure of uncertainty clouded the MR estimate). A cumulative total of only 127 large Chinook salmon was taken in the upper Stikine Aboriginal fishery this week when on average over 208 large Chinook salmon are harvested by this date. The Little Tahltan Chinook salmon weir was operational on the 22 June after a five day installation delay due to high water conditions. No fish were enumerated.

In SW 26 (24–30 June) the fishery management focus switched from Chinook salmon to sockeye salmon; however, the relatively weak Chinook salmon return resulted in managing the fishery based on both sockeye and Chinook salmon escapement considerations. The sockeye salmon management regime was centred on the Tahltan stock group and remained through SW 29 (15–21 July). 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 (19–25 June) through SW 30 (17–23 July) and AC based on run sizes exceeding 24,500 large Chinook salmon. The total Canadian BLC was 2,300 fish; l,500 large Chinook salmon were allocated to lower river commercial fishery and the balance allocated to the Aboriginal, upper commercial, and recreational fisheries. In order to minimize the incidental harvest of Chinook salmon, a mesh size restriction of 140 mm (5.5 inches) was implemented. Fishers were permitted one net only

and the commercial fishing grounds remained the same as that defined in the directed Chinook salmon fishery.

The first targeted sockeye salmon fishery for the 2012 season was posted for an initial two day period commencing Sunday noon, SW 26 (24–30 June). The guideline large Chinook salmon harvest was 836 fish and the sockeye salmon guideline harvest was 2,800 fish; including 1,400 Tahltan Lake sockeye salmon. The total sockeye salmon TAC was based on the preseason run size expectation of 134,000 fish and a total TAC of 31,500; including 13,600 Tahltan, 8,500 Tuya Lake, and 9,400 mainstem sockeye salmon. A harvest estimate of only 200 Tahltan Lake sockeye salmon and 150 large Chinook salmon after 24 hours of fishing prompted a one day extension. The fleet fished under superb fishing conditions due to unseasonably low water flows. The three day fishery yielded a harvest of 389 large Chinook, 84 nonlarge Chinook, and 978 sockeye salmon which was well below the guideline harvests for both species. The total weekly sockeye salmon harvest was comprised of 18% Tahltan enhanced fish, 37% Tahltan wild fish, 39%, Tuya, and 6% mainstem sockeye salmon. The Tahltan sockeye salmon CPUE was only 11 fish; the average was 49 fish. U.S. District 108 and 106 sockeye salmon harvests were reported as below average. The Chinook salmon harvests in upper Stikine fishery continue to be below average. Zero Chinook salmon transited the Little Tahltan weir; on average a total of 47 large Chinook salmon would have been counted by this date. The Kakwan CPUE was 40% of average.

The fishery was posted for an initial two day period in SW 27 (01–07 July) with a Chinook salmon guideline harvest of 440 large fish and a sockeye salmon guideline harvest of 7,500 fish; including 3,700 Tahltan Lake sockeye salmon. The sockeye salmon TAC was based on a run size estimate of 166,700 fish which was generated by averaging the Stikine Management Model (SMM), the run size based in an inriver CPUE linear regression model using commercial harvests, and test fish CPUE model. Harvests of 1,600 Tahltan Lake sockeye and 400 large Chinook salmon after one day of fishing indicated that there was little room to extend another day. The fishery was thus held on two days. The fishing conditions were very good again this week. At this point in the fishery it was decided that no adjustment would be made to the CPUE generated by the 19 licences fishing in attempts to make it comparable to past years when there were 12 licences fishing. The rationale was that the extreme and unusual low flow and therefore increased CPUE would be offset by using the total complement of nets, n=19 instead of using some metric to factor down the effort to make it comparable to past years. The two day fishery yielded a catch of 972 large Chinook, 163 nonlarge Chinook, and 6,394 sockeye salmon; including 3,200 Tahltan Lake origin fish. This harvest was well above the Chinook salmon guideline harvest and close to the Tahltan Lake sockeye salmon guideline harvest of 3,700 fish. The unexpected large “pulse” of Chinook salmon cannot be fully explained. This pulse did not manifest in a strong late return to Little Tahltan River, nor was there evidence that this pulse of fish showed up at the Verrett River spawning site. (Note: viewing conditions at the Verrett were impaired due to high water.) The total weekly sockeye salmon harvest was comprised of 21% Tahltan enhanced fish, 35% Tahltan wild fish, 38% Tuya, and 6% mainstem sockeye salmon. The Tahltan sockeye salmon CPUE was 92 fish; average is114 fish. It was observed that the Tuya run

thus far was relatively strong and above predictions in both the U.S. District 106 and 108 fisheries, as well as the Canadian fishery. The preliminary U.S. harvest reported in District 108 this week was below average with a relatively high percentage Tuya Lake origin fish harvested. The sockeye salmon harvest in the upper Stikine aboriginal fishery was 298 fish, slightly above the average of 208 sockeye salmon. It was predicted that over 50% of the harvest was Tuya Lake origin fish. The Chinook salmon harvest in upper Stikine fishery continues to be below average. The Little Tahltan weir large Chinook salmon count followed suit with only 3 fish counted to date; below the average of 54 fish. The Kakwan CPUE was 51% of average this week.

In SW 28 (08–14 July) the fishery was posted for an initial two day opening with a Chinook salmon guideline harvest of 172 fish and a guideline harvest of 3,400 Tahltan Lake sockeye salmon. The initial estimate of the run size of 163,700 sockeye salmon, including 63,000 Tahltan Lake origin fish, was downgraded to a run size of 148,100 fish, including 46,800 Tahltan Lake origin fish after two days of fishing. This resulted in a weekly guideline harvest of only 1,500 Tahltan Lake sockeye salmon. The day one harvest of only 1,000 Tahltan Lake sockeye salmon prompted a one day extension. A new run size estimated after two days of fishing as articulated above showed this decision was in error. The three day fishery yielded a harvest of 393 large Chinook, 110 nonlarge Chinook and 5,618 sockeye salmon; including a harvest of 2,300 Tahltan Lake sockeye salmon. The Chinook salmon harvest was above the guideline harvest of 172 fish; the harvest of Tahltan sockeye salmon was below the initial target of 3,400 fish, but above the final weekly target of only 1,500 fish. The dramatic drop in the Tahltan run size appeared evident in the considerable drop in the proportion of thermal marked Tahltan Lake sockeye salmon in this week's harvest. This precipitous drop in Tahltan thermal marks which dropped from 21% in the previous week to 10% in the current week was unprecedented. The total weekly sockeye salmon harvest was comprised of 10% Tahltan enhanced fish, 46% Tahltan wild fish, 37% Tuya, and 7% mainstem sockeye salmon. The drop in Tahltan sockeye salmon CPUE was also dramatic dropping from 92 fish from the previous week to 38 fish in the current week. This week's CPUE of 38 fish was only 27% of the average of 143 fish. This week is the historical peak of the Tahltan run through the fishery. The preliminary U.S. harvest estimates for this week indicated the CPUE was below average. The upper river aboriginal fishery harvests were close to average, again it was expected that the majority of the harvest consisted of Tuya Lake origin fish. The Chinook salmon harvests in upper Stikine fishery continue to be below the seasonal average. The Little Tahltan weir count of 128 large Chinook salmon continued to lag well behind the average of 1,584 fish. The upper Stikine recreational fishery harvests were reported as being poor. Zero fish reported transiting the Tahltan Lake sockeye salmon weir this week; on average 2,257 sockeye salmon would have been counted by this date.

In SW 29 (15–21 July) the fishery was posted for an initial two day opening with a guideline harvest of 1,500 Tahltan sockeye salmon. The run size estimate of 166,000 fish was based on averaging the test and commercial CPUE models and the SMM. The Tahltan Lake component was estimated at 54,800 fish. The day one harvest was 1,800 sockeye salmon; including a harvest of 300 Tahltan Lake origin fish. The projected two day harvest was estimated at less than a 1,000 Tahltan Lake sockeye salmon; below the

guideline harvest of 1,500 fish. The below average CPUE on Tahltan Lake sockeye salmon this week and throughout the fishery, thus far, was the deciding factor in not extending this week's fishery. The two day fishery yielded a harvest of 128 large Chinook, 18 nonlarge Chinook and 3,327 sockeye salmon. The Tahltan Lake sockeye salmon harvest of 479 fish was well below the guideline harvest of 1,500 fish. The total weekly sockeye salmon harvest was comprised of 7% Tahltan enhanced fish, 35% Tahltan wild fish, 34% Tuya, and 24% and mainstem sockeye salmon. The Tahltan sockeye salmon CPUE was 13 fish; the average is 96 fish. The end of SW 29 marked the end of the Tahltan Lake sockeye salmon management regime. The remaining sockeye salmon fishery decisions for the lower commercial fishery were driven by mainstem sockeye salmon abundance and TAC. The upper river Aboriginal harvests were 87% of average. The Tahltan weir count of 1,880 sockeye salmon was well behind the average of 7,486 fish to date. The Little Tahltan weir count of 227 large Chinook salmon contrasted poorly with the average of 2,626 fish. The upper Stikine Chinook salmon recreational fishery harvests were reported as being poor.

In SW 30 (22–28 July) the fishery was posted for an initial two day opening with a guideline harvest of 3,455 mainstem sockeye salmon. The terminal run size estimate was 140,400 fish based on the average of the SMM (using test and commercial CPUE) and an inriver run size regression using test and commercial CPUE. The estimated run size of mainstem sockeye salmon was 63,300 fish. The day one harvest of 1,600 sockeye salmon, including a harvest of 1,200 mainstem sockeye salmon triggered a six hour extension. The 52 hour fishery (2.25 days) yielded a harvest of 74 large Chinook, 13 nonlarge Chinook and 3,502 sockeye salmon; including a mainstem sockeye salmon harvest of 2,793 fish. The mainstem harvest was under the weekly guideline harvest of 3,455 sockeye salmon. The total weekly sockeye salmon harvest was comprised of 3% Tahltan enhanced fish, 36% Tahltan wild fish, 9% Tuya, and 51% mainstem sockeye salmon. The mainstem sockeye salmon CPUE was 65 fish; the average was 59 fish. The upper river aboriginal harvests remained below average. The Tahltan weir count of 9,621 sockeye salmon was well below the average of 15,910 fish; the projected total weir count was only 18,900 fish. The Little Tahltan weir count of 470 large Chinook salmon continued to lag well behind the average of 4,012 fish. In 2012, the Tahltan River was surveyed, similar to previous years, to determine if the migrant Chinook salmon were holding. There were no obvious migration barriers; however, it appeared that the number of spawners observed in the mainstem Tahltan River below the Little Tahltan weir was impressive (this observation was made by DFO personnel conducting an over flight survey; there is no historical context for comparison). The Chinook salmon recreational fishery reported poor to moderate success.

In SW 31 (29 July–04 Aug) the fishery was posted for an initial two day opening with a guideline harvest of 3,300 mainstem sockeye salmon. The run size projection increased to 143,000 sockeye salmon based on an average of the inriver commercial CPUE regression, an inriver test fishery CPUE regression, the SMM based on commercial CPUE, and the SMM based on the test fishery CPUE. The mainstem projection was 67,900 sockeye salmon. The day one harvest of 1,500 mainstem sockeye salmon triggered an 8 hour extension. The 56 hour (2.33 days) fishery yielded a harvest of 17

large Chinook, 1 nonlarge Chinook, 27 coho, 21 chum, and 3,543 sockeye salmon; including a mainstem sockeye salmon harvest of 3,379 fish which was close to the guideline harvest of 3,300 fish. The total weekly sockeye salmon harvest was comprised of 0% Tahltan enhanced fish, 18% Tahltan wild fish, 2% Tuya, and 80% mainstem sockeye salmon. The mainstem sockeye salmon CPUE was an impressive 101 fish; the average is 56 fish. The upper river aboriginal fishery effort dropped substantially. The Tahltan weir count was only 11,600 sockeye salmon; average is 23,200 fish. The projected total escapement was 15,900 fish. The cumulative count of large Chinook salmon at the Little Tahltan weir remained low at only 630 fish; average is 4,012 large Chinook salmon.

In SW 32 (05–11 August) the fishery was posted for an initial two day opening with a guideline harvest of 3,669 mainstem sockeye salmon. The TAC was based on a run size projection of 146,600 fish generated from inriver regression models (test and commercial) and the SMM (test and commercial). The projected mainstem sockeye salmon run size was 79,300 fish. The day one harvest of only 870 mainstem sockeye salmon indicated a weakening of the run. This was supported by the substandard test fishery harvests and the poor harvests reported in U.S. District 108 fishery. The fishery was held at two days. The two day fishery yielded a harvest of 8 large Chinook, 54 coho, 74 chum, and 1,743 sockeye salmon; including a mainstem sockeye salmon harvest of 1,643 fish which was well below the guideline harvest of 3,669 fish. The total weekly sockeye salmon harvest was comprised of 0% Tahltan enhanced, 4% Tahltan wild, 1% Tuya, and 95% mainstem sockeye salmon. The mainstem sockeye salmon CPUE was 54 fish; the average was 53 fish. The upper river Aboriginal fishery effort continued to drop. The Tahltan weir count to date was 12,804 sockeye salmon; the projected total escapement was 14,600 fish. The Little Tahltan weir project ended on 11 August. The final count was 720 large and 51 nonlarge Chinook salmon. The count was well below the Canadian escapement target of 3,300 large Chinook salmon; indeed, it was below the lower end of the escapement goal range of 2,700 to 5,300 large Chinook salmon.

In SW 33 (12–18 August) the fishery was posted for an initial one day opening with a guideline harvest of 1,200 mainstem sockeye salmon. The TAC was based on a run size projection of only 123,000 fish generated from a Tahltan based run reconstruction exercise. The projected mainstem sockeye salmon run size was 60,100. Notwithstanding the most current run size estimate, which significantly dropped from the previous week (SW 32) the test fishery harvests were extremely poor which resulted in a decision to fish only one day this week. This week's one day fishery yielded a harvest of 199 coho, 48 chum, and 361 sockeye salmon; including a mainstem sockeye salmon harvest of 354 fish which was below the guideline harvest by 1,200 fish. The total weekly sockeye salmon harvest was comprised of 0% Tahltan enhanced, 6% Tahltan wild, 0% Tuya, and 94% mainstem sockeye salmon. The mainstem sockeye salmon CPUE was 27 fish; the average is 38 fish. Few nets remained fishing in the upper river Aboriginal fishery this week. The Tahltan weir count to date was 13,416 sockeye salmon and the projected escapement was estimated at 14,236 sockeye salmon.

In SW 34 (19–25 August) the fishery was posted for an initial one day opening. The run projection dropped to 111,600 fish; including 56,900 mainstem sockeye salmon. The total projection was based on a run reconstruction estimate driven by the terminal run size of the Tahltan component (accounting of the Tahltan stock was considered near completion) and the ratio of the CPUE of the Tahltan stock to the mainstem CPUE and Tuya CPUE stock groupings. The one day fishery yielded a harvest of 159 coho, 22 chum, and 58 sockeye salmon; including 53 mainstem fish. The total weekly sockeye salmon harvest was comprised of 0% Tahltan enhanced, 2% Tahltan wild, 0% Tuya, and 98% mainstem sockeye salmon. The mainstem sockeye salmon CPUE was 5 fish; the average was 11 fish. No fishing was conducted in the upper Stikine Aboriginal fishery this week; it was presumed that the fishery finished for the season. The Tahltan Lake weir count as of this week was 13,653 sockeye salmon; the total season count is projected to be 13,990 fish.

In SW 35 (26Aug–01 Sept) the fishery was opened for an initial three day period with management objective focused on coho salmon. Of the 19 licensed fishers active in the 2012 Chinook and sockeye salmon commercial fisheries, only 15 licences remained to fish coho salmon. The guideline harvest on coho salmon was 5,000 fish for the season. After two days of fishing and a harvest of 1,029 coho salmon the fishery was extended one day. The four day fishery yielded a harvest of 2,171 coho, 42 chum, and 117 sockeye salmon (all sockeye salmon were mainstem fish).

In SW 36 (02–08 Sept) the fishery was opened for an initial four day opening. The management goal was to harvest the remaining quota of 2,829 coho salmon. The total harvest after four days of fishing was 3,586 coho salmon (above the weekly quota which resulted in exceeding the 5,000 piece coho salmon quota as prescribed by the PST), 42 chum, and 7 sockeye salmon. The fishing conditions were very good; the coho salmon CPUE was well above expectations. The final day of fishing was 05 September. The final coho salmon harvest was 6,188 fish; 404 fish of the total was taken in the course of the sockeye salmon fishery, therefore, not counted toward the 5,000 fish 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 468 sockeye salmon were harvested in 2012 which is below average. Six large Chinook salmon were harvested; below the average harvest of 15 fish. The fishing effort of 12 boat days fished was below 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 Stikine commercial fishery opening.

Aboriginal Fishery

The Stikine River Aboriginal fishery which is located near Telegraph Creek, B.C., harvested 513 large Chinook, 170 nonlarge Chinook, and 4,000 sockeye salmon. The harvests of large Chinook, nonlarge Chinook, and sockeye salmon were all below average. The fishing conditions were good throughout the course of the fishery which extended from SW 23–34 (13 May to 10 August).

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 2012 the catch estimate was 116 large Chinook salmon; 64 fish of which were retained. All of fish were taken in the Telegraph Creek area. The fishing success was reported as relatively poor throughout the course of the Chinook salmon run.

Escapement

Sockeye Salmon

The total of 13,687 sockeye salmon counted at the Tahltan Lake weir in 2012 was below the average of 35,206 fish. The 2012 count was below the escapement target of 24,000 fish and below the lower end of the escapement goal range of 18,000 to 30,000 fish. An estimated 5,764 fish (43% of escapement) originated from the fry-stocking program. This is above the 35% contribution of smolt observed in 2009; the principal cycle year contributing to the 2012 run. A total of 224 sockeye salmon was sacrificed at the weir for stock composition analysis. In addition a total of 3,949 sockeye salmon were collected for broodstock, resulting in a spawning escapement of 9,514 sockeye salmon in Tahltan Lake. The final postseason estimate of 23,326 inriver Tahltan Lake sockeye salmon, minus the inriver harvest of 10,087 fish, resulted in a projected escapement 13,463 Tahltan fish.

The spawning escapements for the mainstem and Tuya stock groups are calculated using stock identification and inriver test and commercial fisheries harvest data. Based on this run reconstruction approach, the postseason escapement estimates are 33,812 mainstem and 13,643 Tuya sockeye salmon. The mainstem spawning escapement is near average and within the escapement goal range of 20,000 to 40,000 fish. Aerial surveys were not conducted due to high turbid water conditions at the index sites.

The existence of stocked Tuya escapement continues to be a concern because of straying of this stock to other Stikine River tributaries. Furthermore, the injury to Tuya River sockeye salmon attempting to ascend the lower reaches of the Tuya River is evident based on reports from First Nations fishers and stock assessment personnel. A study on the behavior of Tuya river sockeye salmon strays in 2004 and 2005 concluded that straying of Tuya River sockeye salmon does not pose a short term 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 May and June 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 other fish capture options. The steering committee decided to proceed with a blasting plan 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 with an abnormal amount of ice at the blasting site. In late October and early November 2008 the project proceeded and succeeded to remove 120 m^3 of rock from the rockslide area.

For the fourth 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 27 July, while en route to camp, an aerial survey was attempted at sites above the rockslide barrier. The river viewing conditions were impaired due to the murky nature of the flow. No sockeye salmon were observed; however, the large number of eagles observed (n=>50). 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.

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 gillnet site located below the blast site, however, had the highest catch, which was probably due to the quality of set gillnet site in that it was set in a natural holding area below the blast site. The number of salmon breaches and the number of successful attempts were recorded over a 60 minute period per day from 27–29 July. Overall, a total of 135 sockeye salmon were observed breaching at foot of the blast site. Of this total 11% succeed in negotiating the velocity and vertical challenge of the site. In 2010 a total 468 breaches was observed, 80 fish or 17% succeeded in ascending the river. The 2009 study showed that only 7% of the fish succeeded negotiating the chute. Approximately 87% of the breaches and 17% of the successes occurred at river right section of the flow in 2009. 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.

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 be addressed. Currently the project is on hold until DFO drafts a strategic, long term plan addressing the issue of excess fish entering the Tuya River.

The fifth year of an experimental test fishery designed to harvest Tuya River sockeye salmon at a site on the mainstem Stikine located between the mouths of the Tahltan and

Tuya rivers was conducted from 21 to 29 July, 2012. The total harvest from the test fishery was 2,306 sockeye, 44 large Chinook, and 5 nonlarge Chinook salmon. Otolith analyses indicate that 2,036 fish (88%) were Tuya Lake origin sockeye salmon. The balance of the harvest consisted of Tahltan enhanced (4%), Tahltan wild (5%) and mainstem sockeye salmon (3%). The harvest rate on Tuya sockeye salmon was estimate at 18% (2,036/11,489). The stock composition analyses assist in determining the future operation of this project which will be contingent on the success of targeting Tuya bound sockeye salmon while limiting the interceptions of non-Tuya sockeye salmon. The incidental harvest of Chinook salmon will also inform the future of, and possible expansion, of the project. 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 2012 Chinook salmon escapement enumerated at the Little Tahltan weir was 720 large fish and 51 nonlarge Chinook salmon. The escapement of large Chinook salmon in the Little Tahltan River was 86% below the average of 4,989 fish and 78% below the Canadian escapement target for this stock of 3,300 large Chinook salmon. The weir count was also well below the low end of the Canadian escapement goal range of 2,700 to 5,300 large fish. This is the sixth consecutive year that the lower end of the escapement was not reached. This year's return, however, is a product of a very weak escapement in 2007 (this year's five-year old fish) when only 562 large Chinook salmon were enumerated. The failure from the 2006 escapement of 3,860 (this year's six-year old fish) cannot be fully explained. The nonlarge Chinook salmon count was 77% below the average of 216 fish.

A MR study was conducted concurrent with the SCMM to assess the inriver Chinook salmon abundance. Inseason MR estimates were calculated weekly SW 24–29 (10 June–21 July). The final postseason estimate of total system wide spawning escapement, based on tag recoveries in the commercial fishery and spawning ground recoveries, was 22,327 large Chinook salmon and was below the average escapement of 28,551. The escapement was 23% above the escapement target of 17,840 large Chinook salmon, but within the escapement goal range of 14,000 to 28,000 fish. The escapement to the Little Tahltan River represented 3% of the total Stikine River escapement. The percentage is below the average Little Tahltan contribution of 15%. Reasons accounting for the failure of Little Tahltan Chinook salmon stock grouping not reaching even the low end of the Canadian escapement range for six consecutive years are being investigated. Past inriver management actions to change the downward trend including; late commercial openings, reducing the TAC by 30% until an inseason estimate is generated (usually 3–4 weeks into the fishery), and reducing the gillnet mesh size during the sockeye salmon fishery to limit the incidental harvest of Chinook salmon have failed in their efficacy.

Stikine River Chinook salmon run timing to the Lower Stikine commercial fishing grounds was normal. Entry time to the Little Tahltan weir was later than average. Verrett Creek escapements counts could not be estimated due to high turbid water. The carcass

pitch crew stationed at the creek from 05–10 August had a challenging time collecting post spawning Chinook salmon due to the flow conditions. The Verrett Creek project is primarily a study to collect spaghetti tags; not to assess escapement numbers. As mentioned earlier in the report, spawning numbers to the mainstem Tahltan River appeared relatively strong and the incidental harvest of Chinook salmon in the Tuya test fishery and the Tuya River sampling project were the highest on record.

Coho Salmon

An attempt at an aerial survey of five index sites was conducted on 05 November. The survey was aborted due to ice, snow and wind. The Stikine River was frozen to an extent never observed by the surveyors in 28-years of surveys.

A coho salmon drift gillnet test fishery was conducted from 05 September to 13 October 2012. The total harvest of 340 coho and 7 chum salmon, and 29 steelhead trout was taken in 460 drift fishing events. Each event was 10–15 minutes in length. Net dimension were constant at 33 m (100 feet) and 150 cm (5.5 inches) mesh, by 30 meshes deep. The total cumulative weekly CPUE (catch per drift) was 5.7 fish; average was 6.0 fish. This test fishery has been operated a various levels of vigour since 1986 through to 2011; (Funding in 2007 was not granted.

Sockeye Salmon Run Reconstruction

The final postseason estimate of the terminal Stikine River sockeye salmon run size is 124,319; 29,514 were of Tahltan Lake origin (wild & stocked), 33,304 were of Tuya origin (fry from Tahltan broodstock stocked into Tuya Lake), and 61,501 were mainstem stocks (Table 3). These estimates are based otolith recovery and analysis and GSI analysis in the U.S. Districts 106 and 108 harvests; otolith analysis, egg diameter stock composition estimates for inriver harvest from the Canadian commercial, aboriginal, ESSR, and test fishery harvest; and escapement data. Analysis of the CPUE data from the commercial and test fisheries indicate a range in escapement estimates. The 2012 total run was below average and below the preseason forecast of 134,000 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 (Figure 2). 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.

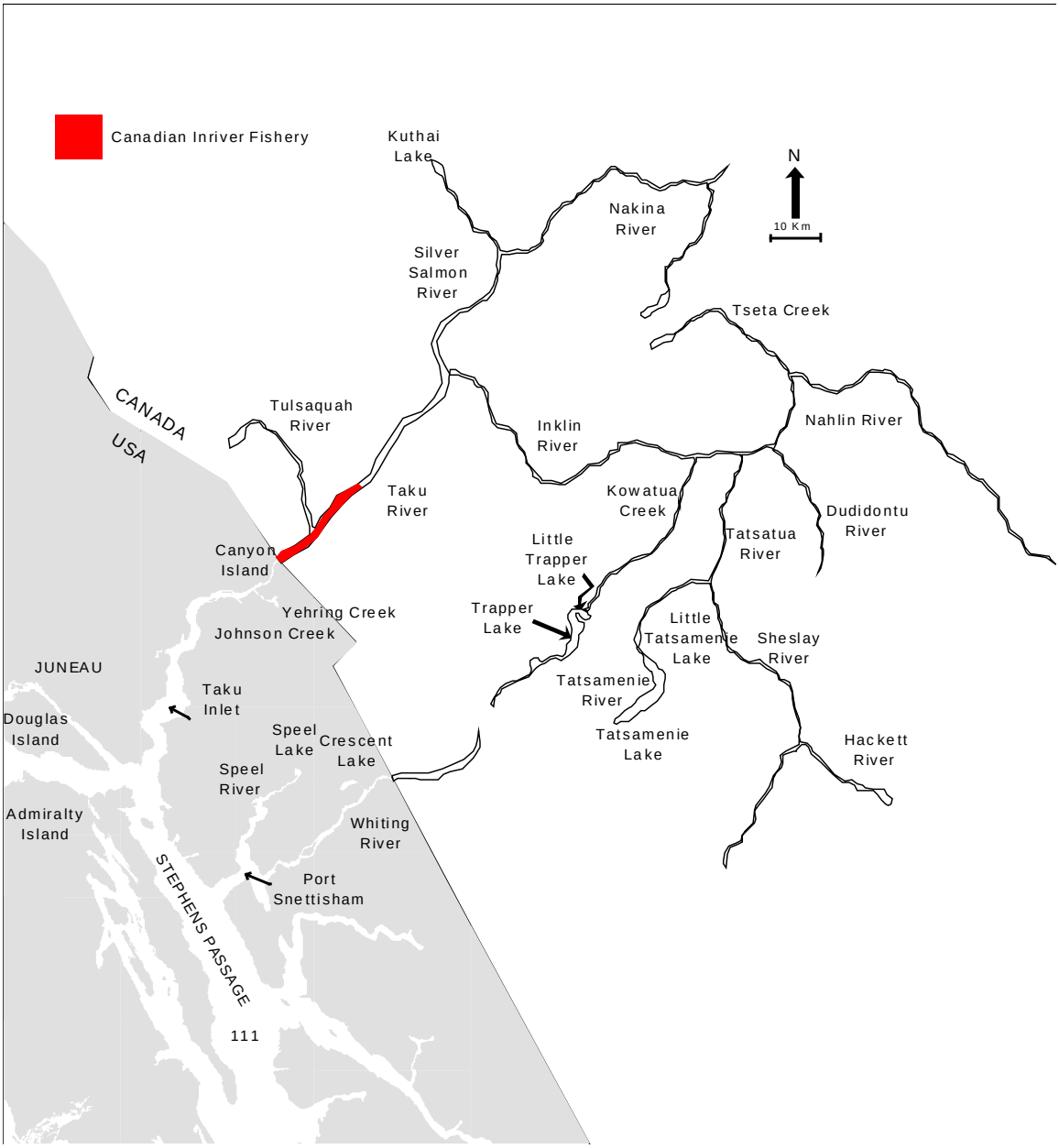

Figure 2. The Taku River and principal U.S. and Canadian fishing areas.

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 catch shares; and, a sockeye salmon catch 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 43 days from May 6 through September 30, 2012. The total harvest included 1,288 Chinook, 125,559 sockeye, 23,666 coho, 192,114 pink, and 566,335 chum salmon. Harvests of pink and chum salmon were above average while harvests of Chinook, sockeye, and coho salmon were below average.

Hatchery stocks contributed substantially to both the sockeye and chum salmon harvests and much less so to the harvest of other species. The 2012 season was the thirteenth year of substantial numbers of adult sockeye salmon returning to the Snettisham Hatchery inside Port Snettisham. These fish contributed 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 34 to target Snettisham Hatchery sockeye salmon.

A bilateral review of the escapement goal for Taku River large Chinook salmon completed in early 2009 resulted in a revised escapement goal range of 19,000 to 36,000 fish. The revised escapement goal along with the 2012 preseason terminal run estimate of 48,036 Taku River large Chinook salmon permitted directed Chinook salmon fisheries in District 111. When portioned over average run timing, the allowed harvest was deemed sufficient to provide limited commercial fishing opportunities and 12-hour openings were allowed on Monday in SW 19 and 20. The first inseason estimate of Chinook salmon run strength generated in SW 20, and all subsequent estimates, was substantially less than the preseason forecast and provided no AC for directed fisheries. The U.S. did not prosecute any further directed commercial Chinook salmon fisheries in 2012. Based on the preseason forecast, effective April 25 in SW 17, existing regulations were liberalized for the sport fishery in District 111. After the weekly run estimates continued to be poor, the liberalized regulations were rescinded effective June 1, in SW 22. The total 2012 traditional drift gillnet Chinook salmon harvest in District 111 was 1,288 fish. The final harvest estimate, including personal use, sport, and commercial drift gillnet and troll harvests through SW 28, is 1,370 large Taku River Chinook salmon based on GSI and CWT analyses. This harvest is well below the 3,500 fish BLC provided by the PST. The final spawning escapement estimate for the Taku River Chinook salmon run is 19,538 large Chinook salmon which falls within the new escapement goal range of 19,000-36,000 fish.

The traditional District 111 drift gillnet sockeye salmon harvest was 125,559 fish and was average. Weekly sockeye salmon harvests and CPUE were below average in 2012 with the exception of SW 29, 30, and 32. Domestic hatchery sockeye salmon stocks began to contribute to the traditional fishery in SW 27 and added substantial numbers to the harvests in SW 29–34. Of the total traditional District 111 sockeye salmon harvest, 43% occurred in Stephens Passage, which is greater than the average of 36%. This increase is primarily due to a relatively strong return of Snettisham Hatchery origin sockeye salmon.

Contributions of U.S. hatchery sockeye salmon to the traditional District 111 drift gillnet fishery totaled 63,963 fish or 51% of the harvest. These were predominately 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. The final harvest estimate of wild Taku River sockeye salmon in the traditional District 111 fishery is 45,410 fish (36%).

Table 4. Taku sockeye salmon run reconstruction, 2012. Estimates do not include spawning escapements below the U.S./Canada border.

	Taku			Non-Taku Enhanced	
	Total	Wild	Enhanced	U.S.	Stikine
Escapement	126,764	120,038	6,725		
Canadian Harvest					
Commercial	29,938	26,830	3,108		
Food Fishery	169	151	18		
Total	30,107	26,981	3,126	0	118
Test Fishery harvest	6	5	1		
Above Border Run	156,877	147,025	9,852		
U.S. Harvest [a]					
District 111	49,657	45,410	4,247	63,963	208
Personal Use	1,287	1,149	138		
Total	50,944	46,559	4,385		
Test Fishery harvest	0				
Terminal Run	207,821	193,584	14,237		

	Total	Wild
Terminal Run	207,821	193,584
Escapement Goal	75,000	75,000
AC	132,821	118,584
Canada		
Harvest Share	21%	21%
Base Allowable	27,892	24,903
Surplus Allowable	27,025	0
Canada AC	54,917	24,903
Actual treaty harvest	30,107	26,981
U.S.		
Harvest Share	79%	79%
US AC	104,928	93,681
Actual harvest	50,944	46,559

[a] U.S. harvest estimate differs from Joint Interception Committee estimate because no estimates are made for harvest other than the listed fisheries.

Once the minimum of the 4,000 to 13,000 sockeye salmon escapement goal range to Speel Lake was achieved, Port Snettisham and the Speel Arm SHA were opened concurrently with the traditional fishery in SW 34–36.

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 23,666 fish was 63% of the average of 37,500 fish. CWT analyses indicate Alaskan hatchery coho salmon contributed 556 fish or 3% of the traditional District 111 harvest.

Management emphasis for the District 111 drift gillnet fishery shifted to sockeye salmon beginning in SW 25. Management actions to conduct the Taku River directed sockeye salmon drift gillnet fishery were limited to imposing restrictions in time, area, and gear. Because there is no bilaterally agreed forecast for Taku River sockeye salmon, early season management of the District 111 fishery was based on fishery CPUE and Canyon Island fish wheel catches. As the fishing season progressed sufficient data was available to estimate the inriver run size from the MR program at Canyon Island and the Taku Management Model that uses migratory timing and historical fishery harvest data to forecast the entire Taku River sockeye salmon run. In the first week of sockeye salmon management, SW 25 (starting June 17), Section 11-B was open for two days with the north line restricted to the latitude of Jaw Point, and a six-inch maximum mesh size imposed to aid in conservation of Chinook salmon. Thirty-two boats harvested 376 Chinook salmon of which 206 were Taku River large fish. The sockeye salmon harvest was 37% and CPUE was 70% of the average.

In SW 26, Section 11-B was opened for two days due to the slowly developing sockeye salmon return. Twenty-nine boats harvested 168 Chinook salmon of which 75 were Taku River large fish. The sockeye salmon harvest was 28% while CPUE was 93% of average. With high water in the Taku River hampering data collection, no inseason estimate of run strength could be generated.

Fishing time for SW 27 was set for two days in Section 11-B due to poor inriver sockeye salmon indicators and poor marine harvests. Effort doubled and 60 boats harvested 251 Chinook salmon, 164 of which were Taku River large fish. Sockeye salmon harvest and CPUE were respectively 38% and 88% of average. The first weekly estimate of sockeye salmon run size was 71% of the average for the week, projecting an inriver run of 99,500 sockeye salmon.

Table 5. U.S. inseason forecasts of terminal run size, total allowable catch, inriver run size, and the U.S. harvest of wild Taku River sockeye salmon for 2012.

Stat Week	Inriver Run	Terminal Run[a]	Total TAC	U.S. TAC	Projected U.S. Catch
27	99,459	119,013	44,013	35,210	19,554
28	131,917	155,697	80,697	64,774	24,050
29	125,768	163,830	88,830	71,064	38,062
30	141,172	203,240	128,240	101,310	62,069
31	162,064	207,372	132,372	104,574	45,348
32	176,745	222,388	147,388	116,437	45,644
33	158,248	201,367	126,367	97,302	43,119

[a]Terminal run does not include any marine harvest of Taku River salmon that might occur outside of District 111.

Fishing time for SW 28 was set for two days in Section 11-B with continued poor inriver sockeye salmon indicators and weak marine harvests. A six-inch minimum mesh size restriction was imposed south of Circle Point to conserve passing wild Port Snettisham sockeye salmon stocks, but still allowing an opportunity to harvest the enhanced DIPAC chum salmon returning to the area. Eighty-two boats harvested 95 Chinook salmon. With insufficient port sampling data to determine the ratio of large to small fish and no tag recoveries from the SW 28 harvest, all Chinook salmon were counted as Taku River origin fish. The total gillnet harvest estimate of large Taku Chinook salmon during the accounting period (SW 19–28) is 668 fish. Sockeye salmon harvest and CPUE were respectively 38% and 75% of average. The second weekly estimate of Taku River sockeye salmon run size was 94% of the average for the week, projecting an inriver run of 131,900 sockeye salmon.

Fishing time for SW 29 was set for two days in Section 11-B. Sockeye salmon harvests and CPUE had been below average in the marine fisheries and an extended period of optimal water levels on the Taku River resulted in Canyon Island fish wheel sockeye salmon catches only two-thirds of average. A six-inch minimum mesh size restriction remained in place south of Circle Point. Effort increased to the 2012 maximum of 131 boats with sockeye salmon harvest and CPUE 126% and 156% of their respective average. Preliminary analysis of otoliths revealed that 24% of the sockeye salmon harvests from Taku Inlet during this week were of Snettisham Hatchery origin, over twice the average for the week. TBR enhanced sockeye salmon of Tatsamenie and Trapper Lake origin contributed 4% and 1% respectively to the harvest in Taku Inlet this week. Samples were not obtained from Stephens Passage. The weekly Taku River sockeye salmon estimate projected an inriver run of 125,800 sockeye salmon, a decline from the previous week.

Even with continued optimal water levels in the Taku River, Canyon Island fish wheel catches continued to be below average. Daily Canadian inriver fishery performance had been variable and generally also below average. The unusually strong presence of DIPAC enhanced sockeye salmon in the previous week's harvest aroused speculation as to the origin of the fish contributing to the previous weeks increased harvest. With the presence

of a sizeable fleet in the area, fishing time for SW 30 was set for two days in Section 11-B. The six-inch minimum mesh size restriction remained in place south of Circle Point. Effort was slightly above average with 126 boats harvesting nearly twice the average number of sockeye salmon with CPUE 173% of average. No extension was given in Taku Inlet due to the uncertainty of the origin of the harvest, as the Canyon Island fish wheel catches had not shown a similar strong increase in sockeye salmon abundance when the management decision needed to be made. An aerial survey of Crescent Lake in Port Snettisham revealed escapement levels much improved from recent years which, along with the high DIPAC enhanced component, suggested good returns to Port Snettisham sockeye salmon systems. Stephens Passage south of Circle Point was extended an additional day with the six-inch minimum mesh restriction remaining. Otolith analysis revealed that 49% of the sockeye salmon harvested in Taku Inlet and 70% of the harvest in Stephens Passage were of Snettisham Hatchery origin; both well above average. TBR enhanced Tatsamenie Lake origin sockeye salmon contributed 4% to Taku Inlet harvests. The weekly Taku River sockeye salmon estimate increased, projecting an inriver run of 141,600 fish.

Fishing time for SW 31 was set for three days in Taku Inlet and Stephens Passage due to the much improved marine fishery and inriver indicators. The six-inch minimum mesh size restriction remained in place south of Circle Point. Section 11-C was opened for three days due to adequate pink salmon returns to mainland systems. Effort declined some to 116 boats initially, but dropped significantly after the first day due to reduced sockeye and chum salmon harvests. Sockeye salmon harvest and CPUE dropped nearly in half from the previous week and both were below average. Otolith analysis revealed that 36% of the sockeye salmon harvest from Taku Inlet and 61% from Stephens Passage were of Snettisham Hatchery origin and TBR enhanced Tatsamenie Lake origin sockeye salmon contributed 5% to the Taku Inlet harvest. The weekly Taku River sockeye salmon estimate projected an increase in the inriver run to 160,000 fish.

Fishing time for SW 32 was set for three days in Taku Inlet, Stephens Passage, and Section 11-C. Initial effort declined to 89 boats with two-thirds of the fleet fishing in Stephens Passage focusing on the strong return of enhanced Snettisham Hatchery sockeye salmon. Sockeye salmon harvest and CPUE in Taku Inlet were below average, while in Stephens Passage, harvest and CPUE were above average. Otolith analysis indicated that 45% of the sockeye salmon harvest from Taku Inlet and 92% of the harvest from Stephens Passage were of Snettisham Hatchery origin. TBR enhanced Tatsamenie Lake origin sockeye salmon contributed 7%. The weekly Taku River sockeye salmon estimate projected an inriver run of 181,000 fish, the highest estimate of the season.

Fishing time for SW 33 was set for three days in Taku Inlet, Stephens Passage, and Section 11-C. The opening was delayed until Monday noon due to the Golden North Salmon Derby occurring in Juneau Area waters. Initial effort remained steady at 102 boats with many leaving for better opportunity elsewhere. About two-thirds of the fleet again focused efforts in Stephens Passage. Sockeye salmon harvest and CPUE in Taku Inlet were 133% and 115% of average, while in Stephens Passage, harvest and CPUE were 107% and 56% of average. Otolith analysis indicated 36% of the harvest from Taku

Inlet and 75% of the harvest from Stephens Passage were of Snettisham Hatchery origin. TBR enhanced Tatsamenie Lake origin sockeye salmon contributed 9% to the Taku Inlet harvest. The weekly Taku River sockeye salmon estimate projected an inriver run of 174,200 fish. Coho salmon catch and CPUE were 304% and 236% of average.

The fall drift gillnet season in District 111 lasted seven weeks, beginning on August 19 in SW 34, and lasting until September 3 in SW 40. During this time management focus switches from sockeye to coho salmon abundance. Fishing time in Section 11-B and 11-C during SW 34 was set at a conservative two days due to poor Canyon Island coho salmon fish wheel catches and mixed inriver fishery indicators. The minimum sockeye salmon escapement to Speel Lake was achieved and the Speel Arm SHA and Port Snettisham were opened for two days concurrent with the rest of the district. An above average 55 boats made landings in the District 111 traditional area this week. Nearly 70 boats began in the Speel Arm SHA to target Snettisham Hatchery sockeye salmon, but harvest rates were well below historical openings in the area. By the end of the first day most boats had left Port Snettisham for other areas. The very small fleet that began in Taku Inlet experienced good coho salmon harvest rates on the first day, but harvest rates declined with the arrival of the fleet from Port Snettisham. The coho salmon harvest was one-third of the previous week's harvest. In Taku Inlet, coho salmon harvest and CPUE were 108% and 126% of their respective averages. The Speel Arm SHA sockeye salmon harvest was a disappointing 14,700 sockeye salmon; the vast majority of which were estimated to be of Snettisham Hatchery origin. The weekly Taku River sockeye salmon estimate declined and projected an inriver run of 158,248 fish. The first inseason estimate of Taku River coho salmon abundance projected an inriver run of 99,000 fish.

Fishing time in Section 11-B, including the Speel Arm SHA, was set for three days in SW 35. A below average 35 boats had coho salmon harvest and CPUE that were 73% and 98% of average, respectively. In the Speel Arm SHA, eight boats harvested 620 sockeye salmon. The final weekly Taku River sockeye salmon estimate projected an inriver run of 158,248 fish.

Fishing time in Section 11-B including the Speel Arm SHA was set for three days in SW 36. A below average 32 boats had coho salmon harvest and CPUE that were 73% and 103% of their respective averages. There was no effort in the Speel Arm SHA.

Fishing time in Section 11-B was set for a below average three days in SW 37 based on low effort and average harvest rates in the marine fishery and mixed inriver indicators. In the marine fishery, a below average 19 boats had coho salmon harvest and CPUE that were 23% and 52% of average, respectively.

Fishing time in Section 11-B was set for three days in SW 38. A below average 15 boats had coho salmon harvest and CPUE of 28% and 63% of their respective averages.

For the remaining two weeks of the season, Section 11-B was open for a below average three days each week. The below average fleet had coho salmon harvest and CPUE of 30% and 65% of average, respectively. The final inseason Taku River coho salmon

estimate projected an inriver run of 79,841 fish which was well above the PST mandated inriver passage of 38,000 coho salmon. The escapement past all fisheries was 66,960 fish. The traditional District 111 sockeye salmon harvest for the SW 34–40 period was 24% of average.

Several other fisheries in the Juneau area harvested transboundary Taku River salmon stocks in 2012. Personal use permits were used to harvest an estimated 1,287 Taku River sockeye salmon. A number of Chinook salmon 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 in the D111 gillnet fishery, 668 fish were estimated to be of Taku River origin based on GSI analysis.

Canadian Fisheries

The Taku River commercial fishery harvest was 1,930 large Chinook, 479 nonlarge Chinook, 29,938 sockeye, and 11,548 coho salmon, in 2012. Sockeye salmon originating from Taku fry stocks contributed an estimated 3,108 fish to the harvest; comprising 10% of the total sockeye salmon harvest. The harvest of large Chinook salmon was below the average and nonlarge Chinook salmon was close to average. In 2005, as a result of the new Chinook salmon agreement which allows directed Chinook 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 ("nonlarge" Chinook salmon i.e. less than 660 mm in length from the MEF). Hence, comparisons with catches prior to 2005 should be viewed accordingly. The harvests of sockeye and coho salmon were each above their respective averages. There were 62 days of fishing; close to average. The seasonal fishing effort of 418 boat days was 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) except for the period from June 17 (SW 25) through July 14 (SW 28) at which time it was reduced to 14.0 cm (5.5 inches) in order to minimize incidental harvest of Chinook salmon.

An additional 865 large Chinook, 98 nonlarge Chinook, 6 sockeye and 2,200 coho salmon were harvested in assessment/test fisheries. The harvest of large Chinook salmon was close to average and the harvest of nonlarge Chinook salmon was about half of the average. The harvest of sockeye salmon was below average; the harvest of coho salmon was close to average. It should be noted that the timing of the assessment/test fisheries has varied from year to year and as with the Chinook salmon adult/jack distinction noted above, any comparisons should be viewed accordingly. The assessment/test fishery responsible for the Chinook (and sockeye) salmon harvests was conducted by the commercial fleet; that responsible for the coho salmon harvest was conducted by two to three boats operating under a scientific collection license. The Chinook salmon assessment/test fishery took place from May 20 (SW 21) through June 13 (SW 24). The coho salmon assessment/test fishery took place from September 9 (SW 37) through October 2 (SW 40).

In addition to the commercial and assessment/test fishery harvests, 81 Chinook, 169 sockeye, and 324 coho salmon were harvested in the Aboriginal fishery in 2012. All fish were harvested in the lower river. Based on commercial harvest data it is estimated that of the 67 Chinook salmon harvest were large and 14 were small.

Recreational harvest figures are not available, but as in recent years it is assumed that about 105 large Chinook salmon were retained in this fishery. The harvests of other species are again believed to have been negligible.

The bilateral preseason Chinook salmon forecast, based on sibling relationships, was for a terminal run of 48,036 fish; below the average run of 49,000 fish. At a run size of this magnitude, factoring in the revised interim MSY escapement point target of 25,500 fish,

the AC was 14,136 fish with 7,436 fish (53% of total) allocated to Canada and 6,700 fish (47% of total) allocated to the U.S. Adding the BLC of 1,500 fish for Canada and 3,500 fish for the U.S. meant that that the TAC was 19,136 fish. This does not factor in use of the midpoint of the escapement goal range versus the MSY point goal for management during the first few weeks of the fishing season.

As in 2012, the fishing plan indicated that the fishery was to be managed to the weekly guidelines reduced by 30% (Table 6.) until an inseason run assessment could be made. As in previous years, reliable inseason projections were not expected until after mid-May or three weeks of fishing. The AC was reduced because the preseason forecast was believed to be biased high, as has been the case in recent years; Chinook salmon productivity appears to be lower than identified in the forecast models. Once reliable joint Canada/U.S. inseason projections were available, the fishery was to be managed to full directed fishery guidelines with the objective of meeting escapement and agreed harvest sharing objectives. Alternatively, in the event the run appeared to below forecast, the commercial fishery was to be reduced to a strictly assessment mode and serve as the test fishery identified in the PST agreement (as occurred in 2007, 2008 and 2011).

Table 6. Weekly large Chinook salmon guideline harvest for the Canadian commercial fishery in the Taku River in 2012.

Week	Assessment/Test Harvest	Directed Harvest	Guideline Harvest
17	-	148	104
18	129	673	471
19	273	1,419	993
20	246	1,282	897
21	220	Inseason estimate	Inseason estimate
22	207	Inseason estimate	Inseason estimate
23	191	Inseason estimate	Inseason estimate
24	153	Inseason estimate	Inseason estimate
Total	1,400		

[a]All harvests apportioned by average run timing; the SW 17 assessment/test harvest of 28 fish was distributed to the other weeks in accordance with average timing.

After inseason run projections identified the availability of an AC, weekly guideline harvests were to be 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; the sum was then 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.

As per normal procedures, weekly fisheries for Chinook, sockeye and coho salmon opened at noon Sunday in 2012. Fishing periods were set with a view to achieving

weekly guideline harvests. Extensions to weekly fishing periods were considered if the weekly guidelines were not achieved. For both drift gillnets and set gillnets, net length was restricted to a maximum of 36.6 m (120 feet); mesh sizes were restricted to between 100 mm (four inches) and 204 mm (8 inches) except for the period from June 17 (SW 25) through July 14 (SW 28) when the maximum permissible was 14.0 cm (5.5 inches).

The management plan indicated that the commercial Chinook salmon fishery would open at a reduced directed fishery level at noon on Sunday, April 29 (SW 18) for an initial 48-hour period. On occasion, the first opening for Chinook salmon has been delayed until midweek in order to increase the likelihood that river conditions would permit fishing (i.e. there were ice free areas), however this was not the case in 2012. The target harvest for this week was 471 fish. The guideline for the previous week for which there was no opening was 104 fish; these were not targeted. Water levels were low but close to average. Based on a day 1 harvest of 34 pieces the fishery was extended one day. The day 2 harvest was 62 pieces, so with plenty of room in the guideline the fishery was extended to 4 days. There was little interest in fishing beyond this as fishers were still in the process of preparing equipment, landing stations, and living quarters for the season. By closing there were six licenses present; comparable to the number starting out in 2010 and 2011. The harvest for the week was 184 fish; 287 fish below the reduced guideline. The CPUE was 9 fish per boat day (fbd), slightly below the 2005–2011 average of 11 fbd.

The reduced directed fishery guideline for SW 19 (May 6–12) was 993 fish. An initial opening of three days was posted. The river remained low and clear. The day 1 harvest was 157 fish and the opening was extended one day. The final harvest after four days of fishing was 494 fish with an average of 7.5 licences fishing daily. The weekly CPUE of 16 fish was below the 2005–2011 average of 25 fish.

SW 20 (May 13–19) was posted for three days with a reduced directed fishery guideline of 897 fish. The harvest for day 1 was only 86 fish. Factoring in reports of poor fishing the previous week in D111 as well as poor Canyon Island gillnet catches, no extension was posted. Harvests improved considerably, however, for days 2 and 3 resulting in a weekly total of 482 fish. The river level was higher than in 2011, but still below average; due to another late spring the freshet was again delayed. The CPUE was 20 fbd, below the average of 43. Eight licences fished in SW 20.

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 3,084 fish was added to the U.S sport and gillnet fishery harvest through SW 19 (448 fish); the total was expanded using average run timing at Canyon Island (30%) for a terminal run size projection of 14,070 fish. This was substantially below both the preseason forecast of 48,036 fish and the number required for directed fishing in both the Canada and U.S.

As a result of this low run size projection, the fishery shifted to assessment/test mode. In order to spread the effort out over three days for the MR estimator the openings were

discontinuous, ranging from two to 20 hours in duration. All openings started at noon and on consecutive days starting with Sunday. Weekly harvest targets were based on the overall test fishery target of 1,400 fish apportioned by average run timing.

The SW 21 (May 20–26) target was 202 fish and the fishery was opened initially for two hours. This was followed by a 4-hour opening and then a 20-hour opening; resulting in a harvest of 235 fish. Water levels had finally started to rise for this week's fishery and by the end of the week the freshet had begun in earnest. The CPUE of 24 fbd was below the average of 31 fbd. The number of licences averaged seven.

The joint run projection made after closing was 11,320 fish; even lower than the first run projection. Projections stayed close to this level for the remainder of the Chinook salmon season i.e. through June 16, SW 24 (Table 7).

The assessment/test fishery target for SW 22 (May 27–June 2) was 207 fish (similar to the previous week's). An initial opening of four hours was posted, followed by a 12-hour opening and then another four hour opening. The resulting harvest was 239 fish. River levels were below average and dropping over the course of the fishery, however the CPUE of 31 fbd was only slightly above the average of 26 fbd. Once again, there were seven active licences.

The test fishery target for SW 23 (June 3–9) was 191 fish. Openings of four, two, and two hours were posted; resulting in a harvest of 240 fish. The first two openings had the highest CPUE of the season; the third opening saw CPUE drop as river levels started to increase again. The weekly CPUE of 90 fbd was well above the average of 28 fbd. Eight licences were active this week.

The assessment/test fishery target for SW 24 (June 10–16) was 153 fish and openings of two, four, and four hours were posted. The river level was very high and the resulting harvest was 98 fish; consequently a fourth opening was posted, for a period of three hours. This brought the harvest total to 151 fish, within two fish of the target. The CPUE was back down to 28 fbd, close to the average of 31 fbd; likewise, effort was back to seven licences.

Week 24 marked the end of the Chinook salmon fishery. The run projection made at closing was 11,917 fish. The inriver run was estimated at only 8,297 fish projecting to 10,765 fish the average run timing. As such even without factoring in harvest, it appeared that escapement would be well below the lower end of the target range (19,000–36,000 fish). Therefore, in order to reduce additional Chinook salmon harvest the maximum allowable mesh size was reduced to 14.0 cm (5.5 inches) for the directed sockeye salmon fishery.

Three additional run projections were made during fishery. These showed only very modest increases (13,160 fish SW 25; 12,801fish SW 26, and 14,141fish SW 28) and as such the mesh size restriction was not lifted until the Chinook salmon run was complete.

The weekly guidelines assessment/test fish harvest targets sum to 3,132 fish (Table 7); the actual harvest of 2,026 fish was 35% below. The Chinook salmon bycatch in the sockeye salmon fishery was 748 fish, the Aboriginal harvest of 67 fish, and an assumed recreational harvest of 105 fish; the actual BLC was 920 large Chinook salmon, 39% below the allocation of 1,500 fish. Efforts taken to minimize commercial bycatch included the mesh restriction noted above and the reduced openings noted below.

Table 7. Forecasts of terminal run size, allowable catch, and weekly guideline, and actual catch of Taku Chinook salmon, 2011.

SW	Terminal Run	AC	AC reduced by 30%	Weekly Guideline / Assessment/Test Fish Target	Actual Harvest
18	48,036	7,436	5,205	471	184
19	48,036	7,436	5,205	993	494
20	48,036	7,436	5,205	897	483
21	14,070	0	0	220	235
22	11,103	0	0	207	239
23	10,662	0	0	191	240
24	10,757	0	0	153	151
Total				3,132	2,026

The DFO preseason forecast for the run of wild Taku sockeye salmon, based on stock recruitment and sibling analyses, projected a run of 197,313 fish; slightly below the average run of 218,000 fish. Approximately 5,300 enhanced fish from Tatsamenie Lake; above the average enhanced Tatsamenie run size of 4,700 fish. In addition, about 700 enhanced Trapper Lake fish were expected from a 2007 outplant. Based on the treaty arrangement, an enhanced run of 5,000–15,000 fish provides Canada with a 21% 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 from the forecast of 197,313 results in an overall TAC of 122,313 fish; 21% of this is 25,686 fish.

The forecast for the run of wild Tatsamenie fish was 20,400 fish. The egg-take goal for this season was based on a target of 30% of escapement up to a maximum of 2.0 million eggs. In light of the favourable Tatsamenie forecast and modest egg-take requirements the coordinated management that typically occurs for Tatsamenie sockeye salmon in Taku Inlet in the U.S. drift gillnet fishery during SW 30–32 (July 22– August 11) and in the Canadian fishery during SW 31–33 (July 29–August 18); i.e. limiting the fisheries to two days/week unless otherwise agreed was unnecessary (as in 2011).

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 enhanced 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 management plan indicated that the sockeye salmon fishery would open for two days in SW 25 (June 17–23). This was reduced to one day due to the conservation concerns for Chinook salmon plus similar concerns for Kuthai Lake sockeye salmon which had a primary brood year escapement of only 204 fish. The weekly guideline based on the preseason forecast was 2,444 wild fish (Table 8). CPUE was 42 fbd, this was above the average of 33; however SW 25 is often still Chinook salmon season with larger mesh size being used. Nine licenses fished. The enhanced of 379 sockeye salmon was well below the guideline based on the preseason forecast.

SW 26 (June 24–June 30) was also opened conservatively for two days. The cumulative guideline harvest through this week based on the preseason forecast was 4,193 fish. After dropping dramatically in SW 25, the water level was increasing again at a similar rate; as a result fishing was poor and the opening was extended to five days in one day increments. The CPUE of 17 fbd was well below the average of 73 fbd and a record low for this week. A total of 603 fish were caught by seven licences.

Table 8. Canadian inseason forecasts of terminal run size, total allowable catch, and spawning escapement of wild Taku sockeye salmon, 2012.

SW	Terminal Run	Total Allowable Catch	Projected Escapement	Canadian Total Allowable Catch	Inseason Guideline	Actual Harvest
25	197,313	122,313	75,000	25,686	2,444	379
26	197,313	122,313	75,000	25,686	4,193	957
27	118,204	43,204	75,000	9,073	6,385	2,593
28	144,558	80,967	110,034	16,193	3,358	4,703
29	136,838	88,830	98,890	17,766	8,009	7,167
30	167,722	92,722	104,555	19,472	10,644	13,729
31	204,053	129,053	129,398	27,101	14,578	17,679
32	197,466	122,466	122,314	25,718	23,565	22,027
33	194,786	119,786	120,622	25,155	23,958	25,062

Note: inseason guidelines are based on previous week's run size

The following SW 27 (July 1–7) was also opened for two days. The cumulative guideline harvest through this week still based on the preseason forecast was 6,385 fish with 957 fish harvested. The river level was very high but dropping. CPUE increased to 93 fbd, above the average 66. The fishery was held to two days. The weekly harvest was 1,672 fish with an average of nine licences fishing. An inseason run assessment was made after this week's fishery. This projected a run of only 118,204 fish, well below the preseason forecast of 197,313 wild fish.

SW 28 (July 8–14) was opened for two days. The cumulative guideline, now based on inseason information, was 3,538 fish with a balance of 765 fish. The river level was now slightly below average and fairly stable. The weekly harvest was 2,110 fish, bringing the cumulative to 4,703; above the guideline. Ten licences were active. CPUE was 112 fbd; above the average of 60. The run projection made after closing showed a moderate increase to 144,558 fish.

Based on this assessment the weekly guideline through SW 29 (July 15–21) was 8,009 fish. With a cumulative harvest to date of 4,703 fish the free balance was 3,306 fish. An opening of three days was posted. The mesh size restrictions were lifted. Mesh sizes of up to 204 mm (8 inches) were again permitted thereby reducing the bycatch of pink salmon which were abundant at this time. The weekly harvest was 2,463 wild fish and 108 enhanced fish with no change in the number of active licences. CPUE was 89 fbd versus the average of 73 fbd. Water levels were above average and increasing during the opening. The run projection made after closing was down slightly to 136,838 fish.

Based on this outlook the cumulative guideline through SW 30 was 10,644 fish. The harvest through SW 30 was 7,167 fish showing a positive balance of 3,478 fish. With a favourable outlook for Tatsamenie sockeye salmon SW 30 was opened for three days. River levels were above average but stable. CPUE was above average and the fishery was extended by one day. The weekly harvest was 6,563 wild fish and 442 enhanced fish with an average of 8.5 licences fishing. The CPUE of 206 fbd was the highest observed in the 2012 season and well above the average of 87 fbd. The run projection made after closing estimate was 167,722 fish.

SW 31 (July 29–August 4) had a cumulative guideline of 14,578 fish and an actual harvest to date of 13,729 showing a positive balance of 849. The escapement projection was now 123,429 fish, well above target, and showing harvestable surplus. The fishery was again opened for three days harvest rates were high and day one and a one day extension posted. A Tulsequah flood began and water levels increased rapidly for days one through three, dropping rapidly on day four. The CPUE for the week of 165 fbd was above average (108). A total of 4,633 fish (3,950 wild and 683 enhanced) were harvested by seven licences. River levels were above average and generally increasing over the course of the opening. The SW 31 run size projection of 204,053 fish showed another increase and the value was now in line with the preseason forecast.

The cumulative guideline SW 32 (August 5–11) was 23,565 fish. The harvest to date was 17,676 fish, and therefore the free balance for the week was 5,888 fish. An opening of four days was posted. River levels were above average and variable. A total of 5,427 fish (4,347 wild and 1,080 enhanced) were harvested with seven licences fishing again. CPUE increased slightly over the previous week to 187 fbd well above the average of 112 fbd. There was little change in the run projection (197,466 fish).

SW 33 (August 12–18) had a cumulative guideline of 23,958 fish and there was an actual harvest to date of 22,024 fish; showing a positive balance of 1,935 fish. The fishery was again opened for four days. The CPUE of 127 fbd was down slightly but still well above average (75 fbd). Effort was unchanged. A total of 3,419 fish were harvest, of which 3,035 were wild and 384 were enhanced. River levels dropped to below average over the course of the openings.

SW 33 was the final week of the directed sockeye salmon fishery. The run projection at this time was 194,786 fish. This was associated with a guideline harvest of 23,434 fish; the actual harvest was 25,029 fish. This does not include allowable surplus harvest. The

escapement projection was 120,626 fish, well above the upper end of the escapement goal range. The inriver run projection was 148,418 fish, above the upper end of the spawning escapement goal range times 1.6, i.e. 120,000 fish. The allowable surplus harvest based on inriver run projections in excess of this value was 28,414 fish. An additional 1,902 and 166 sockeye salmon were harvested in the directed coho salmon fishery and the Aboriginal fishery, respectively. The directed harvest total was 27,097 fish. The total harvest of Taku enhanced fish was 3,136 fish; this included harvests of 2,877 Tatsamenie Lake fish and 258 Trapper Lake fish. In addition, 118 Stikine origin fish were harvested.

The cumulative commercial fishery sockeye salmon CPUE for the season was 1,099 fbd, above the average of 782 fbd. Overall, water levels were above average. 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 likely a positive influence. CPUE was above average from SW 27 onwards, peaking in SW 30.

The preseason outlook for Taku River coho salmon was based on harvest rates in the Taku River CWT program. They were used to estimate the number of coho salmon smolts which emigrated during the spring of 2011 with survivals to return as adults in 2012. Assuming that the marine survival rate would be similar to average a total run of 164,078 fish was expected in 2012, below the average run size of 212,609 fish. Assuming average U.S. exploitation rates this translated to a border escapement of 100,100 fish.

SW 34 (August 19–25) was opened for four days based on the above forecast and the lack of sockeye salmon constraints. Harvest rates were high and the fishery extended to five days. Water levels fell over the course of the opening to below average. Harvest rates were high (86 fbd; average was 56 fbd); this, combined with above average effort (7.5 fbd; average was 4 licenses) resulted in a record coho salmon harvest for this week of 3,285 fish.

SW 35 (August 26 – September 1) also opened for four days. An assessment made early in the week projected a border escapement greater than 75,000 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. At this point the projected surplus escapement was in excess of 31,000 fish. Water levels were increasing during the early part of the week and the fishery was extended by two days. There were again seven licences active for the opening. The CPUE of 65 fbd was close to the average of 79 fbd. A total of 2,725 coho salmon were harvested, which was also a record harvest.

SW 36 (September 2–8) was opened for four days. A run projection made after day three amounted to 71,205 fish with a projected surplus escapement of 14,546 fish. This was associated with a cumulative guideline of 9,429 fish with 7,267 harvested so far. Effort had dropped to four licences. The fishery was extended by one day and then for the remainder of the week. A total of 2,612 coho salmon were harvested, very close to the previous record harvest of 2,602 fish. Water levels were below average. The CPUE of 90

fbd was an exact match to the average. This marked the last week any significant effort as most fishers prepared to decamp.

SW 37 (September 9–15) was opened for seven days. Only three days were fished and by only one licence, resulting in a harvest of 64 coho salmon. The fishery was again opened for seven days the following two weeks. There was effort only on one day by one licence resulting in a harvest of three coho salmon. The fishery closed for the season at the end of SW 40 (Sunday October 6).

A test fishery was again conducted in 2012 in order to ensure that run assessment continued for the majority of the coho salmon run. The fishery started later than usual due to the above average commercial effort. SW 37 (September 9–15) was the first week of fishing. The fishery continued through October 2 (midway through SW 40), and landed 2,200 coho salmon (no sockeye salmon were landed). As in recent years it was carried out via a contract with Taku Wild, owned and operated by the Taku River Tlingit First Nation. Weekly harvest targets versus actual harvest are as follows:

Table 9. Weekly guidelines and actual harvest for the Taku River coho salmon assessment/test fishery, 2011.

SW	Target	Actual	Cumulative
37	700	654	654
38	600	646	1300
39	500	500	1800
40	400	400	2,200

The postseason coho salmon MR estimate indicates that 84,847 fish reached the border. As per the PST provisions established in 2009, the Canadian AC after SW 33 was 10,000 coho salmon plus surplus escapement (35,742 fish). The actual treaty harvest, excluding the test fishery, was 11,872 fish. This includes the commercial harvest taken after SW 33 (8,665 fish), plus the Aboriginal fishery catch of 324 fish; it is assumed that the recreational harvest of coho salmon was zero. Subtracting the total inriver harvest of 14,072 fish from the border passage translates to a spawning escapement estimate of 70,775 fish, 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 finishes) was 254 fbd, above the average of 223 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 and spawning escapement is then estimated by subtracting the inriver harvest. The postseason above border estimate of escapement in 2012 is 156,877 fish; subtracting the inriver harvest of 30,113 fish (29,938 commercial, 169 Aboriginal, and 6 test fish) indicates that 126,764 sockeye salmon reached the spawning grounds and an estimated 6,725 of these were enhanced fish. This spawning escapement was above average and also above the upper end of the interim escapement goal range of 71,000 to 80,000 sockeye salmon. The Canyon Island fish wheel harvest of 4,441 sockeye salmon was near average.

The sockeye salmon count through the Kuthai Lake weir was 182 fish, even lower than the record low count of 204 fish obtained in the primary brood year (2007). Counts have not exceeded 2,000 fish since 2005; the average escapement is 2,969 fish. The 2012 count was below the primary brood year escapement of 204 fish, which was a record low. They did not arrive until July 28 and passage was sporadic with many days of zero counts. The run midpoint, August 18, was about 19 days later than average.

A weir was again operated at King Salmon Lake in 2012. The count was 5,413 fish; an additional 1,500 were estimated to have passed through a breach in the fence July 29–31. The escapement is above the 2004–2011 average of 2,150 fish. In calculating the average escapement, the 2009 and 2011 values were estimated using an aerial survey expansion, while the 2005 count of five fish was excluded. Approximately 150 fish were removed for a trial egg-take.

The Little Trapper Lake weir count was 10,015 sockeye salmon. This was below average but above the primary brood year count of 7,153 fish. The run timing was about average, with the midpoint occurring on August 10. There were no removals for artificial spawning.

The Tatsamenie Lake weir count of 15,605 was the third highest on record and above both the average and the 2007 primary brood year count of 11,187 fish. The fish arrived at the lake about one week late; however the run midpoint was one week early (August 25). Approximately 1,300 fish were removed for broodstock.

Chinook Salmon

Spawning escapement of Chinook salmon in the Canadian portion of the Taku River drainage is typically estimated from the joint Canada/U.S. MR program. In 2012, tag application took place from April 27 through July 18. Tag recovery effort consisted of the commercial and assessment/test Chinook salmon fishery from April 27 through June 13 (SW 18–24), as well as the sockeye and coho salmon commercial fisheries (SW 25–38); in addition, there was spawning ground sampling in August and September on the Nakina, Tatsatua, Kowatua, Nahlin, Dudidontu rivers, as well as Tseta Creek. Very few tags were recovered on large Chinook salmon during spawning grounds sampling and tag recovery rates differed significantly from those encountered in the fisheries. As such the escapement of large Chinook salmon was not estimated directly using MR data. However, ample numbers of tags were recovered on medium Chinook salmon and recovery rates were more comparable with fishery recovery rates. This permitted pooling of spawning ground and fishery results, providing a medium sized Chinook salmon

estimate of 6,481 fish. Spawning grounds sampling uses a multitude of gear types including carcass weirs and hand carcass recovery, rod and reel snagging, and even dip nets and the use of multiple gear types has been shown to decrease age, sex, and size selectively. Consequently, the ratio of medium to large sized Chinook salmon seen in the combined spawning grounds sample (i.e., 0.33) was used to expand the estimate of the medium sized Chinook salmon escapement. This resulted in a large Chinook salmon spawning escapement estimate of 19,538 fish. This figure is considered provisional and may be revised upon further review of both the data collected and the methodology used.

Aerial surveys of large Chinook salmon to the five escapement index areas were as follows: Nakina 1,300 fish (34% below average); Kowatua 402 fish (43% below average); Tatsamenie 660 fish (30% below average); Dudidontu 126 fish (74% above average); Nahlin 726 fish (24% below average); Tseta Creek was not flown. Survey conditions were good to excellent for each survey. The total count of 3,214 large Chinook salmon was 36% below average.

Carcass weirs were again operated on the Nakina and Tatsatua rivers in order to obtain tag and ASL data. A total of 232 large Chinook salmon were recovered on the Nakina River; most fish were observed to be spawning below the weir. On the Tatsatua River 610 large Chinook salmon were encountered; 22% fewer than in 2011 (supplemental angling was used to supplement carcass weir recoveries both years).

Coho Salmon

Spawning escapement of coho salmon in the Canadian portion of the Taku River drainage was estimated from the joint Canada/U.S. MR program. Tag application occurred from July 2 until September 15 (SW 37) and recovery occurred until October 2 (SW 40). The tag recovery effort consisted of the commercial fishery, augmented by a test fishery from SW 37–40. The postseason above border run estimate is 84,847 fish. Subtracting the inriver harvest of 14,072 fish provides in a spawning escapement estimate of 70,775 fish. This is below average but well above the interim escapement goal of 35,000 fish identified in the Treaty

Sockeye Salmon Run Reconstruction

An estimated 45,410 wild Taku River sockeye salmon were harvested in the U.S. District 111 fishery. This final postseason estimate was made by GSI/otolith analysis. An additional 1,149 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 River sockeye salmon is 46,559 fish (Table 5).

In the Canadian commercial fishery, the postseason harvest estimate of wild Taku River sockeye salmon is 26,830 fish. An estimated 151 wild sockeye salmon were taken in the Canadian Aboriginal fishery. An estimated five wild sockeye salmon were taken in the Chinook salmon test fishery. Therefore, the estimated Canadian treaty harvest of wild Taku River sockeye salmon is 26,981fish (Table 5).

The postseason estimate of the above border run size of wild sockeye salmon, based on the joint Canada/U.S. MR program, is 156,877 fish. Deducting the Canadian inriver harvest from the above border run estimate produces an estimated escapement of 120,038 wild sockeye salmon. The terminal run of wild Taku River sockeye salmon is estimated at 193,584 fish. Based on the escapement goal of 75,000 fish, the TAC was 118,584 wild sockeye salmon.

The escapement of Taku River sockeye salmon originating from the fry stocking program was estimated to be 6,725 fish from broodstock otoliths collected at Tatsamenie Lake and estimated for the Trapper escapement. The final estimate is for a terminal run of 14,029 enhanced Tatsamenie and Trapper 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 and sockeye salmon was initially set by the TTC at 33,000 to 58,000 sockeye salmon (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.

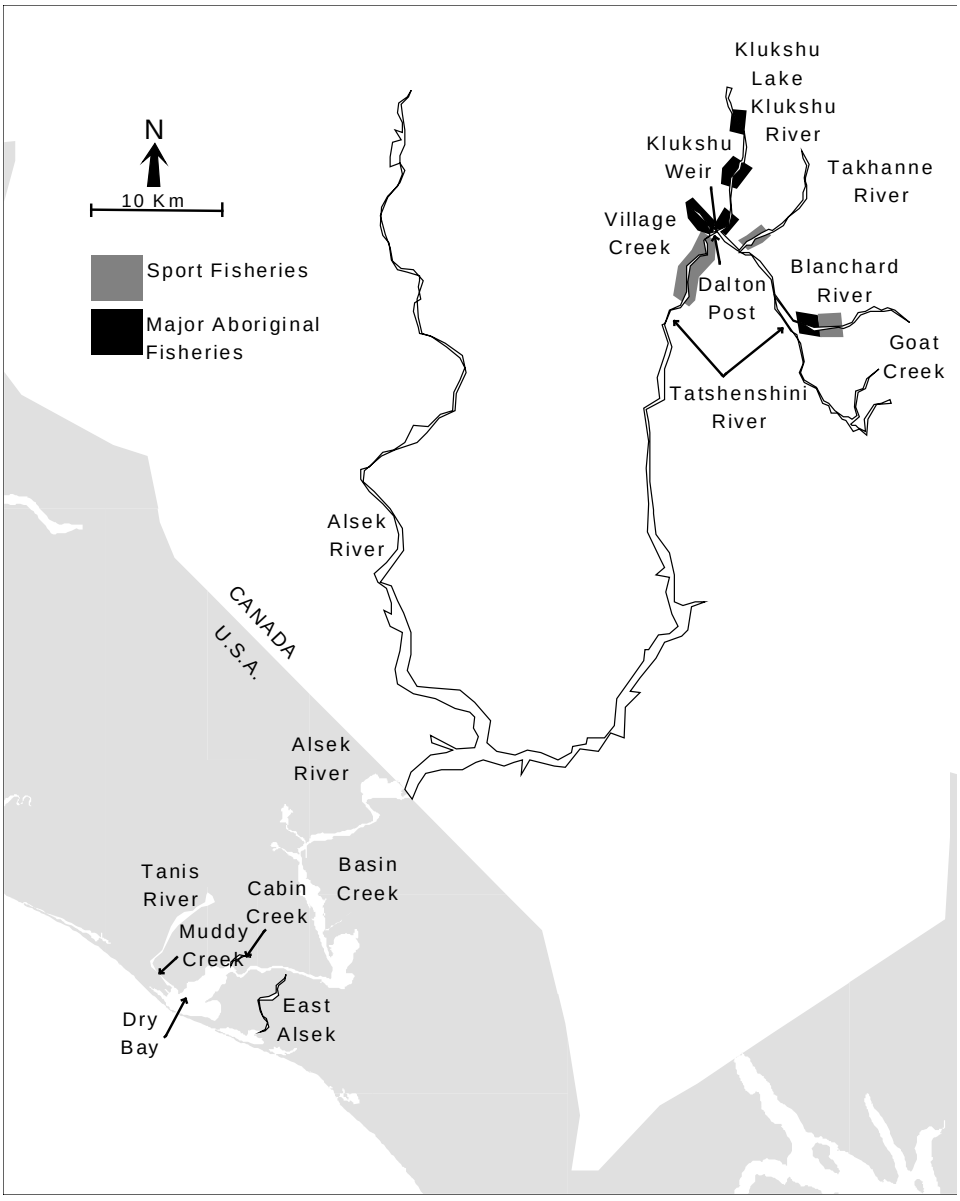

Figure 3. The Alsek River and principal U.S. and Canadian fishing areas.

Preseason Forecasts

The 2012 overall Alsek River sockeye salmon run was expected to be 70,700 sockeye salmon; this is below the average estimate of 87,000 sockeye salmon. The outlook for 2012 was based on a predicted run of 16,300 Klukshu River sockeye salmon derived from the latest Klukshu River stock-recruitment data (Eggers et al. 2011) and a Klukshu River contribution rate to the total run of 23% (based on MR results, 2000–2004, and run size estimates using GSI 2005–2006, 2011). Principal contributing brood years were 2007 (Klukshu escapement of 8,310 sockeye salmon) and 2008 (Klukshu escapement of 2,741 sockeye salmon); the average Klukshu sockeye salmon escapement is 14,000 fish.

The Klukshu early sockeye salmon run counts in 2007 were 2,725 fish and 2008 were 43 fish. The average count is 3,400 sockeye salmon which is above the assumed optimum escapement level of 1,500 fish 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 2012.

The Klukshu Chinook salmon escapements in 2006 were 568 fish and 2007 were 677 fish. For comparison, the average is 1,400 Chinook salmon. Based on these primary brood year escapements, the outlook for 2012 was 1,800 Klukshu Chinook salmon, slightly above the average (1,700) and within the escapement goal range.

U.S. Fisheries

Preseason expectations were for below average runs for both sockeye and Chinook salmon. These expectations were based on parent-year escapements to the Klukshu River. The Alsek River recorded an above average run for sockeye salmon and the escapement goal was achieved in 2012. Chinook salmon returns were below average in 2012 and the escapement goal as measured at the Klukshu River was not attained.

In 2012 traditional management strategies were used by monitoring fishery performance data and comparing it to historical CPUE for a given opening to adjust time and area openings. The Alsek River commercial fishery opened on the first Sunday in June, SW 23 (June 3) for 24 hours with 9 permits catching 59 Chinook and 110 sockeye salmon. Effort started to decline by SW 31 and management strategies switched to coho salmon around SW 34. Coho salmon are targeted from mid-August on and effort becomes minimal. Fishing times remained at three days per week from SW 35 through the first week in October (SW 41), and the river was not fished during the last four weeks of the season.

The 2012 Dry Bay commercial set gillnet fishery harvested 510 Chinook, 18,217 sockeye, and 536 coho salmon (Table 9). No pink and 1 chum salmon were harvested. The Chinook salmon harvest was average. The sockeye salmon harvest was above average. 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 20. The total effort expended in the fishery was 188 boat days, which was above average.

The department conducted a test fishery for Chinook salmon in 2012. This test fishery was conducted in 2005 through 2008 but was discontinued in 2009 and 2010 in order to allow Chinook salmon runs to rebuild. The 2012 test fishery opened on May 21 (SW 21) and closed on June 30 (SW 26). Totals of 251 Chinook salmon and 89 sockeye salmon were harvested (harvest quota maximum of 500 fish). The gear used throughout the fishery was an 8 ¼ inch meshes, 20 fathom set gillnet. All were sampled for ASL, for CWT (just in case, none found), and for genetics.

Canadian Fisheries

Due to the absence of the harvest monitor position in 2005 through 2010, harvests from the food fishery were estimated based on fishery performance data compared with the weir counts. For 2012, the harvest monitor position was in place for the season. The harvest estimate for 2012 was comprised of 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). It is assumed that a near zero harvest of Chinook salmon occurred due to the poor run to the Klukshu River. An estimated 1,734 sockeye and no coho salmon were harvested in the food fishery. The average harvests are 83 Chinook, 1,451 sockeye, and 7 coho salmon.

Final harvest estimates for the Tatshenshini recreational fishery were above average for Chinook salmon, with an estimated 85 fish retained (315 released), and near average for sockeye salmon with 52 retained (157 released), and an unknown number of coho salmon were retained (2 released). These were above average. Due to the poor Chinook salmon return to the Klukshu River, nonretention of Chinook salmon was implemented on July 25 in the Yukon Territory portion of the Tatshenshini River. Retention of sockeye salmon was permitted on August 15th.

Management of salmon in the Yukon Territory is a shared responsibility between DFO and the Salmon Subcommittee (SSC). The SSC was established in 1995 pursuant to the Comprehensive Land Claim Umbrella Final Agreement between the Government of Canada, the Council for Yukon Indians and the Government of the Yukon Territory. The Committee is a public board consisting of ten members, 70% of which are appointed by Yukon First Nations. Two CAFN members sit on the SSC. Although the Committee currently operates by consensus, the voting structure of the Committee is organized so that, should a vote be necessary, 50% of the votes reside with appointees of Yukon First Nations.

Table 10. Harvest and Klukshu index escapement data for Alsek River sockeye, Chinook, and coho salmon for 2012.

	Chinook	Sockeye	Coho
Escapement Index [a]			
Klukshu Weir Count	693	17,694	1,272
Klukshu Escapement	693	17,176	1,272
Harvest [b]			
U.S. Commercial	510	18,217	536
U.S. Subsistence	50	167	22
U.S. Test	251	90	
Canadian Aboriginal	0	1,734	0
Canadian Recreational	85	52	0
Total	896	20,260	558

[a] Klukshu River salmon stocks represent an assumed large and variable portion of the total Alsek River salmon escapement.

[b] U.S. harvest estimate differs from Joint Interception Committee estimate because no estimates are made for harvest other than the listed fisheries.

The 2012 Alsek-Tatshenshini Management Plan was adopted by CAFN, SSC, and DFO. For Chinook 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 the 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 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 >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 <1,300 Chinook and <10,500 sockeye salmon (early and late runs combined).

A mandatory Yukon Salmon Conservation Catch Card (YSCCC), introduced by the SSC in 1999, was required by all recreational salmon fishers in 2012. 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 2012 are shown in Table 9.

Sockeye Salmon

The Klukshu River sockeye salmon weir count was 17,694 fish (count expanded due to high water delaying weir installation until July 13) and escapement estimate was 17,176 fish (Table 9). The count of 5,969 early run fish (count through August 15) was nearly twice of average while the count of 11,725 late run fish was near average. The total escapement of 17,176 fish was 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 1,372 fish (average is 2,632 fish).

Chinook Salmon

The most reliable comparative Chinook salmon escapement index for the Alsek River drainage is the Klukshu River weir count. The Chinook salmon weir count and

escapement was 693 fish (count expanded due to high water delaying weir installation until July 13; Table 9). A minimal harvest above the Klukshu River weir was thought to have occurred due to the poor run so no adjustments to the weir count was made to estimate spawning escapement. The 2012 count was well below the escapement goal range of 1,100 to 2,300 Klukshu Chinook salmon.

Coho Salmon

The Klukshu River coho salmon weir count was 1,272,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 2012, sockeye salmon eggs were collected at Tahltan Lake on the Stikine River for the 24-year, and in the Tatsamenie Lake system on the Taku River for the 23-year of this program.

Tahltan Lake

Triton Environmental Consultants Ltd. were contracted to perform the 2012 Egg Take. Egg Take activities were completed with 5.60 million sockeye salmon eggs collected at Tahltan Lake in the fall of 2012 and delivered to Snettisham hatchery, meeting the target of 5.5 million. The historic target has been 6.0 million eggs. The 5.5 million egg target was agreed upon bilaterally prior to the project beginning in August 2012 due to realizing lower than expected escapement to Tahltan Lake (13,693) and associated Treaty guidance to handle such situations. Following this, less than 30% of the female return would be utilized for broodstock. In the 2012 egg take 29% of the female escapement was used for the egg take. The ability to reach the egg take goal in 2012 was largely due to the changes in methodology and additional resources that were utilized. An additional broodstock collection crew was employed to acquire broodstock by means of angling from secondary sites where seining is not effective. Broodstock collected through both historical beach seine practices and angling were held in large net pens to ripen. Through the additional efforts in 2012, 76% of the total females spawned were from short term holding and 25% of the total females collected were collected from the secondary sites. Without the additional efforts undertaken in 2012, it is clear that the target would not have been achieved. The last day of broodstock collection occurred on September 25 as per the agreed plan and the egg takes were completed from August 31 to September 28.

Initial survivals of Tahltan eggs for many lots were observed to be very low at Snettisham. The first three egg takes resulted in 30–50% mortality upon arrival at Snettisham hatchery. Average survivals to the eyed stage were 67%, which is almost 20% below the long term average for the lake and 10% lower than any other year. The

enhancement subcommittee could not identify any changes in operations or conditions that might account for this low survival. Methods and materials are the same as have been used for many years.

Tatsamenie Lake

B. Mercer and Associates Ltd was contracted to collect eggs at Tatsamenie Lake. Broodstock was captured for the eighteenth year near the assessment weir at the outlet of Tatsamenie Lake and held until ripe. Broodstock collection began August 17 and continued to September 6. Females were 70% of the escapement through the weir at Tatsamenie Lake and 5% of the females were used for broodstock. In 2012 four egg takes were conducted on September 17th and 23rd and October 1st and 6th. An estimated 2.02 million sockeye salmon eggs were delivered from Tatsamenie Lake to the Snettisham Hatchery for incubation and thermal marking. This met the target of 2.0 million as per the agreed bilateral production plan.

Delivery of Tatsamenie Lake eggs to Snettisham Hatchery was delayed to the following day to accommodate egg take activities and ensure enough time to perform the flight as opposed to the flight being the same day after egg collection was completed. Survival upon receipt at Snettisham was very high with an average mortality upon arrival of only 1.2%. Average egg survival to 100 CTU was 96%.

Trapper Lake

No egg collection activities were planned for Trapper Lake in 2012.

Incubation, Thermal Marking, and Fry Stocks

Egg incubation and thermal marking program at Snettisham Hatchery went smoothly in year 2011/2012. 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 2011 brood eggs took place at Snettisham Hatchery and the resultant fry were transported to the appropriate systems from May 25 to June 21, 2012. There were 7 incubators (27% of the eggs collected) lost to IHN this year: numerically 0.54 million and 0.88 million eggs assigned for release into Tahltan and Tuya lakes respectively.

IHN losses were the second highest in the programs history and cumulative losses since 1989 at 9% are slightly higher than average for sockeye salmon culture in Alaska. The 2012 disease history samples for Tahltan were the highest in the programs history with 97% positive and 83% high titer. The enhancement subcommittee will be continuing to assess theses losses and any future ones with regard to any changes in techniques that may be necessary to safeguard against this pathogen.

Tahltan Lake

A total of 2.126 million fry from the 2011 Tahltan Lake sockeye salmon egg take were stocked back into that lake in 2012. Survival from green-egg to out-stocked fry was 62.8%. Fry stocking took place on May 29 and 30.

Tuya Lake

There were 1.596 million fry stocked in Tuya Lake on June 20 and 21, 2012. These fish were from eggs collected at Tahltan Lake in the fall of 2011. Survival from green-egg to stocked fry was 51.5%.

Tatsamenie Lake

Approximately 86% of the eggs collected in 2011 from Tatsamenie Lake survived to the fry stage at the Snettisham Hatchery. Between May 25th and May 29th, 2012, 1.649 million sockeye salmon fry were out-stocked into Tatsamenie Lake. In addition, as part of an onshore extended rearing project, 243,000 fry which had been reared to 0.57 grams in the hatchery were placed into four onshore rearing tanks located near the northeast end of the lake (on June 12th). These fish were transported to lake pens in early August and released in two groups, one on August 1 and the other on August 12, at an average size of 2.2 and 3.2 grams, respectively. Very few of these fish out-migrated after release. This was the fourth year of this program. Full evaluation of the success of this study will not be available until these fish return as adults.

Outplant Evaluation Surveys

Acoustic, Trawl, Beach seine and Limnological Sampling

Standard limnological surveys were conducted at Tatsamenie and Tahltan lakes. No surveys were conducted on Tuya or Trapper lakes. No hydroacoustic surveys were conducted in 2012.

Thermal Mark Laboratories

ADF&G Thermal Mark Laboratory

During the 2012 season the ADFG thermal mark lab processed 19,000 sockeye salmon 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 an 11-week period. Several escapement samples were also examined. The laboratory provided estimates on hatchery contributions for 86 distinct sampling collections. Estimates of the percentage of hatchery fish contributed to commercial fishery harvests were provided to ADF&G and DFO fishery managers 24 to 48 hours after samples arrived at the lab.

Final contribution estimates of stocked fish to Alaskan harvest were 10,508 enhanced Stikine River fish to District 106 and 108 and U.S. subsistence fisheries, and 4,177 enhanced Taku River fish to District 111 and U.S. personal use fisheries. Final estimates of contributions to Canadian fisheries included 12,128 enhanced fish to Stikine River fisheries and 3,126 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 2012 season were analyzed at the DFO thermal mark lab in Whitehorse.

APPENDICES

Standards

Large Chinook salmon are MEF length ≥ 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, 2012.

ONLY inseason reference see the historcial Appendix B3 for final postseason estimate.

	Subsistence	D108 sport			D108 gillnet				D108 troll			US total large
SW	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		28		28				0			0	-28
19		20	0	20	4	29	0	29	61	7	54	103
20	0	135	52	83	1	163	26	137	79	41	38	258
21	1	223	8	215	16	237	40	197	90	41	49	463
22	8	387	67	320				0	59	46	13	341
23	0	204	0	204				0	207	78	129	333
24	5	95	0	95				0	90	12	78	178
25	4	167	0	167	915	1,687	1,027	660	93	47	46	877
26	3	124	159	0	1,014	1,495	1,023	473	176	81	95	570
27	3	40	0	40	371	762	350	412	0	0	0	455
28	8	14	0	14	386	320	262	58	4	0	4	84
29	14	0	0	0	119	190	140	50	0	0	0	64
Total	46	1,437	286	1,186	2,825	4,884	2,869	2,016	859	353	506	3,698

Appendix A. 2. Weekly harvest of Chinook salmon in the Canadian commercial, Telegraph Aboriginal, and recreational fishery in the Stikine River, 2012.

	LRCF													Canada total
	Kept		Released		Estimated mortality (50%)		URCF		Aboriginal Telegraph		Tahltan sport fishery			large Stikine
SW	Large	Non-large	Large	Non-large	Large	Non-large	Large	Non-large	Large	Non-large	Retained	Released	Total	harvest
19	110	5												
20	291	12							4	0				295
21	226	36							5	0				231
22	356	41							6	0				362
23									24	0				24
24	709	90	1	0	1	0			13	0				723
25	628	89	0	0	0	0			75	5				703
26	334	133	0	0	0	0			35	1				369
27	811	329	0	46	0	23			169	61	6	2	6	986
28	328	175	0	7	0	4	2	0	57	42	6	0	6	393
29	181	81	0	0	0	0	4	0	76	50	28	12	28	289
30	51	35	0	0	0	0	0	0	41	10	22	38	22	114
31	24	14	0	0	0	0			8	1	2	0	2	34
32	5	3	0	0	0	0			0	0				5
33	0	0	0	0	0	0								0
34	0	0	0	0	0	0								0
35	0	0	7	0	4	0								4
36	0	0	2	0	1	0								1
37														0
Total	4,054	1,043	10	53	5	27	6	0	513	170	64	52	64	4,532
Total	4,064	1,096												4,642
Total	4,059	1,070												

Appendix A. 3. Weekly harvest of Chinook salmon in the Canadian test fisheries 2012.

	Drift		Set		Commercial license		Tuya		Total	
SW	Large	Non-large	Large	Non-large	Large	Non-large	Large	Non-large	Large	Non-large
19									0	0
20									0	0
21									0	0
22									0	0
23					467	49			467	49
24									0	0
25	9	5							9	5
26	25	8							25	8
27	11	11	4	7					15	18
28	6	5	3	0					9	5
29	1	1	1	1					2	2
30	1	0	0	0			37	5	38	5
31	0	0	0	0			7	0	7	0
32	1	1	0	0					1	1
33	0	0	0	0					0	0
34	0	0	0	0					0	0
35	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
Total	54	31	8	8	467	49	44	5	573	93

Appendix A. 4. Weekly harvest of sockeye salmon in the Alaskan District 106 and 108 fisheries, 2012.

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.

			D106-30				D106-41/42				D108			
SW	Subsistence	D106 Total	Harvest	Permits	Days	Permit days	Harvest	Permits	Days	Permit days	Harvest	Permits	Days	Permit days
19											0	11	1.0	11
20	0										0	23	1.0	23
21	0										3	39	1.0	39
22	0													
23	0													
24	71													
25	86	3,655	636	39	2.0	78	3,019	10	2.0	20	3,182	48	2.0	96
26	56	3,989	174	41	2.0	82	3,815	9	2.0	18	2,763	48	2.0	96
27	116	7,341	2,520	24	3.0	72	4,821	23	3.0	69	4,176	37	3.0	111
28	306	5,767	2,643	16	3.0	48	3,124	18	3.0	54	3,866	53	3.0	159
29	404	9,178	2,522	12	3.0	36	6,656	17	3.0	51	3,443	61	3.0	183
30	163	9,539	4,278	23	3.0	69	5,261	20	3.0	60	3,115	63	3.0	189
31	90	2,805	1,276	21	3.0	63	1,529	23	3.0	69	851	65	3.0	195
32	6	1,718	729	23	3.0	69	989	30	3.0	90	307	39	3.0	117
33	0	973	659	23	3.0	69	314	35	3.0	105	171	20	3.0	60
34	4	340	186	16	2.0	32	154	24	2.0	48	50	26	2.0	52
35	0	96	60	24	2.0	48	36	33	2.0	66	61	34	2.0	68
36	0	30	10	38	3.0	114	20	34	3.0	102	5	29	3.0	87
37	0	13	9	52	3.0	156	4	23	3.0	69	4	27	3.0	81
38	0	21	9	31	3.0	93	12	29	3.0	87	0	19	3.0	57
39	0	1	0	21	2.0	42	1	8	2.0	16	0	9	2.0	18
40		0								0				0
41										0				
Total	1,302	45,466	15,711		40	1,071	29,755		40	924	21,997		43	1,642

Appendix A. 5. Weekly stock proportions of sockeye salmon harvested in the Alaskan D106 commercial drift gillnet fishery, 2012.

Data is based on mean GSI estimates from 106-41/42 and 106-30.											
		Stikine						CPUE of Stikine Fish			
SW	Alaska	AllTahltan	Tuya	Mainstem	Total	TahltanEnhance	WildTahltan	AllTahltan	Tuya	Mainstem	Total
25	0.426	0.276	0.232	0.066	0.574	0.100	0.176	0.498	0.277	0.080	0.259
26	0.393	0.151	0.316	0.140	0.607	0.070	0.082	0.292	0.404	0.180	0.293
27	0.748	0.035	0.118	0.099	0.252	0.013	0.022	0.088	0.196	0.168	0.159
28	0.867	0.014	0.039	0.080	0.133	0.008	0.005	0.039	0.073	0.151	0.094
29	0.883	0.013	0.014	0.090	0.117	0.006	0.007	0.066	0.046	0.307	0.149
30	0.962	0.004	0.001	0.033	0.038	0.001	0.003	0.014	0.003	0.083	0.036
31	0.975	0.000	0.001	0.024	0.025	0.000	0.000	0.000	0.001	0.017	0.007
32	0.971	0.000	0.000	0.029	0.029	0.000	0.000	0.000	0.000	0.011	0.004
33	0.996	0.000	0.000	0.004	0.004	0.000	0.000	0.000	0.000	0.001	0.000
34	0.976	0.015	0.000	0.009	0.024	0.014	0.000	0.003	0.000	0.001	0.001
35	0.990	0.000	0.000	0.009	0.010	0.000	0.000	0.000	0.000	0.000	0.000
36	0.991	0.001	0.000	0.008	0.009	0.000	0.000	0.000	0.000	0.000	0.000
37	0.990	0.000	0.000	0.010	0.010	0.000	0.000	0.000	0.000	0.000	0.000
38	0.991	0.001	0.000	0.009	0.009	0.000	0.000	0.000	0.000	0.000	0.000
39	0.992	0.001	0.000	0.007	0.008	0.000	0.000	0.000	0.000	0.000	0.000
40								0.000	0.000	0.000	0.000
Total	0.809	0.046	0.073	0.072	0.191	0.019	0.028				
25	1,558	1,008	847	242	2,097	364	644	10.3	8.6	2.5	21.4
26	1,566	603	1,262	557	2,423	277	326	6.0	12.6	5.6	24.2
27	5,490	258	864	730	1,851	94	164	1.8	6.1	5.2	13.1
28	4,999	79	226	462	768	48	31	0.8	2.3	4.7	7.8
29	8,108	119	125	826	1,070	53	66	1.4	1.4	9.5	12.3
30	9,177	34	10	317	362	10	24	0.3	0.1	2.6	2.9
31	2,736	0	3	66	69	0	0	0.0	0.0	0.5	0.6
32	1,667	0	0	50	51	0	0	0.0	0.0	0.3	0.3
33	969	0	0	4	4	0	0	0.0	0.0	0.0	0.0
34	332	5	0	3	8	5	0	0.1	0.0	0.0	0.1
35	95	0	0	1	1	0	0	0.0	0.0	0.0	0.0
36	30	0	0	0	0	0	0	0.0	0.0	0.0	0.0
37	13	0	0	0	0	0	0	0.0	0.0	0.0	0.0
38	21	0	0	0	0	0	0	0.0	0.0	0.0	0.0
39	1	0	0	0	0	0	0	0.0	0.0	0.0	0.0
40	0	0	0	0	0	0	0				
Total	36,761	2,108	3,338	3,259	8,705	852	1,256	20.7	31.2	30.9	82.8

Appendix A. 6. Weekly stock proportions of sockeye salmon harvested in the Alaskan Subdistrict 106-41/42 (Sumner Strait) commercial drift gillnet fishery, 2012.

Data is based on mean GSI estimates											
		Stikine						CPUE of Stikine Fish			
SW	Other	AllTahltan	Tuya	Mainstem	Total	TahltanEnhance	WildTahltan	AllTahltan	Tuya	Mainstem	Total
25	0.319	0.331	0.276	0.074	0.681	0.118	0.213	0.547	0.319	0.149	0.346
26	0.365	0.158	0.331	0.146	0.635	0.073	0.085	0.367	0.537	0.410	0.453
27	0.636	0.051	0.176	0.137	0.364	0.017	0.034	0.039	0.094	0.127	0.086
28	0.800	0.025	0.069	0.106	0.200	0.015	0.010	0.016	0.031	0.081	0.039
29	0.868	0.017	0.018	0.097	0.132	0.007	0.010	0.024	0.018	0.167	0.058
30	0.945	0.006	0.002	0.047	0.055	0.002	0.005	0.006	0.001	0.054	0.016
31	0.964	0.000	0.002	0.034	0.036	0.000	0.000	0.000	0.000	0.010	0.003
32	0.995	0.000	0.000	0.005	0.005	0.000	0.000	0.000	0.000	0.001	0.000
33	0.992	0.001	0.000	0.007	0.008	0.000	0.000	0.000	0.000	0.000	0.000
34	0.992	0.001	0.000	0.007	0.008	0.000	0.000	0.000	0.000	0.000	0.000
35	*0.992*	*0.001*	*0.000*	*0.007*	*0.008*	*0.000*	*0.000*	0.000	0.000	0.000	0.000
36	*0.992*	*0.001*	*0.000*	*0.007*	*0.008*	*0.000*	*0.000*	0.000	0.000	0.000	0.000
37	*0.992*	*0.001*	*0.000*	*0.007*	*0.008*	*0.000*	*0.000*	0.000	0.000	0.000	0.000
38	*0.992*	*0.001*	*0.000*	*0.007*	*0.008*	*0.000*	*0.000*	0.000	0.000	0.000	0.000
39	*0.992*	*0.001*	*0.000*	*0.007*	*0.008*	*0.000*	*0.000*	0.000	0.000	0.000	0.000
40	*0.992*	*0.001*	*0.000*	*0.007*	*0.008*	*0.000*	*0.000*	0.000	0.000	0.000	0.000
Total	0.728	0.070	0.111	0.091	0.272	0.028	0.042	0.307	0.439	0.253	1.000
25	963	1,000	832	224	2,056	357	644	50.0	41.6	11.2	102.8
26	1,393	603	1,262	556	2,422	277	326	33.5	70.1	30.9	134.5
27	3,065	248	849	660	1,756	84	164	3.6	12.3	9.6	25.5
28	2,498	79	215	331	626	48	31	1.5	4.0	6.1	11.6
29	5,780	114	120	642	876	48	66	2.2	2.3	12.6	17.2
30	4,972	34	10	245	289	10	24	0.6	0.2	4.1	4.8
31	1,475	0	3	51	54	0	0	0.0	0.0	0.7	0.8
32	984	0	0	5	5	0	0	0.0	0.0	0.1	0.1
33	311	0	0	2	3	0	0	0.0	0.0	0.0	0.0
34	153	0	0	1	1	0	0	0.0	0.0	0.0	0.0
35	36	0	0	0	0	0	0	0.0	0.0	0.0	0.0
36	20	0	0	0	0	0	0	0.0	0.0	0.0	0.0
37	4	0	0	0	0	0	0	0.0	0.0	0.0	0.0
38	12	0	0	0	0	0	0	0.0	0.0	0.0	0.0
39	1	0	0	0	0	0	0	0.0	0.0	0.0	0.0
40	0	0	0	0	0	0	0				
Total	21,665	2,079	3,292	2,718	8,090	824	1,255	91.4	130.6	75.3	297.3

Appendix A. 7. Weekly stock proportions of sockeye salmon harvested in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 2012.

Data is based on mean GSI estimates											
		Stikine						CPUE of Stikine Fish			
SW	Other	AllTahltan	Tuya	Mainstem	Total	TahltanEnhance	WildTahltan	AllTahltan	Tuya	Mainstem	Total
25	0.936	0.012	0.024	0.028	0.064	0.012	0.000	0.178	0.252	0.021	0.042
26	0.993	0.000	0.000	0.007	0.007	0.000	0.000	0.002	0.000	0.001	0.001
27	0.962	0.004	0.006	0.028	0.038	0.004	0.000	0.254	0.266	0.088	0.106
28	0.946	0.000	0.004	0.049	0.054	0.000	0.000	0.009	0.294	0.246	0.238
29	0.923	0.002	0.002	0.073	0.077	0.002	0.000	0.265	0.184	0.460	0.434
30	0.983	0.000	0.000	0.017	0.017	0.000	0.000	0.008	0.001	0.094	0.084
31	0.988	0.000	0.000	0.012	0.012	0.000	0.000	0.003	0.000	0.021	0.019
32	0.937	0.000	0.000	0.062	0.063	0.000	0.000	0.002	0.000	0.060	0.053
33	0.998	0.000	0.000	0.002	0.002	0.000	0.000	0.002	0.001	0.002	0.002
34	0.963	0.026	0.000	0.011	0.037	0.026	0.000	0.276	0.001	0.006	0.017
35	*0.989*	*0.000*	*0.000*	*0.011*	*0.011*	*0.000*	*0.000*	0.001	0.000	0.001	0.001
36	*0.989*	*0.000*	*0.000*	*0.011*	*0.011*	*0.000*	*0.000*	0.000	0.000	0.000	0.000
37	*0.989*	*0.000*	*0.000*	*0.011*	*0.011*	*0.000*	*0.000*	0.000	0.000	0.000	0.000
38	*0.989*	*0.000*	*0.000*	*0.011*	*0.011*	*0.000*	*0.000*	0.000	0.000	0.000	0.000
39	*0.989*	*0.000*	*0.000*	*0.011*	*0.011*	*0.000*	*0.000*	0.000	0.000	0.000	0.000
40	*0.989*	*0.000*	*0.000*	*0.011*		*0.000*	*0.000*				
Total	0.961	0.002	0.003	0.034	0.039	0.002	0.000	0.044	0.062	0.894	1.000
25	595	8	15	18	41	8	0	0.1	0.2	0.2	0.5
26	173	0	0	1	1	0	0	0.0	0.0	0.0	0.0
27	2,425	10	15	70	95	10	0	0.1	0.2	1.0	1.3
28	2,501	0	11	131	142	0	0	0.0	0.2	2.7	3.0
29	2,328	5	5	183	194	5	0	0.1	0.1	5.1	5.4
30	4,206	0	0	72	72	0	0	0.0	0.0	1.0	1.0
31	1,261	0	0	15	15	0	0	0.0	0.0	0.2	0.2
32	683	0	0	46	46	0	0	0.0	0.0	0.7	0.7
33	657	0	0	2	2	0	0	0.0	0.0	0.0	0.0
34	179	5	0	2	7	5	0	0.2	0.0	0.1	0.2
35	59	0	0	1	1	0	0	0.0	0.0	0.0	0.0
36	10	0	0	0	0	0	0	0.0	0.0	0.0	0.0
37	9	0	0	0	0	0	0	0.0	0.0	0.0	0.0
38	9	0	0	0	0	0	0	0.0	0.0	0.0	0.0
39	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0
40											
Total	15,096	29	46	541	615	28	1	0.5	0.8	11.1	12.4

Appendix A. 8. Weekly stock proportions sockeye salmon harvested in the Alaskan District 108 commercial drift gillnet fishery, 2012.

Data is based on mean GSI estimates

		Stikine						CPUE of Stikine Fish			
Week	Other	AllTahltan	Tuya	Mainstem	Total	TahltanEnhance	WildTahltan	AllTahltan	Tuya	Mainstem	Total
25	0.067	0.426	0.340	0.166	0.933	0.184	0.242	0.400	0.273	0.077	0.209
26	0.069	0.332	0.429	0.170	0.931	0.125	0.207	0.271	0.299	0.069	0.181
27	0.082	0.215	0.341	0.361	0.918	0.068	0.148	0.229	0.311	0.191	0.233
28	0.080	0.107	0.152	0.661	0.920	0.026	0.081	0.074	0.090	0.225	0.151
29	0.283	0.029	0.038	0.650	0.717	0.006	0.022	0.015	0.017	0.172	0.091
30	0.182	0.023	0.024	0.771	0.818	0.010	0.013	0.011	0.009	0.178	0.091
31	0.572	0.000	0.000	0.427	0.428	0.000	0.000	0.000	0.000	0.026	0.013
32	0.246	0.000	0.014	0.740	0.754	0.000	0.000	0.000	0.001	0.027	0.013
33	*0.483*	0.001	*0.000*	*0.515*	0.517	*0.000*	*0.000*	0.000	0.000	0.021	0.010
34	*0.483*	0.001	*0.000*	*0.515*	0.517	*0.000*	*0.000*	0.000	0.000	0.007	0.003
35	*0.483*	0.001	*0.000*	*0.515*	0.517	*0.000*	*0.000*	0.000	0.000	0.006	0.003
36	*0.483*	0.001	*0.000*	*0.515*	0.517	*0.000*	*0.000*	0.000	0.000	0.000	0.000
37	*0.483*	0.001	*0.000*	*0.515*	0.517	*0.000*	*0.000*	0.000	0.000	0.000	0.000
38	*0.483*	0.001	*0.000*	*0.515*	0.517	*0.000*	*0.000*	0.000	0.000	0.000	0.000
39	*0.483*	0.001	*0.000*	*0.515*	0.517	*0.000*	*0.000*	0.000	0.000	0.000	0.000
40	*0.483*	0.001	*0.000*	*0.515*	0.517	*0.000*	*0.000*				
Total	0.150	0.171	0.204	0.475	0.850	0.062	0.109	0.239	0.279	0.482	1.000
25	214	1,357	1,084	530	2,968	587	769	14.1	11.3	5.5	30.9
26	190	918	1,186	470	2,573	346	572	9.6	12.3	4.9	26.8
27	342	900	1,425	1,509	3,834	283	617	8.1	12.8	13.6	34.5
28	309	414	588	2,555	3,557	102	312	2.6	3.7	16.1	22.4
29	975	98	131	2,239	2,468	22	76	0.5	0.7	12.2	13.5
30	567	73	73	2,401	2,548	32	41	0.4	0.4	12.7	13.5
31	487	0	0	363	364	0	0	0.0	0.0	1.9	1.9
32	76	0	4	227	231	0	0	0.0	0.0	1.9	2.0
33	83	0	0	88	88	0	0	0.0	0.0	1.5	1.5
34	24	0	0	26	26	0	0	0.0	0.0	0.5	0.5
35	29	0	0	31	32	0	0	0.0	0.0	0.5	0.5
36	2	0	0	3	3	0	0	0.0	0.0	0.0	0.0
37	2	0	0	2	2	0	0	0.0	0.0	0.0	0.0
38	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0
39	0	0	0	0	0	0	0	0.0	0.0	0.0	0.0
40	0	0	0	0	0	0	0				
Total	3,301	3,760	4,492	10,443	18,693	1,372	2,387	35.3	41.3	71.3	147.9

Appendix A. 9. Weekly sockeye salmon harvest and effort in the Canadian commercial and assessment fisheries in the lower Stikine River, 2012.

	LRCF					Telegraph	Drift Net Test		Set Net Test		Commercial License		Test	Commercial
SW	Harvest	Permits	Days	Permit days	URCF	Aboriginal	Harvest	# drifts	Harvest	Hours	Harvest	Hours	Total	Total
19	0	18.0	2.0	36.0									0	0
20	0	19.0	2.0	38.0		0							0	0
21	1	19.0	1.0	19.0		0							0	1
22	7	18.5	2.0	37.0		0							0	7
23				0.0		0					19	57.0	19	0
24	53	19.0	3.0	57.0		0							0	53
25	341	19.0	1.0	19.0		0	23	42					23	341
26	977	18.0	3.0	54.0		1	87	42					87	978
27	6,394	19.0	2.0	38.0		298	125	42	491	48			616	6692
28	5,618	19.0	3.0	57.0	118	1,318	74	42	203	48			277	7054
29	3,217	19.0	2.0	38.0	260	1,113	118	42	122	24			240	4590
30	3,502	19.0	2.3	42.8	90	816	107	42	126	24			233	4408
31	3,543	14.3	2.3	33.4		343	69	42	154	24			223	3886
32	1,743	15.0	2.0	30.0		111	17	56	20	24			37	1854
33	361	13.0	1.0	13.0			14	56	12	24			26	361
34	58	10.0	1.0	10.0			3	42	11	24			14	58
35	117	15.0	4.0	60.0			1	28					1	117
36	7	15.0	4.0	60.0			0	56					0	7
37							0	70					0	0
38							0	98					0	0
39							0	70					0	0
40							0	85					0	0
41							0	81					0	0
Total	25,939		37.6	642.2	468	4,000	638	770	1,139	239	19	57	1,796	30,407

Appendix A. 10. Weekly sockeye salmon stock proportions and harvest by stock in the Canadian commercial fishery in the lower Stikine River, 2012.

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

	Porportion					Harvest				
SW	Small Egg	Tahltan	Tuya	Mainstem	TahltanEnhance	AllTahltan	Tuya	Mainstem	WildTahltan	EnhanceTahltan
19										
20										
21	0.941	0.542	0.382	0.076	0.181	0.54	0.38	0.08	0.36	0.18
22	0.941	0.542	0.382	0.076	0.181	3.79	2.68	0.53	2.53	1.27
23	Test fishery									
24	0.941	0.542	0.382	0.076	0.181	29	20	4	19	10
25	0.941	0.542	0.382	0.076	0.181	185	130	26	123	62
26	0.941	0.542	0.382	0.076	0.181	529	373	74	353	177
27	0.921	0.505	0.341	0.154	0.213	3,228	2,181	985	1,867	1,360
28	0.769	0.328	0.379	0.294	0.096	1,840	2,127	1,650	1,303	538
29	0.489	0.165	0.322	0.513	0.068	531	1,037	1,649	312	219
30	0.202	0.116	0.113	0.771	0.032	405	397	2,700	292	113
31	0.046	0.065	0.052	0.883	0.005	230	183	3,130	212	18
32	0.057	0.060	0.012	0.928	0.000	105	21	1,617	105	0
33	0.018	0.036	0.017	0.947	0.000	13	6	342	13	0
34	0.086	0.016	0.016	0.967	0.000	1	1	56	1	0
35	0.081	0.005	0.022	0.973	0.000	1	3	114	1	0
36	0.000	0.005	0.022	0.973	0.000					
37	0.000	0.000	0.000	1.000	0.000					
Total						7,100	6,483	12,349	4,603	2,497
Proportion						0.274	0.250	0.476	0.177	0.096

	Harvest/Effort below Porcupine			CPUE					
SW	Sockeye	Permit Day	Total	Small Egg	AllTahltan	Tuya	Mainstem	WildTahltan	EnhanceTahltan
19									
20									
21	1	19.0	0.053	0.050	0.029	0.020	0.004	0.019	0.010
22	7	37.0	0.189	0.178	0.102	0.072	0.014	0.068	0.034
23									
24	53	57.0	0.930	0.875	0.504	0.355	0.071	0.336	0.168
25	341	19.0	17.947	16.884	9.722	6.859	1.367	6.479	3.244
26	977	54.0	18.093	17.020	9.801	6.914	1.378	6.531	3.270
27	6,394	38.0	168.263	155.042	84.934	57.404	25.925	49.134	35.801
28	5,618	57.0	98.561	75.769	32.286	37.322	28.953	22.855	9.432
29	3,217	38.0	84.658	41.428	13.969	27.281	43.408	8.207	5.762
30	3,502	42.8	81.918	16.579	9.471	9.284	63.163	6.828	2.643
31	3,543	33.4	105.939	4.911	6.875	5.470	93.593	6.337	0.538
32	1,743	30.0	58.100	3.334	3.500	0.700	53.900	3.500	0.000
33	361	13.0	27.769	0.505	1.000	0.462	26.308	1.000	0.000
34	58	10.0	5.800	0.497	0.096	0.096	5.609	0.096	0.000
35	117	60.0	1.950	0.158	0.011	0.043	1.896	0.011	0.000
36	7	60.0							
37									
Total	25,939	568	670.17	333.23	172.30	152.28	345.59	111.40	60.90
Proportion				0.497	0.257	0.227	0.516	0.166	0.091

Appendix A. 11. Harvest by stock and week for sockeye salmon in the Canadian upper river commercial and Aboriginal fisheries in the Stikine River, 2012.

	Stock				
SW	AllTahltan	Tuya	Mainstem	WildTahltan	EnhanceTahltan
Proportion by stock for upper river fisheries					
24					
25	0.684	0.316	0.000	0.386	0.298
26	0.684	0.316	0.000	0.386	0.298
27	0.684	0.316	0.000	0.386	0.298
28	0.496	0.494	0.010	0.304	0.192
29	0.413	0.572	0.015	0.275	0.138
30	0.550	0.450	0.000	0.410	0.140
31	0.301	0.532	0.167	0.107	0.194
32	0.278	0.305	0.417	0.142	0.136
33					
34					
Total					
Harvest by stock for upper river commercial fishery					
28	59	58	1	36	23
29	107	149	4	72	36
30	50	41	0	37	13
Total	215	248	5	144	71
Harvest by stock for Telegraph aboriginal fishery					
24	0	0	0	0	0
25	0	0	0	0	0
26	1	0	0	0	0
27	204	94	0	115	89
28	654	651	13	401	253
29	460	637	17	306	154
30	449	367	0	335	114
31	103	182	57	37	67
32	31	34	46	16	15
33	0	0	0	0	0
34	0	0	0	0	0
35	0	0	0	0	0
Total	1,901	1,966	133	1,209	692

Appendix A. 12. Weekly harvest, CPUE, and migratory timing of Tahltan, Tuya, and mainstem sockeye salmon stocks in the Stikine test fishery, 2012.

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

		Proportions				Harvest				CPUE				Migratory Timing		
SW	small eggs	AllTahltan	Tuya	Mainstem	EnhanceTahltan	AllTahltan	Tuya	Mainstem	EnhanceTahltan	AllTahltan	Tuya	Mainstem	Total	AllTahltan	Tuya	Mainstem
Drift gillnet																
25	1.000	0.667	0.333	0.000	0.181	28	14	0	8	0.365	0.183	0.000	0.548	0.024	0.012	0.000
26	0.932	0.430	0.535	0.035	0.181	37	47	3	16	0.891	1.108	0.072	2.071	0.059	0.074	0.005
27	0.872	0.350	0.524	0.126	0.213	44	65	16	27	1.042	1.558	0.376	2.976	0.069	0.104	0.025
28	0.620	0.354	0.321	0.325	0.096	26	24	24	7	0.623	0.566	0.572	1.762	0.042	0.038	0.038
29	0.300	0.146	0.255	0.598	0.068	17	30	71	8	0.411	0.717	1.681	2.810	0.027	0.048	0.112
30	0.068	0.047	0.107	0.845	0.032	5	11	90	3	0.120	0.273	2.154	2.548	0.008	0.018	0.143
31	0.085	0.040	0.036	0.924	0.005	3	2	64	0	0.066	0.059	1.518	1.643	0.004	0.004	0.101
32	0.000	0.000	0.000	1.000	0.000	0	0	17	0	0.000	0.000	0.304	0.304	0.000	0.000	0.020
33	0.059	0.000	0.000	1.000	0.000	0	0	14	0	0.000	0.000	0.250	0.250	0.000	0.000	0.017
34	0.000	0.000	0.000	1.000	0.000	0	0	3	0	0.000	0.000	0.071	0.071	0.000	0.000	0.005
35		0.000	0.000	1.000	0.000	0	0	1	0	0.000	0.000	0.036	0.036	0.000	0.000	0.002
Total						160	194	303	69	3.519	4.464	7.035	15.018			
Proportion						0.244	0.295	0.461						0.234	0.297	0.468
Set gillnet																
27		0.350	0.524	0.126	0.213	172	257	62	104	3.581	5.355	1.293	10.229	0.108	0.161	0.039
28		0.354	0.321	0.325	0.096	72	65	66	19	1.496	1.359	1.374	4.229	0.045	0.041	0.041
29		0.146	0.255	0.598	0.068	18	31	73	8	0.744	1.297	3.041	5.083	0.022	0.039	0.091
30		0.047	0.107	0.845	0.032	6	14	107	4	0.253	0.575	4.533	5.362	0.008	0.017	0.136
31		0.040	0.036	0.924	0.005	6	6	142	1	0.263	0.234	6.056	6.553	0.008	0.007	0.182
32		0.000	0.000	1.000	0.000	0	0	20	0	0.000	0.000	0.833	0.833	0.000	0.000	0.025
33		0.000	0.000	1.000	0.000	0	0	12	0	0.000	0.000	0.500	0.500	0.000	0.000	0.015
34		0.000	0.000	1.000	0.000	0	0	11	0	0.000	0.000	0.458	0.458	0.000	0.000	0.014
35		0.000	0.000	1.000	0.000	0	0	0	0					0.000	0.000	0.000
Total						274	372	493	137	6.34	8.82	18.09	33.25			
Proportion						0.240	0.327	0.433						0.191	0.265	0.544
Total Test Fishery Harvest																
25		0.667	0.333	0.000	0.181	28	14	0	8							
26		0.430	0.535	0.035	0.181	37	47	3	16							
27		0.350	0.524	0.126	0.213	216	322	78	131							
28		0.354	0.321	0.325	0.096	98	89	90	27							
29		0.146	0.255	0.598	0.068	35	61	144	16							
30		0.047	0.107	0.845	0.032	11	25	197	8							
31		0.040	0.036	0.924	0.005	9	8	206	1							
32		0.000	0.000	1.000	0.000	0	0	37	0							
33		0.000	0.000	1.000	0.000	0	0	26	0							
34		0.000	0.000	1.000	0.000	0	0	14	0							
35		0.000	0.000	1.000	0.000	0	0	1	0							
Total						434	566	796	206							
Proportion						0.242	0.315	0.443	0.115							

AllTahltan harvest	EnhanceTahltan	WildTahltan
25	0.667	0.181	0.486
26	0.430	0.181	0.250
27	0.350	0.213	0.137
28	0.354	0.096	0.258
29	0.146	0.068	0.078
30	0.047	0.032	0.015
31	0.040	0.005	0.035
32	0.000	0.000	0.000
33	0.000	0.000	0.000
34	0.000	0.000	0.000
35	0.000	0.000	0.000

Appendix A. 13. Daily test harvest taken from the Tuya Assessment Fishery located above the Tahltan River, July 2012.

	Harvest	Proportions				Stock specific harvest			
Date	Total	All Tahltan	Tuya	Mainstem	EnhanceTahltan	All Tahltan	Tuya	Mainstem	EnhanceTahltan
7/21	297	0.135	0.865	0.000	0.038	40	257	0	11
7/22	321	0.120	0.880	0.000	0.060	39	282	0	19
7/23	313	0.064	0.894	0.043	0.043	20	280	13	13
7/24	236	0.046	0.915	0.039	0.021	11	216	9	5
7/25	196	0.064	0.936	0.000	0.000	13	183	0	0
7/26	220	0.168	0.813	0.020	0.125	37	179	4	28
7/27	258	0.163	0.837	0.000	0.000	42	216	0	0
7/28	242	0.002	0.898	0.100	0.020	0	217	24	5
7/29	223	0.040	0.920	0.040	0.020	9	205	9	4
Total	2,306	0.091	0.883	0.026	0.037	210	2,036	60	86

Appendix A. 14. Weekly coho salmon harvest in the Alaskan District 106 and 108 fisheries, 2012.

	D106					D108			Subsistence
SW	Hatchery	Wild	Total	106-41/42	106-30	Hatchery	Wild	Total	harvest
25	2,761	450	3,211	2,320	891		173	173	0
26	3,329	1,313	4,642	3,036	1,606		101	101	0
27	3,876	3,552	7,428	5,094	2,334	29	277	306	0
28	3,577	1,579	5,156	2,429	2,727	336	662	998	0
29	5,067	1,801	6,868	2,009	4,859	244	220	464	0
30	5,531	7,053	12,584	3,748	8,836	163	229	392	0
31	2,719	4,454	7,173	1,968	5,205	49	637	686	0
32	1,620	3,812	5,432	2,916	2,516	141	774	915	0
33	1,052	5,855	6,907	3,540	3,367	201	1,509	1,710	0
34	1,274	3,064	4,338	1,443	2,895	62	1,779	1,841	0
35	3,128	4,937	8,065	2,974	5,091	286	3,051	3,337	25
36	11,223	6,886	18,109	9,790	8,319	572	2,676	3,248	10
37	7,121	4,665	11,786	8,161	3,625	293	1,809	2,102	5
38	11,893	4,999	16,892	6,176	10,716	2,315	1,202	3,517	10
39	2,048	779	2,827	2,053	774	117	193	310	10
Total	66,219	55,199	121,418	57,657	63,761	4,808	15,292	20,100	60

Appendix A. 15. Weekly harvest of coho salmon in the Canadian lower river commercial fishery and test fisheries 2012.

		Test			
SW	LRCF	Drift	Set	Additional	Total
19	0				0
20	0				0
21	0				0
22	0				0
23	0				0
24	0				0
25	0	0			0
26	0	0			0
27	0	0	0		0
28	0	0	0		0
29	1	0	1		2
30	0	0	1		1
31	27	0	0		27
32	54	10	4		68
33	199	16	8		223
34	159	9	29		197
35	2,171	18			2,189
36	3,577	56			3,633
37		40			40
38		129			129
39		57			57
40		49			49
41		9			9
42					0
Total	6,188	393	43	0	6,624

Appendix A. 16. Weekly salmon effort in the Alaskan District 106 and 108 fisheries, 2012.

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.

		D106			106-41/42			106-30			D108			
SW	Start Date	Permits	Days	Permit Days	Permits	Days	Permit Days	Permits	Days	Permit Days	Permits	Days	Permit Days	Subsistence Permits
25	16-Jun	36	2.0	72	28	1.0	28	8	1.0	8	51	2.0	102	
26	23-Jun	41	3.0	123	27	1.0	27	15	1.0	15	44	3.0	132	
27	30-Jun	35	4.0	140	20	1.0	20	15	1.0	15	25	4.0	100	
28	7-Jul	45	3.0	135	28	1.0	28	17	1.0	17	28	3.0	84	
29	14-Jul	51	3.0	153	27	1.0	27	26	1.0	26	38	3.0	114	
30	21-Jul	63	3.0	189	28	1.0	28	36	1.0	36	59	3.0	177	
31	28-Jul	63	4.0	252	29	2.0	58	35	2.0	70	65	4.0	260	
32	4-Aug	69	4.0	276	25	2.0	50	45	2.0	90	55	4.0	220	
33	11-Aug	60	5.0	300	30	2.0	60	30	2.0	60	53	5.0	265	
34	18-Aug	63	5.0	315	38	2.0	76	27	2.0	54	49	5.0	245	
35	25-Aug	59	5.0	295	37	2.0	74	31	0.0	0	42	5.0	210	
36	1-Sep	70	4.0	280	57	0.0	0	27	1.0	27	43	4.0	172	
37	8-Sep	86	4.0	344	54	0.0	0	37	1.0	37	30	4.0	120	
38	15-Sep	61	4.0	244	39	0.0	0	29	1.0	29	26	4.0	104	
39	22-Sep	32	4.0	128	20	0.0	0	13	1.0	13	5	4.0	20	
40	29-Sep	9	3.0	27	9	0.0	0				3	3.0	9	
41	6-Oct	2	2.0	4										
Total			62	3,277		16	476		18	497		60	2,334	129

Appendix A. 17. Weekly salmon effort in the Canadian fisheries in the Stikine River, 2012.

		LRCF			URCF			Telegraph Aboriginal			Test			
	Start			Permit			Permit			Permit			Commercial License	
SW	Date	Permits	Days	Days	Permits	Days	Days	Permits	Days	Days	# Drifts	Set hou	Permits	Days
19	5-May												18.00	2.0
20	12-May												19.00	2.0
21	19-May							6	2	12			19.00	1.0
22	26-May							7	0	0			18.50	2.0
23	2-Jun							7	1	7			18.00	1.0
24	9-Jun							7	4	28			19.00	3.0
25	16-Jun	19.00	1.0	19				7	6	42				
26	23-Jun	18.00	3.0	54				7	4	28				
27	30-Jun	19.00	2.0	38				7	8	56				
28	7-Jul	19.00	3.0	57				7.0	27.0	189	28	48.0		
29	14-Jul	19.00	2.0	38				7.0	22.0	154	42	48.0		
30	21-Jul	19.00	2.3	43	1.0	2.0	2	7.0	6.0	42	42	48.0		
31	28-Jul	14.33	2.3	33	1.0	2.0	2	7.0	4.0	28	42	48.0		
32	4-Aug	15.00	2.0	30	1.0	2.0	2	5.0	1.0	5	42	48.0		
33	11-Aug	13.00	1.0	13				3.0	0.0	0	42	72.0		
34	18-Aug	10.00	1.0	10							42	72.0		
35	25-Aug	15.00	4.0	60							14	24.0		
36	1-Sep	15.00	4.0	60										
37	8-Sep			0										
38	15-Sep			0										
39	22-Sep			0										
40	29-Sep			0										
41				0										
42				0										
Total			27.6	455.2		6.0	6.0		85.0	591.0	294.0	408.0	111.5	11.0

Appendix A. 18. Tuya assessment fishery, 2012.

Date	total nets
7/21	8
7/22	8
7/23	8
7/24	8
7/25	8
7/26	8
7/27	8
7/28	8
7/29	8
7/30	8
Total	80

Appendix A. 19. Daily counts of adult sockeye salmon passing through Tahltan Lake weir, 2012

		Cumulative				Cumulative	
Date	Count [a]	Count	Percent	Date	Count	Count	Percent
9-Jul	Installed			5-Aug	60	11,707	85.53%
10-Jul	0	0	0.00%	6-Aug	139	11,846	86.55%
11-Jul	0	0	0.00%	7-Aug	412	12,258	89.56%
12-Jul	0	0	0.00%	8-Aug	230	12,488	91.24%
13-Jul	0	0	0.00%	9-Aug	196	12,684	92.67%
14-Jul	0	0	0.00%	10-Aug	62	12,746	93.12%
15-Jul	0	0	0.00%	11-Aug	58	12,804	93.55%
16-Jul	2	2	0.01%	12-Aug	159	12,963	94.71%
17-Jul	1	3	0.02%	13-Aug	112	13,075	95.53%
18-Jul	543	546	3.99%	14-Aug	127	13,202	96.46%
19-Jul	561	1,107	8.09%	15-Aug	106	13,308	97.23%
20-Jul	143	1,250	9.13%	16-Aug	32	13,340	97.46%
21-Jul	630	1,880	13.74%	17-Aug	15	13,355	97.57%
22-Jul	2,164	4,044	29.55%	18-Aug	55	13,410	97.98%
23-Jul	1,487	5,531	40.41%	19-Aug	45	13,455	98.30%
24-Jul	1,412	6,943	50.73%	20-Aug	67	13,522	98.79%
25-Jul	679	7,622	55.69%	21-Aug	43	13,565	99.11%
26-Jul	630	8,252	60.29%	22-Aug	22	13,587	99.27%
27-Jul	920	9,172	67.01%	23-Aug	32	13,619	99.50%
28-Jul	449	9,621	70.29%	24-Aug	22	13,641	99.66%
29-Jul	430	10,051	73.43%	25-Aug	6	13,647	99.71%
30-Jul	383	10,434	76.23%	26-Aug	0	13,647	99.71%
31-Jul	237	10,671	77.96%	27-Aug	10	13,657	99.78%
1-Aug	328	10,999	80.36%	28-Aug	19	13,676	99.92%
2-Aug	238	11,237	82.10%	29-Aug	11	13,687	100.00%
3-Aug	131	11,368	83.06%	30-Aug	pulled		
4-Aug	279	11,647	85.10%	31-Aug			

		Hatchery[a]	Wild	Total
Total Counted		5,851	7,836	13,687
Fish removed for broodstock	0.465	1,836	2,113	3,949
Fish removed for otolith samples	0.390	87	137	224
Total Spawners		3,928	5,586	

[a] Thermal mark contribution from pooled brood stock and weir sample otolith results.

Appendix A. 20. Daily counts of sockeye salmon smolt migrating through Tahltan Lake smolt weir, 2012.

		Cumulative				Cumulative	
Date	Count	Count	Percent	Date	Count	Count	Percent
10-May	Installed		0.00%	6-Jun	349	625,821	97.87%
11-May	0	0	0.00%	7-Jun	196	626,017	97.90%
12-May	0	0	0.00%	8-Jun	5,137	631,154	98.70%
13-May	2	2	0.00%	9-Jun	5,473	636,627	99.55%
14-May	25	27	0.00%	10-Jun	928	637,555	99.70%
15-May	1,532	1,559	0.24%	11-Jun	683	638,238	99.81%
16-May	1,724	3,283	0.51%	12-Jun	556	638,794	99.89%
17-May	726	4,009	0.63%	13-Jun	533	639,327	99.98%
18-May	1,011	5,020	0.79%	14-Jun	146	639,473	100.00%
19-May	81,319	86,339	13.50%				
20-May	1,432	87,771	13.73%				
21-May	660	88,431	13.83%				
22-May	1,552	89,983	14.07%				
23-May	3,453	93,436	14.61%				
24-May	88,987	182,423	28.53%				
25-May	174,485	356,908	55.81%				
26-May	57,642	414,550	64.83%				
27-May	27,565	442,115	69.14%				
28-May	29,203	471,318	73.70%				
29-May	19,594	490,912	76.77%				
30-May	23,458	514,370	80.44%				
31-May	3,675	518,045	81.01%				
1-Jun	1,214	519,259	81.20%				
2-Jun	96,541	615,800	96.30%				
3-Jun	6,974	622,774	97.39%				
4-Jun	758	623,532	97.51%	Wild	324,876		
5-Jun	1,940	625,472	97.81%	Hatchery	314,597		
Total					639,473		

Appendix A. 21. Daily counts of adult Chinook salmon passing through Little Tahltan weir, 2012.

	Large Chinook			nonlarge Chinook		
		Cumulative			Cumulative	
Date	Count	Count	Percent	Count	Count	Percent
27-Jun	Installed					
28-Jun	0	0	0.00%	0	0	0.00%
29-Jun	0	0	0.00%	0	0	0.00%
30-Jun	0	0	0.00%	0	0	0.00%
1-Jul	0	0	0.00%	0	0	0.00%
2-Jul	0	0	0.00%	0	0	0.00%
3-Jul	0	0	0.00%	0	0	0.00%
4-Jul	0	0	0.00%	0	0	0.00%
5-Jul	0	0	0.00%	0	0	0.00%
6-Jul	0	0	0.00%	0	0	0.00%
7-Jul	3	3	0.42%	0	0	0.00%
8-Jul	4	7	0.97%	0	0	0.00%
9-Jul	5	12	1.67%	0	0	0.00%
10-Jul	28	40	5.56%	0	0	0.00%
11-Jul	16	56	7.78%	3	3	5.88%
12-Jul	14	70	9.72%	6	9	17.65%
13-Jul	27	97	13.47%	5	14	27.45%
14-Jul	31	128	17.78%	2	16	31.37%
15-Jul	12	140	19.44%	3	19	37.25%
16-Jul	42	182	25.28%	1	20	39.22%
17-Jul	22	204	28.33%	5	25	49.02%
18-Jul	20	224	31.11%	3	28	54.90%
19-Jul	10	234	32.50%	5	33	64.71%
20-Jul	12	246	34.17%	1	34	66.67%
21-Jul	31	277	38.47%	2	36	70.59%
22-Jul	33	310	43.06%	2	38	74.51%
23-Jul	17	327	45.42%	2	40	78.43%
24-Jul	8	335	46.53%	3	43	84.31%
25-Jul	15	350	48.61%	1	44	86.27%
26-Jul	44	394	54.72%	1	45	88.24%
27-Jul	60	454	63.06%	2	47	92.16%
28-Jul	16	470	65.28%	0	47	92.16%
29-Jul	38	508	70.56%	1	48	94.12%
30-Jul	19	527	73.19%	0	48	94.12%
31-Jul	8	535	74.31%	0	48	94.12%
1-Aug	17	552	76.67%	1	49	96.08%
2-Aug	16	568	78.89%	1	50	98.04%
3-Aug	28	596	82.78%	0	50	98.04%
4-Aug	34	630	87.50%	1	51	100.00%
5-Aug	21	651	90.42%	0	51	100.00%
6-Aug	12	663	92.08%	0	51	100.00%
7-Aug	23	686	95.28%	0	51	100.00%
8-Aug	20	706	98.06%	0	51	100.00%
9-Aug	14	720	100.00%	0	51	100.00%
10-Aug	weir out					
Total Counted		720			51	
Broodstock		0			0	
Escapement		720			51	

Appendix B. 1. Historic salmon harvest and effort in the Alaskan District 106 commercial gillnet fishery, 1960–2012.

	Harvest						Days	Effort Permit
Year	Chinook	Sockeye	Coho	Pink	Chum	Boats	Open	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
2011	3,008	146,069	117,860	337,169	158,096	1,002	41.0	2,647
2012	1,853	45,466	121,418	129,646	104,307	718	40.0	1,929
60-11	1,422	110,295	101,007	313,372	113,839		36.9	2,837
02-11	1,851	98,499	144,533	267,410	193,427	959	48.7	2,822

Appendix B. 2 Historic salmon harvest and effort in the Alaskan District 108 commercial gillnet fishery, 1962–2012.

	Harvest							Effort
							Days	Permit
Year	Chinook	Sockeye	Coho	Pink	Chum	Boats	Open	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
2011	5,321	51,478	20,720	65,022	142,526	628	41	1,806
2012	8,027	21,997	20,100	16,374	240,569	651	43	1,642
60-11	3,857	31,081	16,908	27,284	37,775		37.9	1,329
02-11	10,732	53,368	31,189	47,295	122,944	787	52.8	2,391

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, 2005–2012.

GSI used for sport and gillnet. Troll is based on CWT.					
		D108 Large Stikine Chinook			Total Large
Year	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
2011	61	650	970	463	2,145
2012	46	608	1,209	506	2,370

Appendix B. 4. Chinook salmon harvest in the Alaskan District 106 and 108 test fisheries, 1984–2012.

Table only includes years when test fisheries were operated				
	Large Chinook			
Year	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

2009				113

Appendix B. 5. Chinook salmon harvest in the Canadian commercial and recreational fisheries in the Stikine River, 1979–2012.

	LRCF						URCF		Telegraph Aboriginal		Tahltan sport fishery		Total	
			Large		Non-Large									
Year	Large	Nonlarge	Released	morts	Released	morts	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge
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[b]	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[c]									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
2011	1,737	1,260	58	29	100	50	2	14	515	218	53	23	2,336	1,565
2012	4,054	1,043	10	5	53	27	6	0	513	170	64		4,642	1,240
Averages														
85-11	3,020	585					42	16	808	226	145		4,023	851
02-11	5,949	1,092					15	14	711	242	101		6,798	1,377

Appendix B. 6. Chinook salmon harvest in inriver test fisheries in the Stikine River, 1985–2012.

	Drift		Set		Additional drift		Commercial license		Tuya		Total	
Year	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge
1985											0	0
1986	27	12									27	12
1987[b]	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
2011	22	28	0	1	0	0	799	219	13	6	834	254
2012	54	31	8	8	0	0	467	49	44	5	573	93
Averages												
85-11	59	14	46	20	406	75					466	96
02-11	21	19	12	21	277	83					532	161

Appendix B. 7. Index counts of Stikine large Chinook salmon escapements, 1979–2012.

Inriver run and escapement generated from mark-recapture studies, inriver and marine harvest as reported in ADF&G fisheries data series reports Total run from jointly accepted US and Canadian harvest estimates. Terminal run includes only harvest in the Stikine River and District 108. Andrews Creek is expanded counts starting in 1985.

	Inriver	Inriver		Marine	Terminal	% to	Little Tahltan		Tahltan	Beatty	Andrew	Andrew
Year	Run	harvest	Escapement	harvest	Run	Little Tahltan	Weir	Aerial	Aerial	Aerial	Creek	Comments
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 time due to weathe			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
2011	17,652	3,170	14,482	2,145	19,797	0.073	1,058				936	Foot
2012	27,542	5,215	22,327	2,370	29,912	0.032	720				587	Heli
Averages												
96-11	35,677	5,936	29,741			0.174	5,336				1,148	
02-11	35,881	7,330	28,551	9,004	44,885	0.147	4,905				1,545	

Appendix B. 8. General stock proportions and harvest of sockeye salmon in the Alaskan commercial gillnet fishery; District 106 & 108, 1982–2012.

	D106		D106-41/42		D106-30		D108	
Year	Other	Total Stikine	Other	Total Stikine	Other	Total Stikine	Other	Total Stikine
1982	0.806	0.194						
1983	0.884	0.116						
1984	0.926	0.074						
1985	0.898	0.102	0.881	0.119	0.930	0.070	0.064	0.936
1986	0.982	0.018	0.970	0.030	0.998	0.002	0.223	0.777
1987	0.983	0.017	0.982	0.018	0.984	0.016	0.125	0.875
1988	0.980	0.020	0.980	0.020	0.979	0.021	0.251	0.749
1989	0.968	0.032	0.956	0.044	0.984	0.016	0.171	0.829
1990	0.979	0.021	0.974	0.026	0.985	0.015	0.523	0.477
1991	0.876	0.124	0.837	0.163	0.940	0.060	0.291	0.709
1992	0.828	0.172	0.823	0.177	0.841	0.159	0.214	0.786
1993	0.738	0.262	0.696	0.304	0.808	0.192	0.345	0.655
1994	0.833	0.167	0.802	0.198	0.925	0.075	0.534	0.466
1995	0.876	0.124	0.851	0.149	0.921	0.079	0.339	0.661
1996	0.799	0.201	0.724	0.276	0.990	0.010	0.184	0.816
1997	0.847	0.153	0.807	0.193	0.944	0.056	0.188	0.812
1998	0.905	0.095	0.887	0.113	0.947	0.053	0.223	0.777
1999	0.763	0.237	0.719	0.281	0.867	0.133	0.180	0.820
2000	0.876	0.124	0.833	0.167	0.954	0.046	0.331	0.669
2001	0.857	0.143	0.829	0.171	0.901	0.099	0.874	0.126
2002	0.856	0.144	0.831	0.169	0.915	0.085	0.995	0.005
2003	0.838	0.162	0.796	0.204	0.971	0.029	0.345	0.655
2004	0.721	0.279	0.641	0.359	0.948	0.053	0.131	0.869
2005	0.791	0.209	0.744	0.256	0.939	0.061	0.306	0.694
2006	0.726	0.274	0.602	0.398	0.941	0.059	0.197	0.803
2007	0.591	0.409	0.493	0.507	0.943	0.057	0.312	0.688
2008	0.445	0.555	0.328	0.672	0.691	0.309	0.199	0.801
2009	0.618	0.382	0.540	0.460	0.832	0.168	0.183	0.817
2010	0.877	0.123	0.792	0.208	0.970	0.030	0.233	0.767
2011	0.790	0.211	0.691	0.309	0.956	0.044	0.197	0.803
2012	0.809	0.191	0.728	0.272	0.961	0.039	0.150	0.850
Averages								
83-11	0.829	0.171	0.778	0.222	0.926	0.074	0.302	0.698
02-11	0.725	0.275	0.646	0.354	0.911	0.089	0.310	0.690
1982	156,130	37,671						
1983	43,192	5,650						
1984	84,902	6,751						
1985	237,929	27,058	151,525	20,563	86,404	6,495	68	992
1986	143,022	2,687	82,676	2,571	60,346	116	933	3,252
1987	134,083	2,344	77,752	1,413	56,331	931	203	1,418
1988	90,652	1,877	56,202	1,135	34,450	742	313	933
1989	186,562	6,172	103,099	4,787	83,463	1,385	1,725	8,358
1990	181,904	3,901	102,210	2,712	79,694	1,189	6,055	5,519
1991	126,240	17,864	74,767	14,588	51,473	3,277	5,233	12,754
1992	168,184	34,971	120,641	25,967	47,543	9,004	11,300	41,417
1993	151,918	54,037	90,421	39,438	61,497	14,599	26,500	50,374
1994	175,801	35,247	126,312	31,214	49,489	4,033	51,965	45,259
1995	181,619	25,679	113,848	19,865	67,771	5,814	26,015	50,741
1996	248,492	62,608	162,016	61,768	86,476	840	28,373	125,777
1997	142,766	25,752	95,719	22,956	47,047	2,796	17,533	75,506
1998	102,701	10,734	70,140	8,912	32,561	1,822	4,917	17,114
1999	80,026	24,809	52,717	20,608	27,313	4,197	6,578	30,023
2000	78,931	11,145	48,202	9,661	30,729	1,484	5,245	10,588
2001	140,590	23,423	82,215	17,004	58,375	6,419	533	77
2002	48,060	8,075	32,415	6,615	15,645	1,460	207	1
2003	97,984	18,920	70,483	18,112	27,501	808	14,526	27,632
2004	83,793	32,467	55,055	30,874	28,738	1,593	13,511	89,882
2005	87,144	23,048	62,221	21,426	24,923	1,622	30,403	69,062
2006	66,791	25,189	35,144	23,215	31,647	1,975	12,061	49,237
2007	54,625	37,855	35,691	36,720	18,934	1,136	22,027	48,554
2008	13,590	16,943	6,766	13,886	6,824	3,057	7,108	28,571
2009	69,179	42,805	44,431	37,795	24,749	5,009	6,712	29,968
2010	98,563	13,887	46,831	12,274	51,732	1,613	7,631	25,106
2011	115,324	30,765	63,576	28,380	51,748	2,385	10,127	41,351
2012	36,761	8,705	21,665	8,090	15,096	615	3,301	18,693
Averages								
83-12	117,015	21,904	74,455	19,377	44,946	3,086	11,468	32,434
03-12	72,375	25,058	44,186	23,077	28,189	1,981	12,741	42,806

Appendix B. 9. Stikine stock proportions and harvest of sockeye salmon in the Alaskan commercial gillnet fishery; Districts 106 & 108, 1982–2012.

	D106			D106-41/42			D106-30			D108		
Year	AllTahltan	Tuya	Mainstem	AllTahltan	Tuya	Mainstem	AllTahltan	Tuya	Mainstem	AllTahltan	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
2011	0.094	0.066	0.050	0.146	0.098	0.065	0.005	0.013	0.025	0.445	0.142	0.216
2012	0.046	0.073	0.072	0.070	0.111	0.091	0.002	0.003	0.034	0.171	0.204	0.475
Averages												
83-11	0.093	0.067	0.038	0.124	0.090	0.042	0.027	0.020	0.034	0.311	0.129	0.306
02-11	0.158	0.073	0.044	0.208	0.098	0.048	0.033	0.019	0.038	0.380	0.114	0.196
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	7,371	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
2011	13,750	9,693	7,323	13,454	8,972	5,954	296	721	1,368	22,916	7,307	11,127
2012	2,108	3,338	3,259	2,079	3,292	2,718	29	46	541	3,760	4,492	10,443
Averages												
83-11	12,654	6,843	5,151	12,112	6,177	3,793	1,194	665	1,565	18,847	6,109	10,250
02-11	15,539	5,813	3,643	14,900	5,310	2,721	640	503	923	24,413	5,158	11,365

Appendix B. 10. Tahltan sockeye salmon stock proportions and harvest of in the Alaskan commercial gillnet fishery; Districts 106 & 108, 1994–2012.

	D106			D106-41/42			D106-30			D108		
Year	AllTahltan	EnhanceTahltan	WildTahltan	AllTahltan	EnhanceTahltan	WildTahltan	AllTahltan	EnhanceTahltan	WildTahltan	AllTahltan	EnhanceTahltan	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
2011	0.094	0.051	0.043	0.146	0.079	0.067	0.005	0.003	0.003	0.445	0.191	0.254
2012	0.046	0.019	0.028	0.070	0.028	0.042	0.002	0.002	0.000	0.171	0.062	0.109
Averages												
94-11	0.120	0.049	0.071	0.156	0.067	0.089	0.030	0.006	0.024	0.352	0.136	0.216
02-11	0.158	0.076	0.082	0.208	0.104	0.104	0.033	0.006	0.027	0.380	0.185	0.196
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
2011	13,750	7,449	6,301	13,454	7,300	6,155	296	150	146	22,916	9,834	13,083
2012	2,108	852	1,256	2,079	824	1,255	29	28	1	3,760	1,372	2,388
Averages												
94-11	15,510	5,579	9,931	14,457	5,340	9,117	1,052	239	814	25,845	9,739	16,106
02-11	15,539	7,428	8,111	14,900	7,264	7,636	640	164	476	24,413	12,244	12,170

Appendix B. 11. Stikine River sockeye salmon harvest in the U.S. Subsistence fishery, 2004–2012.

Stocks were proportioned based on using inriver stock comps									
	Stikine								
Year	All Tahltan	Tuya	Mainstem	Total	All Tahltan	Tuya	Mainstem	EnhanceTahltan	WildTahltan
2004	0.664	0.026	0.311	243	161	6	75	65	96
2005	0.662	0.020	0.318	252	167	5	80	77	90
2006	0.672	0.144	0.185	390	262	56	72	146	116
2007	0.541	0.165	0.294	244	132	40	72	67	65
2008	0.385	0.326	0.289	428	165	139	124	80	85
2009	0.541	0.244	0.215	723	391	176	156	101	290
2010	0.417	0.289	0.294	1,653	689	479	485	184	505
2011	0.467	0.205	0.328	1,741	814	356	571	309	505
2012	0.246	0.262	0.492	1,302	320	341	641	113	207

Appendix B. 12. Stock proportions of sockeye salmon in the Alaskan District 106 and 108 test fisheries, 1984–2012.

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

			Stikine					
Year	Alaska	Canada	All Tahltan	Tuya	Mainstem	Total	EnhanceTahltan	WildTahltan
Subdistrict 106-41 (Sumner Strait) Proportions								
1984	0.658	0.269	0.029		0.044	0.074		
1985	0.480	0.401	0.109		0.010	0.119		
1986	0.834	0.149	0.008		0.009	0.017		
1987	0.816	0.166	0.015		0.003	0.018		
1988	0.868	0.098	0.034		0.000	0.034		
1989	0.624	0.304	0.017		0.056	0.072		
1990	0.548	0.416	0.014		0.022	0.035		

1994	0.500	0.250	0.250		0.000	0.250	0.083	0.167
Subdistrict 106-41 (Sumner 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		
Subdistrict 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, 1972–2012.

All Tuya Area fish considered to be Tuya fish.

	Commercial/FN				Test					Tahltan Area		Tuya Area	
Year	LRCF	URCF	Telegraph Aboriginal	Total Canadian treaty harvest	Drift Net	Set Net	Additional Drifts	Tuya 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	0
2004	77,530	626	6,862	85,018	420	918	0		1,338		420	1,675	0
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		280
2009	39,409	2,476	5,148	47,033	250	1,092	0	2,144	3,486		349		214
2010	42,049	1,215	7,276	50,540	304	1,450	3	2,792	4,549		158		224
2011	47,575	972	6,893	55,440	590	2,525	21	2,878	6,014		340		153
2012	25,939	468	4,000	30,407	638	1,139	19	2,306	4,102		224		189
Averages													
85-11	37,212	992	5,147	43,352	416	1,347			2,389				
02-11	53,001	877	5,629	59,507	462	1,518	34	2,442	2,991		317		136

[a] 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, 1979–2012.

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 1989-2012. stock comp comes from sampling at this terminal fishing site

	LRCF			URCF			Telegraph Aboriginal			LRTF			Tuya Assessment		
Year	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						
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
2011	0.495	0.212	0.293	0.678	0.288	0.034	0.670	0.284	0.046	0.268	0.154	0.578	0.343	0.568	0.089
2012	0.274	0.250	0.476	0.460	0.529	0.011	0.475	0.491	0.033	0.242	0.315	0.443	0.091	0.883	0.026
Averages															
79-11	0.471		0.419	0.761	0.153	0.086	0.767	0.145	0.089						
02-11	0.562	0.190	0.248	0.704	0.218	0.078	0.697	0.217	0.086	0.360	0.129	0.512			

-continued-

Appendix B. 14. Continued.

	LRCF			URCF			Telegraph Aboriginal			LRTF			Tuya Assessment		
Year	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
2011	23,530	10,106	13,939	659	280	33	4,620	1,957	316	841	482	1,813	988	1,634	257
2012	7,102	6,485	12,352	215	248	5	1,901	1,966	133	434	566	796	210	2,036	60
Averages															
79-11	18,301		11,146	708		77	3,700		401						
02-11	32,870	8,643	11,488	602	215	60	3,898	1,340	390	759	249	1,006			

Appendix B. 15. Tahltan sockeye salmon stock proportions and harvest by stock in the Canadian commercial and assessment fishery in the Stikine River, 1979–2012.

Stock compositions based on: scale circuli counts 1970-1983; SPA in 1985; average of SPA and GPA 1986; stock comp comes from direct sampling of respective fisheries

	LRCF			URCF			Telegraph Aboriginal			LRTF			Tuya Assessment		
Year	AllTahltan	EnhanceTahltan	WildTahltan	AllTahltan	EnhanceTahltan	WildTahltan	AllTahltan	EnhanceTahltan	WildTahltan	AllTahltan	EnhanceTahltan	WildTahltan	AllTahltan	EnhanceTahltan	WildTahltan
1994	0.616	0.000	0.616	0.900	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
2011	0.495	0.188	0.307	0.678	0.240	0.438	0.670	0.223	0.447	0.268	0.115	0.153	0.343	0.127	0.216
2012	0.274	0.096	0.177	0.460	0.152	0.308	0.475	0.173	0.302	0.242	0.115	0.127	0.091	0.037	0.054
Averages															
02-11	0.562	0.227	0.335	0.704	0.232	0.472	0.697	0.224	0.473	0.375	0.136	0.239			
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	65	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
2011	23,530	8,924	14,606	659	234	425	4,620	1,540	3,080	841	361	480	988	365	622
2012	7,102	2,498	4,604	215	71	144	1,901	692	1,209	434	206	228	210	86	124
Averages															
02-11	32,870	14,270	18,600	603	191	412	3,898	1,268	2,630	759	247	511			

Appendix B. 16. Tahltan Lake weir data with enhanced and wild Tahltan fish, 1979–2012.

	Weir count			Actual escapement			Broodstock taken			Sockeye otolith samples			Total spawners		
Year	Total Count	EnhanceTahltan	WildTahltan	TotalEscapement	EnhanceTahltan	WildTahltan	Total	EnhanceTahltan	WildTahltan	Total	EnhanceTahltan	WildTahltan	Total	EnhanceTahltan	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	3,378	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				33,759	3,936	29,823
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	12,528	17,340	5,097	12,243	3,051	1,298	1,753	400	115	285	14,289	3,799	10,490
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
2011	34,588	12,123	22,465	34,248	12,017	22,231	4,559	1,769	2,790	340	106	234	29,689	10,248	19,441
2012	13,687	5,851	7,836	13,463	5,764	7,699	3,949	1,836	2,113	224	87	137	9,514	3,928	5,586
.verages															
02-11	35,206	14,527	20,678	34,889	14,406	20,483	3,532	1,414	2,119	317	121	196	31,357	12,993	18,364

Appendix B. 17. Sockeye salmon harvest by stock in the Stikine River under Canadian ESSR licenses, 1992–2012.

	Tahltan Area ESSR License			Tuya Area ESSR		
Year	All Tahltan	Enhance Tahltan	Wild Tahltan	Tuya	Total	otolith samples
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					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
2011						153
2012						189

Appendix B. 18. Estimated proportion of inriver run comprised of Tahltan, Tuya, and mainstem sockeye salmon, 1979–2012.

In 1979-1988, there were US estimates and 1983-1988, they overlapped with estimates from Canada and the All tahltan estimate was oftened averaged. The estimates are from the LRCF, test, or average of LRCF 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
2011	0.467	0.205	0.328	LRCF
2012	0.246	0.262	0.492	average
Averages				
79-11	0.447		0.452	
02-11	0.513	0.172	0.315	

Appendix B. 19. Aerial survey counts of Mainstem sockeye salmon stocks in the Stikine River drainage, 1984–2012.

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	179	8	387
1992	164	1,242	90	50	17	138	163	22	1,886
1993	57	321	141	28	2	79	107	142	877
1994	267	292	66			62	147	114	948
1995	13	260	11			72	47	31	434
1996	134	351	149			27	54	338	1,053
1997	204	271	25			12	116	32	660
1998	230	246	89			9	183	135	892
1999	56	301	64			54	98	78	651
2000	47	86	86			32	0	90	341
2001	601	2,037	268			163	217	232	3,518
2002	239	216	95			13	353	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
2011				No Surveys Conducted					0
2012	0	0	15			aborted	aborted	aborted	15
Averages									
84-11	151	346	84			35	166	95	842
02-11	145	152	90			4	131	81	542

Appendix B. 20. Stikine River sockeye salmon run size, 1979–2012.

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

	Stikine River					All Tahltan				
Year	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	8,340	17,340	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
2011	139,541	61,947	77,594	73,857	213,399	65,226	30,978	34,248	37,480	102,706
2012	95,840	34,922	60,918	28,700	124,540	23,550	10,087	13,463	6,188	29,738
Averages										
79-11	110,260	42,582	67,679	49,918	160,179	52,893	24,118	28,775	28,490	81,383
02-11	136,849	63,852	72,997	66,499	203,348	73,655	38,766	34,889	40,231	113,885

-continued-

Appendix B. 20. Continued.

	Stikine Mainstem					Tuya				
Year	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	20,092	33,889	16,165	13,877	2,288	15,224	31,389
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	8,342	27,154	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
2011	45,750	16,357	29,393	19,021	64,771	28,565	14,612	13,953	17,356	45,921
2012	47,158	13,347	33,812	14,340	61,498	25,132	11,489	13,643	8,172	33,304
Averages										
79-11	46,607	12,039	34,567	14,579	61,186					
02-11	42,313	13,047	29,266	15,160	57,473	20,881	12,039	8,842	11,109	31,990

Appendix B. 21. Coho salmon harvest in the Alaskan District 106 and 108 test fisheries, 1984–2012.

Table only includes years when test fisheries were operated.

Year	106-41/42	106-30	Total D106	D108
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, 1979–2012.

			Telegraph	Canada total	Test				All
Year	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[b]	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[c]			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
2011	5,821	0	0	5,821	280	130	0	410	6,231
2012	6,188	0	0	6,188	393	43	0	436	6,624
Averages									
85-11	2,222	0	2	2,224	205	293	148	546	2,770
02-11	2,044	0	1	2,045	326	328	200	854	2,899

Appendix B. 23. Index counts of Stikine coho salmon escapements, 1984–2012.

Missing data due to poor survey conditions.

Year	Date	Katete West	Katete	Craig	Verrett	Bronson Slough	Scud Slough	Porcupine	Christina	Total
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[a]	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[b]	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
2011	11/04	182	689	459	309		437	468		2,542
2012	11/05c	aborted	aborted	aborted	aborted		3	336		
Average										
84-11		213	733	904	451		434	570		3,172
02-11		254	869	855	564		300	653		3,370

[a] Veiwing conditions at the Craig River site were poor in 2004 and 2010.

[b] West Katete and Katete not survey due to inclement weather

[c] aborted to due ice condtions and inclement weather

Appendix B. 24. Effort in the Canadian fisheries, including assessment fisheries in the Stikine River, 1979–2012.

	LRCF		URCF		Test Fisheries			
					standard test fisheries		Chinook assessment	
Year	Days	Permit Days	Days	Permit Days	# 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	37.3	349	12.0	15.0	860	468	8	94
2011	44.7	641	9.0	12.0	882	335	3	57
2012	36.6	19.6	6.0	12.0	936	239	1	18
Averages								
85-11	45	407	16	24	625	1,143		
02-11	50	534	14	15	730	707		

Appendix B. 25. Counts of adult sockeye salmon migrating through Tahltan Lake weir, 1959–2012.

	Weir	Date of Arrival			Weir	Total	Total		Samples	Otolith	Spawners		
Year	Installed	First	50%	90%	Pulled	Count	escapement	Broodstock	or ESSR	Samples	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						
1963	3-Aug					1,780	1,780						
1964	23-Jul	26-Jul	14-Aug	25-Aug		18,353	18,353						
1965	19-Jul	18-Jul	2-Sep	7-Sep		1,471	1,471						
1966	12-Jul	3-Aug	13-Aug	21-Aug		21,580	21,580						
1967	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
2011	09-Jul	13-Jul	18-Jul	07-Aug	31-Aug	34,588	34,248	4,559		340	29,689	10,248	19,441
2012	09-Jul	16-Jul	24-Jul	08-Aug	30-Aug	13,687	13,463	3,949		224	9,514	3,928	5,586
Averages													
59-11	09-Jul	18-Jul	29-Jul	11-Aug	06-Sep	25,130	24,404						
02-11	08-Jul	13-Jul	27-Jul	12-Aug	13-Sep	35,206	34,889	3,532		317	31,045	18,052	12,993

Appendix B. 26. Estimates of sockeye salmon smolt migrating through Tahltan Lake smolt weir, 1984–2012.

	Weir	Date of Arrival			Total	Total	Date and	Smolt	
Year	Installed	First	50%	90%	Count	Estimate	Expansion	Wild	Enhanced
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[a]	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[b]		15-May	29-May	05-Jun	595,147	610,407	6/14 97.5%		
1991[c]	05-May	14-May	21-May	30-May	1,439,676	1,487,265	6/13 96.8%	1,220,397	266,868
1992[d]	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		484,929	261,116
2010	06-May	10-May	23-May	07-Jun		557,532		306,344	251,188
2011	07-May	17-May	26-May	01-Jun		1,632,119		960,531	671,588
2012	10-May	13-May	25-May	02-Jun		639,473		324,876	314,597
Averages									
84-11	06-May	11-May	23-May	03-Jun		1,184,349			
02-11	06-May	12-May	23-May	01-Jun		1,538,365		883,147	655,219

[a] Estimate includes approximately 30,000 mortalities from overcrowding on May 22, 1987.

[b] Estimate of 595,147 on June 14 expanded by average % of outmigration by date (97.5%) from historical data.

[c] Estimate of 1,439,673 on June 13 expanded by average % of outmigration by date (96.8%) from historical data.

[d] 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, 1985–2012.

Year	Weir Installed	Date of Arrival First	50%	90%	Total Count	Broodstock and Other	Natural Spawners
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
2011	19-Jun	22-Jun	23-Jul	2-Aug	1,753	0	1,753
2012	27-Jun	7-Jul	26-Jul	5-Aug	720	0	720
Averages							
85-11	21-Jun	26-Jun	20-Jul	01-Aug	5,389		5,385
02-11	20-Jun	26-Jun	22-Jul	02-Aug	4,989	-1	4,988
nonlarge Chinook							
1985	03-Jul	04-Jul	31-Jul	10-Aug	316		316
1986	28-Jun	03-Jul	25-Jul	06-Aug	572		572
1987	28-Jun	03-Jul	26-Jul	06-Aug	365		365
1988	26-Jun	27-Jun	17-Jul	02-Aug	327		327
1989	25-Jun	26-Jun	23-Jul	02-Aug	199		199
1990	22-Jun	05-Jul	22-Jul	30-Jul	417		417
1991	23-Jun	03-Jul	24-Jul	07-Aug	313		313
1992	24-Jun	12-Jul	22-Jul	30-Jul	131		131
1993	20-Jun	30-Jun	14-Jul	01-Aug	60		60
1994	18-Jun	02-Jul	22-Jul	05-Aug	121		121
1995	17-Jun	22-Jun	28-Jul	10-Aug	135		135
1996	17-Jun	12-Jul	25-Jul	05-Aug	22		22
1997	14-Jun	26-Jun	21-Jul	1-Aug	54		54
1998	13-Jun	26-Jun	20-Jul	7-Aug	37		37
1999	18-Jun	1-Jul	23-Jul	6-Aug	202		202
2000	19-Jun	23-Jun	20-Jul	5-Aug	108		108
2001	20-Jun	23-Jun	27-Jul	3-Aug	269		269
2002	20-Jun	26-Jun	21-Jul	7-Aug	618		618
2003	20-Jun	30-Jun	21-Jul	5-Aug	334		334
2004	18-Jun	21-Jun	19-Jul	31-Jul	250		250
2005	19-Jun	29-Jun	23-Jul	4-Aug	231		231
2006	20-Jun	7-Jul	23-Jul	5-Aug	93		93
2007	04-Jul	15-Jul	29-Jul	1-Aug	12		12
2008	19-Jun	14-Jul	25-Jul	29-Jul	139		139
2009	19-Jun	9-Jul	19-Jul	4-Aug	99		99
2010	19-Jun	7-Jul	26-Jul	4-Aug	221		221
2011	27-Jun	7-Jul	26-Jul	4-Aug	194		194
2012	27-Jun	11-Jul	18-Jul	27-Jul	51		51
Averages							
85-11	21-Jun	01-Jul	23-Jul	03-Aug	216		216
02-11	21-Jun	04-Jul	23-Jul	03-Aug	219		212

Appendix B. 28. Historical pink and chum salmon harvest in the Canadian fisheries, 1979–2012.

	LRCF		URCF		Aboriginal		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
2011	3	99	0	0	0	0	3	99
2012	0	363	0	0	0	0	0	363

Appendix C. 1. Weekly Chinook salmon harvest in the U.S. fisheries in D111, 2012.

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

	PU	D111sport			D111 gillnet				D111 troll			U.S. large	D111 Seine
SW	LargeTaku	Largetotal	Largehatchery	Large Taku	Nonlarge	Large total	Large hatchery	Large Taku	Largetotal	Largehatchery	LargeTaku	Taku	non-Taku
18		72	40	32				0				32	
19		73	0	73	4	54	8	46	4	0	4	123	
20		82	0	82	12	109	41	68	4	0	4	154	
21		171	0	171				0				171	
22		213	61	152				0				152	
23		138	0	138				0				138	
24		95	0	95				0				95	
25		65	15	50	135	241	38	203				253	
26		150	51	99	70	98	37	61				160	5
27	20	180	114	66	88	165	24	141				227	25
28	3	120	168	0	0	95		95	30			98	28
Total	23	1,359	449	958	309	762	148	614	38	0	8	1,603	58

Appendix C. 2. Weekly Chinook salmon abundance estimates of above border run and harvest in the Canadian fisheries in the Taku River 2012.

	Above	Commercial		Test fishery		Aboriginal			Total large	Above Border
SW	Border Run	Large	nonlarge	Large	nonlarge	Large	nonlarge	Rec	Harvest	Escapement
18		187	15			3	0		190	
19	2,496	494	39			2	0		496	
20	4,755	483	57			2	0		485	
21	5,587			239	29	12	1		251	
22	6,466			239	37	15	2		254	
23	7,503			240	27	15	2		255	
24	8,763			145	21	3	0		148	
25	10,181	254	108			0	0		254	
26	10,923	232	115			5	3		237	
27	12,136	235	112			1	0		236	
28	12,292	32	23			1	0		33	
29	12,292	9	6			8	6		17	
30	12,292	3	3						3	
31		0	0						0	
32		0	1						0	
33		1							1	
Postseason estimate										
	22,503	1,930	479	863	114	67	14	105	2,965	19,538

Appendix C. 3. Weekly sockeye salmon harvest of Alaskan D111 traditional and terminal common property commercial drift gillnet fishery, 2012.

		Traditional StatArea specific harvests				Terminal
SW	D11 Total	111-32	111-31/90	111-20	111-34	111-(33-35)
25	1,222	1,217	5			
26	1,442	1,417	25			
27	3,257	3,078	179			
28	5,063	4,362	701			
29	19,631	14,567	5,064			
30	32,799	20,188	12,611			
31	17,074	10,819	4,769	1,486		
32	31,837	6,081	24,973	783		
33	10,689	4,764	4,706	1,219		
34	16,777	896	369	64	729	14,719
35	972	326	26			620
36	126	108	18			
37	5	5				
38	4	4				
39	0	0				
40	0	0				
41	0					
Total	140,898	67,832	53,446	3,552	729	15,339

Appendix C. 4. Weekly stock proportions of sockeye salmon harvested in the Alaskan District 111 traditional commercial drift gillnet fishery, 2012.

Stock composition estimates are based on GSI. Does not inlcude Port Snettisham harvests.

			Taku harvest proportions									
	Taku Lakes		Tatsamenie		Little Trapper	Taku	Total		U.S.	Stikine	Total	Total
SW	Other	Mainstem	Wild	Enhanced	Enhanced	Wild	Taku	other	Enhanced	Enhanced	Enhanced	wild
25	*0.387*	*0.551*		*0.000*	*0.010*	0.938	0.948	*0.042*	*0.000*	*0.010*	0.021	0.979
26	*0.411*	*0.309*		*0.000*	*0.000*	0.720	0.720	*0.219*	*0.000*	*0.060*	0.061	0.939
27	0.697	0.212		0.004	0.042	0.909	0.955	0.026	0.004	0.015	0.065	0.935
28	0.427	0.401		0.024	0.053	0.829	0.905	0.021	0.063	0.011	0.150	0.850
29	0.236	0.398		0.041	0.006	0.634	0.681	0.085	0.234	0.000	0.281	0.719
30	0.050	0.272		0.026	0.002	0.321	0.349	0.088	0.563	0.000	0.591	0.409
31	0.079	0.310		0.040	0.000	0.389	0.429	0.139	0.432	0.000	0.472	0.528
32	0.036	0.049		0.015	0.000	0.085	0.100	0.079	0.821	0.000	0.836	0.164
33	0.076	0.222		0.040	0.000	0.298	0.338	0.097	0.565	0.000	0.605	0.395
34	**0.076**	**0.222**		**0.040**	**0.000**	0.298	0.338	**0.097**	**0.565**	**0.000**	0.605	0.395
35	**0.076**	**0.222**		**0.040**	**0.000**	0.298	0.338	**0.097**	**0.565**	**0.000**	0.605	0.395
36	**0.076**	**0.222**		**0.040**	**0.000**	0.298	0.338	**0.097**	**0.565**	**0.000**	0.605	0.395
37	**0.076**	**0.222**		**0.040**	**0.000**	0.298	0.338	**0.097**	**0.565**	**0.000**	0.605	0.395
38	**0.076**	**0.222**		**0.040**	**0.000**	0.298	0.338	**0.097**	**0.565**	**0.000**	0.605	0.395
39	**0.076**	**0.222**		**0.040**	**0.000**	0.298	0.338	**0.097**	**0.565**	**0.000**	0.605	0.395
40	**0.076**	**0.222**		**0.040**	**0.000**	0.298	0.338	**0.097**	**0.565**	**0.000**	0.605	0.395
41	**0.076**	**0.222**		**0.040**	**0.000**	0.298	0.338	**0.097**	**0.565**	**0.000**	0.605	0.395
Total	0.122	0.242	0.000	0.028	0.005	0.364	0.396	0.090	0.512	0.002	0.546	0.454
25	473	673	0	0	12	1,146	1,158	51	0	13	25	1,197
26	593	446	0	0	0	1,038	1,039	316	0	87	87	1,355
27	2,270	689	0	13	137	2,959	3,109	85	13	50	213	3,044
28	2,163	2,032	0	120	266	4,195	4,582	108	320	54	760	4,303
29	4,628	7,818	0	803	115	12,446	13,365	1,671	4,594	1	5,514	14,117
30	1,627	8,907	0	868	53	10,534	11,455	2,878	18,464	1	19,387	13,412
31	1,357	5,288	0	675	0	6,645	7,321	2,374	7,379	1	8,055	9,019
32	1,156	1,564	0	470	1	2,719	3,190	2,515	26,131	1	26,603	5,234
33	815	2,370	0	430	0	3,185	3,615	1,036	6,037	1	6,468	4,221
34	101	295	0	53	0	396	449	129	751	0	804	525
35	27	78	0	14	0	105	119	34	199	0	213	139
36	10	28	0	5	0	38	43	12	71	0	76	50
37	0	1	0	0	0	1	2	0	3	0	3	2
38	0	1	0	0	0	1	1	0	2	0	2	2
39	0	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0	0
Total	15,221	30,189	0	3,453	587	45,410	49,449	11,210	63,963	208	68,210	56,620

Appendix C. 5. Weekly sockeye salmon abundance estimates of above border run and harvest in the Canadian fisheries in the Taku River, 2012.

Based on postseason mark-recapture estimate apportioned by fishwheel CPUE.

	Above Border	Commercial		Assesment/		Above Border
SW	Run	All	Taku	Test	Aboriginal	Escapement
22	341			0		
23	202			0		
24	3,152			3		
25	2,297	373	365	3		
26	6,462	608	586		6	
27	12,501	1,672	1,646		3	
28	12,456	2,079	2,057		2	
29	20,076	2,571	2,558		6	
30	34,439	7,012	7,012		7	
31	25,562	4,633	4,609		24	
32	16,268	5,427	5,427		12	
33	11,494	3,419	3,419		9	
34	8,753	1,526	1,526		11	
35	2,127	547	547		34	
36	678	187	187		13	
37	67	2	2		13	
38					6	
Postseason	155,590	30,056	29,939	6	169	125,476
expansion	156,877	30,056	29,939	6	169	126,762

Appendix C. 6. Estimates of wild and enhanced sockeye salmon stock harvested in the Canadian commercial fishery in the Taku River by week, 2012.

Enhanced estimates based on harvest expanations of thermally marked fish.

	Little Trapper	Tats	Stikine	US	Taku	Little Trapper	Tats	Stikine	US	Taku
SW	Enhanced	Enhanced	Enhanced	Enhanced	Wild	Enhanced	Enhanced	Enhanced	Enhanced	Wild
25	0.000	0.000	0.022	0.000	0.978	0	0	8	0	365
26	0.005	0.000	0.036	0.000	0.958	3	0	22	0	583
27	0.005	0.000	0.016	0.000	0.979	9	0	26	0	1,637
28	0.037	0.011	0.011	0.000	0.941	77	22	22	0	1,957
29	0.021	0.016	0.005	0.000	0.958	54	40	13	0	2,463
30	0.011	0.053	0.000	0.000	0.937	74	369	0	0	6,569
31	0.005	0.137	0.005	0.000	0.853	24	634	24	0	3,950
32	0.000	0.199	0.000	0.000	0.801	0	1,080	0	0	4,347
33	0.000	0.112	0.000	0.000	0.888	0	384	0	0	3,035
34	0.000	0.205	0.000	0.000	0.795	0	313	0	0	1,213
35	0.015	0.045	0.000	0.000	0.939	8	25	0	0	514
36	0.015	0.045	0.000	0.000	0.939	3	9	0	0	176
37	0.015	0.045	0.000	0.000	0.939	0	0	0	0	2
Total	0.008	0.096	0.004	0.000	0.892	253	2,876	117	0	26,811

Appendix C. 7. Weekly coho salmon harvest in the traditional Alaskan District 111 and subdistrict 111-32 (Taku Inlet), commercial drift gillnet fishery, 2012.

Tradiontal fishery only; not include terminal common property harvest.				
	D111			111-32
SW	Total	Hatchery	Wild	
25	0	0	0	0
26	3	0	3	3
27	118	0	118	111
28	56	0	56	36
29	345	0	345	284
30	256	0	256	136
31	1,150	0	1,150	438
32	1,343	0	1,343	734
33	6,133	0	6,133	3,252
34	2,095	0	2,095	1,768
35	3,306	194	3,112	3,190
36	5,082	63	5,019	4,652
37	1,493	0	1,493	1,493
38	1,395	299	1,096	1,395
39	704	0	704	704
40	187	0	187	187
41				
Total	23,666	556	23,110	18,383

Appendix C. 8. Weekly coho salmon abundance estimates of above border run and harvest in the Canadian fisheries in the Taku River, 2012.

	Above border	Harvest				Above border
SW	Run	Commercial	Aboriginal	Recreational	Test	Escapement
18						
19						
20						
21						
22						
23						
24						
25						
26						
27		3				
28		47				
29		124				
30		318				
31		304				
32		631	4			
33		1,456	10			
34	19,932	3,261	181			
35		2,725	68			
36	41,609	2,612	7		654	
37		64	11		646	
38	61,797	3	43		500	
39					400	
40						
Before SW34		2,883				
SW34 to end		8,665				
Postseason Estimat	61,797	11,548	324	0	2,200	47,725
Expanded estimate	85,033	11,548	324		2,200	70,961

Appendix C. 9. Weekly effort in the Alaskan traditional District 111 and subdistrict 111–32 (Taku Inlet), commercial drift gillnet fishery, 2012.

Traditional fishery only; not include common property.

		D111			D111-32		
SW	Start Date	Boats	Days Open	Boat Days	Boats	Days Open	Boat Days
19	6-May	12	0.5	6	12	0.5	6
20	13-May	20	0.5	10	20	0.5	10
21	20-May						
22	27-May						
23	3-Jun						
24	10-Jun						
25	17-Jun	32	2	64	31	2	62
26	24-Jun	29	2.0	58	29	2	58
27	1-Jul	61	2.0	122	53	2	106
28	8-Jul	82	2.0	164	77	2	154
29	15-Jul	130	2.0	260	98	2	196
30	22-Jul	126	3.0	378	75	2	150
31	29-Jul	117	3.0	351	72	3	216
32	5-Aug	98	3.0	294	45	3	135
33	12-Aug	102	3.0	306	43	3	129
34	19-Aug	54	2.0	108	34	2	68
35	26-Aug	35	3.0	105	33	3	99
36	2-Sep	32	3.0	96	30	3	90
37	9-Sep	19	3.0	57	19	3	57
38	16-Sep	15	3.0	45	15	3	45
39	23-Sep	8	3.0	24	8	3	24
40	30-Sep	5	3.0	15	5	3	15
Total			43.0	2,463		42.0	1,620

Appendix C. 10. Weekly effort in the Canadian commercial and assessment fisheries in the Taku River, 2012.

		Commercial			Test		
SW	Start Date	Average Permits	Days Fished	Permit Days	Average Permits	Days Fished	Permit Days
18	29-Apr	3.75	4.00				
19	6-May	6.50	4.00				
20	13-May	7.33	3.00				
21	20-May				7.3	1.3	9.78
22	27-May				6.7	1.2	7.78
23	3-Jun				8.0	0.3	2.67
24	10-Jun				5.0	0.5	2.71
25	17-Jun	9.00	1.00	9.00			
26	24-Jun	6.40	5.00	32.00			
27	1-Jul	8.50	2.00	17.00			
28	8-Jul	8.00	2.00	16.00			
29	15-Jul	8.67	3.00	26.01			
30	22-Jul	8.25	4.00	33.00			
31	29-Jul	7.00	4.00	28.00			
32	5-Aug	7.25	4.00	29.00			
33	12-Aug	6.75	4.00	27.00			
34	19-Aug	7.60	5.00	38.00			
35	26-Aug	7.00	6.00	42.00			
36	2-Sep	4.14	7.00	28.98			
37	9-Sep	1.33	3.00	3.99		7	
38	16-Sep	1.00	1.00			5	
39						5	
40						3	
41							
42							
43							
Total			50	330			

Appendix C. 11. Daily counts of adult sockeye salmon passing through Tatsamenie weir, 2012.

	Tatsamenie		
		Cumulative	
Date	Count	Count	Percent
13-Aug	Weir installed		
14-Aug	0	0	0.0
15-Aug	0	0	0.0
16-Aug	200	200	1.3
17-Aug	1,537	1,737	11.1
18-Aug	1,277	3,014	19.3
19-Aug	1,143	4,157	26.6
20-Aug	1,181	5,338	34.2
21-Aug	950	6,288	40.3
22-Aug	540	6,828	43.8
23-Aug	601	7,429	47.6
24-Aug	189	7,618	48.8
25-Aug	849	8,467	54.3
26-Aug	558	9,025	57.8
27-Aug	910	9,935	63.7
28-Aug	669	10,604	68.0
29-Aug	348	10,952	70.2
30-Aug	285	11,237	72.0
31-Aug	221	11,458	73.4
1-Sep	659	12,117	77.6
2-Sep	450	12,567	80.5
3-Sep	246	12,813	82.1
4-Sep	154	12,967	83.1
5-Sep	135	13,102	84.0
6-Sep	342	13,444	86.2
7-Sep	176	13,620	87.3
8-Sep	244	13,864	88.8
9-Sep	467	14,331	91.8
10-Sep	66	14,397	92.3
11-Sep	58	14,455	92.6
12-Sep	185	14,640	93.8
13-Sep	71	14,711	94.3
14-Sep	223	14,934	95.7
15-Sep	32	14,966	95.9
16-Sep	63	15,029	96.3
17-Sep	117	15,146	97.1
18-Sep	38	15,184	97.3
19-Sep	64	15,248	97.7
20-Sep	62	15,310	98.1
21-Sep	39	15,349	98.4
22-Sep	126	15,475	99.2
23-Sep	7	15,482	99.2
24-Sep	65	15,547	99.6
25-Sep	46	15,593	99.9
26-Sep	2	15,595	99.9
27-Sep	10	15,605	100.0
28-Sep	0	15,605	100.0
29-Sep	0	15,605	100.0
30-Sep	Weir removed		

	Total	Wild	TMR
Holding below weir			
Escapement to lake	15,605	9,347	6,258
Outlet spawners	<15		
otoltih samples	399	239	160
Broodstock a	-1,300	-779	-521
Spawners	14,305		

a Broodstock included 513 females and 410 males from which gametes were collected,
29 females and 39 male mortalities, and 338 females and 86 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, 2012.

		Cumulative	
Date	Count	Count	Percent
26-Jul	Weir installed July 26		
27-Jul	0	0	0.0
28-Jul	0	0	0.0
29-Jul	0	0	0.0
30-Jul	0	0	0.0
31-Jul	0	0	0.0
1-Aug	0	0	0.0
2-Aug	2	2	0.0
3-Aug	36	38	0.4
4-Aug	135	173	1.7
5-Aug	327	500	5.0
6-Aug	555	1,055	10.5
7-Aug	885	1,940	19.4
8-Aug	1,927	3,867	38.6
9-Aug	773	4,640	46.3
10-Aug	778	5,418	54.1
11-Aug	776	6,194	61.8
12-Aug	711	6,905	68.9
13-Aug	187	7,092	70.8
14-Aug	503	7,595	75.8
15-Aug	570	8,165	81.5
16-Aug	290	8,455	84.4
17-Aug	263	8,718	87.0
18-Aug	313	9,031	90.2
19-Aug	171	9,202	91.9
20-Aug	101	9,303	92.9
21-Aug	202	9,505	94.9
22-Aug	64	9,569	95.5
23-Aug	57	9,626	96.1
24-Aug	101	9,727	97.1
25-Aug	10	9,737	97.2
26-Aug	87	9,824	98.1
27-Aug	6	9,830	98.2
28-Aug	30	9,860	98.5
29-Aug	50	9,910	99.0
30-Aug	32	9,942	99.3
31-Aug	31	9,973	99.6
1-Sep	10	9,983	99.7
2-Sep	9	9,992	99.8
3-Sep	4	9,996	99.8
4-Sep	6	10,002	99.9
5-Sep	3	10,005	99.9
6-Sep	2	10,007	99.9
7-Sep	6	10,013	100.0
8-Sep	2	10,015	100.0
9-Sep	0	10,015	100.0
10-Sep	Weir removed		

	Total	Wild
Holding below weir	0	
Escapement to lake	10,015	
Outlet spawners	0	
otoltih samples	0	
Broodstock	0	
Spawners	10,015	

Appendix C. 13. Daily counts of adult sockeye salmon passing through the King Salmon Lake weir, 2012.

		Cumulative	
Date	Count	Count	Percent
7-Jul	Weir Installed		
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	1	1	0.0
14-Jul	0	1	0.0
15-Jul	0	1	0.0
16-Jul	1	2	0.0
17-Jul	0	2	0.0
18-Jul	0	2	0.0
19-Jul	0	2	0.0
20-Jul	0	2	0.0
21-Jul	0	2	0.0
22-Jul	0	2	0.0
23-Jul	113	115	2.1
24-Jul	42	157	2.9
25-Jul	145	302	5.6
26-Jul	413	715	13.2
27-Jul	366	1,081	20.0
28-Jul	380	1,461	27.0
29-Jul	0	1,461	27.0
30-Jul	0	1,461	27.0
31-Jul	0	1,461	27.0
1-Aug	473	1,934	35.7
2-Aug	192	2,126	39.3
3-Aug	166	2,292	42.3
4-Aug	281	2,573	47.5
5-Aug	581	3,154	58.3
6-Aug	249	3,403	62.9
7-Aug	212	3,615	66.8
8-Aug	194	3,809	70.4
9-Aug	145	3,954	73.0
10-Aug	0	3,954	73.0
11-Aug	0	3,954	73.0
12-Aug	0	3,954	73.0
13-Aug	375	4,329	80.0
14-Aug	577	4,906	90.6
15-Aug	176	5,082	93.9
16-Aug	38	5,120	94.6
17-Aug	91	5,211	96.3
18-Aug	67	5,278	97.5
19-Aug	10	5,288	97.7
20-Aug	23	5,311	98.1
21-Aug	11	5,322	98.3
22-Aug	8	5,330	98.5
23-Aug	13	5,343	98.7
24-Aug	22	5,365	99.1
25-Aug	10	5,375	99.3
26-Aug	38	5,413	100.0
27-Aug	Weir Removed		
Total	5,413		

16-Sept Helicopter survey was 870

Appendix C. 14. Daily counts of adult sockeye salmon passing through the Kuthai Lake weir, 2012.

		Cumulative	
Date	Count	Count	Percent
7-Jul	Weir Installed		
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	0	0	0.0
16-Jul	0	0	0.0
17-Jul	0	0	0.0
18-Jul	0	0	0.0
19-Jul	0	0	0.0
20-Jul	0	0	0.0
21-Jul	0	0	0.0
22-Jul	0	0	0.0
23-Jul	0	0	0.0
24-Jul	0	0	0.0
25-Jul	0	0	0.0
26-Jul	0	0	0.0
27-Jul	3	3	1.6
28-Jul	0	3	1.6
29-Jul	0	3	1.6
30-Jul	0	3	1.6
31-Jul	0	3	1.6
1-Aug	0	3	1.6
2-Aug	0	3	1.6
3-Aug	0	3	1.6
4-Aug	0	3	1.6
5-Aug	1	4	2.2
6-Aug	0	4	2.2
7-Aug	0	4	2.2
8-Aug	19	23	12.6
9-Aug	21	44	24.2
10-Aug	0	44	24.2
11-Aug	0	44	24.2
12-Aug	0	44	24.2
13-Aug	0	44	24.2
14-Aug	0	44	24.2
15-Aug	6	50	27.5
16-Aug	30	80	44.0
17-Aug	10	90	49.5
18-Aug	4	94	51.6
19-Aug	3	97	53.3
20-Aug	0	97	53.3
21-Aug	8	105	57.7
22-Aug	2	107	58.8
23-Aug	0	107	58.8
24-Aug	8	115	63.2
25-Aug	0	115	63.2
26-Aug	20	135	74.2
27-Aug	42	177	97.3
28-Aug	5	182	100.0
29-Aug	Weir removed		
Total count		182	
Harvest above weir		0	
Escapement		182	

16-Sept Helicopter survey was 73

Appendix C. 15. Daily counts of large Chinook salmon carcasses at the Nakina River weir, 2012.

	Count (all sizes)				Cumulative Count		Size (sex combined)		
Date	Female	Male	Unknown	Combined	Count	Percent	Large	nonlarge	unknown
2-Aug	0	1	0	1	1	0.4	0	1	0
3-Aug	0	1	0	1	2	0.9	0	1	0
4-Aug	0	1	0	1	3	1.3	0	1	0
6-Aug	0	1	0	1	4	1.7	0	1	0
8-Aug	0	1	0	1	5	2.2	0	1	0
9-Aug	0	1	0	1	6	2.6	1	0	0
12-Aug	0	2	0	2	8	3.4	0	2	0
13-Aug	0	4	0	4	12	5.2	0	3	1
14-Aug	3	12	0	15	27	11.6	8	5	2
15-Aug	2	13	0	15	42	18.1	1	12	2
16-Aug	1	16	0	17	59	25.4	6	10	1
17-Aug	3	14	0	17	76	32.8	5	12	0
18-Aug	3	16	1	20	96	41.4	4	13	3
19-Aug	3	34	0	37	133	57.3	10	26	1
20-Aug	3	23	0	26	159	68.5	8	13	5
21-Aug	2	17	0	19	178	76.7	5	13	1
22-Aug	1	13	0	14	192	82.8	1	6	7
23-Aug	0	22	0	22	214	92.2	3	11	8
24-Aug	0	14	0	14	228	98.3	1	10	3
25-Aug	0	4	0	4	232	100.0	2	2	0
Total	21	210	1	232			55	143	34

Appendix D. 1. All historic harvest and effort of salmon in the D111 gillnet fishery, 1960–2012.

These estimates include traditional and common proporty terminal harvest.							
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
2011	2,510	163,896	28,574	344,766	667,929	3,480	46
2012	1,291	140,898	24,115	193,969	566,741	2,608	43
average							
60-11	4,067	109,733	42,491	114,867	186,035	3,008	
02-11	5,486	212,312	39,328	144,739	445,472	3,473	

Appendix D. 2. Annual harvest estimates of Taku River large Chinook salmon in the D111 fisheries, 2005–2012.

Estimates based on GSI for gillnet and sport, troll is CWT, PU is count by permit					
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
2011	48	573	518	0	1,139
2012	23	671	668	8	1,370
Averages					
05-11	32	1,203	4,593	5	5,833

Appendix D. 3. Annual Chinook Salmon harvest in the Canadian fisheries in the Taku River, 1979–2012.

	Commerical		Aboriginal		Test			Rec	Total
Year	Large	nonlarge	Large	nonlarge	Large	nonlarge	released large	Large	All 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
2011	2,342	514	150	21	680	134		105	3,277
2012	1,930	479	67	14	863	114		105	2,965
Averages									
85-11	2,180	303	92					177	2,876
02-11	3,644	531	164	65	831	163	1,132	105	4,744

Appendix D. 4. Taku River large Chinook salmon run size, 1979–2012.

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

	Above Border MR					Above Border		
	Spawning		Confidence Intervals		Canadian	Run	U.S.	Terminal
Year	Escapement	Method	Lower	Upper	Harvest [a]	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
2011	27,523	Medium expansion	19,411	35,635	3,277	30,800	1,139	31,939
2012	19,538	Medium expansion	15,007	23,851	2,965	22,503	1,370	23,873
Averages								
95-11	42,646				3,791	46,437	5,025	51,461
02-11	36,775				4,744	41,519	5,058	46,576

[a] 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, 1975–2012.

Year	Kowatua	Tatsamenie	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 [ab]	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
2011	377	917	301	128	1,380	808	3,783
2012	402	660	126		1,300	726	3,214
Averages							
85-11	770	1,027	601	358	3,696	1,562	7,520
02-11	709	944	485	305	2,182	943	5,044

[a] Partial survey. Tseta 84

[b] Extrapolated results. Nahlin 84

[c] 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, 1967–2012.

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

	D111 gillnet harvest				PU Taku harvest		
	All	D11 without snet for stock comp					
Year	D111	harvest	Wild Taku	EnhancedTaku	All Taku	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	114,460	651	1,289	1,287	2
2003	205,433	177,903	134,957	767	1,218	1,208	10
2004	241,254	177,830	75,186	676	1,150	1,135	15
2005	87,254	71,472	44,360	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
2011	100,400	100,049	65,090	5,604	1,111	1,024	87
2012	140,898	124,830	45,410	4,039	1,287	1,149	138
Averages							
95-11	135,619	126,113	86,891	2,924	1,087	1,052	34
02-11	130,056	115,076	70,070	2,700	1,019	982	37

Appendix D. 7. Stock proportions and harvest of sockeye salmon in the traditional Alaska District 111 commercial drift gillnet fishery, 1983–2012.

Data based on analysis of scale patterns, otolith marks, and incidence of brain parasites 1983-2011; starting 2012 based on gsi.
Does not include harvest inside Port Snettisham

	Taku Lakes		Tatsamenie		Little Trapper	Taku			U.S.	Stikine
Week	Other	Mainstem	Wild	Enhanced	Enhanced	Wild	Total	Other	Enhanced	Enhanced
1983						0.755	0.755	0.245		
1984						0.758	0.758	0.242		
1985						0.838	0.838	0.162		
1986	0.328	0.303	0.204			0.834	0.834	0.166		
1987	0.312	0.376	0.031			0.720	0.720	0.280		
1988	0.276	0.305	0.082			0.663	0.663	0.337		
1989[a]	0.077		0			0.849	0.849	0.152		
1990	0.232	0.336	0.286			0.855	0.855	0.145		
1991	0.337	0.373	0.232			0.941	0.941	0.059		
1992	0.269	0.445	0.191			0.904	0.904	0.096		
1993	0.391	0.308	0.123			0.822	0.822	0.178		
1994	0.466	0.361	0.091			0.917	0.917	0.058	0.025	
1995	0.260	0.428	0.153	0.029	0.010	0.841	0.880	0.093	0.026	
1996	0.186	0.499	0.232	0.014	0.010	0.917	0.941	0.045	0.014	
1997	0.237	0.282	0.286	0.011	0.011	0.805	0.826	0.053	0.120	
1998	0.245	0.209	0.245	0.004	0.008	0.699	0.710	0.033	0.257	
1999	0.436	0.235	0.119	0.005	0.003	0.790	0.797	0.072	0.131	
2000	0.412	0.211	0.151	0.008	0.002	0.773	0.783	0.058	0.160	
2001	0.206	0.268	0.207	0.031	0.000	0.682	0.713	0.046	0.241	
2002	0.352	0.173	0.126	0.004	0.000	0.650	0.654	0.047	0.299	
2003	0.328	0.398	0.033	0.004	0.000	0.759	0.763	0.056	0.181	
2004	0.148	0.233	0.042	0.004	0.000	0.423	0.427	0.051	0.522	
2005	0.125	0.456	0.040	0.008	0.000	0.621	0.629	0.145	0.226	
2006	0.110	0.361	0.159	0.022	0.000	0.631	0.653	0.060	0.288	
2007	0.124	0.355	0.089	0.034	0.000	0.568	0.603	0.106	0.291	
2008	0.119	0.267	0.154	0.100	0.000	0.540	0.640	0.082	0.278	
2009	0.114	0.343	0.109	0.004	0.000	0.566	0.570	0.140	0.288	0.002
2010	0.046	0.523	0.155	0.012	0.002	0.724	0.738	0.151	0.109	0.001
2011	0.118	0.397	0.135	0.040	0.016	0.651	0.707	0.045	0.246	0.003
2012	0.122	0.242	0.000	0.028	0.005	0.364	0.396	0.090	0.512	0.002
Averages										
86-11	0.240	0.338	0.147			0.736	0.751		0.206	
02-11	0.158	0.351	0.104	0.023	0.002	0.613	0.638		0.273	0.002
1983						23,460	23,460			
1984						57,619	57,619			
1985						73,367	73,367			
1986	23,816	21,999	14,829			60,644	60,644			
1987	23,851	28,724	2,388			54,963	54,963			
1988	10,741	11,854	3,191			25,785	25,785			
1989[a]						62,804	62,804			
1990	29,489	42,673	36,330			108,492	108,492			
1991	37,359	41,376	25,736			104,471	104,471			
1992	35,625	59,004	25,329			119,959	119,959			
1993	66,952	52,820	21,116			140,888	140,888			
1994	49,234	38,142	9,576			96,952	96,952		2,634	
1995	26,893	44,271	15,765	3,049	1,017	86,929	90,994		2,727	
1996	36,917	98,876	45,983	2,849	1,913	181,776	186,538		2,838	
1997	22,389	26,621	27,033	1,003	1,028	76,043	78,074		11,358	
1998	16,775	14,306	16,743	246	560	47,824	48,630		17,588	
1999	33,780	18,231	9,194	358	241	61,205	61,804		10,155	
2000	68,500	35,025	25,042	1,285	276	128,567	130,128		26,528	
2001	58,736	76,418	58,937	8,880	0	194,091	202,971		68,649	
2002	61,922	30,397	22,141	651	0	114,460	115,111		52,708	
2003	58,280	70,801	5,876	767	0	134,957	135,724		32,196	
2004	26,314	41,366	7,505	676	0	75,186	75,862		92,810	
2005	8,909	32,591	2,860	579	0	44,360	44,939		16,161	
2006	10,995	35,993	15,825	2,210	0	62,814	65,024		28,659	
2007	13,311	38,084	9,484	3,684	0	60,879	64,563		31,213	
2008	13,833	31,170	17,999	11,680	0	63,002	74,682		32,467	
2009	7,050	21,275	6,796	240	0	35,121	35,361		17,888	148
2010	2,833	32,407	9,597	760	150	44,837	45,747		6,759	79
2011[a]	11,799	39,743	13,548	4,047	1,557	65,090	70,694		24,595	288
2012	15,221	30,189	0	3,453	587	45,410	49,449	11,210	63,963	208
Average[a]										
86-11	30,252	39,367	17,953			86,619	88,531		26,552	
02-11	21,525	37,383	11,163	2,529	171	70,070	72,771		33,546	172

[a] The Trapper and Mainstem groups were combined in the 1989 and 2010 analyses.

Appendix D. 8. Proportion of wild Taku River sockeye salmon in the Alaskan District 111 commercial drift gillnet harvest by week, 1983–2012.

Data based on scale patterns and incidence of brain parasites 1983-201;starting in 2012 based on gsi. Does not include enhanced fish.

	Week										
Year	25	26	27	28	29	30	31	32	33	34	Total
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
2011		0.988	0.943	0.797	0.766	0.699	0.683	0.606	0.365	0.228	0.651
2012	0.938	0.720	0.909	0.829	0.634	0.321	0.389	0.085	0.298	0.298	0.298
Average											
83-11		0.968	0.917	0.883	0.835	0.792	0.800	0.791	0.741	0.721	0.849
02-11		0.962	0.901	0.858	0.797	0.767	0.739	0.717	0.633	0.637	0.831

Appendix D. 9. Annual sockeye salmon harvest estimates of wild and enhanced fish in the Canadian fisheries in the Taku River, 1979–2012.

	All harvest					Wild			Enhanced		
		Commercial									
Year	All harvest	Taku	Aborginal	Test	Test released	Commercial	Aboriginal	Test	Commercial	Aboriginal	Test
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		19,883	118	90	265	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		14,988	143	337	1,726	16	39
2008	19,284		215	10	32	17,241	192	9	2,043	23	1
2009	10,980		106	174		10,875	105	172	105	1	2
2010	20,211	20,180	184	297		19,554	178	287	626	6	10
2011	24,032	23,898	124	521		22,145	114	480	1,753	10	41
2012	30,056	29,938	169	6		26,830	151	5	3,108	18	1
Averages											
86-11	24,158		188			23,621	184		812		
03-11	21,795		158	252	130	20,989	151	241	790	7	11

Appendix D. 10. Annual sockeye salmon stock proportions and harvest by stock in the Canadian commercial fishery on the Taku River, 1986–2012.

Data based on scale pattern, brain parasite, and thermal mark analyses 2986-2011; starting 2012 based on GSI.

										Historical SPA		
	Taku		Tatsamenie		Little Trapper	Taku		Stikine	US		King	Little Trapper
Year	Lakes	Mainstem	Wild	Enhance	Enhance	Wild	Enhance	Enhance	Enhance	Kuthai	Salmon	Wild
1986	0.508	0.350	0.143			1.000				0.111		0.397
1987	0.263	0.649	0.088			1.000				0.062		0.201
1988	0.559	0.343	0.098			1.000				0.143		0.417
1989[a]	0.053	[a]	0.203			1.000				0.053		[a]
1990	0.499	0.338	0.163			1.000				0.112		0.388
1991	0.372	0.452	0.176			1.000				0.064		0.308
1992	0.332	0.569	0.099			1.000				0.092		0.240
1993	0.519	0.432	0.049			1.000				0.126		0.392
1994	0.640	0.302	0.058			1.000				0.158		0.482
1995	0.474	0.373	0.112	0.031	0.010	0.959	0.041			0.047		0.427
1996	0.325	0.442	0.215	0.010	0.008	0.982	0.018			0.105		0.221
1997	0.402	0.277	0.294	0.008	0.019	0.973	0.027			0.120		0.282
1998	0.432	0.254	0.283	0.003	0.028	0.969	0.031			0.225		0.207
1999	0.694	0.145	0.147	0.006	0.008	0.986	0.014			0.389		0.305
2000	0.377	0.326	0.282	0.016	0.000	0.984	0.016			0.172		0.205
2001	0.352	0.364	0.246	0.039	0.000	0.961	0.039			0.184		0.168
2002	0.745	0.192	0.062	0.002	0.000	0.998	0.002			0.316		0.428
2003	0.633	0.271	0.089	0.008	0.000	0.992	0.008			0.231	0.023	0.378
2004	0.370	0.586	0.031	0.013	0.000	0.987	0.013			0.168	0.071	0.132
2005	0.340	0.505	0.143	0.012	0.000	0.988	0.012			0.098	0.038	0.204
2006	0.259	0.474	0.229	0.038	0.000	0.962	0.038			0.055	0.028	0.176
2007	0.203	0.524	0.170	0.096	0.000	0.897	0.096	0.007		0.102	0.000	0.101
2008	0.373	0.222	0.299	0.099	0.000	0.894	0.099	0.007		0.308	0.007	0.058
2009	0.569	0.276	0.145	0.007	0.000	0.990	0.007	0.002		0.155	0.000	0.414
2010	0.195	0.605	0.167	0.017	0.014	0.967	0.031	0.002		0.162	0.033	
2011	0.171	0.422	0.329	0.056	0.017	0.921	0.073	0.004	0.001	0.058	0.083	0.030
2012	0.175	0.570	0.148	0.095	0.009	0.893	0.103	0.004				
Averages[b]												
86-11	0.419	0.378	0.166	0.028	0.006	0.978	0.033			0.146		0.273
03-11	0.407	0.386	0.166	0.037	0.002	0.959	0.039	0.005		0.166	0.031	0.214
1986	7,484	5,152	2,103			14,739				1,629		5,855
1987	3,562	8,793	1,199			13,554				834		2,728
1988	6,720	4,122	1,172			12,014				1,715		5,005
1989[a]	990		3,763			18,545				990		
1990	10,538	7,131	3,431			21,100				2,355		8,183
1991	9,322	11,327	4,418			25,067				1,601		7,721
1992	9,784	16,764	2,924			29,472				2,699		7,085
1993	17,229	14,347	1,641			33,217				4,192		13,036
1994	18,402	8,684	1,676			28,762	0			4,544		13,858
1995	15,462	12,185	3,659	1,003	331	31,306	1,334			1,528		13,934
1996	13,552	18,422	8,959	401	331	40,933	732			4,357		9,195
1997	9,649	6,637	7,060	201	456	23,346	657			2,891		6,758
1998	8,223	4,829	5,397	56	533	18,449	589			4,279		3,944
1999	14,358	2,992	3,034	126	171	20,384	297			8,044		6,314
2000	10,554	9,122	7,897	436	0	27,573	436			4,809		5,745
2001	16,753	17,330	11,709	1,868	0	45,792	1,868			8,748		8,005
2002	23,131	5,948	1,925	49	0	31,004	49			9,826		13,305
2003	20,706	8,855	2,902	267	0	32,463	267			7,568	755	12,383
2004	7,464	11,799	620	266	0	19,883	266			3,381	1,430	2,653
2005	7,382	10,950	3,108	257	0	21,440	257			2,120	829	4,433
2006	5,461	9,993	4,840	805	0	20,294	805			1,168	589	3,704
2007	3,391	8,759	2,838	1,602	0	14,988	1,602	125		1,697	0	1,694
2008	7,202	4,276	5,763	1,905	0	17,241	1,905	137		5,949	139	1,114
2009	6,252	3,035	1,588	80	0	10,875	80	25		1,703	0	4,549
2010	3,950	12,235	3,369	334	290	19,554	624	31		3,274	676	
2011	4,099	10,140	7,906	1,347	406	22,145	1,753	106	28	1,387	1,990	723
2012	5,254	17,143	4,434	2,852	257	26,830	3,109	118				
Averages[b]												
86-11		9,233	4,074		139	24,002	759			3,709		6,747
02-11		8,476	3,696	816	51	19,916	867	98		3,122	716	3,907

[a] The Trapper and Mainstem groups were combined in the 1989 and 2010 analyses.

[b] Averages do not include 1989 and 2010.

Appendix D. 11. Annual sockeye salmon weir counts, escapements, and samples at the Tatsamenie weir, 1984–2012.

Ototlith samples are a proportion of the broodstock samples.

					Broodstock					
	Weir	Actual	Spawning Escapement		otolith samples			broodstock taken		
Year	Count	Spawners	wild	enhanced	wild	enhanced	All samples	wild	enhanced	Total
1984										
1985[a]										
1986										
1987[a]		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	**5,495**	**4,379**	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
2011	7,880	6,580	4,848	1,732	294	105	399	958	342	1,300
2012	15,605	14,305	8,583	5,722	240	160	400	780	520	1,300
Averages										
02-11	7,140	5,551	4,338	1,213	279	89	369	1,178	411	1,589

[a] 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, 1983–2012.

Broodstock estimate is based on commercial ratio with tats weir data							
	Weir	Actual	Trapper spawning esc		Broodstock		
Year	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			
2011	3,809	3,809	3,521	288			
2012	10,015	10,015	9,532	483			
Averages							
83-11	11,887	11,564					
02-11	11,378	11,115					

Appendix D. 13. Taku River sockeye salmon run size, 1984–2012.

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.

	Above Border MR				Expanded					Total
	Run	Start	Expansion		Above Border	Canadian		U.S.	Terminal	Exploitation
Year	Estimate	Date	Method	Factor	Run Estimate	harvest	Escape.	Harvest	Run	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	116,400	251,633	59%
2003	193,390	20-May	No Expansion		193,390	33,024	160,366	136,942	330,332	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	46,089	188,244	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%
2011	139,926	25-Apr	No Expansion		139,926	24,543	115,383	71,805	211,731	46%
2012	155,590	25-Apr	FW CPUE for SW 23 and 24	0.008	156,877	30,113	126,764	50,736	207,612	39%
Averages										
84-11	124,777	28-May			127,671	24,269	103,402	87,786	215,457	50%
02-11	128,052	13-May			129,005	22,188	106,817	73,804	202,810	47%

Appendix D. 14. The terminal run reconstruction of Taku wild and enhanced sockeye salmon, 1984–2012.

	Wild Total Run				Enhanced Total Run			
Year	Canadian harvest	Escape	U.S. harvest	Terminal Run	Canadian harvest	Escape	U.S. harvest	Terminal Run
1984	27,292	113,962	57,619	198,873				
1985	14,411	109,563	74,287	198,261				
1986	14,939	100,106	60,644	175,689				
1987	13,887	82,136	54,963	150,986				
1988	12,967	79,674	25,785	118,427				
1989	18,805	95,263	63,366	177,434				
1990	21,474	96,099	109,285	226,858				
1991	25,380	129,493	105,271	260,143				
1992	29,862	137,514	121,176	288,551				
1993	33,523	108,625	142,089	284,236				
1994	29,001	102,579	98,063	229,642				
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	115,747	250,271	50	659	653	1,362
2003	32,755	159,026	136,165	327,946	269	1,340	777	2,386
2004	20,091	105,974	76,321	202,386	268	714	692	1,673
2005	21,840	119,384	45,496	186,720	262	669	593	1,524
2006	20,628	143,660	63,587	227,875	818	2,491	2,241	5,550
2007	15,468	84,691	61,387	161,545	1,781	3,072	3,742	8,596
2008	17,442	63,892	63,905	145,239	2,067	4,167	11,787	18,021
2009	11,152	71,489	35,984	118,625	108	348	396	852
2010	20,019	87,364	45,824	153,207	642	1,003	943	2,588
2011	22,740	113,022	66,113	201,875	1,803	2,362	5,691	9,856
2012	26,987	120,038	46,559	193,584	3,126	6,725	4,177	14,029
Averages								
84-11	23,767	102,483	85,985	212,235				
02-11	21,381	105,135	71,053	197,569	807	1,683	2,751	5,241

Appendix D. 15. Annual sockeye salmon escapement estimates of Taku River and Port Snettisham sockeye salmon stocks, 1979–2012.

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

	Little Trapper		Little Tatsamenie		Tatsamenie		King Salmon	Kuthai Lake	Nahlin River	Crescent Lake		Speel Lake	
Year	Count	Escape.	Count	Escape.	Count	Escape.	Weir	Weir	Weir	Count	Escape.	Count	Escape.
1980								1,658					
1981								2,299					
1982													
1983[a]	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[a]	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[a]	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
2011	3,809	3,809			7,880	6,580	**2,899**	811		na	na	4,777	4,777
2012	10,015	10,015			15,605	**14,305**	5,413	182		na	na	5,681	5,681
Averages													
83-11	11,887	11,564			7,892	5,872	1,882	3,696				7,911	
02-11	11,378	11,115			7,140	5,551	1,882	2,969				5,044	

Appendix D. 16. Historical Taku River coho salmon harvested in D111 terminal fisheries, 1992–2012.

Sportfish estimate is based on all landings made in Juneau (not just D11)						
	D11 Gillnet		Juneau Sport Fish			
Year	Harvest	SE	Harvest	SE	PU	Total
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	######
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
2011	4,829	1,237	4,340	977	224	9,393
2012	10,760	2,674	662	465	132	11,554
02-11	23,260		5,678		139	29,076

Appendix D. 17. Historical coho salmon in the Canadian fisheries in the Taku River, 1987–2012.

	Commercial					
Year	Total	Before SW34	After SW33	Aboriginal	Test	Test released
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	5,966	2,387	3,579	450	3,268	
2005	4,924	1,412	3,512	162	3,173	
2006	8,567	4,947	3,620	300	2,802	
2007	5,244	2,229	3,015	155	2,674	
2008	3,906	2,802	1,104	67	0	1,012
2009	5,649	2,379	3,270	154	3,963	
2010	10,349	3,283	7,066	59	4,000	
2011	8,446	2,353	6,093	30	4,002	
2012	11,548	2,883	8,665	324	2,200	
Averages						
83-12	5,317			167		
02-13	5,930			248	2,397	

Appendix D. 18. Historic Taku River coho salmon terminal run size, 1987–2012.

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

	Above Border M-R									Total
	Run	End	Expansion		Expanded	Canadian		U.S.	Terminal	Exploitation
Year	Estimate	Date	Method	Factor	Estimate	Harvest	Escape.	Harvest	Run	Rate
1987	43,750	20-Sep	Test Fish CPUE	1.42	61,976	6,519	55,457			
1988	43,093	18-Sep		1.00	43,093	3,643	39,450			
1989	60,841	1-Oct		1.00	60,841	4,033	56,808			
1990	75,881			1.00	75,881	3,685	72,196			
1991	132,923			1.00	132,923	5,439	127,484			
1992	50,557	5-Sep	District 111-32 CPUE	1.79	90,394	5,541	84,853	74,745	165,139	0.486
1993	62,076	11-Sep	District 111-32 CPUE	1.84	114,091	4,634	109,457	35,703	149,794	0.269
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
2011	83,349	9-Oct	no expansion	1.00	83,349	12,478	70,871	9,393	92,742	0.236
2012	61,797	15-Sep	CYI run timing	1.37	84,847	14,072	70,775	11,554	96,401	0.266
Averages										
87-11	93,652			1.12	100,059	6,985	93,074	31,728	138,066	0.28
02-11	134,662			1.00	134,662	8,576	126,086	29,076	163,738	0.24

Appendix D. 19. Escapement counts of Taku River coho salmon. Counts are for age-.1 fish and do not include jacks, 1984–2012.

Because of variability between methods, visibility, observers, and timing, these counts are not an index of run strength.

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

[a] Weir count combined with spawning ground count. Tatsamenie 88-90, Yehring 86-87, Nahlin 92.

Bold--Incomplete count or minial estimates

Appendix D. 20. Historical effort in the Alaskan District 111 and Subdistrict 111-32 (Taku Inlet) commercial drift gillnet fishery, 1960–2012.

Days open are for the entire district and include openings to harvest spawner chinook salmon, 1960-1975.
Traditioanl fishery; not inlcude common property fishery

	D111		D111-32		
Year	Boat Days	Days Open	Boat Days	Days Open	PU
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	2,764	54.00	2,357	54.00	120
2011	3,303	46.00	2,669	46.00	133
2012	2,463	43.00	1,620	42.00	153
Averages					
60-11	2,999	48	2,253	45	
02-11	3,285	61	2,414	57	124

Appendix D. 21. Historical effort in the Canadian commercial fishery in the Taku River, 1979–2012.

	Commercial	
Year	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
2011	440	63
2012	330	50
Averages		
79-11	339	43
02-11	379	59

Appendix D. 22. Canyon Island fish wheel salmon counts and periods of operation on the Taku River, 1984–2012.

Total counts from both fishwheels and suppentmental gillnets when water is low									
		Catch							
	Period of						Pink		
Year	Operation	Chinook	Sockeye	Coho	Pink	Chum	even year	odd year	Steelhead
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
2011	4/25-10/02	728	3,671	1,843	17,775	177		17,775	93
2012	5/21-9/15	598	4,441	965	5,826	232	5,826		24
Averages									
84-11		981	5,208	2,331	14,981	457	13,042	16,919	81
02-11		1,015	4,912	2,557	12,018	295	9,887	14,147	83

Appendix E. 1. Weekly salmon harvest and effort in the lower Alsek River fisheries, 2012.

SW	Chinook	Sockeye	Coho	Pink	Chum	Boats	Effort Days Open	Boat Days
23	23	11	0					
24	83	7	0					
25	145	72	0					
Total	251	90	0					
Commercial Fishery								
23	59	110	0	0	0	9	1.0	9.0
24	123	1,508	0	0	0	13	2.0	26.0
25	234	2,393	0	0	0	12	2.0	24.0
26	52	2,563	0	0	0	12	2.0	24.0
27	32	4,163	4	0	0	13	2.0	26.0
28	9	4,755	0	0	0	13	2.0	26.0
29	1	979	1	0	0	11	1.0	11.0
30	0	1,082	0	0	0	10	1.0	10.0
31	0	210	0	0	0	4	1.0	4.0
32-35	0	451	164	0	0	7	10.0	19.0
36	0	3	367	0	1	3	3.0	9.0
37	0	0	0	0	0	0	3.0	0.0
38	0	0	0	0	0	0	3.0	0.0
39	0	0	0	0	0	0	3.0	0.0
40	0	0	0	0	0	0	3.0	0.0
Total	510	18,217	536	0	1		39	188

Weeks 32–35 were combined for confidentiality.

Appendix E. 2. Weekly salmon harvest and effort in the Canadian Aboriginal and sport fisheries in the Alsek River, 2012.

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

	Chinook				Sockeye				Coho			
	Recreational			Total	Recreational			Total	Recreational			Total
SW	Kept	Released	Aboriginal	harvest	Kept	Released	Aboriginal	harvest	Kept	Released	Aboriginal	harvest
24	0	0			0	0			0	0		
25	0	0			0	0			0	0		
26	0	0			0	0			0	0		
27	5	8			0	22			0	0		
28	35	58	Weekly		0	52	Weekly		0	0	Weekly	
29	38	52	Data		0	20	Data		0	0	Data	
30	7	62	Not		0	10	Not		0	0	Not	
31	0	112	Available		0	30	Available		0	0	Available	
32	0	2			0	5			0	0		
33	0	18			7	18			0	0		
34	0	3			25	0			0	0		
35	0	0			20	0			0	0		
36	0	0			0	0			0	0		
37	0	0			0	0			0	0		
38	0	0			0	0			0	0		
39	0	0			0	0			0	0		
40	0	0			0	0			0	2		
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		
Total	85	315	0	85	52	157	1,734	1,786	0	2	0	0
Village Creek food fish			NA				NA				NA	
Harvest at Klukshu River weir			0				214				0	
Food fish above Klukshu Weir							304				0	

Appendix E. 3. Daily counts of salmon passing through Klukshu River weir, 2012.

Jack Chinook salmon included in the Chinook counts.

	Chinook			Sockeye			Coho		
		Cumulative			Cumulative			Cumulative	
Date	Daily	Daily	Prop.	Daily	Daily	Prop.	Daily	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	0	0	0.000	0	0	0.000	0	0	0.000
17-Jun	0	0	0.000	0	0	0.000	0	0	0.000
18-Jun	0	0	0.000	0	0	0.000	0	0	0.000
19-Jun	0	0	0.000	0	0	0.000	0	0	0.000
20-Jun	0	0	0.000	0	0	0.000	0	0	0.000
21-Jun	1	1	0.001	0	0	0.000	0	0	0.000
22-Jun	0	1	0.001	0	0	0.000	0	0	0.000
23-Jun	0	1	0.001	0	0	0.000	0	0	0.000
24-Jun	0	1	0.001	0	0	0.000	0	0	0.000
25-Jun	0	1	0.001	0	0	0.000	0	0	0.000
26-Jun	0	1	0.001	0	0	0.000	0	0	0.000
27-Jun	0	1	0.001	0	0	0.000	0	0	0.000
28-Jun	0	1	0.001	0	0	0.000	0	0	0.000
29-Jun	0	1	0.001	0	0	0.000	0	0	0.000
30-Jun	0	1	0.001	0	0	0.000	0	0	0.000
1-Jul	0	1	0.001	0	0	0.000	0	0	0.000
2-Jul	0	1	0.001	0	0	0.000	0	0	0.000
3-Jul	0	1	0.001	0	0	0.000	0	0	0.000
4-Jul	0	1	0.001	0	0	0.000	0	0	0.000
5-Jul	0	1	0.001	0	0	0.000	0	0	0.000
6-Jul	0	1	0.001	0	0	0.000	0	0	0.000
7-Jul	0	1	0.001	0	0	0.000	0	0	0.000
8-Jul	0	1	0.001	0	0	0.000	0	0	0.000
9-Jul	0	1	0.001	0	0	0.000	0	0	0.000
10-Jul	0	1	0.001	0	0	0.000	0	0	0.000
11-Jul	0	1	0.001	0	0	0.000	0	0	0.000
12-Jul	0	1	0.001	0	0	0.000	0	0	0.000
13-Jul	0	1	0.001	1	1	0.000	0	0	0.000
14-Jul	7	8	0.012	58	59	0.003	0	0	0.000
15-Jul	7	15	0.022	59	118	0.007	0	0	0.000
16-Jul	5	20	0.030	88	206	0.012	0	0	0.000
17-Jul	8	28	0.042	2	208	0.012	0	0	0.000
18-Jul	8	36	0.054	9	217	0.012	0	0	0.000
19-Jul	12	48	0.072	20	237	0.014	0	0	0.000
20-Jul	33	81	0.121	6	243	0.014	0	0	0.000
21-Jul	19	100	0.150	7	250	0.014	0	0	0.000
22-Jul	78	178	0.267	117	367	0.021	0	0	0.000
23-Jul	39	217	0.325	17	384	0.022	0	0	0.000
24-Jul	40	257	0.385	22	406	0.023	0	0	0.000
25-Jul	11	268	0.402	15	421	0.024	0	0	0.000
26-Jul	36	304	0.456	130	551	0.032	0	0	0.000
27-Jul	5	309	0.463	4	555	0.032	0	0	0.000
28-Jul	10	319	0.478	21	576	0.033	0	0	0.000
29-Jul	6	325	0.487	8	584	0.033	0	0	0.000
30-Jul	50	375	0.562	117	701	0.040	0	0	0.000
31-Jul	53	428	0.642	118	819	0.047	0	0	0.000
1-Aug	38	466	0.699	80	899	0.051	0	0	0.000
2-Aug	5	471	0.706	37	936	0.054	0	0	0.000
3-Aug	4	475	0.712	13	949	0.054	0	0	0.000
4-Aug	28	503	0.754	296	1,245	0.071	0	0	0.000

- Continued -

Appendix E.3. Page 2 of 2.

	Chinook			Sockeye			Coho		
		Cumulative			Cumulative			Cumulative	
Date	Daily	Daily	Prop.	Daily	Daily	Prop.	Daily	Daily	Prop.
5-Aug	18	521	0.781	170	1,415	0.081	0	0	0.000
6-Aug	28	549	0.823	269	1,684	0.096	0	0	0.000
7-Aug	21	570	0.855	372	2,056	0.118	0	0	0.000
8-Aug	13	583	0.874	159	2,215	0.127	0	0	0.000
9-Aug	14	597	0.895	434	2,649	0.152	0	0	0.000
10-Aug	7	604	0.906	68	2,717	0.155	0	0	0.000
11-Aug	26	630	0.945	1,140	3,857	0.221	0	0	0.000
12-Aug	7	637	0.955	489	4,346	0.249	0	0	0.000
13-Aug	7	644	0.966	319	4,665	0.267	0	0	0.000
14-Aug	3	647	0.970	355	5,020	0.287	0	0	0.000
15-Aug	12	659	0.988	949	5,969	0.341	0	0	0.000
16-Aug	2	661	0.991	281	6,250	0.358	0	0	0.000
17-Aug	2	663	0.994	560	6,810	0.390	0	0	0.000
18-Aug	1	664	0.996	128	6,938	0.397	0	0	0.000
19-Aug	0	664	0.996	693	7,631	0.437	0	0	0.000
20-Aug	0	664	0.996	486	8,117	0.464	0	0	0.000
21-Aug	0	664	0.996	711	8,828	0.505	0	0	0.000
22-Aug	0	664	0.996	680	9,508	0.544	0	0	0.000
23-Aug	1	665	0.997	770	10,278	0.588	0	0	0.000
24-Aug	0	665	0.997	571	10,849	0.621	0	0	0.000
25-Aug	0	665	0.997	239	11,088	0.634	0	0	0.000
26-Aug	0	665	0.997	864	11,952	0.684	0	0	0.000
27-Aug	0	665	0.997	362	12,314	0.704	0	0	0.000
28-Aug	1	666	0.999	1,079	13,393	0.766	0	0	0.000
29-Aug	0	666	0.999	144	13,537	0.774	0	0	0.000
30-Aug	0	666	0.999	204	13,741	0.786	0	0	0.000
31-Aug	1	667	1.000	562	14,303	0.818	0	0	0.000
1-Sep	0	667	1.000	160	14,463	0.827	0	0	0.000
2-Sep	0	667	1.000	635	15,098	0.864	0	0	0.000
3-Sep	0	667	1.000	55	15,153	0.867	0	0	0.000
4-Sep	0	667	1.000	273	15,426	0.882	0	0	0.000
5-Sep	0	667	1.000	224	15,650	0.895	0	0	0.000
6-Sep	0	667	1.000	86	15,736	0.900	0	0	0.000
7-Sep	0	667	1.000	12	15,748	0.901	0	0	0.000
8-Sep	0	667	1.000	23	15,771	0.902	0	0	0.000
9-Sep	0	667	1.000	68	15,839	0.906	0	0	0.000
10-Sep	0	667	1.000	40	15,879	0.908	0	0	0.000
11-Sep	0	667	1.000	7	15,886	0.909	0	0	0.000
12-Sep	0	667	1.000	148	16,034	0.917	0	0	0.000
13-Sep	0	667	1.000	21	16,055	0.918	0	0	0.000
14-Sep	0	667	1.000	39	16,094	0.921	0	0	0.000
15-Sep	0	667	1.000	48	16,142	0.923	0	0	0.000
16-Sep	0	667	1.000	20	16,162	0.924	0	0	0.000
17-Sep	0	667	1.000	338	16,500	0.944	0	0	0.000
18-Sep	0	667	1.000	7	16,507	0.944	0	0	0.000
19-Sep	0	667	1.000	49	16,556	0.947	1	1	0.001
20-Sep	0	667	1.000	375	16,931	0.968	9	10	0.008
21-Sep	0	667	1.000	306	17,237	0.986	14	24	0.019
22-Sep	0	667	1.000	45	17,282	0.989	4	28	0.022
23-Sep	0	667	1.000	3	17,285	0.989	0	28	0.022
24-Sep	0	667	1.000	4	17,289	0.989	0	28	0.022
25-Sep	0	667	1.000	4	17,293	0.989	2	30	0.024
26-Sep	0	667	1.000	0	17,293	0.989	0	30	0.024
27-Sep	0	667	1.000	5	17,298	0.989	0	30	0.024
28-Sep	0	667	1.000	7	17,305	0.990	0	30	0.024
29-Sep	0	667	1.000	8	17,313	0.990	0	30	0.024
30-Sep	0	667	1.000	2	17,315	0.990	1	31	0.024
1-Oct	0	667	1.000	0	17,315	0.990	0	31	0.024
2-Oct	0	667	1.000	2	17,317	0.991	0	31	0.024
3-Oct	0	667	1.000	15	17,332	0.991	541	572	0.450
4-Oct	0	667	1.000	150	17,482	1.000	700	1,272	1.000
5-Oct		667	1.000		17,482	1.000		1,272	1.000
6-Oct		667	1.000		17,482	1.000		1,272	1.000
7-Oct		667	1.000		17,482	1.000		1,272	1.000
Total Count		667			17,482			1,272	
Adjustments		693			17,694			0	
Harvest at weir		0			214			0	
Harvest above weir		0			304			0	
Total Escapement		693	0	0	17,176	0	0	0	0

Appendix E. 4. Salmon harvest and effort in the U.S. Commercial fishery in the Alsek River, 1960 to 2012.

						Effort	
Year	Chinook	Sockeye	Coho	Pink	Chum	Boat Days	Days Open
1960							
1961	2,120	23,339	7,679	84	86	1,436	80.0
1962							
1963	131	6,055	7,164	42	34	692	68.0
1964	591	14,127	9,760	144	367	592	68.0
1965	719	28,487	9,638	10	72	1,016	72.0
1966	934	29,091	2,688	22	240	500	64.0
1967	225	11,108	10,090	107	30	600	68.0
1968	215	26,918	10,586	82	240	664	68.0
1969	685	29,259	2,493	38	61	807	61.0
1970	1,128	22,654	2,188	6	26	670	52.3
1971	1,222	25,314	4,730	3	120	794	60.5
1972	1,827	18,717	7,296	37	280	640	65.0
1973	1,757	26,523	4,395	26	283	894	52.0
1974	1,162	16,747	7,046	13	107	699	46.0
1975	1,379	13,842	2,230	16	261	738	58.0
1976	512	19,741	4,883	0	368	550	58.5
1977	1,402	40,780	11,817	689	483	882	57.0
1978	2,441	50,580	13,913	59	233	929	57.0
1979	2,525	41,449	6,158	142	263	1,110	51.0
1980	1,382	25,522	7,863	21	1,005	773	42.0
1981	779	23,641	10,232	65	816	588	40.0
1982	532	27,443	6,534	6	358	552	33.0
1983	94	18,293	5,253	20	432	487	38.0
1984	60	14,326	7,868	24	1,610	429	33.0
1985	213	5,792	5,490	3	427	277	33.0
1986	481	24,791	1,344	13	462	517	34.0
1987	347	11,393	2,517	0	1,924	388	40.5
1988	223	6,286	4,986	7	908	324	34.0
1989	228	13,513	5,972	2	1,031	378	38.0
1990	78	17,013	1,437	0	495	374	38.0
1991	103	17,542	5,956	0	105	530	49.0
1992	301	19,298	3,116	1	120	372	46.0
1993	300	20,043	1,215	0	49	372	40.0
1994	805	19,639	4,182	0	32	403	61.0
1995	670	33,112	14,184	13	347	879	53.5
1996	772	15,182	5,514	0	165	419	51.0
1997	568	25,879	11,427	0	34	611	59.0
1998	550	15,007	4,925	1	145	358	41.0
1999	482	11,441	5,660	0	112	319	44.0
2000	677	9,522	5,103	5	130	307	37.0
2001	541	13,995	2,909	8	17	234	50.0
2002	700	16,918	9,525	0	1	270	73.0
2003	937	39,698	47	0	0	271	60.0
2004	656	18,030	2,475	0	2	280	76.5
2005	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
2011	546	24,169	1,614	0	11	235	46.0
2012	510	18,217	536	0	1	188	27.0
Averages							
61-11	724	19,956	5,443	34	286	527	51
02-11	506	16,441	2,370	0	5	224	50

Appendix E. 5. Salmon harvest in the U.S. Chinook salmon test fishery in the Alsek River, 2005–2012.

Year	Chinook	Sockeye
2005	423	222
2006	135	224
2007	347	367
2008	465	55

2011	421	157
2012	251	90

Appendix E. 6. Salmon harvest in the U.S. subsistence and personal use fisheries in the Alsek River, 1976–2012.

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
2011	42	175	18
2012	50	167	22
Averages			
76-11	44	141	30
02-11	50	214	26

Appendix E. 7. Salmon catches in the Canadian Aboriginal and recreational fisheries in the Alsek River, 1976 to 2012.

	Chinook			Sockeye			Coho		
Year	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
2011	119	95	214	2,053	57	2,110	9	20	29
2012	0	85	85	1,734	52	1,786	0	0	0
Averages									
76-11	220	249	469	2,276	283	2,559	11	101	112
02-11	83	71	154	1,451	47	1,498	7	68	75

Appendix E. 8. Annual Klukshu River weir counts of Chinook, sockeye, and coho salmon, 1976 to 2012.

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 Rivers.
Jack Chinook salmon are included in Chinook counts.
Coho counts are partial counts; weir is removed prior to the end of the run.

	Chinook		Sockeye				Coho a	
Year	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	4,465	5,712	5,509	424	421
2010	2,356	2,257	5,073	13,887	18,960	18,546	2,365	2,361
2011	1,670	1,609	5,635	15,754	21,389	20,769	2,119	2,110
2012	693	693	5,969	11,725	17,694	17,176	1,272	1,272
Averages								
76-11	2,253	2,073	3,041	13,220	16,261	14,387	1,898	
02-11	1,488	1,430	3,442	11,559	15,001	14,136	2,495	2,488

Appendix E. 9. Alsek River sockeye salmon escapement 2000 to 2012.

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.

	Inriver Run	CI		Canadian	Spawning	U.S.	Total	Percent
Year	Estimate	Lower	Upper	Harvest	Escapement	Harvest	Run	Klukshu
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%
2011	86,009	72,970	99,049	2,110	83,899	24,501	110,510	26.6%
2012	78,384	64,311	92,456	1,786	76,598	18,474	96,858	24.2%
Averages								
00-06, 11	69,200			1,657	67,543	17,798	86,998	23.4%

Appendix E. 10. Alsek River sockeye salmon counts from U.S. and Canadian aerial surveys and from the electronic counter at Village Creek, 1985–2012.

Surveys not made every year at each tributary.

	U.S. Aerial Surveys				Canada Aerial Surveys[a]		
Year	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	**433**
1989	320			680	1,689	1,700	9,569
1990	275	300		3,500			**5,313**
1991				800			**86**
1992	1,000	10		50			**7,447**
1993	4,800			900			**2,104**
1994	250			600	366		**3,921**
1995	2,700			350			4,042
1996	325			650			1,583
1997	600			350			2,267
1998				130			826
1999	30			800			**NA**
2000	25			180			1,860
2001				700			**1,897**
2002	No surveys flown						2,765
2003	No surveys flown						**2,778**
2004	No surveys flown						**1,968**
2005	No surveys flown						1,408
2006	No surveys flown						979
2007	No surveys flown						10,254
2008	No surveys flown					1,000	NA
2009	No surveys flown					4,500	**887**
2010	No surveys flown					2,500	**2,305**
2011	No surveys flown					150	355
2012	No surveys flown					2,038	**1,372**
Averages							
86-11							2,851
02-11							2,633

[a] Includes several streams from Lo-Fog to Goat Creek.

Bold are incomplete counts

Appendix E. 11. Aerial survey index counts of Alsek River Chinook salmon escapements, 1984 to 2012.

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	[a]	158	34
1990	[a]	325	32
1991	121	86	63
1992	86	77	16
1993	326	351	50
1994	349	342	67
1995	338	260	[b]
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		
2011	No surveys conducted		
2012	No surveys conducted		
Averages			
84-08	245	183	43

[a] Not surveyed due to poor visibility. 89,90 Blanchard

[b] 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.

	Inriver Run Past	CI		U.S. Harvest Dry Bay		Total Inriver	Canadian Harvest		
Year	Dry Bay	Lower	Upper	Commercial	Subsistence	Run	Aboriginal	Sport	Escapement
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

Klukshu weir count of large Chinook salmon as a percent of the Alsek escapement of large Chinook salmon

	Weir Count		Percent
Year	All	Large	Klukshu
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%

Appendix E. 13. Alsek River Chinook salmon escapement, 2007, 2011–2012.

Year	Combined U.S.Tributary Counts	
1985	450	
1986	1,100	
1987	100	
1988	1,900	
1989	1,990	
1990	1,600	
1991	500	[a]
1992	1,010	[a]
1993	800	[a]
1994	975	[a]
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	

[a] Few systems surveyed.

Appendix E. 14. Aerial survey counts of coho salmon from U.S. lower Alsek River tributaries, 1985–2000.

	Chinook	Sockeye	Coho
Escapement Index [a]			
Klukshu Weir Count	693	17,694	1,272
Klukshu Escapement	693	17,176	1,272
Harvest [b]			
U.S. Commercial	510	18,217	536
U.S. Subsistence	50	167	22
U.S. Test	251	90	
Canadian Aboriginal	0	1,734	0
Canadian Recreational	85	52	0
Total	896	20,260	558

[a] Klukshu River salmon stocks represent an assumed large and variable portion of the total Alsek River salmon escapement.

[b] U.S. harvest estimate differs from Joint Interception Committee estimate because no estimates are made for harvest other than the listed fisheries.

Appendix F. 1. Tahltan Lake egg collection, fry plants, and survivals, 1989–2012.

Numbers for eggs and fry are millions.

Eggs collected from Tahltan broodstock are used for outplants to both Tahltan and Tuya Lakes.

	Egg Take		Designated	Fry	Percent	Survival		Thermal
						Fertilized	Green	Mark
Brood Year	Target	Collected	Tahltan	Planted	Fertilized	Egg to Fry	Egg to Fry	Pattern
1989[a]	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	1:1.4+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	2.248	0.923	0.769	0.709	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	3.826	2.773	2.228	0.901	0.892	0.804	2:1.6
2000	6.000	2.388	2.388	1.873	0.920	0.852	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	1.018	0.943	1:1.7
2003	6.000	5.391	2.661	2.226	0.899	0.931	0.836	1.6&1:1.5+2.4
2004	6.000	5.701	1.966	1.226	0.803	0.777	0.624	1:1.6+2.6
2005	6.000	4.552	1.809	1.280	0.800	0.885	0.708	1:1.4+2.2
2006	6.000	4.364	2.954	2.466	0.910	0.917	0.835	1:1.3n,2.2
2007	6.000	4.060	2.209	1.540	0.756	0.922	0.697	1,2n,3H
2008	6.000	3.386	2.398	1.395	0.850	0.684	0.582	1,4H
2009	6.000	4.469	2.609	1.830	0.774	0.906	0.701	5,2H
2010	6.000	6.000	3.097	1.230	0.824	0.482	0.397	4,3H
2011	6.000	6.481	3.383	2.130	0.854	0.737	0.630	3,2n,2H
2012	5.000	5.597	3.674	1.349	0.664	0.553	0.367	1,4H
Averages								
89-11	5.757	4.585	2.553	1.858	0.864	0.853	0.741	
02-11	6.000	4.845	2.587	1.795	0.840	0.826	0.695	

Appendix F. 2. Tuya Lake fry plants and survivals, 1991–2012.

Numbers for eggs and fry are millions.

	Egg Take			Survival		Thermal
	Designated	Fry	Percent	Fertilized	Green	Mark
Brood Year	Tuya	Planted	Fertilized	Egg to Fry	Egg to Fry	Pattern
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	2.611	0.932	0.867	0.808	1:1.4
1997	0.521	0.433	0.911	0.912	0.830	2:1.4
1998	2.024	1.603	0.917	0.864	0.792	1:1.4
1999	1.053	0.867	0.960	0.857	0.823	2:1.4
2000	All eggs collected in 2000 and 2001 were for backplant into Tahltan La					
2001						
2002	1.271	1.124	0.904	0.978	0.885	1:1.7+2.3
2003	2.730	2.445	0.927	0.966	0.895	1:1.4
2004	3.734	3.200	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	2,1,3H
2008	0.988	0.832	0.856	0.984	0.842	6H
2009	1.860	0.976	0.794	0.661	0.525	3,4H
2010	2.852	1.240	0.819	0.531	0.435	3n,3H
2011	3.098	1.600	0.865	0.597	0.516	6H
Averages						
91-11	2.456	1.835	0.891	0.845	0.756	
02-11	2.254	1.629	0.876	0.841	0.742	

Appendix F. 3. Tatsamenie Lake egg collection, fry plants, and survivals, 1989–2012.

Numbers for eggs and fry are millions.

	Egg Take			Fry	Percent	Survival		Thermal Mark	Last Date
Brood Year	Target	Collected [a]	Transport	Planted	Fertilized	Fertilized Egg to Fry	Green Egg to Fry	Pattern(s)	Released
1990	2.500	0.985	0.673	0.673	0.775	0.684	0.683	1:1.3	22-Jun
1991	1.500	1.360	1.232	1.232	0.927	0.906	0.906	2:1.4	26-Jun
1992	1.750	1.486	0.909	0.909	0.858	0.612	0.612	1:1.5	14-Jul
1993	2.500	1.144	0.521	0.521	0.619	0.455	0.455	2:1.5	14-Jul
1994	2.500	1.229	0.898	0.898	0.801	0.731	0.730	1:1.5	21-Jul
1995	2.500	2.407	1.724	1.724	0.843	0.716	0.716	1:1.5	25-Jun
1996	5.000	4.934	3.941	3.941	0.849	0.800	0.799	1:1.5&1:1.5,2.3	27-Jun
1997	5.000	4.651	3.597	3.597	0.910	0.773	0.773	2:1&2:1.5,2.3	9-Jul
1998	2.500	2.414	1.769	1.769	0.897	0.733	0.733	1:1.4+2.5&1:1.4+2.3	30-Jun
1999	2.500	0.461	0.350	0.350	0.922	0.742	0.760	2:1.5	4-Jul
2000	3.000	2.816	2.320	2.320	0.943	0.902	0.824	1.1.5+2.3&1.1.5	26-Jun
2001	4.800	4.364	2.233	2.233	0.900	0.638	0.512	2:1.5&2:1.5,2.3	25-Jun
2002	3.000	2.498	1.353	0.911	0.823	0.588	0.365	1:1.4&1:1.4+2.3	27-May
2003	5.000	2.642	2.141	2.141	0.919	0.873	0.810	1.1.5+2.3&1.1.5	27-May
2004	5.000	0.750	0.628	0.628	0.933	0.837	0.837	1:1.4+2.5n&1:1.4+2.3,3.3	20-May
2005	5.000	1.811	1.471	1.471	0.936	0.813	0.813	1:1.4+2.3&1:1.4+2.5	8-Jun
2006	5.000	4.810	3.705	3.705	0.920	0.770	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	2.522	2.122	0.885	0.687	0.578	2n3&2,3n,1&1,3n,2&3,2n,1	6-Jun
2008	5.000	4.902	3.874	3.871	0.892	0.900	0.790	3,2H & 3,3H	3-Jun
2009	5.000	1.224	0.717	0.716	0.852	0.586	0.585	6,2H & 3n,2H	22-May
2010	2.000	1.896	1.599	1.599	0.919	0.842	0.843	2,1,2H & 2,2,3H	29-May
2011	2.000	2.190	1.893	1.893	0.912	0.864	0.864	3n,5H&6,2H	29-May
2012	2.000	1.836	1.636	1.636	0.955	0.933	0.891	3n,2H & 3,3H	1-Jun
Averages									
90-11	3.548	2.484	1.821	1.783	0.874	0.748	0.716		17-Jun
02-11	4.200	2.640	1.990	1.906	0.899	0.776	0.726		30-May

Multiple Release Treatments

	Treatment 1				Treatment 2			
Brood Year	Mark	Treatment	Number Released	Last Date Released	Mark	Treatment	Number Released	Last Date Released
1996	1:1.5	onshore	3.441	27-Jun	1:1.5,2.3	onshore	0.500	27-Jun
1997	2:1.5	onshore	3.202	29-Jun	2:1.5,2.3	fed at lake	0.394	9-Jul
1998	1:1.4+2.5	unfed	0.751	9-Jun	1:1.4+2.3	fed at lake	1.018	30-Jun
1999	2:1.5	fed at lake	0.350	4-Jul				
2000	1.1.5+2.3	fed early	1.265	15-Jun	1.1.5	fed late	1.054	26-Jun
2001	2:1.5	unfed early	0.727	30-May	2:1.5,2.3	fed	1.432	25-Jun
2002	1:1.4	direct release early	0.911	27-May	1:1.4+2.3	fed - IHN loss	0.000	none
2003	1.1.5+2.3	unfed early south	1.005	27-May	1.1.5	unfed early north	1.136	24-May
2004	1:1.4+2.5N	unfed early south	0.367	20-May	1:1.4+2/3,3.3	unfed early north	0.261	20-May
2005	1:1.4+2.3	unfed early south	0.775	8-Jun	1:1.4+2.5	unfed early north	0.696	8-Jun
2006	1:1.2,2.1,3.2	unfed early south	1.808	7-Jun	1:1.2,2.2,3.3	1:1.2,2.2,3.1 early north	1.897	13-Jun
2007	1,3n,2	unfed early midlake	0.971	6-Jun	2n3	2,3n1 early north	1.150	5-Jun
2007	3,2n,1	extended rearing[c]	0.400	8-Jun				
2008	3,2H	unfed early north	0.115	3-Jun	3,3H	extended rearing	0.115	26-Jul
2009	6,2H	unfed early north	0.506	22-May	3n,2H	extended rearing	0.210	12-Aug
2010	2,1,2H	unfed early north	1.398	29-May	2,2,3H	extended rearing	0.198	14-Aug
2011	3n,5H	unfed early north	1.649	29-May	6,2H	extended rearing	0.242	21-Aug
2012	3n,2H	unfed early north	1.419	1-Jun	3,3H	extended rearing	0.216	9-Aug
Averages								
98-11			1.155	6-Jun			0.687	1-Jul
02-11			0.901	31-May			0.591	2-Jul

[a] Eggs not transported but placed in inlake incubator; 2000 = 244,000, 2001 = 865,000, 2002 196,000, 2003 = 190,000.

[b] Survival rates are for hatchery eggs and hatchery fry plants and do not inlcude the lake incubators.

[c] All died to IHNV

Appendix F.4. Trapper and King Salmon lakes egg collection, fry plants, and survivals, 1990–2012.

Numbers for eggs and fry are millions.

		Egg Take			Fry	Percent	Survival		Thermal	Last
							Fertilized	Green	Mark	Date
Brood Year	Lake	Target	Collected [a]	Transport	Planted	Fertilized	Egg to Fry	Egg to Fry	Pattern	Released
1990	Trapper	2.500	2.314	0.934	0.934			0.404	5H	22-Jun
1991	Trapper	2.500	2.953	1.811	1.811			0.613	6H	11-Jun
1992	Trapper	2.500	2.521	1.113	1.113			0.442	7H3	22-Jun
1993	Trapper		1.174	0.916	0.916			0.781	5H5n	24-Jun
1994	Trapper		1.117	0.773	0.773			0.692	7H	3-Jul
2006	Trapper	1.000	1.109	0.897	0.897	0.897	0.905	0.808	6H	20-Jun
2007	Trapper	1.000	0.900	0.353	0.353	0.604	0.650	0.393	4,2nH	5-Jun
2012	King Salmon	0.250	0.238	0.197	0.197	0.896	0.949	0.850	6,2H3	2-Jun

Appendix G. 1. Annual stock proportion estimates (mean) of large Chinook salmon harvested in the Alaskan District 108 commercial drift gillnet, 2012.

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

			5 Reporting Groups				
Year	Sample Size	Statistic	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
2011	70	Mean	0.202	0.529	0.144	0.056	0.069
		SD	0.064	0.071	0.059	0.035	0.032
		CI05	0.101	0.411	0.060	0.010	0.024
		CI95	0.311	0.644	0.251	0.123	0.129
2012	202	Mean	0.019	0.627	0.229	0.124	0.001
		SD	0.025	0.042	0.041	0.033	0.002
		CI05	0.000	0.557	0.161	0.074	0.000
		CI95	0.071	0.696	0.297	0.181	0.005

Appendix G. 2. Annual estimates of large Chinook salmon harvested in the Alaskan District 108 commercial drift gillnet, 2012.

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

			5 Reporting Groups				
Year	Sample Size	Statistic	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
2011	70	Estimate	566	1,480	404	158	192
		SD	180	198	165	99	91
		CI05	283	1,152	167	27	67
		CI95	870	1,803	702	344	361
2012	202	Estimate	90	3,064	1,119	607	4
		SD	121	205	201	159	12
		CI05	0	2,722	788	364	0
		CI95	345	3,397	1,450	885	23

Appendix G. 3. Annual stock proportion estimates (mean) of large Chinook salmon harvested in the Alaskan District 108 sport fisheries, 2012.

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

			5 Reporting Groups				
Year	Sample Size	Statistic	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
2011	199	Mean	0.237	0.099	0.272	0.133	0.259
		SD	0.047	0.028	0.061	0.037	0.037
		CI05	0.162	0.055	0.176	0.075	0.201
		CI95	0.317	0.148	0.377	0.197	0.322
2012	201	Mean	0.165	0.326	0.259	0.119	0.132
		SD	0.043	0.042	0.053	0.031	0.032
		CI05	0.095	0.258	0.176	0.071	0.083
		CI95	0.237	0.396	0.350	0.174	0.189

Appendix G. 4. Annual estimates of large Chinook salmon harvested in the Alaskan District 108 sport fisheries, 2012.

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

			5 Reporting Groups				
Year	Sample Size	Statistic	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
2011	70	Estimate	303	126	348	170	331
		SD	60	36	78	48	47
		CI05	207	71	225	96	257
		CI95	405	189	482	252	412
2012	202	Estimate	237	468	372	171	189
		SD	62	61	76	45	46
		CI05	136	370	253	102	120
		CI95	341	569	503	250	272

Appendix G. 5. Annual stock proportion estimates (mean) of large Chinook salmon harvested in the Alaskan District 111 commercial drift gillnet, 2012.

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

			5 Reporting Groups				
Year	Sample Size	Statistic	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
2011	70	Mean	0.808	0.162	0.001	0.001	0.028
		SD	0.052	0.049	0.007	0.004	0.020
		CI05	0.717	0.089	0.000	0.000	0.005
		CI95	0.887	0.249	0.003	0.001	0.066
2012	206	Mean	0.873	0.120	0.003	0.001	0.003
		SD	0.029	0.026	0.011	0.002	0.006
		CI05	0.823	0.079	0.000	0.000	0.000
		CI95	0.917	0.166	0.026	0.003	0.015

Appendix G. 6. Annual estimates of large Chinook salmon harvested in the Alaskan District 111 commercial drift gillnet, 2012.

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

			5 Reporting Groups				
Year	Sample Size	Statistic	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
2011	70	Estimate	518	104	1	0	18
		SD	33	31	4	3	13
		CI05	459	57	0	0	3
		CI95	568	160	2	1	43
2012	202	Estimate	665	91	2	0	3
		SD	22	20	8	1	4
		CI05	627	60	0	0	0
		CI95	699	126	19	3	11

Appendix G. 7. Annual stock proportion estimates (mean) of large Chinook salmon harvested in the Alaskan District 111 sport fisheries, 2012.

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

			5 Reporting Groups				
Year	Sample Size	Statistic	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
2011	200	Mean	0.435	0.500	0.019	0.019	0.027
		SD	0.046	0.040	0.030	0.013	0.014
		CI05	0.358	0.435	0.000	0.000	0.008
		CI95	0.509	0.566	0.082	0.043	0.053
2012	200	Mean	0.493	0.480	0.001	0.004	0.021
		SD	0.040	0.040	0.007	0.011	0.011
		CI05	0.427	0.414	0.000	0.000	0.007
		CI95	0.558	0.547	0.006	0.030	0.042

Appendix G. 8. Annual estimates of large Chinook salmon harvested in the Alaskan District 111 sport fisheries, 2012.

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

			5 Reporting Groups				
Year	Sample Size	Statistic	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
2011	70	Estimate	549	631	24	23	34
		SD	58	50	38	17	17
		CI05	452	548	0	0	10
		CI95	642	713	103	55	67
2012	202	Estimate	670	653	2	6	29
		SD	54	55	9	15	15
		CI05	581	562	0	0	9
		CI95	758	743	8	40	57

Appendix G. 9. Weekly stock proportion estimates (mean) of sockeye salmon harvested in the Alaskan Subdistrict 106-41/42 (Sumner Strait) commercial drift gillnet fishery, 2012.

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

	Sample Sizes					5 Reporting Groups				
			Aged	Otolith Marked		Enhance	Enhance		Stikine/Taku	
SW	Total	Genotyped	(not genotyped)	(not genotyped)	Statistic	Tahltan	Tuya	Other	Mainstem	Tahltan
25	380	61	169	150	Mean	0.118	0.276	0.319	0.074	0.213
					SD	0.017	0.023	0.039	0.025	0.035
					CI05	0.092	0.239	0.255	0.036	0.157
					CI95	0.146	0.314	0.384	0.119	0.273
					P=0	0.000	0.000	0.000	0.000	0.000
26	398	65	172	161	Mean	0.073	0.331	0.365	0.146	0.085
					SD	0.013	0.024	0.038	0.033	0.025
					CI05	0.053	0.293	0.304	0.094	0.049
					CI95	0.095	0.370	0.428	0.202	0.129
					P=0	0.000	0.000	0.000	0.000	0.000
27	516	164	242	110	Mean	0.017	0.176	0.636	0.137	0.034
					SD	0.006	0.017	0.028	0.023	0.013
					CI05	0.009	0.149	0.589	0.101	0.016
					CI95	0.028	0.204	0.681	0.176	0.057
					P=0	0.000	0.000	0.000	0.000	0.000
28	260	174	52	34	Mean	0.015	0.069	0.800	0.106	0.010
					SD	0.008	0.016	0.029	0.025	0.007
					CI05	0.005	0.045	0.750	0.068	0.002
					CI95	0.030	0.096	0.846	0.149	0.024
					P=0	0.000	0.000	0.000	0.000	0.000
29	277	178	67	32	Mean	0.007	0.018	0.868	0.097	0.010
					SD	0.005	0.008	0.024	0.022	0.007
					CI05	0.001	0.007	0.827	0.063	0.002
					CI95	0.017	0.033	0.906	0.134	0.023
					P=0	0.000	0.000	0.000	0.000	0.000
30	516	207	265	44	Mean	0.002	0.002	0.945	0.047	0.005
					SD	0.002	0.002	0.018	0.017	0.004
					CI05	0.000	0.000	0.914	0.020	0.000
					CI95	0.006	0.006	0.972	0.077	0.013
					P=0	0.000	0.000	0.000	0.000	0.002
31	488	201	247	40	Mean	0.000	0.002	0.964	0.034	0.000
					SD	0.000	0.002	0.012	0.012	0.000
					CI05	0.000	0.000	0.943	0.016	0.000
					CI95	0.000	0.006	0.982	0.055	0.000
					P=0	0.940	0.000	0.000	0.000	0.935
32	238	151	58	29	Mean	0.000	0.000	0.995	0.005	0.000
					SD	0.000	0.000	0.008	0.008	0.001
					CI05	0.000	0.000	0.977	0.000	0.000
					CI95	0.000	0.000	1.000	0.023	0.000
					P=0	0.936	0.934	0.000	0.188	0.933
33	27	19	8	0	Mean	0.000	0.000	0.992	0.007	0.000
					SD	0.003	0.003	0.020	0.019	0.004
					CI05	0.000	0.000	0.955	0.000	0.000
					CI95	0.000	0.000	1.000	0.041	0.000
					P=0	0.920	0.919	0.000	0.226	0.917

Appendix G. 10. Weekly stock proportion estimates (mean) of sockeye salmon harvested in the Alaskan Subdistrict 106-41/42 (Sumner Strait) commercial drift gillnet fishery, 2012.

Estimates reported represent only SW with GSI estimates--will not sum to season total
CI05 is the lower credibility interval and CI95 is the upper credibility interval.

			5 Reporting Groups				
			Enhanced	Enhanced		Stikine/Taku	
SW	Sample Sizes	Statistic	Tahltan	Tuya	Other	Mainstem	Tahltan
25	380	Mean	357	832	963	224	644
		SD	50	69	118	76	106
		CI05	278	721	771	110	475
		CI95	442	947	1,158	360	825
26	398	Mean	277	1,262	1,393	556	326
		SD	49	90	143	125	94
		CI05	201	1,117	1,161	357	186
		CI95	363	1,412	1,632	769	492
27	516	Mean	84	849	3,065	660	164
		SD	28	81	135	109	60
		CI05	44	720	2,839	488	78
		CI95	134	985	3,283	846	274
28	260	Mean	48	215	2,498	331	31
		SD	24	49	92	77	22
		CI05	17	142	2,342	213	6
		CI95	92	301	2,643	465	74
29	277	Mean	48	120	5,780	642	66
		SD	34	53	160	144	46
		CI05	9	48	5,504	421	12
		CI95	114	218	6,028	895	156
30	516	Mean	10	10	4,972	245	24
		SD	10	10	94	91	24
		CI05	1	1	4,807	108	1
		CI95	31	31	5,115	404	71
31	488	Mean	0	3	1,475	51	0
		SD	0	3	19	18	1
		CI05	0	0	1,441	25	0
		CI95	0	9	1,501	84	0
32	238	Mean	0	0	984	5	0
		SD	0	0	8	8	1
		CI05	0	0	966	0	0
		CI95	0	0	989	22	0
33	27	Mean	0	0	311	2	0
		SD	1	1	6	6	1
		CI05	0	0	300	0	0
		CI95	0	0	314	13	0

Appendix G. 11. Weekly stock proportion estimates (mean) of sockeye salmon harvested in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 2012.

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

	Sample Sizes					5 Reporting Groups				
SW	Total	Genotyped	Aged (not genotyped)	Otolith Marked (not genotyped)	Statistic	Enhanced Tahltan	Enhanced Tuya	Other	Stikine/Taku Mainstem	Tahltan
25	336	75	249	12	Mean	0.012	0.024	0.936	0.028	0.000
					SD	0.006	0.008	0.029	0.028	0.001
					CI05	0.004	0.012	0.878	0.000	0.000
					CI95	0.023	0.039	0.971	0.084	0.000
					P=0	0.000	0.000	0.000	0.037	0.929
26	73	20	53	0	Mean	0.000	0.000	0.993	0.007	0.000
					SD	0.001	0.001	0.018	0.018	0.004
					CI05	0.000	0.000	0.960	0.000	0.000
					CI95	0.000	0.000	1.000	0.038	0.000
					P=0	0.927	0.926	0.000	0.222	0.917
27	512	122	382	8	Mean	0.004	0.006	0.962	0.028	0.000
					SD	0.003	0.003	0.017	0.016	0.001
					CI05	0.001	0.002	0.932	0.006	0.000
					CI95	0.009	0.012	0.985	0.058	0.000
					P=0	0.000	0.000	0.000	0.003	0.932
28	488	112	363	13	Mean	0.000	0.004	0.946	0.049	0.000
					SD	0.000	0.003	0.033	0.033	0.001
					CI05	0.000	0.001	0.888	0.000	0.000
					CI95	0.000	0.010	0.996	0.107	0.000
					P=0	0.941	0.000	0.000	0.025	0.929
29	498	108	367	23	Mean	0.002	0.002	0.923	0.073	0.000
					SD	0.002	0.002	0.025	0.025	0.001
					CI05	0.000	0.000	0.879	0.035	0.000
					CI95	0.006	0.006	0.961	0.116	0.000
					P=0	0.000	0.000	0.000	0.000	0.932
30	504	101	330	73	Mean	0.000	0.000	0.983	0.017	0.000
					SD	0.000	0.000	0.023	0.023	0.001
					CI05	0.000	0.000	0.934	0.000	0.000
					CI95	0.000	0.000	1.000	0.066	0.000
					P=0	0.940	0.942	0.000	0.153	0.931
31	500	109	305	86	Mean	0.000	0.000	0.988	0.012	0.000
					SD	0.000	0.000	0.011	0.011	0.001
					CI05	0.000	0.000	0.967	0.000	0.000
					CI95	0.000	0.000	1.000	0.033	0.000
					P=0	0.941	0.942	0.000	0.031	0.932
32	232	72	85	75	Mean	0.000	0.000	0.937	0.062	0.000
					SD	0.000	0.000	0.024	0.024	0.001
					CI05	0.000	0.000	0.894	0.026	0.000
					CI95	0.000	0.000	0.974	0.106	0.000
					P=0	0.935	0.936	0.000	0.000	0.928
33	174	68	68	38	Mean	0.000	0.000	0.998	0.002	0.000
					SD	0.001	0.001	0.006	0.006	0.001
					CI05	0.000	0.000	0.987	0.000	0.000
					CI95	0.000	0.000	1.000	0.013	0.000
					P=0	0.933	0.934	0.000	0.254	0.930
34	77	21	32	24	Mean	0.026	0.000	0.963	0.011	0.000
					SD	0.018	0.001	0.033	0.028	0.002
					CI05	0.005	0.000	0.900	0.000	0.000
					CI95	0.060	0.000	0.994	0.066	0.000
					P=0	0.000	0.928	0.000	0.216	0.921

Appendix G. 12. Weekly estimates of sockeye salmon harvested in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 2012.

Estimates reported represent only SW with GSI estimates--will not sum to season total
CI05 is the lower credibility interval and CI95 is the upper credibility interval.

			5 Reporting Groups				
			Enhanced	Enhanced		Stikine/Taku	
SW	Sample Sizes	Statistic	Tahltan	Tuya	Other	Mainstem	Tahltan
25	336	Mean	8	15	595	18	0
		SD	4	5	19	18	1
		CI05	3	8	559	0	0
		CI95	15	25	618	54	0
26	73	Mean	0	0	173	1	0
		SD	0	0	3	3	1
		CI05	0	0	167	0	0
		CI95	0	0	174	7	0
27	512	Mean	10	15	2,425	70	0
		SD	7	8	42	41	1
		CI05	2	4	2,348	16	0
		CI95	23	31	2,483	146	0
28	488	Mean	0	11	2,501	131	0
		SD	0	8	87	86	2
		CI05	0	2	2,348	0	0
		CI95	0	26	2,632	284	0
29	498	Mean	5	5	2,328	183	0
		SD	5	5	63	63	2
		CI05	0	0	2,218	89	0
		CI95	15	15	2,423	293	0
30	504	Mean	0	0	4,206	72	0
		SD	1	1	100	100	3
		CI05	0	0	3,994	0	0
		CI95	0	0	4,278	283	0
31	500	Mean	0	0	1,261	15	0
		SD	0	0	14	14	1
		CI05	0	0	1,233	0	0
		CI95	0	0	1,276	43	0
32	232	Mean	0	0	683	46	0
		SD	0	0	18	18	1
		CI05	0	0	652	19	0
		CI95	0	0	710	77	0
33	174	Mean	0	0	657	2	0
		SD	0	0	4	4	1
		CI05	0	0	650	0	0
		CI95	0	0	659	8	0
34	77	Mean	5	0	179	2	0
		SD	3	0	6	5	0
		CI05	1	0	167	0	0
		CI95	11	0	185	12	0

Appendix G. 13. Weekly stock proportion estimates (mean) of sockeye salmon harvested in the Alaskan District 108 commercial drift gillnet fishery, 2012.

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

	Sample Sizes					5 Reporting Groups				
			Aged	Otolith Marked		Enhanced	Enhanced		Stikine/Taku	
SW	Total	Genotyped	(not genotyped)	(not genotyped)	Statistic	Tahltan	Tuya	Other	Mainstem	Tahltan
25	419	212	1	206	Mean	0.184	0.340	0.067	0.166	0.242
					SD	0.021	0.026	0.014	0.021	0.022
					CI05	0.151	0.298	0.046	0.133	0.206
					CI95	0.220	0.384	0.093	0.203	0.279
					P=0	0.000	0.000	0.000	0.000	0.000
26	419	194	0	225	Mean	0.125	0.429	0.069	0.170	0.207
					SD	0.017	0.026	0.015	0.020	0.022
					CI05	0.098	0.386	0.046	0.138	0.173
					CI95	0.155	0.472	0.095	0.205	0.244
					P=0	0.000	0.000	0.000	0.000	0.000
27	445	259	2	184	Mean	0.068	0.341	0.082	0.361	0.148
					SD	0.012	0.022	0.014	0.023	0.017
					CI05	0.049	0.306	0.060	0.323	0.121
					CI95	0.088	0.377	0.106	0.400	0.176
					P=0	0.000	0.000	0.000	0.000	0.000
28	338	280	0	58	Mean	0.026	0.152	0.080	0.661	0.081
					SD	0.009	0.019	0.015	0.026	0.015
					CI05	0.014	0.122	0.057	0.618	0.058
					CI95	0.042	0.184	0.106	0.703	0.106
					P=0	0.000	0.000	0.000	0.000	0.000
29	417	382	2	33	Mean	0.006	0.038	0.283	0.650	0.022
					SD	0.004	0.010	0.022	0.023	0.007
					CI05	0.002	0.024	0.247	0.613	0.012
					CI95	0.013	0.055	0.320	0.688	0.035
					P=0	0.000	0.000	0.000	0.000	0.000
30	299	284	2	13	Mean	0.010	0.024	0.182	0.771	0.013
					SD	0.008	0.010	0.029	0.030	0.008
					CI05	0.002	0.011	0.136	0.721	0.003
					CI95	0.026	0.042	0.231	0.819	0.029
					P=0	0.000	0.000	0.000	0.000	0.000
31	77	69	0	8	Mean	0.000	0.000	0.572	0.427	0.000
					SD	0.002	0.002	0.057	0.057	0.002
					CI05	0.000	0.000	0.479	0.334	0.000
					CI95	0.000	0.000	0.665	0.521	0.000
					P=0	0.858	0.858	0.000	0.000	0.859
32	73	65	0	8	Mean	0.000	0.014	0.246	0.740	0.000
					SD	0.001	0.013	0.051	0.052	0.001
					CI05	0.000	0.001	0.167	0.651	0.000
					CI95	0.000	0.040	0.334	0.821	0.000
					P=0	0.927	0.000	0.000	0.000	0.927
33	*36*	*33*	*0*	*3*	*Mean*	*0.000*	*0.000*	*0.483*	*0.515*	*0.000*
					SD	*0.003*	*0.003*	*0.074*	*0.074*	*0.003*
					CI05	*0.000*	*0.000*	*0.355*	*0.399*	*0.000*
					CI95	*0.001*	*0.001*	*0.600*	*0.643*	*0.001*
					P=0	*0.851*	*0.850*	*0.000*	*0.000*	*0.852*

Appendix G. 14. Weekly estimates of sockeye salmon harvested in the Alaskan District 108 commercial drift gillnet fishery, 2012.

Estimates reported represent only SW with GSI estimates--will not sum to season total
CI05 is the lower credibility interval and CI95 is the upper credibility interval.

			5 Reporting Groups				
			Enhanced	Enhanced		Stikine/Taku	
SW	Sample Sizes	Statistic	Tahltan	Tuya	Other	Mainstem	Tahltan
25	419	Mean	586	1,083	214	529	769
		SD	66	83	46	68	71
		CI05	481	949	145	422	655
		CI95	699	1,221	295	645	889
26	419	Mean	346	1,186	190	470	572
		SD	48	73	42	56	59
		CI05	271	1,066	126	380	478
		CI95	428	1,305	263	566	673
27	445	Mean	283	1,425	342	1,509	617
		SD	50	91	59	97	70
		CI05	206	1,277	250	1,351	505
		CI95	369	1,576	443	1,670	736
28	338	Mean	102	588	309	2,555	312
		SD	34	73	59	99	57
		CI05	54	472	219	2,391	223
		CI95	163	711	411	2,716	411
29	417	Mean	22	131	975	2,239	76
		SD	13	33	76	79	25
		CI05	6	81	851	2,109	40
		CI95	46	189	1,101	2,368	122
30	299	Mean	32	73	567	2,401	41
		SD	25	31	90	93	26
		CI05	5	33	422	2,247	10
		CI95	81	130	720	2,553	91
31	77	Mean	0	0	487	363	0
		SD	1	1	48	48	1
		CI05	0	0	407	284	0
		CI95	0	0	566	443	0
32	73	Mean	0	4	76	227	0
		SD	0	4	16	16	0
		CI05	0	0	51	200	0
		CI95	0	12	103	252	0
33	*36*	*Mean*	*0*	*0*	*83*	*88*	*0*
		SD	*1*	*1*	*13*	*13*	*1*
		CI05	*0*	*0*	*61*	*68*	*0*
		CI95	*0*	*0*	*103*	*110*	*0*

Appendix G. 15. Weekly stock proportion estimates (mean) of sockeye salmon harvested in the Alaskan District 111 traditional commercial drift gillnet fishery by week, 2012.

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

	Sample Sizes					8 Reporting Groups							
SW	Total	Genotyped	Aged (not genotyped)	Otolith Marked (not genotyped)	Statistic	Enhanced Snettisham	Enhanced Stikine	Enhanced Tatsamenie	Enhanced Trapper	Other	Snettisham	Stikine/Taku Mainstem	Taku Lakes
25	*98*	*54*	*42*	*2*	*Mean*	*0.000*	*0.010*	*0.000*	*0.010*	*0.039*	*0.003*	*0.551*	*0.387*
					SD	*0.001*	*0.010*	*0.001*	*0.010*	*0.028*	*0.012*	*0.060*	*0.057*
					CI05	*0.000*	*0.001*	*0.000*	*0.001*	*0.006*	*0.000*	*0.450*	*0.295*
					CI95	*0.000*	*0.030*	*0.000*	*0.030*	*0.094*	*0.020*	*0.648*	*0.483*
					P=0	*0.930*	*0.000*	*0.929*	*0.000*	*0.000*	*0.783*	*0.000*	*0.000*
26	*49*	*25*	*21*	*3*	*Mean*	*0.000*	*0.060*	*0.000*	*0.000*	*0.219*	*0.001*	*0.309*	*0.411*
					SD	*0.002*	*0.033*	*0.002*	*0.002*	*0.083*	*0.005*	*0.091*	*0.085*
					CI05	*0.000*	*0.017*	*0.000*	*0.000*	*0.098*	*0.000*	*0.164*	*0.274*
					CI95	*0.000*	*0.123*	*0.000*	*0.000*	*0.370*	*0.001*	*0.462*	*0.555*
					P=0	*0.924*	*0.000*	*0.924*	*0.924*	*0.000*	*0.846*	*0.000*	*0.000*
27	260	112	131	17	Mean	0.004	0.015	0.004	0.042	0.026	0.000	0.212	0.697
					SD	0.004	0.008	0.004	0.012	0.016	0.002	0.040	0.042
					CI05	0.000	0.005	0.000	0.024	0.006	0.000	0.149	0.626
					CI95	0.012	0.030	0.012	0.064	0.056	0.000	0.279	0.765
					P=0	0.000	0.000	0.000	0.000	0.000	0.860	0.000	0.000
28	379	152	170	57	Mean	0.063	0.011	0.024	0.053	0.017	0.004	0.401	0.427
					SD	0.012	0.005	0.008	0.011	0.010	0.008	0.035	0.035
					CI05	0.044	0.004	0.012	0.035	0.005	0.000	0.344	0.371
					CI95	0.085	0.020	0.038	0.073	0.037	0.021	0.459	0.485
					P=0	0.000	0.000	0.000	0.000	0.000	0.585	0.000	0.000
29	341	140	104	97	Mean	0.234	0.000	0.041	0.006	0.035	0.050	0.398	0.236
					SD	0.023	0.000	0.011	0.004	0.015	0.019	0.035	0.030
					CI05	0.197	0.000	0.025	0.001	0.014	0.023	0.340	0.187
					CI95	0.273	0.000	0.060	0.014	0.061	0.085	0.456	0.287
					P=0	0.000	0.881	0.000	0.000	0.000	0.000	0.000	0.000
30	768	155	136	477	Mean	0.563	0.000	0.026	0.002	0.047	0.040	0.272	0.050
					SD	0.018	0.000	0.006	0.002	0.010	0.012	0.022	0.013
					CI05	0.533	0.000	0.017	0.000	0.032	0.022	0.236	0.030
					CI95	0.593	0.000	0.037	0.005	0.066	0.062	0.307	0.071
					P=0	0.000	0.796	0.000	0.000	0.000	0.000	0.000	0.000
31	684	189	150	345	Mean	0.432	0.000	0.040	0.000	0.099	0.040	0.310	0.079
					SD	0.018	0.000	0.008	0.000	0.015	0.011	0.022	0.014
					CI05	0.402	0.000	0.028	0.000	0.076	0.024	0.274	0.058
					CI95	0.463	0.000	0.053	0.000	0.124	0.060	0.346	0.103
					P=0	0.000	0.793	0.000	0.889	0.000	0.000	0.000	0.000
32	670	69	99	502	Mean	0.821	0.000	0.015	0.000	0.046	0.033	0.049	0.036
					SD	0.013	0.000	0.004	0.000	0.012	0.011	0.007	0.008
					CI05	0.799	0.000	0.010	0.000	0.027	0.017	0.038	0.025
					CI95	0.841	0.000	0.021	0.000	0.067	0.052	0.062	0.051
					P=0	0.000	0.796	0.000	0.892	0.000	0.000	0.000	0.000
33	471	73	111	287	Mean	0.565	0.000	0.040	0.000	0.059	0.038	0.222	0.076
					SD	0.021	0.000	0.009	0.000	0.017	0.014	0.024	0.017
					CI05	0.530	0.000	0.027	0.000	0.034	0.018	0.184	0.049
					CI95	0.599	0.000	0.055	0.000	0.088	0.062	0.262	0.106
					P=0	0.000	0.782	0.000	0.885	0.000	0.000	0.000	0.000

Appendix G. 16. Weekly estimates of sockeye salmon harvested in the Alaskan District 111 traditional commercial drift gillnet fishery by week, 2012.

Estimates reported represent only SW with GSI estimates--will not sum to season total
CI05 is the lower credibility interval and CI95 is the upper credibility interval.

			8 Reporting Groups							
SW	Sample Sizes	Statistic	Enhanced Snettisham	Enhanced Stikine	Enhanced Tatsamenie	Enhanced Trapper	Other	Snettisham	Stikine/Taku Mainstem	Taku Lakes
25	*98*	*Mean*	*0*	*13*	*0*	*12*	*47*	*4*	*673*	*473*
		SD	*1*	*12*	*1*	*12*	*35*	*14*	*74*	*70*
		CI05	*0*	*1*	*0*	*1*	*7*	*0*	*550*	*361*
		CI95	*0*	*37*	*0*	*37*	*115*	*25*	*791*	*590*
26	*49*	*Mean*	*0*	*87*	*0*	*0*	*315*	*1*	*446*	*593*
		SD	*2*	*48*	*3*	*2*	*120*	*7*	*131*	*123*
		CI05	*0*	*25*	*0*	*0*	*141*	*0*	*236*	*395*
		CI95	*0*	*177*	*0*	*0*	*533*	*1*	*666*	*800*
27	260	Mean	13	50	13	137	84	1	689	2,270
		SD	12	25	13	40	51	5	129	137
		CI05	1	17	1	78	20	0	484	2,039
		CI95	38	97	38	210	182	1	909	2,491
28	379	Mean	320	54	120	266	88	19	2,032	2,163
		SD	63	27	40	58	51	39	177	175
		CI05	223	19	63	178	23	0	1,741	1,879
		CI95	430	104	192	368	186	104	2,324	2,453
29	341	Mean	4,594	1	803	115	679	991	7,818	4,628
		SD	449	7	210	81	287	373	693	592
		CI05	3,873	0	490	21	266	445	6,682	3,679
		CI95	5,351	1	1,176	273	1,198	1,660	8,959	5,626
30	768	Mean	18,464	1	868	53	1,554	1,324	8,907	1,627
		SD	593	8	204	53	340	399	715	411
		CI05	17,489	0	561	3	1,041	731	7,733	999
		CI95	19,441	5	1,229	158	2,151	2,034	10,085	2,344
31	684	Mean	7,379	1	675	0	1,685	689	5,288	1,357
		SD	315	4	133	3	254	188	375	233
		CI05	6,863	0	470	0	1,291	411	4,673	994
		CI95	7,902	3	906	1	2,124	1,024	5,905	1,758
32	670	Mean	26,131	1	470	1	1,468	1,047	1,564	1,156
		SD	412	9	112	6	387	337	237	261
		CI05	25,429	0	308	0	868	547	1,198	780
		CI95	26,782	5	670	1	2,140	1,650	1,965	1,628
33	471	Mean	6,037	1	430	0	632	404	2,370	815
		SD	226	4	91	3	178	146	253	186
		CI05	5,663	0	290	0	363	190	1,964	526
		CI95	6,407	3	590	1	945	665	2,797	1,137