PACIFIC SALMON COMMISSION
JOINT TRANSBOUNDARY TECHNICAL COMMITTEE

FINAL ESTIMATES OF TRANSBOUNDARY RIVER SALMON PRODUCTION, HARVEST AND ESCAPEMENT AND A REVIEW OF JOINT ENHANCEMENT ACTIVITIES IN 2016

REPORT TCTR (19)-1

January, 2019

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)
FBD	Fish per boat day
GSI	Genetic Stock Identification
IHNV	Infectious Hematopoietic Necrosis (a virus which infects sockeye salmon)
LCM	Latent Class Model
MEF	Mid Eye Fork (fish length measurement)
MR	Mark–Recapture
MSY	Maximum Sustained Yield
POH	Post-Orbital-Hyperal (fish length measurement)
PSC	Pacific Salmon Commission
PST	Pacific Salmon Treaty
SCMM	Stikine Chinook Management Model
SHA	Special Harvest Area
SMM	Stikine Management Model
SPA	Scale Pattern Analysis
SW	Statistical Week
TAC	Total Allowable Catch
TMR	Thermal Mark Recovery
TRTFN	Taku River Tlingit First Nation
TBR	Transboundary River
TTC	Transboundary Technical Committee
YSC	Yukon Salmon Committee

CALENDAR OF STATISTICAL WEEKS

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

EXECUTIVE SUMMARY

Final estimates of harvests and escapements of Pacific salmon returning to the transboundary Stikine, Taku, and Alsek rivers for 2016 are presented and compared with historical patterns. Average, unless defined otherwise, refers to the most recent 10-year average (2006–2015). 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 final postseason estimate of the 2016 Stikine River sockeye salmon terminal run was 247,900 fish, of which approximately 171,900 fish were harvested in various fisheries including assessment/test fisheries. An estimated 75,800 Stikine River fish escaped to spawn; 4,300 fish were removed for brood stock, and an estimated 8,700 fish migrated to the barrier in the Tuya River and were not harvested. The terminal run was above average and the harvest was above average. The Tahltan Lake sockeye salmon total weir count was 38,600 fish was above the goal range of 18,000 to 30,000 fish. The estimated spawning escapement of 28,700 mainstem Stikine River sockeye salmon was within the goal range of 20,000 to 40,000 fish. The estimated U.S. commercial harvest of Stikine River sockeye salmon in Districts 106 and 108, including the Stikine River subsistence fishery, was 83,500 fish. The sockeye salmon harvest in the Canadian inriver commercial was 75,700 fish and the AF harvest was 10,600 fish. The inriver test fisheries harvested 1,800 sockeye salmon. Weekly inseason run projections from the SMM ranged from 153,500 to 242,500 sockeye salmon. The final inseason model prediction was 242,500 fish, with a TAC of 181,900 fish. The final postseason terminal run estimate was 247,900 fish and an AC estimate of 93,300 Stikine River sockeye salmon for each country, Canada harvested 93% and the U.S. harvested 89% of their respective TACs.

The 2016 Stikine River large Chinook salmon run was estimated at 15,500 fish, of which approximately 4,940 fish were harvested in various fisheries. The estimated escapement of Stikine River large Chinook salmon was 10,550 fish; below both the escapement goal of 17,400 fish and the escapement goal range 14,000 to 28,000 fish. The run and harvest were below their respective averages. The Little Tahltan River large Chinook salmon escapement of 920 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 fish. The estimated U.S. commercial harvest of Stikine River Chinook salmon in Districts 108 gillnet, test, troll, subsistence, and sport fisheries was 1,710 fish. The estimated Canadian commercial, Aboriginal, assessment/test, and sport fisheries harvest was 3,240 fish. Managers used harvest in the MR, model, and other assessment estimates to generate inseason run sizes after SW 25. The inseason run projections were consistent throughout the course of the fishery in predicting a terminal run size that was substantially lower than the preseason expectation of 33,900 large Chinook salmon. Weekly inseason run projections ranged from 18,100 to 22,800 large Chinook salmon.

The 2016 run size of Stikine River coho salmon cannot be quantified. The U.S. harvest of Stikine River coho salmon is also unknown since there is no stock identification program for this species. Mixed stock coho salmon harvest in District 106 122,100 fish (41% Alaska hatchery) and District 108 was 22,200 fish (36% Alaska hatchery). The Canadian inriver coho salmon harvest of 5,300 fish was above average. The annual aerial surveys indicated a well below average return to the 6 index sites that were surveyed by Canada. The inseason weekly CPUE of coho salmon from both the lower Stikine River Canadian fishery and sockeye salmon test fishery (incidentally caught coho salmon) was below average.

In May 2014, a landslide occurred near the mouth of the Tahltan River. The landslide deposited approximately 8,000 m^3 of debris into the river which may have restricted access to Tahltan River Chinook and sockeye salmon spawning sites until mid-July 2014. Remedial work was done to improve fish passage at the landslide in March 2015. However, it is assumed the landslide still has the potential to continue to restrict upstream passage, especially during periods of high water. In 2016 radio telemetry results did not indicate that the Chinook salmon escapement was unduly affected, although the water levels were relatively low. Similarly, for sockeye salmon neither the timing nor the magnitude of the escapement (well above average) to Tahltan Lake appeared to be symptomatic of any impediments to migration.

Taku River

The final postseason estimate of the 2016 Taku River sockeye salmon terminal run is 288,700 fish, 268,800 wild fish, and 20,000 hatchery fish. The U.S. harvested 68,000 Taku River wild fish, Canada harvested 33,300 wild fish and the estimated above border spawning escapement was 167,500 wild sockeye salmon. The terminal run size was above average. The wild escapement was well above average and well above the goal range of 71,000 to 80,000 fish. The U.S. and Canada harvested an estimated 45% and 76% of their respective ACs.

The estimated 2016 Taku River large Chinook salmon terminal run was 14,840 fish; above border run was 14,010 fish and spawning escapement was 12,380 fish. The run was the lowest on record and the harvests were well below average. The total harvest of large Chinook salmon in the inriver assessment/test fishery and Canadian commercial, Aboriginal, and recreational fisheries in the Taku River was 1,630 fish. The traditional District 111 mixed stock drift gillnet fishery total harvest of 580 Chinook salmon was the lowest on record dating back to 1960.

The estimated above border run of Taku River coho salmon in 2016 is 99,200 fish, which was average. The Canadian inriver commercial harvest was 9,500 coho salmon with an additional 2,000 fish harvested in the assessment/test fishery and 50 fish harvested in the aboriginal fishery. After all Canadian harvests are subtracted from the above border run the above border spawning escapement is estimated at 87,700 coho salmon, which exceeds the mid-point of the newly adopted escapement goal range of 50,000 to 90,000 fish. The U.S. harvest of 34,400 coho salmon in the traditional District 111 mixed stock fishery was below average. Alaskan hatcheries contributed an estimated 7,400 fish, or 21% of the District 111 harvest.

Alsek River

The 2016 Alsek River harvest of 6,700 sockeye salmon in the U.S. commercial fishery was below average. The Canadian inriver recreational fishery reported no harvest sockeye salmon while the Aboriginal food fishery harvest was approximately 815 fish. The Klukshu River weir count of 7,600 sockeye salmon was below average and the escapement of 7,400 fish was below the escapement goal range of 7,500 to 11,000 fish. The count of 1,400 early run sockeye salmon (i.e. through August 15) and the late run count of 6,200 were both below average.

The 650 Chinook salmon counted through the Klukshu River weir was below average and the estimated escapement (also 651 fish) was below the escapement goal range of 800 to 1,200 Chinook salmon. The U.S. Dry Bay harvest of 130 large Chinook salmon was below average. The Canadian recreational and Aboriginal fishery harvests of 80 and 10 fish, respectively, were both below average.

Current stock assessment programs prevent an accurate comparison of the Alsek River coho salmon run with historical runs. There was minimal effort during the U.S. Dry Bay coho salmon fishery and harvest figures are negligible. The Canadian recreational and Aboriginal fisheries harvested no coho salmon. The operation of the Klukshu River weir does not provide a complete enumeration of coho salmon into this system since it is removed before the run is complete.

Enhancement

For brood year 2016, an estimated 5.3 million eggs were collected at Tahltan Lake, transported to Snettisham Hatchery and 3.1 million fry were planted back in Tahltan Lake. An estimated 1.8 million eggs were collected at Tatsamenie Lake, transported to the hatchery and 1.2 million fry were transported back to the lake. One million fry were directly released into the Tatsamenie Lake and 144,000 fry were released from the extended rearing program. An estimated 271,000 eggs were collected at Lower Trapper Lake, transported to the hatchery and 212,000 fry were planted back in the lake. The fry planted into Lower Trapper Lake will help jump start the colonization of Upper Trapper Lake. In the late fall of 2017, barrier removal to Upper Trapper Lake is scheduled to begin. In the spring of 2016, brood year 2015 sockeye salmon were transported from Snettisham Hatchery to project lakes. Approximately 3.4 million sockeye salmon fry were planted in Tahltan Lake. Approximately 470,000 fry were planted in Tatsamenie Lake. An estimated 334,000 fry were designated to be directly planted in Tatsamenie Lake, but approximately 50,000 were pen reared in the lake as a "proof of concept" experiment. Approximately 86,000 sockeye salmon were reared in cap troughs on-shore, transferred to net pens and then released into the lake.

Adult sockeye salmon otoliths were processed inseason by the ADF&G otolith lab to estimate weekly contribution of fish from U.S./Canada TBR fry planting programs to District 106, 108, and 111 gillnet fisheries and to Canadian commercial fisheries in the Stikine and Taku rivers. Final estimates of stocked fish to Alaskan harvests were 31,400 Stikine River fish to District 106 and 108, and 6,800 Taku River fish to District 111. Final

estimates of stocked fish to Canadian fisheries included 33,300 fish to Stikine River fisheries and 4,000 fish to the Taku River fisheries.

INTRODUCTION

This report presents final estimates of the 2016 harvest and escapement data for Pacific salmon runs to the transboundary Stikine, Taku, and Alsek rivers and describes management actions taken during the season. Harvest and effort data are presented by week, for each river for both U.S. and Canadian fisheries. Spawning escapement data for most species are reported from weir counts or other escapement monitoring techniques. Joint enhancement activities on the Stikine and Taku rivers are also summarized.

The TTC met prior to the season to update joint management, stock assessment and enhancement plans and determine preseason forecasts and outlooks for run strengths and initial TAC estimates for the various species and rivers. The results of this meeting are summarized in: PSC TTC, TCTR (16)-1 Salmon Management and Enhancement Plans for the Stikine, Taku and Alsek Rivers, 2016.

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 assessment/test fisheries located in the lower and upper Stikine River, and by a Canadian AF in the upper portion of the river (Figure 1). In addition, Canadian terminal area fisheries are occasionally operated in the lower Tuya River and/or at Tahltan Lake when escapements are estimated to include excess salmon to spawning requirements (ESSR). A recreational fishery also exists in the Canadian sections of the Stikine River drainage. In 1995, a U.S. personal use fishery was established in the lower Stikine River; no harvests were reported in this fishery in 1995 through 2000. Approximately 30 sockeye salmon were harvested in 2001, and the personal use fishery on the Stikine River was not open in 2002 and 2003. A U.S. subsistence fishery was opened in 2004 for sockeye salmon and in 2005 for Chinook and coho salmon.

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.

In May 2014, a landslide occurred near the mouth of the Tahltan River. The landslide deposited approximately 8,000 m^3 of debris into the river which may have restricted access to Tahltan River Chinook and sockeye salmon spawning sites until mid-July 2014. For the 2014 season, Canada estimated that approximately 90% and 7% of the Chinook and

sockeye salmon respectively failed to access their traditional spawning grounds located above the landslide. In March 2015 select boulders at the landslide were demolished using an industrial expansion compound set into drill holes within the boulders. The resulting fragments were displaced downstream by manual labor and by the erosional effects of the spring freshet. The exercise resulted in an increase in the channel width, ridding the site of a "pinch point" where it was observed that salmon struggled in their attempts to ascend the river in 2014. In 2015, Chinook salmon were observed attempting to negotiate the landslide from late May to late June; no observation of fish succeeding in transiting the site was made until 30 June, when Tahltan River flows started to drop. Radio telemetry data, however, indicated the first radio tagged fish passed the weir on 28 June (on average approximately 50% of the fish enter the Tahltan River by late June). In 2015 during low flow regimes, sockeye salmon were observed being rejected from the landslide channel; moreover, several sockeye salmon carcasses were observed below the landslide. In 2016, water levels were generally conducive to fish passage; preliminary telemetry results and weir counts suggest that overall, escapements were not unduly affected by the landslide.

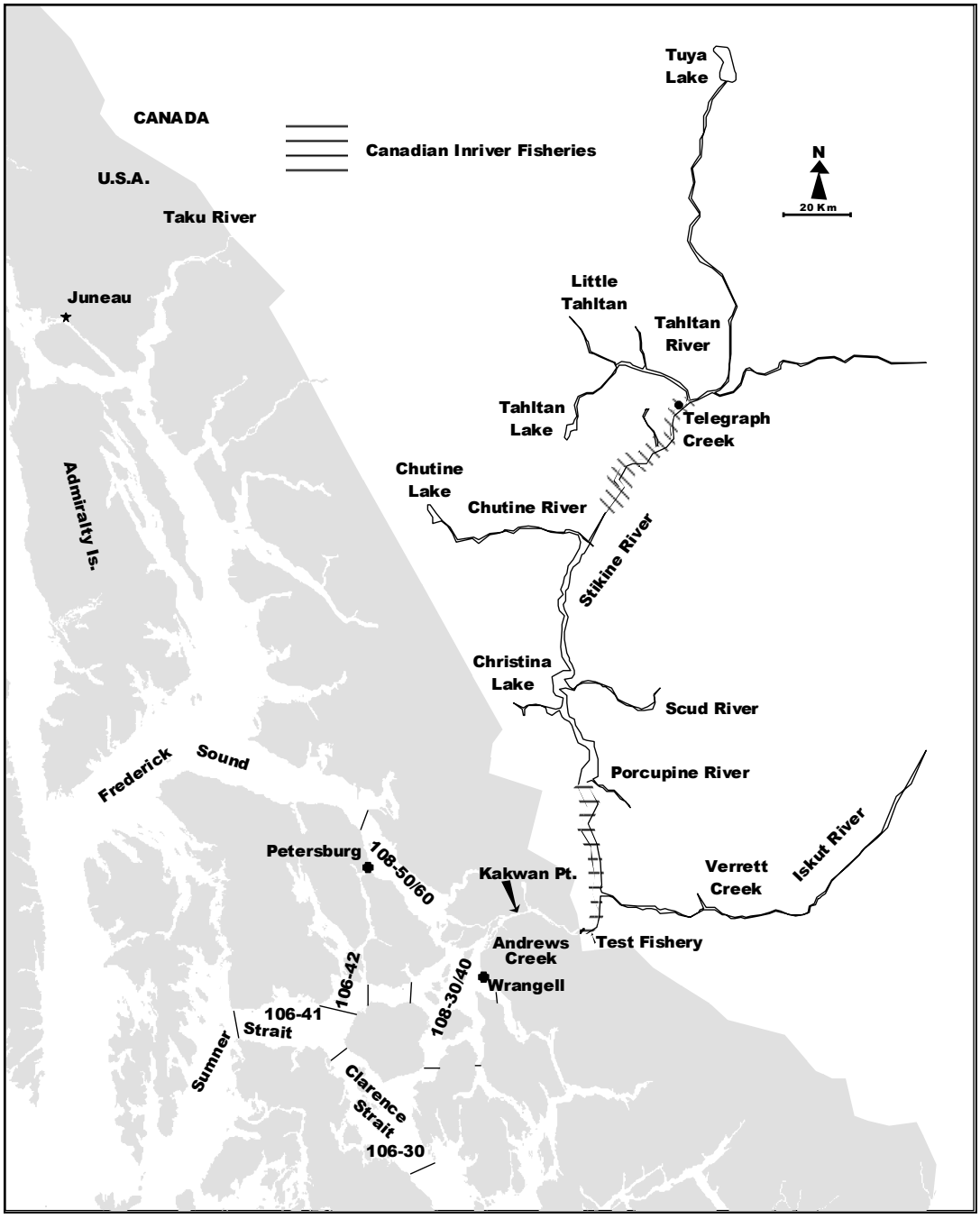

Figure 1. The Stikine River and principal U.S. and Canadian fishing areas.

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 MR 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 1996–2015. Most of the CPUE and run size data sets (CPUE vs. run size) are significantly correlated. Inseason model estimates were generated commencing in SW 22 and available for management purposes the following week (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 26 and were averaged with the SCMM for the remainder of the Chinook reporting period. 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 33,900 large Chinook salmon was above the threshold run size limit of 28,100 fish (Table 1); hence, triggering the option to conduct a directed Chinook salmon fisheries in the U.S. and Canada. The threshold number is the sum of the midpoint escapement goal (21,000 fish) + the Canadian BLC (2,300 fish) + the U.S. BLC (3,400 fish) + the inriver assessment/test fishery harvest (1,400 fish). In conjunction with the AC associated with the directed fishery, both U.S. and Canada are permitted a base level catch harvested as bycatch taken in the course of the targeted sockeye salmon net fisheries and Chinook salmon taken in traditional recreational fisheries.

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, troll, and subsistence fisheries and the inriver assessment/test, Canadian gillnet, and sport fisheries, 2016.

	Start	Terminal Run		TAC			Estimated Harvest
SW	Date	Estimate[a]	Method[b]	Total	Weekly	Cumulative	Cumulative
Canada Estimates							
19	1-May	33,900	Preseason	4,740	140	140	46
20	8-May	33,900	Preseason	4,740	334	474	154
21	15-May	33,900	Preseason	4,740	378	851	296
22	22-May	33,900	Preseason	4,740	357	1,208	647
23	29-May	27,000	SCMM	2,250	322	1,530	896
24	5-Jun	22,000	SCMM	0	0	0	896
25	12-Jun	22,000	SCMM	0	0	0	896
26	19-Jun						
27	26-Jun						
28	3-Jul						
29	10-Jul						
U.S. Estimates							
19	1-May	33,900	Preseason	1,060	66	104	106
20	8-May	33,900	Preseason	1,060	81	185	406
21	15-May	33,900	Preseason	1,060	122	307	635
22	22-May	33,900	Preseason	1,060	164	470	974
23	29-May	20,147	SCMM	0	0	0	1,265
24	5-Jun	21,846	SCMM	0	0	0	1,613
25	12-Jun	21,802	SCMM	0	0	0	1,716
26	19-Jun	22,799	SCMM	0	0	0	2,098
27	26-Jun	21,159	Average	0	0	0	2,097
28	3-Jul	19,187	Average	0	0	0	2,050
29	10-Jul	19,882	Average	0	0	0	2,234
Postseason estimates							1,707

[a] Inseason estimates were generated and reported the previous SW

[b] Average of mark–recapture and SCMM

The preseason forecast for the Stikine River large Chinook salmon terminal run was approximately 33,900 large Chinook salmon (Table 1), which indicated a run size characterized as slightly above average. Joint Canadian and U.S. inseason predictions of terminal run size ranged from 18,089 to 22,799 large Chinook salmon (Table 1) Project biologists used the daily harvest and effort data transmitted from the Kakwan Point tagging site and from the commercial fishing grounds to make weekly run projections based on the SCMM and MR models. 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. Given the paucity of spaghetti tags recovered inseason and customary high flows in May, affecting catching performance which drives the management model, managers used the preseason forecast during SW 19–22 The first inseason estimate was generated in SW 22. Based on MR data from the inriver commercial fishery tag recoveries and tag recoveries from Verrett and Little Tahltan river escapement sampling, and the U.S. harvest from

District 108, the final postseason estimate of the terminal run size of Stikine Chinook salmon was 15,496 large Chinook salmon, below the final inseason estimate of 18,089 large Chinook salmon in SW 29 (Table 1). The 2016 Little Tahltan River escapement of 921 large Chinook salmon represents 9% of the total Stikine River escapement of 10,343 large fish, close to the average of approximately 8% (note that this average has declined significantly in the last ten years).

Sockeye Salmon

The preseason forecast for the Stikine River sockeye salmon run was approximately 223,000 fish (Table 2), and characterized as an above average run. The forecast included approximately 87,000 natural Tahltan sockeye salmon, 42,000 enhanced Tahltan fish, 38,000 enhanced Tuya sockeye salmon, and 56,000 mainstem sockeye salmon. The preseason forecast was used from SW 26 to 28 for the inriver fishery. The U.S. used the SMM beginning in SW 28 for District 106 and 108.

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

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 fish), average (40,000–80,000 fish), or above average (+80,000 fish). The SMM for 2016 was based on CPUE data from 1994 to 2011 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; however, the Lower River Test fishery CPUE data was available to enter into the SMM model to compare and contrast the respective run sizes generated from each of the inputs. In 2016 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, 2010–2015, only one net per licence was permitted, while in 1996–1999 and 2005–2009 two nets per license were allowed. Only one net was permitted in the 2016 fishing season.

In 2014, 2015, and 2016 a new model was tested: the Stikine Forecasting Management Model (SFMM). The results were summarized in: PSC Technical report No. 38 Stikine Sockeye Salmon Management Model: Improving Management Uncertainty. This model was based on a second order polynomial relationship between weekly cumulative harvest or CPUE in District 106-41 and yearly run size. Triggers of run size for the Tahltan stock were ≤98,000 fish or >98,000 fish in the District 106-41 fishery, and 0, <46,000 fish, or >175,000 fish in the District 108 fishery. Triggers were not used for the mainstem stock. Additional model runs using cumulative harvest or CPUE in the District 108 sockeye salmon area was also tested. The sockeye salmon area harvest and CPUE in District 108 does not include 108-20 and 108-10 fishing areas, or midweek openings.

Table 2. Weekly forecasts of run size and total allowable harvest for Stikine River sockeye salmon as estimated inseason by the Stikine Management Model and other methods, 2016.

	Start	Terminal		TAC			Cumulative Harvest	
SW	Date	Estimate	Method	Total	U.S.	Canada	U.S.	Canada
Model runs generated by Canada								
26	19-Jun	223,000	Preseason Forecast	167200	83,600	83,600		4
27	26-Jun	223,000	Preseason Forecast	167200	83,600	83,600		4,014
28	3-Jul	223,000	Preseason Forecast	167200	83,600	83,600		17,452
29	10-Jul	198,983	SMM	143183	71,592	71,592		27,226
30	17-Jul	178,819	SMM	123019	61,510	61,510		53,761
31	24-Jul	200,815	SMM	145015	72,508	72,508		59,413
32	31-Jul	224,665	SMM	168865	84,433	84,433		78,883
33	7-Aug	242,234	SMM	186434	93,217	93,217		81,338
34	14-Aug	244,978	SMM	189178	94,589	94,589		86,091
Model runs generated by the U.S.								
25	12-Jun	223,000	Preseason Forecast	167,200	83,600	83,600	782	4
26	19-Jun	223,000	Preseason Forecast	167,200	83,600	83,600	13,196	4,014
27	26-Jun	223,000	Preseason Forecast	167,200	83,600	83,600	24,474	17,452
28	3-Jul	153,986	SMM	89,514	44,757	44,757	26,368	27,226
29	10-Jul	153,487	SMM	91,611	45,806	45,806	61,817	53,761
30	17-Jul	178,820	SMM	117,547	58,773	58,773	66,509	59,413
31	24-Jul	200,815	SMM	140,279	70,140	70,140	72,476	78,883
32	31-Jul	224,665	SMM	163,774	81,887	81,887	73,118	81,338
33	7-Aug	242,513	SMM	181,876	90,938	90,938	71,307	86,091
Final postseason estimate				186,524	93,262	93,262	83,441	86,716

Harvest does not include test fishery

Table 3. Terminal run reconstruction for Stikine River sockeye salmon, 2016.

				Total	Tahltan	
	All Tahltan	Tuya	Mainstem	Stikine	EnhancedTahltan	WildTahltan
Total Count[a]	38,631	8,698	28,646	75,975	14,918	23,543
Natural Spawning	34,146		28,646		13,245	20,901
Broodstock	4,315				1,672	2,643
Excess[c]		8,698				
Tahltan weir Biological Sampl	170	0		170	52	118
ESSR Harvest[b]	0			0		
est mort. at rockslide	0				0	0
Canadian Harvest						
Aboriginal	8,561	2,062	21	10,644	2,529	6,031
Upper Commercial	270	62	1	333	74	196
Lower Commercial	52,021	12,568	11,151	75,739	15,332	36,688
Total	60,852	14,692	11,173	86,716	17,936	42,916
% Harvest	52.6%	52.7%	42.1%	51.0%	25.9%	29.3%
Test Fishery Harvest	949	320	492	1,760	326	622
Tuya Test	0	0	0	0	0	0
All Canadian harvest	61,800	15,011	11,665	88,476	18,262	43,538
(plus biological samples)	61,970	15,011	11,665	88,646		
Above Border Run	100,431	23,709	40,310	164,451	33,180	67,082
U.S. Harvest[a]						
106-41&42	12,532	4,262	3,765	20,559	4,401	8,131
106-30	202	26	908	1,135	51	151
108	40,868	8,605	10,148	59,622	13,355	27,514
Subsistence	1,298	307	521	2,126	383	916
Total	54,900	13,199	15,343	83,441	18,189	36,711
% Harvest	47.4%	47.3%	57.9%	49.0%	50.4%	46.1%
Test Fishery Harvest	0	0	0	0	0	0
Terminal Run	155,331	36,908	55,653	247,892	51,369	103,792
Escapement Goal	24,000	0	30,000			
Terminal Excessd		5,928				
Total TAC	130,383	30,980	25,161	186,524		
Total Harvest[e]	116,700	28,210	27,007	171,917		
Canada TAC	65,191	15,490	12,580	93,262		
Actual Harvest[fg]	60,852	14,692	11,173	86,716		
% of total TAC	93%	95%	89%	93%		
U.S. TAC	65,191	15,490	12,580	93,262		
Actual Harvest[fg]	54,900	13,199	15,343	83,441		
% of total TAC	84%	85%	122%	89%		

[a] Total count of fish pass the 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 2016 District 106 drift gillnet fishery was open for 47 days from June 13 through October 4. Total fishing time was average (48.0 days). Sections 6-A, 6-B, and 6-C were open simultaneously each week throughout the season. Weekly participation varied throughout the season with nearly half of the openings having above average effort and ranged between 76 permits in SW32 to 15 in SW41. Total season effort in boat days was 2,642 and was average (2,692 boat days).

District 106 drift gillnet fishery salmon total harvest was above average and included: 2,094 Chinook, 106,649 sockeye, 122,101 coho, 358,309 pink, and 130,236 chum salmon. Sockeye and pink salmon harvest were above average, coho, and chum salmon harvests were below average, and Chinook salmon was average. An estimated 723 Chinook salmon in the District 106 harvest (35%) were of Alaska hatchery origin. An estimated 21,694 Stikine River sockeye salmon were harvested in District 106, approximately 20% of the harvest. An estimated 50,505 coho salmon in the District 106 harvest were of Alaska hatchery origin.

Stikine River sockeye salmon harvests in the two major fishing areas of District 106 were markedly different. In the Sumner Strait fishery (Subdistrict 106-41/42) 72,954 sockeye salmon were harvested, of which 20,559 fish were estimated to be Stikine River sockeye salmon which contributed 28% of the total sockeye salmon harvest in that subdistrict. I the Clarence Strait fishery (Subdistrict 106-30) 33,695 sockeye salmon were harvested, of which an estimated 1,135 fish were estimated to be Stikine River sockeye salmon which contributed 3% of the total sockeye salmon harvest in that subdistrict.

The District 108 drift gillnet fishery was opened for a total of 58 days starting May 2 and included three weeks of directed Stikine River Chinook salmon fishing prior to sockeye salmon directed fisheries beginning SW 25 (June 13). Total fishing time was average (53 days). District 108 closed concurrently with District 106 on October 4. Participation in District 108 was below average most weeks, with the exception of SWs 26 through 30. The total season effort of 2,342 boat days was above the average of 2,296 boat days.

District 108 drift gillnet salmon total harvest was above average and included: 10,024 Chinook, 70,143 sockeye, 22,146 coho, 35,250 pink, and 200,653 chum salmon. Harvests of sockeye and chum salmon were above average, and Chinook, coho, and pink salmon harvests were below average. Large Chinook salmon harvested in District 108 drift gillnet fishery from SWs 19 through 29 totaled 4,824 fish and genetic stock analysis identified 1,060 large Chinook salmon harvested through SW 29 as above border Stikine River origin. In the District 108 drift gillnet fishery an estimated 59,622 Stikine River sockeye salmon were harvested which contributed to 85% of the District 108 sockeye salmon harvest. An estimated 36% (8,012 fish) of the District 108 coho salmon harvest were of Alaska hatchery origin.

In 2016, U.S. Federal subsistence fisheries targeting Chinook, sockeye, and coho salmon occurred on the Stikine River and were managed by the USFS. Subsistence fishing was

restricted to federally qualified users and required a permit issued by the USFS to participate and was restricted from marine waters to the U.S./Canadian border. Fishing in "clearwater" tributaries, side channels, or at stock assessment sites was also prohibited. Annual guideline harvest levels were 125 Chinook, 600 sockeye, and 400 coho salmon. Allowable gear for the fishery included: dipnets, spears, gaffs, rod and reel, beach seine, and gillnets not exceeding 15 fathoms in length with mesh size no larger than 5½ inches, except during the Chinook salmon fishery when nets with mesh up to 8 inches were allowed. Subsistence fishing was allowed from May 15 to June 20 to target Chinook salmon, June 21 to July 31 to target sockeye salmon, and August 1 to October 1 to target coho salmon. In 2016, a total of 47 permits were issued and the estimated harvests included 20 large Chinook, 2,126 sockeye, and 73 coho salmon.

The Stikine River Chinook salmon preseason forecast was 33,900 large Stikine River Chinook salmon, which resulted in a U.S. AC of 1,060 large Stikine River Chinook salmon. This U.S. AC was large enough to allow for a limited directed commercial gillnet and troll fisheries that began on the first Monday in May. Opening lengths for the gillnet fishery were determined by anticipated effort combined with available AC. The preseason forecast was used to determine AC until reliable inseason run estimates were generated. Troll fishery openings are dependent on gillnet fishery openings. If gillnet fishing was opened for 1 day the subsequent troll fishery would open for 3 days. The Stikine River flats remained closed to gillnet throughout the directed Chinook salmon fishery. Small area closures also occurred to reduce conflicts between commercial and sport fishermen and to reduce steelhead interception. Additional restrictions included a minimum mesh size of 7 inches for gillnetters throughout the directed Stikine Chinook salmon fishery as a tool for steelhead conservation.

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 per person and a resident daily bag limit of three Chinook salmon, 28 inches or greater in length, and a possession limit of six king salmon, a nonresident bag and possession limit of two king salmon, 28 inches or greater in length, with an annual limit of six king salmon. On June 2, the liberalized sport fish regulations were rescinded due to assessments indicating towards a weaker run that would not run an U.S. AC. The 2016 estimated sport fish harvest of 438 Stikine Chinook salmon was below the average harvest of 1,412 fish since directed fisheries were reinstated in 2005.

The District 108 directed Stikine Chinook gillnet fishery began at 8:00 a.m. on Monday, May 2, (SW 19) for a 1-day opening and 3-day opening for the troll fishery. There were 4 gillnetters that made landings in District 108 during the initial opening, with several more boats reporting no harvest. The majority of boats fished in Section 8-B, and this trend continued throughout the directed Stikine Chinook salmon gillnet fishery. Average gillnet harvest rates in this initial opening were lower than years with a similar forecast. The District 108 gillnet harvest during SW 19 was 7 large Chinook salmon. The troll and sport fisheries harvested an additional 197 fish. The U.S. weekly AC cumulative guideline, based on historical run timing and the preseason forecast, was 104 Stikine Chinook salmon. After factoring in the troll and sport fish harvests, and deducting the hatchery component, the

total U.S. harvest of 204 Stikine Chinook salmon, which was above the weekly cumulative guideline.

During SW 20 (May 8–May 14) and SW 21 (May 15–May 21) District 108 was opened with the same area and time as the previous week. Gillnet effort increased to 11 boats making landings in SW 20 and 12 boats in SW 21, well below the 2005–2012 average (years with directed gillnet fisheries). The cumulative harvest based on CWT of large Stikine Chinook salmon by the U.S. fisheries was estimated to be 783 fish, above the allowable cumulative harvest guideline of 307 fish. Average harvest rates showed minimal increases as the fishery developed, but continued to be well below expectations. Low fish abundance hampered attempts to assess the run size inseason; however, poor fishery performance in both marine and inriver fisheries indicated lower abundance than what was expected. As a result, directed commercial fisheries closed until the start of the directed sockeye salmon fishery. The troll fishery reverted to a spring troll fishery on May 22 and was limited to two hatchery access areas near Anita Bay. The directed Stikine Chinook salmon gillnet fishery was open for a total of 3 days and an estimated 102 large Stikine Chinook salmon were harvested based on CWT information. The directed troll fishery was open for 9 days and harvested and estimated 405 large Stikine Chinook salmon based on CWT information. The final postseason estimate of the terminal run size based on MR information was 15,496 Stikine River large Chinook salmon resulting in no U.S. AC (Table 1). The total cumulative harvest estimate through SW 29 was 1,707 fish based on GSI analysis, well below the U.S. base level harvest of 3,400 fish. The harvest included 1,060, 560, 438, and 20 fish from gillnet, troll, sport, and subsistence fisheries, respectfully.

Stikine River sockeye salmon preseason forecast indicated an above average terminal run size of 223,000 fish, with a resulting U.S. AC of 80,000 fish (Table 2). Preseason forecasts were the primary basis used for management during SWs 25 through 27. Inseason estimates of terminal run sizes were first produced on a weekly basis beginning in SW 27 and were used from SW 28 throughout the end of season with the final inseason estimate being produced in SW 32. Inseason abundance estimates were highly variable and ranged between 154,000 and 243,000 fish. The postseason Stikine River sockeye salmon run estimate of 247,892 fish resulted in an U.S. AC of 93,262 sockeye salmon. The total U.S. cumulative harvest was estimated to be 83,441 fish, based on GSI analysis (Table 3).

Directed sockeye salmon drift gillnet fisheries in Districts 106 and 108 began in SW 25 at 12:00 noon on Monday, June 13, for an initial period of 2 days. The opening was initially planned for 3 days based on the preseason forecast and anticipated effort but was reduced to two days due to the low returns of Stikine River Chinook salmon. Additionally, an expanded area off the Stikine River delta in District 108 was closed. Effort was comprised of 6 boats in Clarence Strait (106-30), 25 boats in Sumner Strait (106-41), and 50 boats in District 108. An estimated 1,027 Stikine River sockeye salmon were caught in the District 106 and 108 drift gillnet fisheries this week.

Districts 106 and 108 drift gillnet fisheries opened for an initial 3 days in SW 26 (June 19–June 25). Fishing time was based on the anticipated available AC derived from the well above average forecast of Tahltan sockeye salmon. The expanded closure remained in

place for the initial 3-day opening. On the grounds surveys indicated an abundance of sockeye salmon below the level to warrant additional fishing time in District 106. However, harvest rates were well above average for fishermen targeting sockeye salmon in District 108. Sockeye salmon harvest rates for inriver fisheries in the Stikine River were also well above average with stock assessments indicating the harvest consisted primarily of Tahltan Lake sockeye salmon. With good sockeye salmon harvest rates providing confidence in the forecast, a 2-day midweek opening occurred in District 108. The expanded closure was reduced for the midweek opening to the Old Stikine closure line which kept the Stikine River delta closed. An estimated 13,625 Stikine River sockeye salmon were harvested this week with the majority (10,477 fish) being harvested in District 108. During SW 26, 34 boats fished in Sumner Strait, 12 boats fished in Clarence Strait, and 74 boats fished in District 108.

Both districts were opened for an initial three days in SW 27 (June 26–July 2) beginning Sunday at noon with District 108 opening for an additional 2.5 day midweek opening. Area restrictions in District 108 were relaxed to open the Stikine River delta, which has not been opened to the commercial drift gillnet fishery since 2007. Harvest in District 106 did not indicate a surplus of sockeye salmon to warrant extra time. Sockeye salmon harvest in District 108 continued to be well above average. There were 36 boats in Sumner Strait, 23 boats in Clarence Strait, and 85 boats in District 108. An estimated 23,029 Stikine River sockeye salmon were caught this week; 3,896 fish in District 106 and 19,133 fish in District 108.

During SW 28 (July 3–July 9), Districts 106 and 108 were opened for an initial 3 days with an additional 2.5-day midweek opening in District 108. The first inseason forecast of Stikine River sockeye salmon terminal run size generated for this week was 154,000 fish with a resultant U.S. AC of 44,800 fish, which was considerably below the preseason forecasts (Table 2). However, on the grounds surveys of the gillnet fleet in both districts indicated well above average sockeye salmon abundance. This combined with good inriver harvests indicated that the SMM was not responding well as is typical for initial model outputs. The U.S. cumulative harvest of Stikine River sockeye salmon through SW 28 was estimated to be 59,671 fish. There were 27 boats in Clarence Strait, 29 boats in Sumner Strait, and 76 boats in District 108.

Districts 106 and 108 were opened for an initial 4 days during SW 29 (July 10–July 16) with an additional 1-day mid-week opening in District 108. Effort continued to be below average in District 106 with 24 boats in Clarence Strait and 33 boats in Sumner Strait. Harvest rates of sockeye salmon in both subdistricts fell to below average. Effort in District 108 decreased to near average with 58 boats making landings. Surveys of fishermen targeting sockeye salmon in District 108 indicated that harvest rates of sockeye salmon continued to be well above average for the fourth week in a row. The SMM assessment provided a slight decrease with a projected run size of 153,500 sockeye salmon, which resulted in a U.S. AC of 45,800 fish (Table 2). By this week, it was evident that the SMM was slow to react to a robust Stikine River sockeye salmon run as indicated by both marine and inriver harvests. An estimated 11,277 Stikine River sockeye salmon were harvested in SW 29 with a cumulative harvest of 70,949 fish.

Both districts were open for an initial 3 days during SW 30 (July 17–July 23). Sockeye salmon harvest rates, on average, usually began to decline for SW 30 in District 106. Although this was the case in Clarence Strait, surveys in Sumner Strait indicated harvest rates that were well above average. Harvest rates were also above average for fishermen in the traditional areas targeting sockeye salmon in District 108. Although the numbers of vessels fishing in District 108 increased this week, very few targeted sockeye salmon. Run size estimates and corresponding U.S. AC produced by the SMM increased in SW 30 with a predicted terminal run size of 178,800 Stikine River sockeye salmon, which resulted in a U.S. AC of 58,800 fish (Table 2). Inseason estimates generated by the SFMM pointed towards a run size larger than the preseason forecast. Due to the low effort in District 108, above average harvest rates, and available U.S. AC, a 1-day extension occurred in both districts. An estimated 5,326 Stikine River sockeye salmon were harvested by U.S. fisheries this week. Effort included 26 boats in Clarence Strait, 40 boats in Sumner Strait, and 68 boats in District 108.

Sockeye salmon harvests began to wane in SW 31; however, harvest rates remained above average for the next few weeks. Statistical week 31 (July 24–July 30) was the final week for Stikine River sockeye salmon management. Both districts were open for an initial 3 days beginning July 24. The inseason forecast used for SW 31 estimated a terminal run size of 200,800 Stikine River sockeye salmon with an available U.S. AC of 70,100 fish (Table 2). On the grounds surveys indicated that sockeye salmon harvest rates were better than average again in District 106. Harvest rates in District 108 decreased from previous weeks but remained above the 10-year average. Overall, fishery performance did not indicate a surplus of sockeye salmon above the estimated harvest for this week and both districts closed as scheduled. Effort included 31 boats fishing in Clarence Strait, 36 boats in Sumner Strait, and 63 boats in District 108. The estimated U.S. harvest of Stikine River sockeye salmon in SW 31 was 2,439 fish with a cumulative harvest through SW31 of 78,714 fish. An estimated 2,602 Stikine River sockeye salmon were harvested in the District 106 and 108 drift gillnet fisheries through the remainder of the season.

During SWs 32 through 35 (July 31–August 27), both Districts 106 and 108 were managed based on pink salmon abundance. 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. Three day openings occurred in SW 32 through 34. SW 35 was open for 2 days. Effort in both districts was above average in SW 32 and SW 34 and below average in SW 33. Effort was above average for District 106 and below for District 108 during SW 35.

Beginning in SW 36 (August 28–September 3), management emphasis transitioned from pink to coho salmon abundance. Prior to the switch to coho salmon management, 52,600 coho salmon, approximately 43% of the total District 106 had been harvested. The hatchery contribution was approximately 14,400 fish in District 106 prior to SW 36 and was comprised primarily of Neck Lake/Burnett Inlet enhanced summer coho salmon. During the coho salmon management period, coho salmon harvests were above average in District 106 with an estimated harvest of 33,500 hatchery fish and 33,400 wild coho salmon. Harvest of wild coho salmon in District 108 was below average with an estimated harvest

of 14,000 fish. Both districts opened for 2 days during the first two weeks of coho salmon management. Starting SW 38, both districts were opened for 3 days each week through SW 39 and then open for 2 days for the final opening in SW 40. The 2016 gillnet season concluded at noon on Tuesday, October 4, in both districts.

Canadian Fisheries

Final harvests from the combined Canadian commercial, Aboriginal gillnet and sport fisheries in the Stikine River in 2016 included; 2,731 large Chinook, 794 nonlarge Chinook, 86,716 sockeye, 5,346 coho, 364 chum, and 89 pink salmon. The test/terminal area 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 was not prosecuted in 2016.

The harvest of large and nonlarge Chinook salmon was below average. The sockeye salmon harvest was above average. The final estimate of the total contribution of sockeye salmon from the Canada/U.S. fry-stocking program to the combined Canadian Aboriginal and commercial fisheries was 33,273 fish, 38% of the catch. The harvest of 5,346 coho salmon was above average.

The Chinook salmon assessment fishery was initiated in 2016 once the directed fishery had been suspended, catches included; 483 large Chinook, 39 nonlarge Chinook, and 13 sockeye salmon. A sockeye salmon test fishery was conducted for stock assessment purposes in the lower Stikine River from 23 June to 28 August, 2016. The test fishery was located immediately upstream from the Canada/U.S. border. Test fishery catches totaled 21 large Chinook, 16 nonlarge Chinook, 1,760 sockeye, 140 coho, 33 pink, 40 chum salmon, and 52 steelhead trout (all steelhead trout were released). The objectives of the sockeye salmon test fishery were similar to those in previous years: to provide inseason catch, stock ID and effort data for input, 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.

The coho salmon test fishery was conducted in the lower Stikine River in 2016.

Lower Stikine River Commercial Fishery

Canadian commercial fishers in the lower Stikine River harvested 2,116 large Chinook, 655 nonlarge Chinook, 75,739 sockeye, 5,346 coho, 89 pink, and 364 chum salmon. A total of 626 steelhead trout were released in 2016; 274 pink and 416 chum salmon were also released. In respect to the catch of large Chinook salmon, 897 fish were harvested in a directed Chinook salmon fishery (SWs 19–23) and 1,219 large Chinook salmon were harvested in the directed sockeye and coho salmon fisheries (SWs 26–36). The catches of sockeye and coho salmon were above average, while the harvest of large and nonlarge Chinook salmon was below average.

The fleet targeted Chinook salmon for a total of 136 boat days, which was below the average of 206 boat days. Sockeye salmon were targeted for a total of 429 boat days, above the average of 342 boat days. The coho salmon fishery was opened for a total of 130 boat days, above the average of 107 boat days.

The stock composition of the lower river commercial fishery harvest of sockeye salmon was 15,332 enhanced Tahltan fish, which accounted for 20.2% of the sockeye salmon harvest; 36,688 wild Tahltan sockeye salmon accounting for 48.3% of the harvest; 11,151 mainstem fish accounting for 16.2% of the harvest; and, 12,568 enhanced Tuya sockeye salmon accounted for 16.6% of the harvest (Table 3).

Weekly Chinook and sockeye salmon guideline harvests, based on SCMM, SMM and MR 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. After SW 25, for purposes of managing the lower river harvest, 800 large Chinook salmon were allocated to the upper Stikine River commercial and Aboriginal fisheries. The allocation consisted of 100, 20, and 680 large Chinook salmon in the sport, upper commercial and AF, respectively. A total of 8,000 sockeye salmon was allocated to the upper Stikine River commercial and AF. The remaining balance of the Chinook and sockeye salmon TAC was allocated to the lower Stikine River 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 23 was focused on the harvest of large Chinook salmon taken in a directed commercial fishery. From SW 26 through SW 30, 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. Unlike past years but similar to 2015, the switch to the mainstem sockeye management commenced in SW 31 versus SW 30. This action was in response to the continued relative strength of the Tahltan sockeye stock groupings beyond SW 29. The coho salmon management regime commenced on SW 35.

The preseason forecast of 33,900 large Chinook salmon was above the treaty agreed to threshold run size of 28,100 fish that triggers a directed fishery. A targeted commercial fishery was prosecuted by Canada in 2016. The Canadian guideline harvests in the directed Chinook salmon fishery were based on an overall AC of 4,740 large Chinook salmon. This TAC was apportioned from SW19 through SW 25. The weekly guideline harvests were derived from historical run timing data from the 2006–2015 inriver commercial fisheries.

The Chinook salmon directed fishery regime commenced at 1200 hrs, 01 May (SW 19). The sockeye salmon fishery regime (that incidentally harvested Chinook salmon allocated under the base level allocation) commenced at 1200 hrs 19 June (SW 26). Fishers were limited to one net with a maximum length of 135 metres (443 ft.). The maximum mesh size was 203 mm (8 in.) when targeting Chinook or coho salmon, and 140 mm (5.5 in.) when targeting sockeye salmon. The fishing zone extended from the Canada/ U.S. boundary to a

point near the confluence of the Porcupine and Stikine rivers and the lower 10 km reach of the Iskut River.

(Note: some of the catch figures listed in the following narrative may not match the final catch records listed in the tables. This is due to slight changes in the catches as a result of a postseason check of the catch slips, updated stock composition information, and assessment of Chinook salmon large versus nonlarge size ratios.)

The first directed Chinook salmon fishery opening was posted for 24 hrs commencing 1200 hrs 01 May (SW 19). The guideline harvest was 140 large Chinook salmon, based on the preseason forecast. Water levels were above average and rising during the fishing period. The estimated harvest after 20 hrs of fishing indicated a projected harvest for a 24 hrs period of ~30 large Chinook salmon. An additional 24 hrs was added to fishery. The final catch was 46 large Chinook salmon. The fish per boat day (fbd) of 2.1 large Chinook salmon was below average.

The fishery was posted for 24 hrs in SW 20 with a weekly guideline harvest of ~330 large Chinook salmon based on the preseason forecast. A 20 hrs hail suggested that catch rates had doubled those from SW 19. The decision was made to extend the fishery for 24 hrs for day 2 and again for day 3. The final weekly harvest was 108 large Chinook salmon taken under above average and stable water conditions. The fbd of 3.7 large Chinook salmon was approximately 40% of average. The cumulative CPUE at the Kakwan tagging site was only 15% of average.

The fishery was posted for 24 hrs in SW 21 with a weekly guideline harvest of ~380 large Chinook salmon, again, based on the preseason forecast. A 20 hrs hail suggested a catch of 58 large Chinook. CPUE for day 1 was nearly twice that of the previous week. Extended the fishery for 24 hrs (day 2) and again for another 24 hrs period on day 3. The final harvest for the week was 142 large Chinook salmon taken during above average water levels. The fbd of 4.9 large Chinook salmon was well below the average of 11.8 large Chinook salmon. The cumulative CPUE at the Kakwan tagging site was only 24% of average.

In SW 22 the fishery was posted for 48 hrs with a weekly guideline harvest of ~360 large Chinook salmon using the preseason forecast. The projected catch after day 2 was ~300 large fish. The decision was to extend for a final 10 hrs. Water rose throughout day 1 and 2. The catch rate was 8.3fbd after 44 hrs versus the average of 11.2 fbd for the week. The final harvest for the week was 352 large Chinook salmon taken in above average water levels. The catch rate improved to 8.9 fbd for the week which was still below average. The cumulative CPUE at the Kakwan tagging site remained well below average.

In SW 23, the fishery was posted for only 24 hrs with a weekly guideline harvest of ~680 large Chinook salmon. A joint inseason estimate had not yet been generated but based on the preliminary analysis; the run looked to be well below the preseason forecast. After 20 hrs of fishing, the catch rates continued to be well below average and the decision was made not to extend the fishery. The final harvest for the week was 249 large Chinook salmon. The water level was below average and stable through the fishing period. The catch

rate ended the week at 14.7 fbd versus an average of 21.3 large Chinook salmon per day. Estimates made after the close of the fishery suggested the terminal run was ~22,000 large Chinook salmon, well below the preseason forecast. At run sizes of this magnitude, there is no AC for Canada. The directed fishery ended and the decision was made to initiate an assessment fishery for SW 24–25. The assessment fishery catch was 483 large Chinook salmon in which a total of 5 spaghetti tags were recovered. The terminal run projection remained ~22,000 large Chinook salmon after the assessment fishery was completed in SW 25.

In SW 26, fishery management switched to sockeye salmon which was centered on the Tahltan stock group and was expected to remain so until SW 29. Fishers were permitted one net only and the commercial fishing grounds remained the same as defined in the Chinook salmon fishery. The overall Canadian sockeye salmon AC of 83,600 including 52,200 Tahltan Lake sockeye salmon, 18,800 Tuya Lake sockeye salmon and 12,600 mainstem sockeye salmon was based on the preseason run size expectation of 223,000 fish.

The fishery was posted for an initial 48 hrs period commencing Sunday noon, 19 June (SW 26). The guideline catch for sockeye salmon was 7,600 fish (including ~5,700 Tahltan Lake sockeye salmon). Tahltan catch rates were above average for day 1 (99% small egg fish) while Chinook salmon catches were below average. The decision was made to extend the fishery by 24 hrs. Catches for day 2 (1.2k) were similar to day 1. No further extensions were made due to dropping Chinook salmon projections (~21k term. run). The three day fishery yielded a harvest of 423 large Chinook salmon and 3,982 sockeye salmon, including ~2,800 Tahltan Lake sockeye salmon. The total weekly sockeye salmon harvest was comprised of 70% Tahltan, 29% Tuya, and 1% mainstem sockeye salmon. The Tahltan sockeye salmon fbd was 53 versus an average of 40 fish.

The fishery was posted for an initial 72 hrs period in SW 27 with a sockeye salmon guideline harvest of 18,000 fish, including 13,300 Tahltan Lake sockeye salmon. The weekly guideline was based on the preseason forecast. The harvest of approximately 8,000 Tahltan/Tuya sockeye salmon and dropping large Chinook salmon catches after day 2 indicated that there was room to extend the fishery. The above average fbd of Tahltan Lake sockeye salmon prompted the decision to add an additional 48 hrs. The fishing conditions were very good due to below average and stable water levels. The final catches for the week consisted of 361 large Chinook, 193 nonlarge Chinook, and 16,468 sockeye salmon; including ~13,400 Tahltan Lake origin fish which was in line with the weekly guideline. The total weekly sockeye salmon harvest was comprised of 81% Tahltan, 18% Tuya, and 1% mainstem sockeye salmon. The Tahltan sockeye salmon fbd was 149 versus an average of 115 fish.

In SW 28 the fishery was posted for an initial 72 hrs period with a guideline harvest of ~14,600 sockeye salmon including 10,200 Tahltan Lake sockeye salmon. The run size generated from the SMM in SW 27 of approximately 154,00 sockeye salmon, including ~71,000 Tahltan Lake origin fish, was considered to be low based on the US catches and the inriver CPUE data; therefore, management decisions were based on the preseason forecast for SW 28. Catch rates after day 2 continued to be well above average for this

period (183 fbd versus 112) and the Tahltan/Tuya composition was holding at 97%, based on this, the fishery was extended for 48 hrs. The catch for the week consisted of 265 large Chinook and 20,321 sockeye salmon, including a harvest of 15,950 Tahltan Lake sockeye salmon. The Chinook salmon harvest was well below average for SW 28. The harvest of Tahltan sockeye salmon was well above the guideline. The total weekly sockeye salmon harvest was comprised of 79% Tahltan, 19% Tuya, and 2% mainstem sockeye salmon. The week's Tahltan Lake sockeye salmon fbd of 183 was well above average. Week 28 marks the historical peak of the Tahltan Lake sockeye salmon through the fishery; catches to date indicated the run timing appeared to be normal.

In SW 29 the fishery was posted for an initial 72 hrs opening with a guideline harvest of ~10,800 sockeye salmon, including 8,500 Tahltan sockeye salmon. This week's run size estimate was generated using the SMM (day 1, SW 29) and it indicated a run size of approximately 199,000 sockeye salmon. The Tahltan Lake component was estimated at 135,000 fish, slightly above the preseason forecast. The estimated catch of 5,500 Tahltan Lake sockeye after 2 days of fishing prompted a 24 hrs extension. This week's 4 day fishery yielded a harvest of 90 large Chinook and 13,299 sockeye salmon. The Tahltan Lake sockeye salmon harvest of 11,204 fish was above the guideline harvest for this week. The total weekly sockeye salmon harvest was comprised of 84% Tahltan, 9% Tuya, and 7% mainstem sockeye Historically SW 29 marked the end of the Tahltan Lake sockeye salmon management regime; however, given the relative strength of Tahltan sockeye salmon (Tuya fish to a lesser degree), it was decided that Tahltan sockeye salmon abundance would govern management decisions through SW 30.

In SW 30 the fishery management regime remained focused on Tahltan Lake sockeye salmon abundance. The fishery was posted for an initial 48 hrs period with a guideline harvest of ~4,000 sockeye salmon, including 3,500 Tahltan Lake sockeye. Again, the run size estimate was based on the SMM for the week. The terminal run estimate had dropped to ~179,000 sockeye salmon, of which 126,000 were Tahltan fish. The catch of ~3,300 sockeye salmon taken during the first 24 hrs of the opening plus a Tahltan/Tuya composition of 81% prompted a 24 hrs extension. This week's 72 hrs fishery yielded a harvest of 46 large Chinook and 9,247 sockeye salmon, including a Tahltan Lake sockeye salmon harvest of 6,034 fish. The Tahltan Lake sockeye salmon harvest was above the weekly guideline. The total weekly sockeye salmon harvest was comprised of 65% Tahltan, 9% Tuya, and 26% mainstem sockeye salmon. The Tahltan Lake sockeye salmon fbd was well above average, whereas the mainstem sockeye salmon fbd of 50 fish was near the average of 54 fish for this week, indicating that the mainstem sockeye salmon return may be as forecasted (~56,000). The fishery was conducted under near average water levels.

In SW 31, management decisions switched from a focus on Tahltan Lake sockeye salmon abundance to the abundance of mainstem sockeye salmon. The fishery was posted for an initial 48 hrs opening with a guideline harvest of ~4,000 sockeye salmon of which there were no available AC for mainstem sockeye salmon. The run size projection increased to ~201,000 sockeye salmon based on the SMM but the mainstem projection had diminished to ~20,000 fish which was well below the preseason expectation. The increase in overall

run size was driven primarily by the above average abundance of Tahltan Lake sockeye salmon in SW 30 and this had a negative impact on the mainstem sockeye salmon projection. It was believed that the model projection of mainstem sockeye salmon was low based on the average catch rates observed inriver. The day one harvest of ~1,200 mainstem sockeye salmon and a fbd of 79 were encouraging but the decision was made to hold the fishery at 48 hrs in light of the poor SMM projection. This week's 48 hrs fishery harvested 15 large Chinook, 12 coho, and 5,240 sockeye salmon, including 2,987 mainstem fish. The total weekly sockeye salmon harvest was comprised of 37% Tahltan, 6% Tuya, and 57% mainstem sockeye salmon. The mainstem sockeye salmon fbd of 96 fish was well above the average of 50.

In SW 32, the fishery was posted for 48 hrs period with a guideline harvest of ~400 mainstem sockeye salmon. The TAC was based on an overall run size projection of ~225,000 sockeye salmon including 36,000 mainstem sockeye salmon generated by the SMM which was a significant improvement over the previous estimate but still below what was felt to be a stronger mainstem sockeye salmon return. Consideration for an extension was not given due to the current mainstem sockeye salmon projection despite strong CPUE for mainstem fish. This week's fishery conducted under below average water levels yielded a harvest of 13 large Chinook, 86 coho, and 3,891 sockeye salmon, including a mainstem sockeye salmon catch of 2,568 fish. The mainstem sockeye salmon fbd was 80 versus an average of 52 fish.

In SWs 33 and 34, the fishery was held to a 24 hrs period for each of the weeks. Terminal run projections made by the SMM had improved to ~245,000 sockeye salmon with 52,000 of those being mainstem fish. By the end of SW 34, Canada had harvested ~11,000 mainstem sockeye salmon which was slightly above an AC of ~10,400. Catch rates for mainstem sockeye salmon continued to be well above average for SWs 33 and 34 which were 56 and 46 fbd respectively. Fishing conditions were generally good with average to below average water levels and effort held until SW 34 when only 11 licences fished.

In SW 35, the fishery was opened for an initial 72 hrs period with the management objective focused on coho salmon abundance. A total of 12 licences were fished. The guideline harvest on coho salmon was 5,000 fish for the season with the intention of spreading the harvest over SW 35 and 36. The CPUE in the commercial fishery was 34 fbd near the average of 36. After 2 days of fishing, the fishery was extended for 24 hrs. This week's 72 hrs fishery yielded a harvest of 1,591 coho and 997 sockeye salmon, 90% of which were mainstem sockeye salmon.

In SW 36, the fishery was opened for an initial 72 hrs period. A total of 16 licences fished for the week. After 2 days of fishing and a harvest of ~1,100, the fishery was extended for 48 hrs and then a final 12 hrs after the fifth day of fishing. The final week of the fishery yielded a harvest of 3,366 coho and 587 sockeye salmon, 90% of which were mainstem sockeye salmon. The final coho salmon harvest was 5,346 fish, 389 of which were taken in the course of the sockeye salmon fishery and, therefore, not counted toward the 5,000 fish allocation as prescribed in the PST.

Upper Stikine River Commercial Fishery

A small commercial fishery has existed near Telegraph Creek on the upper Stikine River since 1975. A total of 333 sockeye and no large Chinook salmon were caught in 2016, which was well below the average. The fishing effort of 6 boat days fished was below average. Generally, fishery openings were based on the lower Stikine commercial fishery openings, lagged one week.

Aboriginal Fishery

The upper Stikine AF fishery, which is located near Telegraph Creek, B.C., harvested 615 large Chinook, 139 nonlarge Chinook and 10,644 sockeye salmon in 2016. The harvest of large Chinook salmon was average. The harvest of sockeye salmon was the highest on record, assumed to be driven by the above average Tahltan Lake sockeye salmon run size, good fishing conditions, and increased effort.

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 2016, the harvest of Chinook salmon was believed to be negligible. Restrictions were in place on the Tahltan River starting June 01 that did not permit salmon fishing until further notice in an attempt to protect holding Chinook salmon that were negotiating the partial barrier created by the landslide that occurred in 2014. Access to the fishing sites near the mouth of the Tahltan River was restricted by the Tahltan First Nation Chief and Council in order to limit recreational harvest on Little Tahltan River bound Chinook salmon. On July 15, retention of Chinook salmon was restricted to 2 per day which had to be 65 cms or less on the Stikine River including the Tahltan River. The quota change was in response to the low escapement projection for large Chinook salmon.

Escapement

Sockeye Salmon

A total of 38,631 sockeye salmon were counted through the Tahltan Lake weir in 2016, 40% above the average of 27,639 fish and above the escapement goal range of 18,000 to 30,000 fish. An estimated 14,918 fish (39% of the escapement) originated from the fry-stocking program, which was similar to the 30% contribution observed in smolts leaving the lake in 2013, the principal smolt year contributing to the 2016 return. A total of 4,315 sockeye salmon were collected for brood stock and 173 fish were collected for stock identification purposes, resulting in a spawning escapement of 34,143 sockeye salmon in Tahltan Lake. Although remedial work was done at the Tahltan River landslide in March 2015, the site remains a potential challenge for both Chinook and sockeye salmon for migration to their respective spawning grounds located above the landslide. However, the

landslide does not appear to have had a significant impact on passage of sockeye salmon in 2016, which could be due to below average water levels this past season.

The spawning escapements for the mainstem and Tuya stock groups are calculated using stock identification, test fishery, and inriver commercial harvest data. The mainstem sockeye salmon escapement estimate was 28,646 fish, the target escapement is 30,000 fish, and within the escapement goal range of 20,000 to 40,000 fish. The Tuya escapement estimate was 8,698 sockeye salmon. Aerial survey counts of mainstem sockeye salmon were below average in 2016– the reason for this is unclear but poor viewing conditions encountered on two indices contributed to the low count.

Chinook Salmon

In 2016 to assess the inriver Chinook salmon abundance, a MR study was conducted concurrently with the SCMM. Inseason MR estimates for large Chinook salmon were calculated weekly; SW 26–29. The postseason Stikine River spawning escapement estimate of 10,554 large Chinook salmon was based on tag recoveries from the commercial fishery and spawning ground recoveries. This was 57% below the average escapement of 18,479 large fish, and below the escapement goal range of 14,000 to 28,000 large Chinook salmon.

The 2016 Chinook salmon escapement enumerated at the Little Tahltan River weir was 921 large fish and 318 nonlarge Chinook salmon. The escapement of large Chinook salmon in the Little Tahltan River was below the average of 1,366 fish and below the lower end of the Canadian escapement target range of 2,700 to 5,300 large fish. This was the tenth consecutive year that the Canadian escapement target range was not reached. The weir count was also well below the lower end of the Canadian escapement goal range of 2,700 to 5,300 large fish. This was the tenth consecutive year that the lower end of the Canadian escapement target was not reached. Preliminary analyses of radio telemetry data suggest that the escapement was not significantly affected by the 2014 Tahltan River landslide; as mentioned above, low water levels may have played a positive role in this. The Little Tahltan River weir count represented approximately 9% of the total Stikine River large Chinook salmon escapement, close to the average weir count contribution of 8% (note that this average has declined significantly in the last ten years).

At Verrett Creek, a total of 50 large Chinook salmon were counted via helicopter. The carcass pitch crew stationed at the creek from 4–10 August sampled 70 large and 42 medium Chinook salmon. The aerial count and the carcass pitch results were both below average despite good to excellent viewing / fish capture conditions.

Coho Salmon

The annual coho salmon aerial survey was conducted on November 3 under generally favorable viewing conditions; very low water was encountered at a number of sites. However, the total count of coho salmon observed at six index sites was only 292 fish, 83% below average. The inseason weekly CPUE of coho salmon from both the lower Stikine

River Canadian fishery and sockeye salmon test fishery (incidentally caught coho salmon) were also below average. The reason for the very low survey counts is unclear.

A coho salmon drift gillnet test fishery was not conducted in 2016 due to budgetary constraints.

Sockeye Salmon Run Reconstruction

The final postseason estimate of the terminal Stikine River sockeye salmon run was 247,892 fish. Of this number, approximately 155,331 fish were of Tahltan Lake origin (wild & enhanced), 36,908 fish were of Tuya origin (fry from Tahltan brood stock stocked into Tuya Lake), and 55,653 fish were mainstem (Table 3). These estimates are based on postseason data, including otolith recovery and GSI analysis in the U.S. Districts 106 and 108 harvests. For inriver estimates they are based on inseason and postseason otolith analysis: egg diameter stock-composition estimates for inriver harvest from the Canadian commercial, Aboriginal, ESSR, and test fishery harvests, and escapement data. The 2016 terminal run was above average and above the preseason forecast of 223,000 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. Canadian fisheries for Taku River salmon include a commercial gillnet fishery located in the river near the Canada/U.S. border, an AF, and a sport fishery (Figure 2).

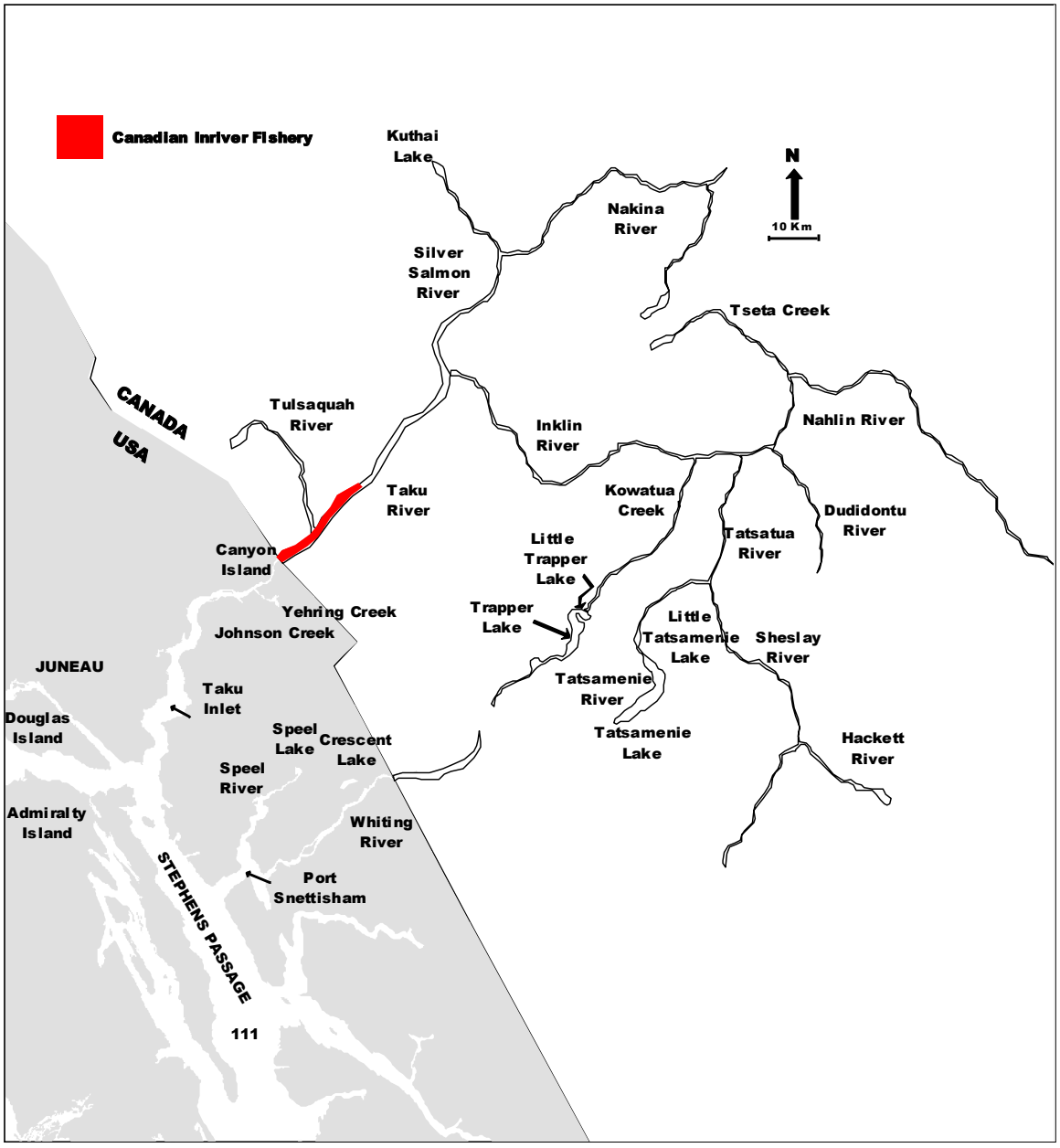

Figure 2. The Taku River and principal U.S. and Canadian fishing areas.

Harvest Regulations

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

U.S. Fisheries

The traditional District 111 commercial drift gillnet salmon fishery was open for a total of 56 days from June 19 through October 6, 2016. The harvest totaled 582 Chinook, 148,317 sockeye, 34,445 coho, 44,668 pink, and 447,616 chum salmon. Harvest of sockeye salmon was above average, while harvests of all other salmon species were below average. The traditional fishery does not include harvests from the Speel Arm SHA inside Port Snettisham.

The 2016 season was the seventeenth year of adult sockeye salmon returns to the Snettisham Hatchery inside Port Snettisham. These fish contributed to the traditional harvests in Taku Inlet and Stephens Passage, and made up nearly the entire common property harvest in the Speel Arm SHA inside Port Snettisham, which was initially opened to fishing during SW 33 to target Snettisham Hatchery sockeye salmon. This was the second year of full production for DIPAC's revitalized enhanced coho salmon program, and these fish contributed to the traditional harvests in Taku Inlet. Hatchery stocks contributed substantially to the total harvest of sockeye, chum and coho salmon and more minimally to the harvest of Chinook 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 adjusted 2016 preseason terminal run forecast of 29,200 Taku River large Chinook salmon provided no AC for directed fisheries for either country. An inriver assessment/test fishery was conducted by Canada with a target of 1,400 large fish apportioned out over seven weeks according to average run timing. Tagging for the inriver MR project was again increased with additional effort using drifted tangle nets on both sides of the border and a second year of a purse seine feasibility study in Taku Inlet, as well as the traditional Canyon Island fish wheels. A total of 1,277 tagged fish were put out by these efforts. The first inseason terminal run estimate was delayed until SW 23 even though data was sufficient to produce an estimate by Thursday of SW 22. This first bilateral estimate, which was agreed to on June 3, projected a terminal run size of 11,600 large Chinook salmon and the week-long delay in producing the estimate resulted in an additional 250 large Chinook salmon being harvested in the assessment/test fishery. Due to the low projection, it was agreed to shift the assessment/test fishery into a non-lethal mode for SWs 24 and 25. The SW 25 inseason terminal run estimate of 14,720 Taku River large Chinook salmon set the stage for conservative openings the following week for both Canada and U.S. directed sockeye salmon fisheries. The 2016 District 111 drift gillnet Chinook salmon harvest in SWs 26–28 was 369 fish of which 53% were large fish. Postseason GSI analysis indicates

Alaskan hatchery Chinook salmon contributed 25% of the large fish harvest, and 75% of those (159 fish) were of Taku River origin through SW 28. The Juneau area sport harvest of Taku River large Chinook salmon was estimated at 635 fish during the same time period based on GSI analysis. The final postseason spawning grounds MR estimate of Taku River spawning escapement is 12,381 large Chinook salmon.

The traditional District 111 sockeye salmon harvest of 148,317 fish was well above average and the highest since 2004. Weekly sockeye salmon CPUE was generally average to above average through SW 31 after which it became more than double the average through SW 36. Snettisham Hatchery sockeye salmon stocks began to contribute to the traditional fishery in SW 28 and otolith sampling occurred through SW 33 in Taku Inlet and through SW 36 in Stephens Passage. Of the total traditional District 111 sockeye salmon harvest, 72% occurred in and around Taku Inlet (average is 65%), 16% occurred in Stephens Passage south of Circle Point (average is 26%) and 12% occurred in Port Snettisham (average is 10%). The contributions of Taku River wild, Taku River enhanced, Port Snettisham enhanced, and other sockeye salmon stocks were derived from estimates based inseason on otolith analysis and postseason from estimates based on GSI and otolith analyses. The final postseason estimated stock composition of the harvest of sockeye salmon in the traditional District 111 fishery is 66,980 (51%) wild Taku River, 6,710 (5%) enhanced Tatsamenie, and 50,150 (38%) Snettisham Hatchery fish.

Table 4. Taku River sockeye salmon run reconstruction, 2016. Estimates do not include spawning escapements below the U.S./Canada border.

U.S. harvest estimate differs from Joint Interception Committee estimate because no estimates are made for harvest other than the listed fisheries.
Total escapement includes a small number of non-Taku River enhanced fish

	Taku			Non-Taku Enhanced	
	Total	Wild	Enhanced	US	Stikine
Escapement	176,417	167,348	9,069		
Canadian Harvest					
Commercial	37,120	33,112	4,007	124	57
Aboriginal Fishery	191	170	21		
Total	37,311	33,282	4,029		
Test Fishery harvest	123	109	14		
Above Border Run	213,851	200,739	13,112		
U.S. Harvest					
District 111 Gillnet	73,690	66,980	6,710	50,150	154
D111 Amlaga Seine					
Personal Use	1,184	1,051	133		
Total	74,874	68,031	6,843		
Test Fishery harvest	0				
Terminal Run	288,725	268,770	19,955		

	Total	Wild
Terminal Run	288,725	268,770
Escapement Goal	75,000	75,000
TAC	213,725	193,770
Canada		
Harvest Share	23%	23%
Canada AC	49,157	44,567
Surplus Allowable	56,417	47,348
Canada AC + Surplus	105,574	91,915
Actual harvest	37,311	33,282
U.S.		
Harvest Share	77%	77%
US AC	164,568	149,203
Actual harvest	74,874	68,031

Opportunity to target returning Snettisham Hatchery sockeye salmon inside Port Snettisham began in SW 33 and later that same week the Speel Arm SHA was opened due to significant fish movement through the Speel Lake weir and an additional large number of fish observed in the creek below the weir. In SW 33, 77% of the total boats in District 111 fished inside Port Snettisham and the Speel Arm SHA. The Speel Arm SHA was opened until SW 38 but only received effort through SW 36.

Coho salmon stocks harvested in District 111 include returns to the Taku River, Port Snettisham, Stephens Passage, and local Juneau area streams, as well as Alaskan hatchery release sites. In early 2015 an escapement goal range of 50,000 to 90,000 Taku River coho salmon with a 70,000 fish point goal was adopted. The U.S. management intent in 2016 was to pass 75,000 coho salmon above border to provide for escapement and a 5,000 fish

assessment fishery, and Canada may harvest any fish surplus to the 70,000 fish escapement goal. The 2016 preseason inriver run forecast of 127,000 Taku River coho salmon was above the average inriver run of 98,200 fish. The traditional District 111 coho salmon harvest of 34,445 fish was 87% of the 39,730 fish average. DIPAC enhanced coho salmon first appeared in the District 111 harvest in SW 36 and in SW 39 comprised 72% of the total harvest. CWT analyses indicate DIPAC enhanced coho salmon contributed 7,356 fish or 21% of the 2016 District 111 traditional drift gillnet harvest.

Management of the District 111 drift gillnet fishery is based on Taku River wild sockeye salmon abundance in SWs 25–33 and on Taku River wild coho salmon abundance in SWs 34–42. The 2016 fishery began by regulation in SW 26. Management actions were limited to imposing restrictions in time, area, and gear. Because there is no bilaterally agreed forecast for Taku River sockeye salmon, early season management of the District 111 fishery is based on fishery CPUE and Canyon Island fish wheel catches. As the fishing season progresses, sufficient data is acquired to estimate the inriver run size from the inriver MR program using the Canyon Island fish wheels as event 1 and the Canadian inriver fishery as event 2, and to use that estimate in conjunction with historical migratory timing and fishery harvest data to project the season's Taku River sockeye salmon terminal run size. In the first week of sockeye salmon management starting June 19, Section 111-B was opened with restrictions in time, area, and gear due to Chinook salmon conservation concerns. The opening was limited to two days with a six-inch maximum mesh size restriction and a never previously used area restriction that closed the west side of Taku Inlet, including the Point Bishop area, where incidences of significant Chinook salmon harvest had been observed in past seasons. Effort was a little more than half of average for this week with 29 boats fishing. The sockeye salmon harvest was 48%, and the CPUE was 130% of average. The total Chinook salmon harvest was 134 fish with approximately 44 fish estimated as Taku River origin large fish based on inseason CWT analyses.

In SW 27, Section 11-B was originally opened for two days with no gear or area restrictions for Chinook salmon conservation due to nearly 99% of the Taku River Chinook salmon run historically having transited the fishery by this time. With above average sockeye salmon CPUE in the first two days and a well below average fleet size, the fishery was extended for one day for a total of three days of fishing. Forty-seven boats harvested 163 Chinook salmon of which 44 were estimated to be Taku River large fish based on inseason CWT analysis. The sockeye salmon harvest was 62% and CPUE was 100% of average. Otolith analysis showed the King Salmon Lake enhanced sockeye salmon contribution to the Taku Inlet harvest was 6%. The inseason mark–recapture estimate generated midweek in SW 27 to inform the decision for the SW 28 opening projected an escapement of 63,600 Taku River sockeye salmon which is below the lower end of the goal range.

Fishing time for SW 28 was again set for two days in Section 11-B due to the low inseason projection the previous week. A six-inch minimum mesh size restriction was implemented in Stephens Passage south of Circle Point to conserve Port Snettisham wild sockeye salmon stocks transiting the area while allowing opportunity to harvest returning DIPAC enhanced chum salmon and this restriction remained in place through SW 32. With a small fleet size and above average sockeye salmon CPUE on the first day of the fishery, but some

uncertainty in the Taku River sockeye salmon run size with inseason projections only creeping up, a one day extension was announced only in Stephens Passage (south of Circle Point) with the mesh restriction remaining to provide opportunity to harvest returning enhanced chum salmon while minimizing impact on Taku River sockeye salmon. This resulted in three total days of fishing in statistical area 111-31 but only two days in 111-32 (Taku Inlet). Effort increased slightly from the previous week to 55 boats which harvested 72 Chinook salmon, 50 of which were Taku River large fish based on inseason CWT analysis. The total District 111 gillnet harvest of Taku River large Chinook salmon for the Chinook salmon accounting period SWs 18–28, is 159 fish based on postseason GSI analysis. Sockeye salmon harvest and CPUE, which had decreased dramatically on the second day in Taku Inlet, were respectively 42% and 80% of average. Otolith analysis revealed that 2% of the sockeye salmon harvest from Taku Inlet and 22% from Stephens Passage were of Snettisham Hatchery origin. The King Salmon Lake enhanced sockeye salmon contribution to the Taku Inlet harvest was 7%. The midweek inseason abundance estimate that was available when the decision for the SW 29 fishery was made projected a terminal run of 152,000 wild sockeye salmon with approximately one-third of the run historically through the District 111 fishery.

Table 5. U.S. inseason forecasts of D111 terminal run size, total allowable catch, inriver run size, and the U.S. harvest of Taku River wild sockeye salmon for 2016.

SW	Inriver Run	Terminal Run	Total TAC	US TAC	Projected[a] US harvest
27	16,400	NA	NA		NA
28	26,810	141,490	66,490		30,120
29	56,004	201,103	126,103		28,667
30	55,095	156,379	81,379		39,119
31	81,000	166,067	91,067		39,033
32	111,444	180,575	105,575		46,204
33	163,667	218,832	143,832		45,343
34	174,382	219,508	144,508		46,972
35	211,471	239,358	164,358		45,244
Postseason	167,348	200,739	193,770		68,031

[a]Forecast based on estimate including entire weeks data.

Fishing time for SW 29 was again set for two days in Section 11-B with Taku River sockeye salmon run projections improved, but still below the preseason forecast, and the uncertainty from the drop in CPUE over the course of the previous week. Sockeye salmon CPUE was below average for the two days, early Taku River sockeye salmon run projections were steadily improving, and the majority of the below average sized fleet was targeting chum salmon. A one day extension was announced in statistical area 111-32 with a six-inch minimum mesh size restriction implemented and an area restriction closing Taku Inlet north of Greely Point while a two day extension with the same mesh restriction in place was announced in 111-31, to provide opportunity on DIPAC enhanced chum salmon while minimizing sockeye salmon harvests in the area. This resulted in three total days of fishing in Taku Inlet and four total days in Stephens Passage. Effort for the week increased from the previous week to 70 boats, 60% of average. Sockeye salmon harvest and CPUE

were 37% and 38% of their respective averages. Otolith analysis revealed that 15% of the sockeye salmon harvest from Taku Inlet, and 53% from Stephens Passage, were of Snettisham Hatchery origin. The Tatsamenie Lake enhanced sockeye salmon contribution to the Taku Inlet harvest was 1% while the King Salmon Lake enhanced sockeye salmon contribution was 2%. The sockeye salmon inriver run estimate generated midweek projected an increased terminal wild run size of 201,000 fish although the cumulative fish wheel count was nearly as low as it had ever been at this point in the season.

Fishing time for SW 30 was again set for two days in Section 11-B based on variable inriver indicators and extensions were announced similar to the previous week with one extra day in 111-32 and two extra days in 111-31, for a total of three and four days respectively. The area and gear restrictions used during the previous week's extension in 111-32 were not implemented due to increased sockeye salmon CPUE observed during the first two days of the fishery. Effort increased to nearly 90% of the average with 103 boats making landings. This week had the largest effort of the season in Taku Inlet with 89 boats making landings. The sockeye salmon harvest for the entire opening was 129% of average while CPUE was 105% of average. Otolith analysis revealed that 21% of the sockeye salmon harvest from Taku Inlet, and 59% from Stephens Passage, were of Snettisham Hatchery origin. TBR enhanced sockeye salmon of Tatsamenie and King Salmon lakes origin contributed 3% and <1% in Taku Inlet, respectively. The weekly Taku River wild sockeye salmon terminal run projection dropped to 156,000 fish.

Fishing time for SW 31 was again set for two days in Section 11-B based on not particularly strong inriver indicators and concern over an effort increase from conservative openings in nearby gillnet areas. The same extensions as the previous week were announced for a total of three days in 111-32 and four days in 111-31. The extra time was based on increased sockeye salmon CPUE and a significant reduction in effort that continued to taper off throughout the opening. Effort dropped from the previous week to 76 boats, 75% of average for the week, and only 25 boats remained by the third day of the opening. The sockeye salmon harvest dropped to 89% of average while CPUE was 97% of average. Otolith analysis revealed that 37% of the sockeye salmon harvested in Taku Inlet and 94% of the harvest in Stephens Passage were of Snettisham Hatchery origin. TBR enhanced sockeye salmon of Tatsamenie and King Salmon lakes origin contributed 6% and <1% to the Taku Inlet harvest, respectively. The weekly Taku River sockeye salmon run size estimate indicated 81,000 fish had passed above the border, projecting a terminal run of 166,000 wild fish.

Fishing time for SW 32 was set for three days in Section 11-B with Taku River sockeye salmon escapement being estimated within the goal range. Both Taku Inlet and Stephens Passage were extended for an additional day for a total of four days of fishing due to well above average sockeye salmon CPUE. The mesh restriction in Stephens Passage was removed for the last day of the opening due to increasing escapement of Speel Lake wild sockeye salmon through the weir and an obvious abundance of fish observed in Speel Arm. Effort declined from the previous week to 69 boats, and sockeye salmon harvest and CPUE were 287% and 298% of their respective averages. The sockeye salmon harvest this week of 47,500 fish nearly doubled the second highest weekly harvest (27,605 fish in SW 33) in

the traditional area (not including the Speel Arm SHA). Otolith analysis indicated that 38% of the sockeye salmon harvest from Taku Inlet was of Snettisham Hatchery origin, and TBR enhanced sockeye salmon of Tatsamenie Lake origin contributed 8% of the Taku Inlet harvest which was the highest contribution of the season. Otolith samples were not obtained from Stephens Passage this week due to low effort there and mixed landings between statistical areas. The weekly Taku River wild sockeye salmon terminal run size projection increased from the previous week to 181,000 fish.

Fishing time for SW 33 was set for three days in Section 11-B and the six-inch minimum mesh size restriction south of Circle Point was removed for the season. The entrance of Port Snettisham was opened to increase opportunity on returning Snettisham Hatchery sockeye salmon with increased escapement of wild fish into Speel Lake. Nearly 80% of the effort was concentrated in and around Port Snettisham to target returning Snettisham Hatchery sockeye salmon and to be positioned for a potential opening of the Speel Arm SHA. A one day extension of the previously opened area plus nearly all of the Speel Arm SHA was announced midday on August 9 to begin at noon on August 10, due to significant movement of fish through the Speel Lake weir, and the vast majority of the fleet immediately ran into the Speel Arm SHA to claim their position, foregoing an entire day of fishing in the traditional areas of the district. Later in the week the entire Speel Arm SHA was opened until further notice. Effort was the highest of the season this week with 114 boats fishing in the traditional area (mostly the entrance of Port Snettisham and lower Stephens Passage) and this transition to above average effort would generally remain throughout the rest of the season. Sockeye salmon harvest and CPUE, excluding the Speel Arm SHA, for the last official week of sockeye salmon management were 336% and 176% of their respective averages. Otolith analysis indicated that 42% of the sockeye salmon harvest from Taku Inlet and 85% from Stephens Passage were of Snettisham Hatchery origin. TBR enhanced sockeye salmon of Tatsamenie Lake origin accounted for 6% of the Taku Inlet and 2% of the Stephens Passage harvests. This was the final week of otolith sampling from Taku Inlet but Stephens Passage would have two more weeks of minimal sampling in SWs 35 and 36. The weekly Taku River wild sockeye salmon terminal run size projection increased from the previous week to 219,000 fish.

The fall drift gillnet season in District 111 occurred over eight weeks, beginning on August 14 in SW 34, and ending on October 6 in SW 41. During this time, management in Section 11-B switches from being driven by Taku River sockeye to Taku River coho salmon abundance.

Fishing time for SW 34 was set for three days in Section 11-B with the opening delayed until Monday to accommodate the Golden North Salmon Derby taking place in Juneau area waters. The majority of effort remained in or near the Speel Arm SHA at the beginning of the opening to target returning Snettisham Hatchery sockeye salmon, but redistributed to the remainder of the district after it became apparent that there was not a large buildup of hatchery sockeye salmon in the southern portion of the district. A total of 52 boats made landings throughout the week in the traditional area which was 121% of average. The sockeye salmon harvest for the traditional fishery was 232% of average, while CPUE was 224% of average. The Speel Arm SHA remained open until further notice and 29 boats

made landings there throughout the week. The coho salmon harvest and CPUE for the traditional fishery were 77% and 71% of average, respectively. The first Taku River coho salmon inriver run estimate was produced this week and expanded by average run timing projected an above border run of 89,000 fish, below the preseason forecast. The last inseason weekly Taku River wild sockeye salmon terminal run size projection increased slightly from the previous week to 219,500 fish.

Fishing time in Section 11-B for SW 35 was set for three days again with coho salmon CPUE increasing during the previous week both in District 111 and the inriver fishery and assessment projects. A total of 54 boats made landings throughout the week in the traditional area; 125% of average. The Speel Arm SHA remained open until further notice and received little effort throughout the week. Coho salmon harvest and CPUE in the traditional fishery were 99% and 90% of average, respectively. Sockeye salmon harvest was over three times the average, and although the sample size was small, otolith analysis revealed that Tatsamenie Lake enhanced sockeye salmon contributed 4% to the Stephens Passage harvest for the week. The projected inriver run estimate for Taku River coho salmon decreased slightly from the previous week to 87,000 fish.

Section 11-B was opened for three days again in SW 36 with a below average forecast Taku River coho salmon run estimate instigating a below average opening time. A total of 43 boats, 96% of average, made landings in the traditional fishery with coho salmon harvest and CPUE at 89% and 110% of average, respectively. CWT analysis indicated that 55% of the traditional coho salmon harvest was comprised of Alaska hatchery fish, resulting in the largest weekly hatchery coho salmon harvest of the season in District 111. The Speel Arm SHA remained open until further notice and received very little effort throughout the week. The weekly Taku River coho salmon inriver run projection dropped slightly once again to 84,000 fish. The last week of otolith sampling (with a minimal sample size) in Stephens Passage showed that 5% of the sockeye salmon harvest was composed of enhanced fish of Tatsamenie Lake origin, the highest weekly percentage of the season there.

Fishing time in SW 37 was again set for three days in Section 11-B due to some uncertainty in the Taku River coho salmon run, but consistent weekly projections continued to align with the US passing 75,000 fish above border. The Speel Arm SHA remained open until further notice and received no effort throughout the week. Effort fell to 34 boats or 91% of average and shifted almost entirely to Taku Inlet with only four boats making landings in Stephens Passage. The coho salmon harvest was 72% of average while CPUE was 106% of average. CWT analysis indicated that 26% of the coho salmon harvest was comprised of Alaska hatchery fish. The weekly Taku River coho salmon inriver run projection rose slightly to 85,000 fish.

Fishing time in SW 38 was set for four days in Section 11-B due to a below average to average sized fleet, relatively high hatchery contribution, and an increasing run size projection. The Speel Arm SHA was open concurrently with Section 11-B, again attracted no effort, and closed for the season this week. Effort fell from the previous week to 27 boats, just slightly above average, with the coho salmon harvest 67% of average while CPUE was 73% of average. CWT analysis indicated that Alaska hatchery fish contributed

24% to the weekly coho salmon harvest. The weekly Taku River coho salmon inriver run projection fell to 83,000 fish.

Fishing time in Section 11-B was again set for four days in SWs 39, 40, and 41. The Taku River coho salmon inriver run projection remained very consistent over the entire coho management time period and climbed up to 92,000 fish in SW 40. The fleet size remained above average with 15, 10, and 1 boat fishing in SWs 39, 40, and 41, respectively. Coho salmon harvest and CPUE were slightly below average in SW 39, but well above average in both SW 40 and 41. Over 1,500 Alaska hatchery coho salmon were harvested in these three final openings which was 56% of the total harvest. The season ended at noon on Thursday, October 6.

The District 111 fall chum salmon harvest in SWs 34–41 was 45% of average. Escapement numbers for Taku River chum salmon are unknown; however, the number of chum salmon caught by the fish wheels at Canyon Island can be used as an index of escapement. The 2016 fish wheel catch of 66 chum salmon (Fish Wheel 1 and 2 only) was 25% of average and the lowest fish wheel chum salmon catch since the project began.

The District 111 traditional drift gillnet pink salmon harvest of 44,700 fish was 29% of average and the second lowest in the last 20 years. The escapement number to the Taku River is unknown; however the number of pink salmon caught by the fish wheels at Canyon Island can be used as an index of escapement. The total of 1,369 pink salmon caught in the fish wheels (Fish Wheel 1 and 2 only) was 56% of the 2014 parent-year and 13% of the 1996 to 2014 even-year average, not to mention the lowest fish wheel pink salmon catch since the project began.

Several other fisheries in the Juneau area harvested transboundary Taku River salmon stocks in 2016. A number of Chinook salmon stocks are known to contribute to the Juneau area sport fishery, including wild fish from the Chilkat River, as well as hatchery stocks, but the major contributor of large, wild fish is from the Taku River. Of the Chinook salmon harvested in the sport fishery, 635 fish were estimated to be of Taku River origin through SW 28 based on postseason GSI analysis. Personal use permits were used to harvest an estimated 1,200 Taku River sockeye salmon along with an estimated incidental harvest of 30 Taku River large Chinook salmon. The District 111 Amalga Harbor SHA common property purse seine fishery, northwest of Juneau, was conducted for the fifth consecutive season to target returning DIPAC enhanced summer chum salmon. There were three total openings in 2016, occurring on Thursdays in July, each lasting six hours. Some portion of the incidental sockeye salmon harvest from these fisheries is assumed to be of Taku River origin, but the magnitude of the contribution is unknown. DIPAC conducted GSI analysis of the 2013 and 2014 harvest with samples averaging 35% Taku River origin. No GSI analysis was conducted in 2016. Incidental sockeye salmon harvest in the Amalga Harbor purse seine fishery was 2,684 fish. Otolith analysis indicated that 48% were enhanced fish of DIPAC origin, and 3% were enhanced fish of TBR origin.

Canadian Fisheries

The Taku River commercial fishery harvest was 508 large Chinook (greater than 660 mm MEF, mostly 3-ocean or older), 195 nonlarge Chinook, 37,120 sockeye, and 9,466 coho salmon in 2016. Sockeye salmon originating from Taku fry plants contributed an estimated 4,007 fish to the catch, comprising 10.7% of the total commercial sockeye salmon harvest. The catch of large Chinook salmon was below the average and nonlarge Chinook salmon was below average as well. In 2005, as a result of the new Chinook salmon agreement which allows directed Chinook salmon fishing if abundance warrants, catch accounting for nonlarge 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 MEF). Hence, comparisons with catches prior to 2005 should be viewed accordingly. The catch of sockeye salmon was above average (third highest recorded) and the coho salmon catch was average. There were 70 days of fishing; above average. The seasonal fishing effort of 354 boat-days was below average. As is typical, both set and drift gillnets were used, with the majority of the catch taken in drift gillnets. No Chinook salmon were harvested in a directed Chinook salmon fishery but were caught as bycatch in the sockeye and coho salmon fisheries. The maximum allowable mesh size was 20.4 cm (8.0 inches) except for the period of June 19 to July 16, at which time it was reduced to 14.0 cm (5.5 inches) to minimize the incidental catch of Chinook salmon.

In addition to the commercial fishery catches, 101 Chinook, 191 sockeye, and 47 coho salmon were harvested in the Aboriginal fishery. All but 50 of the Chinook salmon were harvested in the commercial fishing area on the lower river with the remainder from the Nakina River. Based on commercial catch data, it is estimated that 91 of the Chinook salmon caught on the lower river were large and 10 were nonlarge; the Nakina River catch is assumed to have been large fish only. On average, 138 Chinook, 145 sockeye and 160 coho salmon are harvested annually in the Aboriginal fishery.

A test fishery to capture coho salmon for stock assessment purposes took place starting September 11 through October 8 (SWs 38–41). The fishery landed 2,007 coho and 122 sockeye salmon.

Complete recreational harvest figures are not available, but it is estimated that about 10 large Chinook salmon were retained in this fishery. Due to the poor inseason projections of large Chinook salmon, retention was not permitted after June 18th therefore, it is believed that the harvest was not very significant. The catches of other salmon species are thought to have been negligible.

The bilateral preseason forecast for the Taku River Chinook salmon terminal run was 29,200 large fish, well below average run size of 31,607 fish. The forecast generated by the Taku River Chinook salmon model produced a terminal run size estimate of 32,600 fish. However, due to consistent overestimation in recent years, this preseason forecast was reduced by 12% reflecting forecast performance for the past 5-years. An additional consideration for reducing the model produced forecast was the general poor performance of Chinook salmon stocks in recent years throughout northern British Columbia and Alaska.

At a run size of this magnitude, factoring in the revised interim MSY escapement point target of 25,500 fish, there was no AC for either the U.S. or Canada based on the preseason forecast.

Table 6. Weekly large Chinook salmon guideline harvest for the Canadian assessment fishery in the Taku River for 2016.

SW	Start Date	Assessment Harvest	Directed Harvest	Preseason Guideline
19	1-May	119		150
20	8-May	208		280
21	15-May	201		320
22	22-May	242		170
23	29-May	251		180
24	5-Jun	Suspended		160
25	12-Jun	Suspended		140
Total		1,021	0	1,400

The inseason management of Taku River Chinook salmon depends on abundance estimates generated from the joint MR program in the lower Taku River with tags being applied below the border and recoveries typically being made in the Canadian assessment and/or commercial fisheries. In recent years, when the preseason forecast or inseason projections have indicated no AC, the commercial fishery has operated in an assessment mode and served as the test fishery identified in the PST agreement. In 2016, the assessment fishery was conducted using a target of 1,400 fish as specified in the agreement.

The 2016 management plan indicated that the Chinook salmon assessment (test) fishery was scheduled to open at noon Sunday, May 4. Weekly fishing periods would be set with the intention of achieving assessment targets. The harvest would be spread over 3 openings, to a maximum of 4. Shortfalls/overages would be apportioned over the remaining weeks of the assessment fishery. Mesh sizes would be restricted to between 100 mm (4 inches) and 204 mm (8 inches) and net length would be up to 36.6 m (120 ft.). Use of set nets was prohibited during the assessment fishery and fishers were restricted to a total of one drift net. If reliable inseason run projections were greater than 31,900 large Chinook salmon, a directed Canadian commercial fishery may be considered (provided the weekly guideline exceeded the test fishery target) in accordance with weekly projections of terminal run size and guideline harvests. The Canadian catch would be managed with the objective of meeting escapement and agreed Canada/U.S. and domestic harvest sharing provisions. In the event that reliable run projections (i.e. estimates made after SW 21) fell below an escapement of 16,150 fish, suspension of the assessment fishery would be considered.

The Chinook salmon assessment fishery opened on May 4 (SW 19) for an initial 6 hour period with a weekly catch guideline of 150 fish. The fishery was extended for an additional two periods of 14 and 4 hours respectively. The fishery ended for the week after the third opening with a total catch of 119 large Chinook salmon. There were 4 licenses present and

the CPUE averaged 30 fish per boat day (fbd) which was near average (34 fbd) for SW 19. Water levels were above average and rose sharply through the fishing period.

The initial opening for SW 20 was set for 10 hours beginning on May 9 and an additional two periods were added (20 and 24 hours respectively). The weekly guideline harvest was 280 large Chinook salmon. Four to five licenses fished and caught a total of 208 fish. The weekly average CPUE was 21 fbd which was half of average (40 fbd) despite stable to dropping water levels.

The assessment fishery opened for 20 hours on May 15 to start SW 21. Two additional fishing periods of 20 hours were added plus a final period of 24 hours. The weekly guideline harvest was set at approximately 320 pieces and up to four licenses fished catching a total of 201 large Chinook salmon. The combined weekly CPUE was 21 fish per boat day, below the average of 30 fbd. The water level was above average and rose steadily during the fishing period.

For SW 22, the assessment fishery opened for 24 hours on May 22. Two additional fishing periods of 20 and 10 hours were added. The weekly guideline harvest was set at approximately 170 pieces and up to five licenses fished catching a total of 242 large Chinook salmon. The combined weekly CPUE was 23 fish per boat day, well below the average of 41 fbd. The water level peaked and dropped during the weekly fishing period. To date, a bilateral inseason estimate had not been generated.

The initial opening for SW 23 was set at 20 hours with a weekly target of approximately 180 large Chinook salmon. Two additional openings of 5 hours each were added. Catch rates improved to 43 fbd but remained below average. Up to five licenses fished catching 251 large Chinook salmon. Water levels were below average throughout the fishing period. A joint terminal run estimate made after the weekly fishing period suggested an escapement well below the target and the decision was made to suspend the assessment fishery.

The assessment fishery catches noted in Table 7 total 1,021 large Chinook salmon. The Chinook salmon bycatch in the sockeye and coho salmon fishery was 508 large fish (no directed Chinook salmon harvest for 2016); adding the Aboriginal fishery catch of 91 and an assumed recreational harvest of 10 fish, the actual BLC was 609 large Chinook salmon, 41% of Canada's BLC. Efforts to minimize commercial bycatch included mesh size restrictions in the first four weeks of the sockeye salmon fishery and a one day opening in SW 26. Additionally, low effort throughout the sockeye salmon season helped to reduce incidental Chinook salmon harvest.

Table 7. Forecasts of terminal run size, allowable catch (AC), weekly guidelines, and actual catch of Taku River large Chinook salmon, 2016.

SW	Terminal Run	AC*	AC reduced by 30%	Weekly Guideline / Assessment Target	Actual Harvest
19	29,200	0	0	150	119
20	29,200	0	0	280	208
21	29,200	0	0	320	201
22	29,200	0	0	170	242
23	11,588	0	0	180	251
24		0	0	160	Suspended
25	14,720	0	0	140	Suspended
Total				1,400	1,021

*: No directed Chinook salmon fishery in 2016.

As per normal procedures, weekly fisheries for sockeye and coho salmon opened at noon Sunday. 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 and set gillnets, net length was restricted to a maximum of 36.6 m (120 ft.); mesh sizes were restricted to between 100 mm (4 inches) and 204 mm (8 inches) except for the period from June 19 (SW 26) through July 16 (SW 29) when the maximum permissible was 14.0 cm (5.5 inches) in order to reduce the bycatch of Chinook salmon.

The preseason forecast for wild Taku sockeye salmon was based on stock recruitment and sibling analyses, and projected a run of 200,000 fish, above the average run size of 172,000 fish. Approximately 10,300 enhanced fish from Tatsamenie Lake were forecasted, above the average Tatsamenie enhanced run size of 7,600 fish. Based on the treaty arrangement, an enhanced run of 5,001–15,000 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 200,000 resulted in an overall TAC of 125,000 fish; 21% of that was approximately 26,000 fish.

The forecast for the run of wild Tatsamenie fish was 25,500 fish, above the average of approximately 8,700 fish. The egg-take goal for the 2016 season was based on a target of 30% of the escapement up to a maximum of 2.0 million eggs. During SWs 31–33 (July 24–August 13), management attention focused on Tatsamenie sockeye salmon to ensure an adequate number of sockeye salmon escaped to Tatsamenie Lake to support wild production and egg-take objectives.

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 catch was consistent with conservation and Treaty goals; and b) management was responsive to changes in projections of abundance, i.e. abundance-based.

The following summarizes the fishery management on a weekly basis and generally captures catch estimates and stock assessment information made inseason. Sockeye salmon catches in relation to run projections are for wild fish; CPUE data is for wild and enhanced fish combined. Guideline harvests presented in Table 8 are based on run projections made the previous week; additionally, those identified in the verbiage were generally based on the previous week's run projection. Weekly enhanced contributions to the overall catch are based on calculations made inseason. Guidelines identified in Table. 8 were set using a 21:79 harvest split up to SW 31 and 23:77 thereafter.

The management plan indicated that the sockeye salmon fishery would be restricted to a 24 hrs period in SW 26 (June 19–25) due to the poor returns observed at Kuthai Lake over the past 10 years. Additionally, modifications could be made based on Chinook salmon escapement concerns. The weekly guideline based on the preseason forecast was 1,584 wild fish (Table 8). Weekly effort included five licenses, below average, and the CPUE of 90 fbd was above the weekly average of 53. Water levels were below average and stable. The fishery was held at one day, resulting in a weekly catch of 432 sockeye salmon and 106 large Chinook salmon. A joint large Chinook salmon estimate generated after the week suggested the terminal run was approximately 13,900 fish.

Statistical week 27 (June 26–July 02) was opened on two days. The weekly guideline harvest for the week, based on the preseason forecast, was 1,586 sockeye salmon. Seven licenses fished on day 1; the CPUE of 111 fbd was well above the weekly average of 52. As a result, the fishery was extended to three days and the remainder of the week saw catch rates well above average. Water levels remained below average for the fishing period. Weekly catch totals were 1,933 wild sockeye salmon (74 enhanced King Salmon sockeye) and 185 large Chinook salmon. The terminal run projection after the final day of fishing was 117,882 fish, well below the preseason forecast.

Table 8. Canadian inseason forecasts of terminal run size, total allowable catch (TAC), and spawning escapement of wild Taku sockeye salmon, 2016.

SW	Terminal Run	TAC	Projected Escapement	Canadian AC	Weekly Guideline	Surplus AC*	Actual Catch
26	200,000	125,000	75,000	26,000	1,584	0	432
27	200,000	125,000	75,000	26,000	1,586	0	1,933
28	117,882	42,882	86,127	9,005	643	0	2,482
29	142,221	67,221	95,915	14,116	1,460	0	3,324
30	219,825	144,825	163,235	30,413	3,570	0	1,396
31	160,841	85,841	108,555	18,027	2,732	0	3,394
32	182,622	107,622	120,119	22,601	3,790	0	4,990
33	164,959	89,959	103,086	20,691	2,332	5,928	5,490

Note: Terminal run assessments and weekly guidelines based on previous week's run size projections. *Surplus AC was calculated using the final estimate for each SW.

Statistical week 28 (July 03–09) was opened again on two days. The weekly guideline was set at 643 sockeye salmon. Day 1 CPUE (130 fbd) was well above the weekly average of 57 fbd and an additional 24 hours was added. The weekly catch was 2,482 sockeye salmon

(plus 382 enhanced King Salmon sockeye), bringing the cumulative to 4,847 fish, above the cumulative guideline of 3,813 fish. A total of 115 large Chinook salmon was also caught. Weekly licenses fishing averaged seven, and the water remained stable and below average during the fishing period. The weekly sockeye salmon CPUE held at 130 fbd. The run projection made after the close of the fishery was 142,221 fish, up from the SW 27 estimate.

Using the previous week's projection, the weekly guideline for SW 29 (July 10–16) was 1,460 sockeye salmon. An opening of two days was posted based on the lower than average number of licenses fishing and the catch rates observed the previous week. The opening was characterized by rising but below average water levels. The catch rate for the first day of the fishery was 186 fbd versus an average of 74 fbd for this period. The fishery was extended another 24 hours based on the strong catch rates. The weekly catch was 3,324 sockeye salmon (plus 137 enhanced King Salmon and Tatsamenie sockeye). The number of licenses fishing for the week held at seven. A run projection of 219,825 fish, made after the end of the fishery, was well above the estimates generated in SWs 27–28.

Statistical week 30 (July 17–23) was opened on three days due to improving run outlooks. The weekly guideline was set at 3,570 sockeye salmon. The allowable maximum mesh size was increased from 14.0 mm (5.5 inches) to 204 mm (8 inches) as the Chinook salmon run was essentially complete. River levels were slightly above average to start the week and rose slightly during the fishing period. The weekly CPUE (70 fbd) was well below average (107 fbd), this coupled with run projections below the previous week meant that additional fishing time was not warranted. The weekly catch was 1,396 wild sockeye salmon and 77 enhanced fish. The cumulative sockeye salmon catch after week 30 was 9,566 wild fish, above the guideline of 8,463 fish. The licenses fished for the week was seven. After day 3 of the fishery, a run projection of 160,841 fish was made which was well below the SW 29 estimate.

For SW 31 (July 24–30), the weekly guideline was set at 2,732 sockeye salmon based on run outlook from SW 30. The initial opening was three days with a view that an above average projected Tatsamenie run should be contributing significantly. A run projection made after day 2 suggested the run size was below that of SW 30 and no further fishing time was added. Conversely, the weekly catch rate (176 fbd) was well above average (116 fbd) indicating that the run was better than projected. The weekly catch was 3,394 wild sockeye salmon and 251 enhanced Tatsamenie fish. Seven licenses fished and the river level was above average and dropping through the opening. The final weekly run projection was 182,622 much improved from the previous week.

Statistical week 32 (July 31–August 06) opened for three days. The weekly guideline was 3,790 fish based on the final run projection in SW 31. For both day 1 and 2, catch rates were well above average and in light of this, an additional 24 hour period was added. The weekly CPUE was 196 fbd (versus an average of 113 fbd) for 7–8 licenses; fishing conditions were favourable as water levels were below average. The weekly catch was 4,990 wild and 679 enhanced sockeye salmon. The weekly terminal run projection of

164,959 did not suggest that the run was improving despite some of the highest commercial catch rates recorded for SW 32.

Statistical week 33 (August 07–13) started with a weekly guideline harvest of 2,332 fish. With the drop in the run projection, the fishery was opened on two days only. River levels were near average for the fishing period. The fishery was extended for an additional 48 hours due to extremely good catch rates in the fishery (220 fbd versus average 73 fbd). Weekly licenses fished averaged seven. A total of 5,490 wild sockeye salmon and 864 enhanced Tatsamenie fish were caught.

This marked the end of the directed sockeye salmon fishery. The run projection after SW 33 improved to 202,116 wild fish, at the preseason forecast; the cumulative weekly inseason guideline was 25,876 fish at a 23% harvest share. The actual harvest of wild fish was 23,441 fish. The escapement projection was 125,928 wild fish, well above the goal range of 71,000 to 80,000 fish.

Adding the wild sockeye salmon taken in the directed coho salmon fishery (9,826 fish) brought the total commercial harvest to 33,267 wild fish. The inseason catch estimate of enhanced Taku sockeye salmon was 4,007 which included 646 fish from King Salmon Lake and 3,361 fish from Tatsamenie Lake. A small number of Stikine and US domestic enhanced origin fish were also harvested.

Postseason figures for the above are presented in the Sockeye Salmon Run Reconstruction section.

The forecast for the total run of Taku River coho salmon in 2016 was 202,000 fish. This forecast was generated using the relationship between the CPUE in smolt tagging and the total run estimates seen over the past nineteen years. The average total run of Taku River coho salmon is approximately 175,000 fish. Assuming average U.S. exploitation rates, this translated to an inriver run of approximately 127,000 fish. Based on the bilaterally agreed to escapement goal of 70,000 fish (range: 50,000–90,000 fish), the U.S. intent was to manage its fisheries to target a minimum above border run of approximately 75,000 coho salmon. A directed Canadian harvest of 5,000 fish would be permitted starting in week 34 for assessment purposes. Canada was also permitted to harvest all coho salmon in excess of 70,000 plus the fish allocated for assessment purposes. Approximately 2,000 coho salmon would be set aside for a test fishery to be conducted as commercial effort dissipated.

Statistical week 34 (August 14–20) was opened on three days based on the above forecast. The weekly guideline harvest was set at 5,900 coho salmon (projected ~ 57,000 surpluses to escapement target). Catch rates for the week were below average (21 fbd versus 62 fbd) but sockeye salmon catches were at all-time highs for this time of the year. In light of the good sockeye salmon catches, the fishery was extended for two days. Fishing conditions were less than favourable with increasing water levels and the number of licenses was above average (~8 licenses versus 6). A total of 813 coho salmon were landed plus 5,212 sockeye salmon (including 705 enhanced Tatsamenie fish). The MR estimate after day 3

indicated that 20,888 fish had crossed the border; this projected to 89,047 fish, well below the preseason forecast but still provided Canada with harvest opportunity.

Statistical week 35 (August 21–27) was opened on three days with a guideline harvest of approximately 2,000 fish. Coho salmon catch rates for the week were below average (44 fbd versus 67 fbd), but sockeye salmon CPUE was the highest on record for the week. An additional 24 hours was added to provide more opportunity to capitalize on the extremely good return of Tatsamenie sockeye. A coho salmon run projection made after day 3 (87,224 fish) was near the SW 34 projection. Water levels were near average, and seven licenses fished for the week. A total of 1,238 coho salmon and 3,538 sockeye salmon were caught (including 479 enhanced fish).

Statistical week 36 (August 28–September 03) was opened on three days again with a guideline harvest of approximately 2,000 fish. Coho salmon catch rates for the week had improved to average (71 fbd versus 70 fbd), and sockeye salmon continued with good catch rates for the time of the year (75 fbd versus 17 fbd). An additional 48 hours was added in light of the improved coho catches and reduced effort. A coho salmon run projection made after day 3 (83,669 fish) was slightly below the previous week's estimate. Water levels were above average to start but dropped steadily through the fishing period. Between five and seven licenses fished for the week. A total of 2,072 coho salmon and 2,179 sockeye salmon were caught (including 295 enhanced fish).

Statistical week 37 (September 04–10) was opened on three days with a guideline harvest of approximately 1,800 fish. Coho salmon catch rates were above average (53 fbd versus 42 fbd), and sockeye salmon catches had finally begun to diminish. An additional 48 hours was added due to the good coho catch rates and the shrinking number of licenses. A coho salmon run projection made after day 3 (85,483 fish) was similar to estimates produced to date. Between three and seven licenses fished for the week. A total of 1,424 coho salmon and 497 sockeye salmon were caught (including 67 enhanced fish).

From SW 38 to 41 (September 11–October 08), one to two licenses fished opportunistically. Weekly openings ranged from five to seven days in duration. A total of 1,936 coho salmon were caught during the final weeks of the season. No further commercial fishing time was allocated.

Escapement

Sockeye Salmon

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

The sockeye salmon MR program has been operated annually since 1984 to estimate the above border run size, spawning escapement is then estimated by subtracting the inriver

harvest. The final postseason estimate of above border run in 2016 is 213,851 fish; subtracting the inriver harvest of 37,434 fish (37,120 commercial, 191 Aboriginal, and 123 assessment/test fish) indicates that 176,417 sockeye salmon reached the spawning grounds. Using otolith thermal mark data from Tatsamenie Lake broodstock, it is estimated that 5,768 of Tatsamenie Lake escapement were enhanced fish. Using an overall harvest rate of 18% it was estimated that 3,026 of King Salmon Lake escapement were enhanced fish. The wild spawning escapement was above average, and above the interim escapement goal range of 71,000 to 80,000 wild sockeye salmon. The traditional Canyon Island fish wheel catch of 4,942 sockeye salmon was average.

The sockeye salmon count through the Kuthai Lake weir was 1,476 fish. An aerial survey did not take place in 2016. The 2016 count was 72% above the average of 857 fish and 82% above the primary brood year (2011) escapement estimate of 811 fish.

The King Salmon Lake weir count of 6,404 fish was well above the average of 1,764 fish and the primary brood year (2011) escapement estimate of 2,899 fish.

The Little Trapper Lake weir count was 7,771 sockeye salmon, 93% of the average of 8,367 fish and almost double the 2011 primary brood year count of 3,809 fish. Run timing was about average, with the peak occurring on August 7. There were 177 removals for artificial spawning.

The Tatsamenie Lake weir count of 32,934 sockeye salmon was a record year well above the average of 8,556 fish and the 2011 primary brood year count of 7,880 fish. The run was about one week late with the midpoint occurring approximately September 5. Based on thermal mark data noted above, 6,044 fish or 18% of the weir count was enhanced. There were a total of 1,500 removals which included: 1,046 for broodstock, 40 mortalities, and 414 fish held and released unspawned.

Chinook Salmon

Spawning escapement of Chinook salmon in the Canadian portion of the Taku drainage was estimated from the joint Canada/U.S. MR program. Tag application took place from April 28 through August 19 using fish wheels and drift gillnets to capture fish. The fish wheels were located at Canyon Island and drift gillnets were used in the lower river from the Wright River just downstream of the U.S./Canada border. Catches in the drift gillnet accounted for 75% of the tags applied. Tag recovery effort consisted of assessment/test or commercial fisheries from May 4 through May 31 (SW's 19–23), as well as the sockeye and coho salmon commercial fisheries (SW's 26–35). In addition, there was spawning ground sampling in July through September on the Nakina, Tatsatua, Kowatua, Nahlin, and Dudidontu rivers, as well as on Tseta Creek. Lower river assessment/test and commercial data was used to give an inriver run estimate of 14,011 large Chinook salmon resulting in an escapement estimate of 12,381 fish after accounting for inriver harvest.

Aerial surveys of large Chinook salmon to the five escapement index areas were as follows: Nakina 800 fish (below average); Kowatua 303 fish (below average); Tatsamenie 92 fish

(below average); Dudidontu 156 fish (below average); and Nahlin 379 fish (below average). Viewing conditions were good to excellent for all surveys and the total peak count of 1,730 large Chinook salmon which expands to 8,996 large fish using an expansion factor of 5.2. The count of 1,730 large Chinook salmon was the lowest observed since standardized surveys began in the early 1970s.

The carcass weir on the Tatsatua River operated to obtain tag and age, sex, and length data. A total of 198 large Chinook salmon were encountered, either on the weir or through supplemental angling, and this was below average. Comparisons between years should be made cautiously as water levels, effort and fish distribution can have a significant effect on the numbers of fish observed.

Coho Salmon

Spawning escapement of coho salmon in the Canadian portion of the Taku drainage was estimated from the joint Canada/U.S. MR program. Tag application occurred from June 29 (SW 27) until October 1 (SW 40) and recovery occurred until October 8 (SW 41). The tag recovery effort consisted of the commercial fishery followed by a four week test fishery which commenced September 11 (SW 38) and caught approximately 500 fish per week. The final postseason inriver MR estimate is 99,224 fish. Taking into account the inriver harvest of 11,520 fish (9,466 commercial, 47 Aboriginal, and 2,007 assessment/test fish) the spawning escapement estimate was 87,704 fish. This was 96% of the average escapement (91,669fish) and above the 2016 escapement objective of 70,000 fish.

Pink Salmon

There is no program to estimate the escapement of Taku River pink salmon; however, the Canyon Island fish wheels were used as an index of escapement. A total of 3,207 pink salmon were captured in the fish wheels in 2016; this was well below the average (11,189 fish).

Chum Salmon

Chum salmon escapement numbers to the Taku River are unknown; however, the numbers of fall chum captured by the fish wheels at Canyon Island were used as an index of escapement. A total of 81 chum salmon were captured in the wheels in 2016, which was below average.

Sockeye Salmon Run Reconstruction

An estimated 66,980 wild and 6,710 enhanced Taku sockeye salmon were harvested in the traditional U.S. District 111 drift gillnet fishery. This estimate was made by using GSI and otolith analysis. An additional 1,051 wild and 133 sockeye salmon were estimated to have been taken in the U.S. inriver personal use fishery. The estimated total U.S. harvest of Taku sockeye salmon is 68,031 wild and 6,843 enhanced fish (Table 5).

In the Canadian commercial fishery, the final postseason harvest estimate of Taku sockeye salmon is 33,112 wild, 3,361 enhanced Tatsamenie Lake, and 646 enhanced King Salmon Lake fish. Also harvested was 57 from the Stikine, and 124 fish from U.S. domestic stocks; total Canadian commercial harvest was 37,301 (37,120 Taku fish and 181 non-Taku enhanced fish). An estimated 170 wild and 21 enhanced sockeye salmon were taken in the Canadian Aboriginal fishery. Therefore, the estimated Canadian treaty harvest of Taku sockeye salmon is 33,282 wild and 4,029 enhanced fish (Table 5). The test fisheries harvested 123 fish.

The final postseason estimate of the above border run size of sockeye salmon, based on the joint Canada/U.S. MR program, is 213,851 fish. Deducting the Canadian inriver harvest noted above from the above border run estimate results in an estimated escapement of 176,417 sockeye salmon; 167,348 wild fish. The escapement of Taku River sockeye salmon originating from the fry planting program was estimated to be 6,044 fish from brood stock otoliths collected at Tatsamenie Lake and an estimated 3,023 fish from King Salmon. The terminal run of Taku River sockeye salmon is estimated at 288,725 fish; 268,770 wild and 19,955 enhanced fish. Based on the escapement goal of 75,000 wild fish, the wild AC was 193,770 fish and combining wild and enhanced terminal run the TAC was 213,725 sockeye salmon. The harvest sharing agreement based on total terminal enhanced run was 77% U.S. and 23% Canada.

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 does call for the development and implementation of cooperative abundance-based management plans and programs for Alsek River Chinook and sockeye salmon. In February 2013, the bilateral TTC and bilateral TBR Panel agreed to the revised biological escapement goals for Alsek River Chinook and sockeye salmon. These were Alsek River Chinook salmon MSY target of 4,700 fish (escapement goal range 3,500–5,300 fish), Klukshu River Chinook salmon MSY target of 1,000 fish (escapement goal range of 800–1,200 fish), Alsek River sockeye salmon MSY target of 29,700 fish (escapement goal range of 24,000–33,500 fish), and Klukshu River sockeye salmon MSY target of 9,700 fish (escapement goal range 7,500–11,000 fish). The principle escapement-monitoring tool for Chinook and sockeye salmon stocks on the Alsek River is the Klukshu weir, operated by the DFO in cooperation with the Champagne-Aishihik First Nation (CAFN). The weir has been in operation since 1976. To make the management objectives of Chinook and sockeye salmon better defined in terms of Klukshu stocks, the revised goals expressed in terms of Klukshu escapements, were used in 2016. Mark–recapture programs to estimate the total inriver abundance and the fraction of the escapement contributed by the Klukshu stocks were in operation since 1997 for Chinook salmon and since 2000 for sockeye salmon. These however were discontinued in 2005. Currently, total Alsek River run estimates for Chinook salmon are generated by expanding the total Klukshu River run by a factor of 4.0; sockeye salmon are generated using GSI analysis and the expansion of the Klukshu River weir counts.

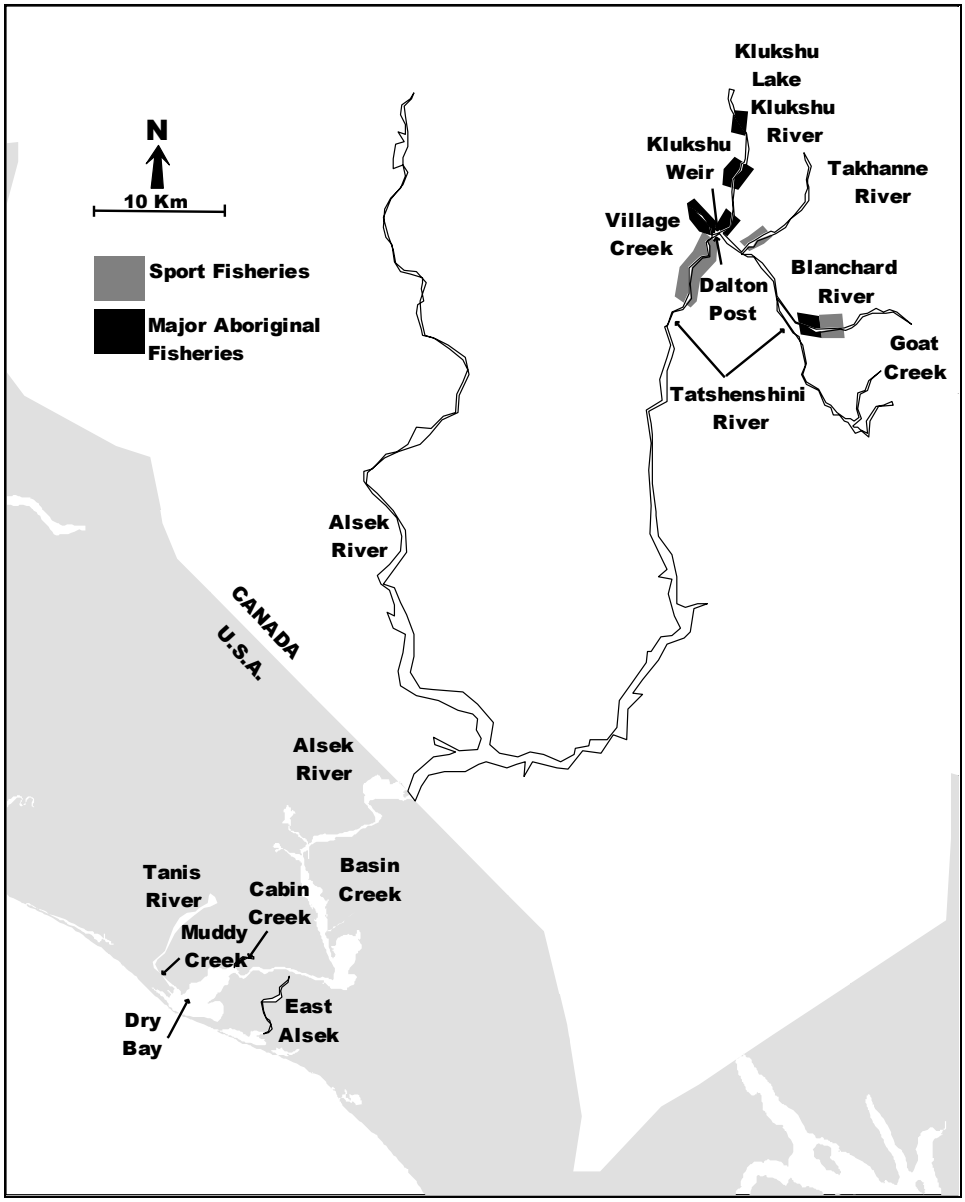

Figure 3. The Alsek River and principal U.S. and Canadian fishing areas.

Preseason Forecasts

The Klukshu River Chinook salmon escapements in 2010 and 2011 were 2,259 and 1,610 fish, respectively. For comparison, the average is approximately 1,200 Chinook salmon. Based on the primary brood year escapements, the production outlook for 2016 was 1,900 fish (reduced by 26% to account for forecast error) Klukshu River Chinook salmon, above the average of approximately 1,400 fish and above the revised escapement goal range.

The 2016 Alsek River sockeye salmon run was expected to be approximately 83,000 fish; this was above the average run size estimate of approximately 68,000 sockeye salmon. The outlook for 2016 was based on a predicted run of 19,000 Klukshu River sockeye salmon

derived from the latest Klukshu River stock-recruitment data (2011 Eggers et al.) and an assumed Klukshu River contribution to the total run of 23%, which was based on MR results (2000–2004) and run size estimates using GSI (2005–2006, 2011). Principal contributing brood years were 2011 (Klukshu River escapement of 20,800 sockeye salmon) and 2012 (Klukshu River escapement of 17,200 sockeye salmon); the average Klukshu River sockeye salmon escapement was approximately 11,400 fish. Based on the current stock-recruitment analysis, the range of Klukshu River escapements that appears most likely to produce optimum yields is 7,500 to 11,000 sockeye salmon.

The Klukshu River early sockeye salmon run counts in 2011 and 2012 were 5,635 and 5,969 fish, respectively. The average count was approximately 2,700 sockeye salmon which is above the minimum management target of 1,500 fish used by DFO. The early run to the weir was expected to be above this level in 2016.

The coho salmon partial escapement estimates at the Klukshu River weir in 2012 (1,270 fish) and 2013 (7,320 fish) suggested the run in 2016 would be above average. The recent average weir count was approximately 2,100 coho salmon.

U.S. Fisheries

Preseason expectations were for above average runs for both sockeye and Chinook salmon. These projections were based on parent-year escapements to the Klukshu River. In 2016, the Alsek River recorded a below average run for sockeye salmon and the lower bound of Klukshu River escapement goal range was attained. Chinook salmon runs were also below average in 2016, and the escapement goal as measured at the Klukshu River was not achieved.

In 2016 management decisions were made 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 June 5 for one day. Chinook and sockeye salmon harvests were both below average. Eleven permits harvested 28 Chinook and 136 sockeye salmon during the first opening. Peak sockeye salmon harvest occurred during SW 28 with 12 permits harvesting nearly 1,200 fish. Effort started to decline by SW 33 and by SW 35 coho salmon management strategies were in place. Coho salmon are targeted starting in mid-August and effort becomes minimal. Fishing times remained at three days per week in SW 35 and SW 36. As fishing effort continued to drop, fishing times increased and by SW42 fishing was opened 7 days a week in SW 42 and SW 43. The river was not fished the last five out of six weeks of the season. The commercial fishing season closed on October 28.

The 2016 Dry Bay commercial set gillnet fishery harvested 132 Chinook, 6,709 sockeye, and 655 coho salmon (Table 9). The chum salmon harvest was negligible and no pink salmon were harvested. A test fishery for Chinook salmon was conducted in the Alaska portion of the Alsek River in 2005–2008 and from 2011–2012. Test fishing ceased in 2014.

Canadian Fisheries

Due to the absence of a harvest monitor position in 2016, catches from the food fishery were estimated based on fishery performance data compared with the weir counts. The harvest estimate for 2016 was comprised of the fish taken from the Klukshu River weir (elders only) and an estimate of catches above/below the weir (based on the past relationship with the weir count and harvest). An estimated 10 Chinook, 815 sockeye, and no coho salmon were harvested in the food fishery. The recent average catches are 60 Chinook, 1,159 sockeye, and 4 coho salmon.

Catch estimates for the Tatshenshini River recreational fishery were an estimated 70 Chinook salmon retained (no estimate of fish released), and no sockeye salmon were retained (no estimate of fish released). There were no recorded coho salmon caught although this is considered incomplete as fishing may have taken place after monitoring had ceased. These catches were all below average for Chinook and sockeye salmon.

Management of salmon in Yukon is a shared responsibility between DFO and the Salmon Sub-Committee (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. 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 9. Final estimates of harvest and Klukshu index escapement data for Alsek River Chinook and sockeye salmon for 2016.

	Chinook	Sockeye
Klukshu River		
Weir count	651	7,584
Harvest below/at/above weir	5	193
Escapement	646	7,391
Harvest [b]		
U.S. Commercial	132	6,709
U.S. Subsistence/P.U.	8	105
U.S. Test		
Canadian Aboriginal	10	815
Canadian Recreational	70	0
Alsek River		
Above border run	2,604	59,651
Total inriver run	2,744	66,465
<Above border run above + U.S. harvest>		
Total escapement	2,524	58,836
<Above border run above - U.S. harvest>		

The 2016 Alsek-Tatshenshini management plan, adopted by CAFN, SSC, and DFO, was based on the escapement objectives described in the Harvest Regulations & Management Objectives section above. For Chinook and early run sockeye salmon management, the status of the Klukshu weir counts was reviewed about July 18 to ensure weir and spawning escapement targets were on track. The status of the late run sockeye salmon was also reviewed in the first week of September. Adjustments to inseason fishing regimes in the Aboriginal fishery in 2016 were not deemed necessary as escapement needs (sockeye salmon) and food fishery thresholds (Chinook salmon) were projected to be met. In the recreational fishery, retention of Chinook salmon was not permitted effective July 27 due to run projections below the lower bound of the escapement goal. Additionally, there were no significant surpluses that warranted liberalization of the possession limits in the recreational fishery. Other key elements of the plan are described below.

The center of Aboriginal fishing activity in the Alsek River drainage occurs at the CAFN village of Klukshu, on the Haines Road, about 60 km south of Haines Junction. Salmon are harvested by means of gaff, small gillnets, sport rods, and traditional fish traps as the fish migrate up the Klukshu River and into Klukshu Lake. The fishing plan for the Aboriginal fishery in the Klukshu River 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 < 800 Chinook, < 1,500 early, and < 7,500 total 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 per day, two in possession. 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. Recreational salmon fishing was permitted in the Tatshenshini River seven days a 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 < 1,000 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 2016. 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 drainage-wide escapement of each species is enumerated at the weir on the Klukshu River. Current escapement monitoring programs including the Klukshu and Village Creek weirs, GSI based run reconstruction, expanded counts, 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 2016 are shown in Table 9. A video enumeration system was installed on the Klukshu River in 2016 (following on the installation of a similar system on Village Creek in 2014), which facilitated salmon passage 24 hours per day.

Sockeye Salmon

In 2016, the final Klukshu River sockeye salmon weir count was 7,584 fish and the escapement estimate was 7,391 fish (Table 9). The count of 1,405 early run fish (count through August 15) was below the average of 2,659 fish as was the count of 6,179 late run fish with an average of 9,022 fish. The total escapement of 7,391 fish was below the recommended escapement goal range of 7,500 to 11,000 fish. The sockeye salmon count at Village Creek was 410 fish; this was well below average.

Chinook Salmon

The most reliable comparative Chinook salmon escapement index for the Alsek River drainage is the Klukshu River weir count. In 2016, the final Chinook salmon weir count was 651 fish and the escapement estimate was 646 fish (Table 9). The 2016 escapement estimate was below the escapement goal range of 800 to 1,200 Klukshu Chinook salmon.

Coho Salmon

The Klukshu River coho salmon weir count was 2,141 fish. As in past years, this does not 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

Snettisham Hatchery is operated by DIPAC, a private non-profit aquaculture organization in Juneau, Alaska. A cooperative agreement between ADF&G and DIPAC provides for Snettisham Hatchery to serve the needs of the joint TBR enhancement projects.

Egg incubation and thermal-marking at Snettisham Hatchery went smoothly in 2015/2016. In 2016, brood year 2015 fry were transported to the appropriate systems from May 9th to May 27th. There were minimal infectious hematopoietic necrosis (IHNV) losses of the 2015 brood year. An estimated 89,100 Tatsamenie fry in a single incubator were confirmed positive with IHNV and destroyed. Those fry were thermal marked and destined for the extended rearing program.

In 2016, sockeye salmon eggs were collected at Tahltan Lake on the Stikine River for the twenty-eighth year, Tatsamenie Lake system on the Taku River for the twenty-seventh year and Trapper Lake on the Taku River for the eighth year.

Tahltan Lake

For brood year 2016, the Stikine Enhancement Production Plan set the egg-take goal at 4.91 million sockeye salmon eggs. Canadian technical staff modified the egg-take goal to 5.3 million eggs based on observed escapement and estimated production not exceeding treaty stocking guidelines. Tahltan Fisheries were contracted to perform the egg take. Eleven egg takes occurred from September 2nd to 23rd. A total of 2,084 female and 2,007 male sockeye salmon were spawned. An estimated 5.3 million eggs for delivery to

Snettisham Hatchery in Alaska. Two of the 11 lots of eggs being transported to the hatchery were delayed by one day and four were delayed by two days, due to weather. The egg survival at Snettisham Hatchery from green to eyed egg was 76%, which is significantly lower than the long-term average of 85%. An additional loss of 174 thousand eggs to IHNV brought the green egg to stocked fry survival down to 59%. There were 3.1 million sockeye salmon fry planted in Tahltan Lake.

For brood year 2015, a total of 3.4 million sockeye salmon fry were planted back into Tahltan Lake on May 9, 10, 11 and 13. Survival from green egg to stocking fry was 75%.

Tatsamenie Lake

For brood year 2016, the Taku Enhancement Production Plan (TEPP) set the egg-take goal at 2.0 million sockeye salmon eggs. B. Mercer and Associates Ltd was contracted to collect eggs. Broodstock was captured near the assessment weir and held until ripe. Escapement through the weir was 33,000 fish, which is the largest escapement on record. Four egg takes occurred from September 13th to 24th. A total of 458 female and 400 male sockeye salmon were spawned. An estimated 1.8 million eggs were delivered to Snettisham Hatchery. Three of the lots of eggs being transported to the hatchery were delayed by a day and one lot was delayed by three days, due to weather. The egg survival from green to eyed egg was 73%, which is significantly lower than the long-term average of 88%. The green egg to stocked fry survival was 68%. There were 1.2 million sockeye salmon fry delivered to Tatsamenie Lake. Approximately 1.0 million fry were direct planted into the lake. The water supply that fed the on-shore extended rearing troughs was lost. The remaining fry were lake reared in four net pens. Approximately 144 thousand lake-reared fry were released into the lake at 3.9 grams. Approximately 38 thousand fry were destroyed after being diagnosed with IHNV.

For brood year 2015, 470,576 sockeye salmon fry were transported back to Tatsamenie Lake. Survival from green egg to stocked fry was 64%. Approximately 334,349 sockeye salmon fry were released directly into the lake on May 14th. Approximately 86,000 sockeye salmon fry were delivered to four onshore extended rearing tanks, located near the northeast end of the lake, on May 27th at 0.7 grams. The fry were reared to 1.8 grams and transferred to pens in the lake. The fry were released into the lake at 5.6 grams on August 11th. There were less than 200 mortalities. This was the eighth year of this program. Full evaluation of the success of this study will not be available until these fish return as adults. Additionally, 50,000 fry were placed directly into a lake net pen at .7 grams on May 14th. The fry were released on July 13th at 4.2 grams. There were only 28 mortalities.

Trapper Lake

For brood year 2016, the TEPP set the egg-take goal at 250 thousand sockeye salmon eggs. B. Mercer and Associates Ltd was contracted to collect eggs at Lower Trapper Lake.An estimated 277 thousand eggs were delivered to Snettisham Hatchery. Approximately 212 thousand fry were planted in Lower Trapper Lake. The planted fry will help jump start sockeye salmon colonization of Upper Trapper Lake. In late fall 2017, barrier removal to Upper Trapper Lake is scheduled to begin.

King Salmon Lake

Taku River Tlingit Fisheries conducted a project to test the feasibility of using King Salmon Lake to produce sockeye salmon. In 2012 and 2014, sockeye salmon eggs were collected in King Salmon Lake, sent to Snettisham Hatchery for incubation and the resulting fry were back planted into the lake. In 2016, the four-year-old component of the brood year 2012 egg take returned to the lake. Escapement into the lake was 6,404 fish which is significantly higher than the average of 1,947 fish. Otolith data is pending.

Tuya Lake

Fry stocking into Tuya Lake was discontinued in 2014 due to Canadian domestic concerns.

Sockeye Supplementation 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 2016.

Thermal Mark Laboratories

ADF&G Thermal Mark Laboratory

During the 2016 season, the ADF&G Thermal Mark Lab processed 18,468 sockeye salmon otoliths collected by ADF&G and DFO staff as part of the U.S./Canada fry-stocking evaluation program. These collections came from commercial and test fisheries in both U.S. and Canadian waters on the Taku and Stikine rivers over a 14-week period. The laboratory provided estimates on hatchery contributions for 86 distinct sample collections. Estimates of the percentage of hatchery fish contributed to commercial fishery catches were provided to ADF&G and DFO fishery managers 24 to 48 hours after samples arrived at the lab.

Final estimates of stocked sockeye salmon to Alaskan harvests were 31,388 Stikine River fish to District 106 and 108, and 6,800 stocked Taku River sockeye salmon to District 111. Final estimates of stocked sockeye salmon to Canadian fisheries included 32,627 fish to Stikine River fisheries and 4,030 fish to the Taku River fisheries.

Canadian Thermal Mark Laboratory

Subsamples of juvenile and adult otolith samples collected at the study lakes during the 2016 season are being analyzed at the DFO thermal mark lab in Whitehorse.

APPENDICES

Standards

Large Chinook salmon are MEF length ≥ 660 mm
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 harvests of Alaska Hatchery pink and chum salmon
All catches of Tahltan, Trapper, and Tatsamenie lakes, unless otherwise noted, include both wild and hatchery fish.
Bold numbers are incomplete or interpolated numbers
Italicized numbers are used when the GSI estimates do not meet acceptable levels of precision and accuracy agreed upon by the TTC (April 2013): to estimate the proportion of mixtures within 10% of the true mixture 90% of the time.

Appendix A. 1. Weekly harvest estimates of Chinook salmon in the US gillnet, troll, recreational, and subsistence fisheries in District 108, 2016.

ONLY weekly reference see the historcial Appendix B3 for final postseason estimate. All weekly estimates of large Stikine Chinook salmon are based on ASL and CWT data (small expansions may lead to negative numbers)

	Subsistence--Stikine		D108 sport			D108 gillnet				D108 troll			US total large
SW	Large	Nonlarge	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	0	0	0	0	0								0
19	0	0	29	0	29	1	7	0	7	240	73	167	203
20	0	0	72	0	72	5	29	0	29	154	71	83	184
21	0	0	177	0	177	11	66	0	66	165	12	153	396
22	0	0	365	23	342					104	38	66	408
23	0	0	218	24	194					65	57	8	202
24	0	0	170	118	52					65	95	-30	22
25	1	3	160	0	160	382	1,113	873	240	100	1	99	500
26	4	6	172	62	110	1,333	1,248	274	974	50	21	29	1,117
27	3	3	45	0	45	1,479	1,065	1,976	-911	83	92	-9	-872
28	8	9	34	0	34	599	861	567	294	2	0	2	338
29	4	5	0	0	0	423	435	437	-2	0	0	0	2
Total	20	26	1,442	227	1,215	4,232	4,824	4,126	697	1,028	460	568	2,500

Appendix A. 2. Weekly harvest of Chinook salmon in the Canadian commercial, Telegraph Aboriginal, and recreational fishery in the Stikine River, 2016.

	LRCF													Canada total
	Kept		Released		Estimated mortality (50%)		URCF		Aboriginal Telegraph		Tahltan sport fishery			large Stikine
SW	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Retained	Released	Total	harvest
19	46	2							1					47
20	108	8							0					108
21	142	4							0					142
22	352	31							8					360
23	249	29							11					260
24									87	2				87
25					0	0			97	26				97
26	423	202			0	0			102	22				525
27	361	193			0	0			62	14				423
28	265	109			0	0			98	14				363
29	90	46			0	0			90	42				180
30	46	16			0	0			29	13				75
31	15	11			0	0			15	4				30
32	13	2			0	0			15	2				28
33	2	2			0	0								2
34	1	0			0	0								1
35	1	0			0	0								1
36	2	0			0	0								2
37														0
Total kept	2,116	655	0	0	0	0	0	0	615	139	0	0	0	2,731
Total harvest	2,116	655												2,731
Total harvest + mortality	2,116	655												

Appendix A. 3. Weekly harvest of Chinook salmon in the Canadian test fisheries in the Stikine River, 2016.

	Drift		Set		Commercial license		Tuya		Total	
SW	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge
19									0	0
20									0	0
21									0	0
22									0	0
23									0	0
24					229	19			229	19
25					254	20			254	20
26	10	7	4	3					14	10
27	4	2							4	2
28		1							0	1
29									0	0
30	1								1	0
31		2	1	1					1	3
32	1								1	0
33									0	0
34									0	0
35									0	0
36									0	0
37									0	0
38									0	0
39									0	0
40									0	0
41									0	0
42									0	0
Total	16	12	5	4	483	39	0	0	504	55

Appendix A. 4. Weekly harvest of sockeye salmon in the Alaskan District 106 and 108 fisheries, 2016.

SW	Subsistence	D106 Total	D106-30	D106-41/42	D108
22-24	15				
25	33	1,235	74	1,161	444
26	129	5,836	798	5,038	11,389
27	316	9,536	2,225	7,311	22,283
28	689	16,025	5,554	10,471	17,655
29	593	14,842	4,112	10,730	8,382
30	282	16,951	3,432	13,519	5,146
31	27	14,196	5,296	8,900	1,654
32	34	15,539	7,264	8,275	1,817
33	5	5,700	2,100	3,600	587
34	0	4,039	1,758	2,281	524
35	0	1,809	747	1,062	161
36	3	592	199	393	62
37	0	286	115	171	22
38	0	53	18	35	16
39	0	10	3	7	1
40	0	0	0	0	0
41	0	0	0	0	0
Total	2,126	106,649	33,695	72,954	70,143

Appendix A. 5. Weekly stock proportions of sockeye salmon harvested in the Alaskan D106 commercial drift gillnet fishery, 2016.

Estimates derived from GSI estimates for subdistricts 10641/42 and 106-30; see Appendices G. 1 and G. 2. for GSI detail

		Stikine					
SW	Other	All Tahltan	Tuya	Mainstem	Total	ıltan Enhaı	WildTahltan
25	0.495	0.343	0.101	0.061	0.505	0.113	0.229
26	0.461	0.353	0.109	0.078	0.539	0.126	0.227
27	0.591	0.271	0.071	0.066	0.409	0.088	0.183
28	0.585	0.263	0.107	0.045	0.415	0.095	0.169
29	0.720	0.164	0.055	0.061	0.280	0.056	0.108
30	0.917	0.044	0.008	0.031	0.083	0.017	0.027
31	0.927	0.014	0.008	0.050	0.073	0.005	0.009
32	0.961	0.004	0.004	0.031	0.039	0.002	0.003
33	0.983	0.000	0.002	0.015	0.017	0.000	0.000
34	0.989	0.000	0.000	0.011	0.011	0.000	0.000
35	0.988	0.000	0.000	0.012	0.012	0.000	0.000
36	0.987	0.000	0.000	0.013	0.013	0.000	0.000
37	0.985	0.000	0.000	0.014	0.015	0.000	0.000
38	0.987	0.000	0.000	0.013	0.013	0.000	0.000
39	0.988	0.000	0.000	0.012	0.012	0.000	0.000
Total	0.797	0.119	0.040	0.044	0.203		
25	611	423	125	75	624	140	283
26	2,689	2,060	634	453	3,147	734	1,327
27	5,640	2,585	680	631	3,896	843	1,743
28	9,373	4,221	1,712	719	6,652	1,520	2,702
29	10,687	2,432	815	909	4,155	828	1,605
30	15,546	740	135	531	1,405	282	458
31	13,162	203	119	712	1,034	78	124
32	14,937	67	55	480	602	28	39
33	5,602	1	12	86	98	0	1
34	3,994	1	0	44	45	0	1
35	1,787	0	0	21	22	0	0
36	584	0	0	7	8	0	0
37	282	0	0	4	4	0	0
38	52	0	0	1	1	0	0
39	10	0	0	0	0	0	0
Total	84,955	12,733	4,287	4,673	21,694	4,452	8,282

Appendix A. 6. Weekly stock proportions of sockeye salmon harvested in the Alaskan Subdistrict 106-41/42 (Sumner Strait) commercial drift gillnet fishery, 2016.

Estimates based on mean GSI; see Appendix G. 1 for GSI details.							
		Stikine					
SW	Other	All Tahltan	Tuya	Mainstem	Total	ıltan Enha	WildTahltan
25	0.464	0.364	0.108	0.064	0.536	0.121	0.244
26	0.391	0.409	0.124	0.075	0.609	0.146	0.263
27	0.494	0.353	0.093	0.060	0.506	0.114	0.238
28	*0.415*	*0.395*	*0.162*	*0.029*	*0.585*	*0.145*	*0.250*
29	0.625	0.220	0.076	0.080	0.375	0.076	0.144
30	0.900	0.054	0.010	0.036	0.100	0.020	0.034
31	0.891	0.021	0.013	0.075	0.109	0.007	0.014
32	0.934	0.008	0.007	0.051	0.066	0.003	0.005
33	0.974	0.000	0.003	0.023	0.026	0.000	0.000
34	0.982	0.000	0.000	0.017	0.018	0.000	0.000
35	**0.989**	**0.000**	**0.000**	**0.010**	**0.011**	**0.000**	**0.000**
36	0.996	0.000	0.000	0.003	0.004	0.000	0.000
37	**0.996**	**0.000**	**0.000**	**0.003**	**0.004**	**0.000**	**0.000**
38	**0.996**	**0.000**	**0.000**	**0.003**	**0.004**	**0.000**	**0.000**
39	**0.996**	**0.000**	**0.000**	**0.003**	**0.004**	**0.000**	**0.000**
Total	0.718	0.172	0.058	0.052	0.282	0.060	0.111
25	538	423	125	74	623	140	283
26	1,971	2,060	627	380	3,067	734	1,326
27	3,613	2,578	680	441	3,698	835	1,742
28	4,341	4,134	1,693	303	6,130	1,519	2,615
29	6,704	2,356	815	855	4,026	814	1,543
30	12,166	728	135	490	1,353	270	458
31	7,931	184	119	666	969	60	124
32	7,732	66	55	421	543	28	39
33	3,505	0	12	83	95	0	0
34	2,241	0	0	40	40	0	0
35	1,051	0	0	11	11	0	0
36	392	0	0	1	1	0	0
37	170	0	0	1	1	0	0
38	35	0	0	0	0	0	0
39	7	0	0	0	0	0	0
Total	52,395	12,532	4,262	3,765	20,559	4,401	8,131

Appendix A. 7. Weekly stock proportions of sockeye salmon harvested in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 2016.

Estimates based on mean GSI; see Appendix G. 2 for GSI details.							
		Stikine					
SW	Other	All Tahltan	Tuya	Mainstem	Total	ıltan Enhaı	WildTahltan
25	0.984	0.001	0.001	0.015	0.016	0.000	0.001
26	0.900	0.000	0.008	0.092	0.100	0.000	0.000
27	0.911	0.004	0.000	0.085	0.089	0.003	0.000
28	*0.906*	*0.016*	*0.003*	*0.075*	*0.094*	*0.000*	*0.016*
29	0.969	0.018	0.000	0.013	0.031	0.003	0.015
30	0.985	0.003	0.000	0.012	0.015	0.003	0.000
31	0.988	0.003	0.000	0.009	0.012	0.003	0.000
32	0.992	0.000	0.000	0.008	0.008	0.000	0.000
33	0.998	0.000	0.000	0.001	0.002	0.000	0.000
34	0.997	0.000	0.000	0.002	0.003	0.000	0.000
35	0.986	0.000	0.000	0.014	0.014	0.000	0.000
36	**0.969**	**0.000**	**0.000**	**0.031**	**0.031**	**0.000**	**0.000**
37	**0.969**	**0.000**	**0.000**	**0.031**	**0.031**	**0.000**	**0.000**
38	**0.969**	**0.000**	**0.000**	**0.031**	**0.031**	**0.000**	**0.000**
39	**0.969**	**0.000**	**0.000**	**0.031**	**0.031**	**0.000**	**0.000**
Total	0.966	0.006	0.001	0.027	0.034	0.002	0.004
25	73	0	0	1	1	0	0
26	718	0	7	73	80	0	0
27	2,027	8	0	190	198	8	0
28	5,032	87	19	416	522	0	87
29	3,983	76	0	53	129	14	62
30	3,379	12	0	41	53	12	0
31	5,231	18	0	47	65	18	0
32	7,205	0	0	58	59	0	0
33	2,097	0	0	3	3	0	0
34	1,753	0	0	4	5	0	0
35	736	0	0	11	11	0	0
36	193	0	0	6	6	0	0
37	111	0	0	4	4	0	0
38	17	0	0	1	1	0	0
39	3	0	0	0	0	0	0
Total	32,560	202	26	908	1,135	51	151

Appendix A. 8. Weekly stock proportions sockeye salmon harvested in the Alaskan District 108 commercial drift gillnet fishery, 2016.

Estimates based on mean GSI; see Appendix G. 3 for GSI details.

		Stikine					
SW	Other	All Tahltan	Tuya	Mainstem	Total	ıltan Enha	WildTahltan
25	0.091	0.579	0.149	0.180	0.909	0.229	0.350
26	0.080	0.711	0.143	0.066	0.920	0.230	0.481
27	0.141	0.660	0.163	0.036	0.859	0.200	0.460
28	0.131	0.644	0.117	0.108	0.869	0.212	0.432
29	0.150	0.473	0.090	0.288	0.850	0.194	0.279
30	0.238	0.345	0.062	0.355	0.762	0.107	0.237
31	0.150	0.248	0.057	0.544	0.850	0.092	0.156
32	0.385	0.132	0.021	0.463	0.615	0.046	0.086
33	0.532	0.053	0.020	0.395	0.468	0.006	0.047
34	*0.453*	*0.033*	*0.005*	*0.509*	*0.547*	*0.010*	*0.024*
35	**0.453**	**0.033**	***0.005***	***0.509***	**0.547**	***0.010***	***0.024***
36	**0.453**	**0.033**	***0.005***	***0.509***	**0.547**	***0.010***	***0.024***
37	**0.453**	**0.033**	***0.005***	***0.509***	**0.547**	***0.010***	***0.024***
38	**0.453**	**0.033**	***0.005***	***0.509***	**0.547**	***0.010***	***0.024***
39	**0.453**	**0.033**	***0.005***	***0.509***	**0.547**	***0.010***	***0.024***
Total	0.150	0.583	0.123	0.145	0.850	0.190	0.392
25	41	257	66	80	403	101	156
26	912	8,093	1,631	754	10,477	2,618	5,474
27	3,150	14,708	3,621	804	19,133	4,465	10,243
28	2,317	11,369	2,069	1,899	15,338	3,747	7,622
29	1,260	3,961	751	2,410	7,122	1,625	2,336
30	1,225	1,773	320	1,828	3,921	551	1,222
31	249	411	94	900	1,405	153	258
32	700	239	37	841	1,117	83	156
33	312	31	12	232	275	4	27
34	237	17	3	267	287	5	12
35	73	5	1	82	88	2	4
36	28	2	0	32	34	1	1
37	10	1	0	11	12	0	1
38	7	1	0	8	9	0	0
39	0	0	0	1	1	0	0
Total	10,521	40,868	8,605	10,148	59,622	13,355	27,514

Appendix A. 9. Weekly sockeye salmon harvest and effort in the Canadian commercial and assessment fisheries in the lower Stikine River, 2016.

	LRCF					Telegraph	Drift Net Test		Set Net Test		Commercial	Test
SW	Harvest	Permits	Days	Permit days	URCF	Aboriginal	harvest	# drifts	harvest	hours	License/assessment	Total
19				0.0								0
20				0.0								0
21				0.0								0
22				0.0								0
23				0.0								0
24				0.0							2	2
25				0.0		4					11	11
26	3,982	17.7	3.00	53.0		28	104	42	350	60		454
27	16,468	18.0	5.00	90.0		685	18	14	53	12		71
28	20,321	17.4	5.00	87.0		2,348	26	14	100	12		126
29	13,299	15.3	4.00	61.0	152	2,996	63	28	102	24		165
30	9,247	16.0	3.00	48.0	181	2,950	53	28	204	48		257
31	5,240	15.5	2.00	31.0		768	76	42	177	48		253
32	3,891	16.0	2.00	32.0		710	52	42	153	48		205
33	1,143	16.0	1.00	16.0		122	40	42	60	48		100
34	564	11.0	1.00	11.0		33	27	42	84	48		111
35	997	11.8	4.00	47.0			1	28	4	40		5
36	587	15.2	5.50	83.4						8		0
37				0.0								0
38												0
39												0
Total	75,739		35.5	559.4	333	10,644	460	322	1,287	396	13	1,760

Appendix A. 10. Weekly sockeye salmon stock proportions and harvest by stock in the Canadian commercial fishery in the lower Stikine River, 2016.

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	AllTahltan	Tuya	Mainstem	ahltanEnhanc	AllTahltan	Tuya	Mainstem	WildTahltan	TahltanEnhance
19						0	0	0	0	0
20						0	0	0	0	0
21						0	0	0	0	0
22						0	0	0	0	0
23						0	0	0	0	0
24						0	0	0	0	0
25						0	0	0	0	0
26	0.989	0.659	0.331	0.010	0.212	2,625	1,318	39	1,779	845
27	0.994	0.800	0.183	0.017	0.240	13,173	3,014	281	9,224	3,949
28	0.978	0.762	0.204	0.034	0.218	15,488	4,141	692	11,048	4,440
29	0.929	0.757	0.150	0.093	0.208	10,066	1,999	1,234	7,298	2,768
30	0.742	0.679	0.120	0.201	0.242	6,280	1,111	1,856	4,042	2,238
31	0.429	0.499	0.103	0.398	0.110	2,616	541	2,083	2,040	576
32	0.342	0.317	0.110	0.573	0.091	1,233	428	2,230	879	354
33	0.212	0.261	0.010	0.730	0.120	298	11	834	161	137
34	0.111	0.125	0.007	0.868	0.013	70	4	490	63	7
35	0.102	0.108	0.000	0.892	0.010	108	0	889	98	10
36	0.104	0.109	0.000	0.891	0.013	64	0	523	56	8
37						0	0	0	0	0
Total						52,020	12,568	11,151	36,688	15,332
Proportion						0.687	0.166	0.147	0.484	0.202

	Harvest/Effort below Porcupine			CPUE					
Week	Sockeye	Permit Day	Total	Small Egg	AllTahltan	Tuya	Mainstem	WildTahltan	TahltanEnhance
19									
20									
21									
22									
23									
24									
25									
26	3,982	53.0	75.118	74.306	49.513	24.869	0.736	33.568	15.945
27	16,468	90.0	182.978	181.797	146.364	33.491	3.122	102.487	43.877
28	20,321	87.0	233.575	228.524	178.023	47.598	7.954	126.990	51.033
29	13,299	61.0	218.016	202.574	165.016	32.770	20.230	119.637	45.379
30	9,247	48.0	192.646	142.897	130.827	23.148	38.671	84.205	46.622
31	5,240	31.0	169.032	72.442	84.387	17.452	67.194	65.794	18.594
32	3,891	32.0	121.594	41.598	38.531	13.375	69.687	27.477	11.054
33	1,143	16.0	71.438	15.153	18.625	0.688	52.125	10.052	8.573
34	564	11.0	51.273	5.697	6.386	0.365	44.521	5.733	0.653
35	997	47.0	21.213	2.169	2.298	0.000	18.915	2.088	0.210
36	587	83.4	7.035	0.734	0.768	0.000	6.267	0.677	0.092
37									
Total			1343.92	967.89	820.74	193.76	329.42	578.71	242.03
Proportion				0.720	0.611	0.144	0.245	0.431	0.180

Appendix A. 11. Harvest by stock and week for sockeye salmon in the Canadian upper river commercial and Aboriginal fisheries in the Stikine River, 2016.

In the absence of otolith analysis the fraction of Tuya, Tahltan wild, and Tahltan enhanced was calculated based on the lower River fraction from the previous week(used week 25 fraction from lower river for both weeks 24-25)

	Stock				
SW	All Tahltanb	Tuya	Mainstem	WildTahltan	ahltanEnhanc
Proportion by stock for upper river fisheries					
24	0.708	0.290	0.002	0.494	0.214
25	0.708	0.290	0.002	0.494	0.214
26	0.708	0.290	0.002	0.494	0.214
27	0.664	0.334	0.002	0.450	0.214
28	0.812	0.186	0.002	0.571	0.241
29	0.787	0.211	0.002	0.565	0.223
30	0.833	0.165	0.002	0.609	0.224
31	0.848	0.150	0.002	0.522	0.326
32	0.827	0.171	0.002	0.571	0.256
33	0.741	0.257	0.002	0.476	0.265
34	0.962	0.036	0.002	0.398	0.565
Total					
Harvest by stock for upper river commercial fishery					
27	0	0	0	0	0
28	0	0	0	0	0
29	120	32	0	86	34
30	151	30	0	110	40
Total	270	62	1	196	74
Harvest by stock for Telegraph aboriginal fishery					
24	0	0	0	0	0
25	3	1	0	2	1
26	20	8	0	14	6
27	455	229	1	308	147
28	1,907	436	5	1,341	566
29	2,359	631	6	1,692	668
30	2,456	488	6	1,797	660
31	651	115	2	401	250
32	587	121	1	405	182
33	90	31	0	58	32
34	32	1	0	13	19
35	0	0	0	0	0
Total	8,561	2,062	21	6,031	2,529

Appendix A. 12. Weekly harvest, CPUE, and migratory timing of Tahltan, Tuya, and mainstem sockeye salmon stocks in the Stikine River test fishery, 2016.

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

		Proportions				Harvest				CPUE				Migratory Timing		
SW	small egg	AllTahltan	Tuya	Mainstem	TahltanEnhance	AllTahltan	Tuya	Mainstem	TahltanEnhance	AllTahltan	Tuya	Mainstem	Total	AllTahltan	Tuya	Mainstem
Drift gillnet																
25																
26	0.988	0.712	0.279	0.009	0.254	74	29	1	26	1.764	0.690	0.022	2.476	0.122	0.048	0.002
27	0.962	0.789	0.197	0.014	0.229	14	4	0	4	1.014	0.254	0.018	1.286	0.070	0.018	0.001
28	0.902	0.824	0.144	0.032	0.328	21	4	1	9	1.530	0.267	0.059	1.857	0.106	0.019	0.004
29	0.804	0.742	0.166	0.092	0.299	47	10	6	19	1.670	0.373	0.207	2.250	0.116	0.026	0.014
30	0.643	0.556	0.222	0.222	0.212	29	12	12	11	1.053	0.420	0.420	1.893	0.073	0.029	0.029
31	0.398	0.445	0.146	0.409	0.116	34	11	31	9	0.805	0.264	0.741	1.810	0.056	0.018	0.051
32	0.112	0.317	0.073	0.610	0.051	16	4	32	3	0.393	0.091	0.755	1.238	0.027	0.006	0.052
33	0.087	0.112	0.122	0.765	0.054	4	5	31	2	0.107	0.117	0.729	0.952	0.007	0.008	0.050
34	0.075	0.036	0.091	0.873	0.018	1	2	24	0	0.023	0.058	0.561	0.643	0.002	0.004	0.039
35	0.000	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						242	81	138	83	8.360	2.533	3.548	14.440			
Proportion						0.526	0.175	0.299						0.579	0.175	0.246
Set gillnet																
26		0.712	0.279	0.009	0.254	249	98	3	89	4.156	1.626	0.052	5.833	0.125	0.049	0.002
27		0.789	0.197	0.014	0.229	42	10	1	12	3.484	0.871	0.062	4.417	0.104	0.026	0.002
28		0.824	0.144	0.032	0.328	82	14	3	33	6.867	1.200	0.267	8.333	0.206	0.036	0.008
29		0.742	0.166	0.092	0.299	76	17	9	30	3.155	0.704	0.391	4.250	0.095	0.021	0.012
30		0.556	0.222	0.222	0.212	114	45	45	43	2.365	0.943	0.943	4.250	0.071	0.028	0.028
31		0.445	0.146	0.409	0.116	79	26	72	21							
32		0.317	0.073	0.610	0.051	49	11	93	8	1.011	0.233	1.944	3.188	0.030	0.007	0.058
33		0.112	0.122	0.765	0.054	7	7	46	3	0.140	0.153	0.957	1.250	0.004	0.005	0.029
34		0.036	0.091	0.873	0.018	3	8	73	2	0.064	0.159	1.527	1.750	0.002	0.005	0.046
35		0.000	0.000	1.000	0.000	0	0	4	0	0.000	0.000	0.100	0.100	0.000	0.000	0.003
Total						700	237	351	241	21.24	5.89	6.24	33.37			
Proportion						0.544	0.184	0.272						0.636	0.176	0.187
Total Test Fishery Harvest																
25		0.000	0.000	0.000	0.000	0	0	0	0							
26		0.712	0.279	0.009	0.254	323	127	4	116							
27		0.789	0.197	0.014	0.229	56	14	1	16							
28		0.824	0.144	0.032	0.328	104	18	4	41							
29		0.742	0.166	0.092	0.299	122	27	15	49							
30		0.556	0.222	0.222	0.212	143	57	57	54							
31		0.445	0.146	0.409	0.116	113	37	104	29							
32		0.317	0.073	0.610	0.051	65	15	125	10							
33		0.112	0.122	0.765	0.054	11	12	77	5							
34		0.036	0.091	0.873	0.018	4	10	97	2							
35		0.000	0.000	1.000	0.000	0	0	5	0							
Total						942	317	488	324							
Proportion						0.539	0.182	0.279	0.185							

AllTahltan harvest		TahltanEnhance	WildTahltan
25	0.000	0.000	0.000
26	0.712	0.254	0.458
27	0.789	0.229	0.560
28	0.824	0.328	0.496
29	0.742	0.299	0.444
30	0.556	0.212	0.345
31	0.445	0.116	0.329
32	0.317	0.051	0.266
33	0.112	0.054	0.058
34	0.000	0.018	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 2016.

Not conducted in 2016

Appendix A. 14. Weekly coho salmon harvest in the Alaskan District 106 and 108 fisheries, 2016.

	D106					D108			Subsistence
SW	Hatchery	Wild	Total	106-41/42	106-30	Hatchery	Wild	Total	harvest
25	186	326	512	390	122	23	10	33	0
26	1,897	612	2,509	1,554	955	0	469	469	0
27	1,946	2,551	4,497	2,712	1,785	871	90	961	0
28	3,997	2,834	6,831	3,035	3,796	282	470	752	0
29	3,172	3,145	6,317	3,421	2,896	170	339	509	2
30	1,691	3,948	5,639	2,997	2,642	0	609	609	0
31	589	3,623	4,212	1,864	2,348	81	545	626	12
32	492	5,638	6,130	2,547	3,583	3	944	947	0
33	188	3,315	3,503	2,060	1,443	81	706	787	0
34	21	6,835	6,856	4,554	2,302	89	1,721	1,810	0
35	229	5,357	5,586	3,233	2,353	6	1,157	1,163	0
36	2,550	4,182	6,732	4,257	2,475	178	1,989	2,167	8
37	3,043	4,902	7,945	3,673	4,272	250	1,329	1,579	10
38	12,384	9,084	21,468	6,432	15,036	1,186	1,897	3,083	23
39	8,150	11,301	19,451	5,723	13,728	1,203	938	2,141	12
40	7,287	2,952	10,239	3,805	6,434	2,408	657	3,065	6
41	2,683	991	3,674	899	2,775	1,181	264	1,445	0
Total	50,505	71,596	122,101	53,156	68,945	8,012	14,134	22,146	73

Appendix A. 15. Weekly harvest of coho salmon in the Canadian lower river commercial fishery and test fishery 2016.

		Test			
SW	LRCF	Drift	Set	Additional	Total
19					
20					
21					
22					
23					
24					
25					
26					0
27					0
28	1				1
29	2		1		3
30	3		1		4
31	12	1	2		15
32	86	4	11		101
33	96	3	4		103
34	189	20	41		250
35	1,591	8	35		1,634
36	3,366		9		3,375
37					0
38					
39					
40					
41					
42					
Total	5,346	36	104	0	5,486

Appendix A. 16. Weekly salmon effort in the Alaskan District 106 and 108 fisheries, 2016.

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
25	12-Jun	31	2.0	62	26	2.0	52	6	2.0	12	50	2.0	100
26	19-Jun	45	3.0	135	34	3.0	102	12	3.0	36	74	5.0	245
27	29-Jun	54	3.0	162	36	3.0	108	23	3.0	69	85	5.5	339
28	3-Jul	55	3.0	165	29	3.0	87	27	3.0	81	76	5.5	292
29	10-Jul	56	4.0	224	33	4.0	132	24	4.0	96	58	5.0	230
30	17-Jul	64	4.0	256	40	4.0	160	26	4.0	104	68	4.0	272
31	24-Jul	64	3.0	192	36	3.0	108	31	3.0	93	63	3.0	189
32	31-Jul	76	3.0	228	32	3.0	96	45	3.0	135	59	3.0	177
33	7-Aug	52	3.0	156	28	3.0	84	24	3.0	72	38	3.0	114
34	14-Aug	66	3.0	198	35	3.0	105	32	3.0	96	36	3.0	108
35	21-Aug	73	2.0	146	37	2.0	74	37	2.0	74	22	2.0	44
36	28-Aug	55	2.0	110	38	2.0	76	18	2.0	36	24	2.0	48
37	4-Sep	61	2.0	122	38	2.0	76	23	2.0	46	17	2.0	34
38	11-Sep	69	2.0	138	34	2.0	68	35	2.0	70	19	2.0	38
39	18-Sep	74	3.0	222	32	3.0	96	48	3.0	144	12	3.0	36
40	25-Sep	32	3.0	96	15	3.0	45	17	3.0	51	12	3.0	36
41	2-Oct	15	2.0	30	6	2.0	12	10	2.0	20	7	2.0	14
Total			47	2,642		47	1,481		47	1,235		55	2,316

Appendix A. 17. Weekly salmon effort in the Canadian fisheries in the Stikine River, 2016.

		Commercial license			Test fishery			LRCF			URCF			Telegraph Aboriginal			Test	
SW	Start Date	Permits	Days	Permit Days	Permits	Days	Permit Days	Permits	Days	Permit Days	Permits	Days	Permit Days	# Drifts	Set hours
19	1-May			0	11.00	2.0	22				1	1	1		
20	8-May			0	9.67	3.0	29						0		
21	15-May			0	9.67	3.0	29						0		
22	22-May			0	16.33	2.4	39				3	2	5		
23	29-May			0	17.00	1.0	17	0	1		6	2	12		
24	5-Jun	17.000	0.542	9			0				4	7	31		
25	12-Jun	17.500	0.500	9			0				6	7	40		
26	19-Jun				17.67	3.0	53				4	7	29	42	60
27	26-Jun				18.00	5.0	90	0	1		7	7	48	14	12
28	3-Jul				17.40	5.0	87	0.0	3.0	0	20.3	7.0	142	14	12.0
29	10-Jul				15.25	4.0	61	1.0	3.0	3	25.0	7.0	175	28	24.0
30	17-Jul				16.00	3.0	48	1.0	3.0		24.7	7.0	173	28	48.0
31	24-Jul				15.50	2.0	31	0.0	3.0		8.1	7.0	57	42	48.0
32	31-Jul				16.00	2.0	32	0.0	2.0		5.7	7.0	40	42	48.0
33	7-Aug				16.00	1.0	16	0.0	2.0		1.8	4.0	7	42	48.0
34	14-Aug				11.00	1.0	11				1	4	4	42	48.0
35	21-Aug				11.75	4.0	47							28	40.0
36	28-Aug				15.17	5.5	83								8.0
37	4-Sep						0								
38	11-Sep						0								
39	18-Sep						0								
40	25-Sep						0								
41	2-Oct						0								
42	9-Oct						0								
Total				1.0	18.0		46.9	695.9		18.0	3.0		76.0	764.0	322.0	396.0

Appendix A. 18. Tuya assessment fishery, 2016.

Not conducted in 2016

Appendix A. 19. Daily counts of adult sockeye salmon passing through Tahltan Lake weir, 2016.

		Cumulative				Cumulative	
Date	Count [a]	Count	Percent	Date	Count	Count	Percent
7-Jul	weir in			13-Aug	1,001	30,591	79.19%
8-Jul	0	0	0.00%	14-Aug	1,057	31,648	81.92%
9-Jul	0	0	0.00%	15-Aug	452	32,100	83.09%
10-Jul	0	0	0.00%	16-Aug	389	32,489	84.10%
11-Jul	804	804	2.08%	17-Aug	394	32,883	85.12%
12-Jul	1,006	1,810	4.69%	18-Aug	491	33,374	86.39%
13-Jul	1,124	2,934	7.59%	19-Aug	643	34,017	88.06%
14-Jul	986	3,920	10.15%	20-Aug	32	34,049	88.14%
15-Jul	499	4,419	11.44%	21-Aug	337	34,386	89.01%
16-Jul	515	4,934	12.77%	22-Aug	669	35,055	90.74%
17-Jul	775	5,709	14.78%	23-Aug	200	35,255	91.26%
18-Jul	585	6,294	16.29%	24-Aug	422	35,677	92.35%
19-Jul	615	6,909	17.88%	25-Aug	430	36,107	93.47%
20-Jul	119	7,028	18.19%	26-Aug	309	36,416	94.27%
21-Jul	207	7,235	18.73%	27-Aug	85	36,501	94.49%
22-Jul	55	7,290	18.87%	28-Aug	358	36,859	95.41%
23-Jul	863	8,153	21.10%	29-Aug	249	37,108	96.06%
24-Jul	460	8,613	22.30%	30-Aug	292	37,400	96.81%
25-Jul	1,032	9,645	24.97%	31-Aug	169	37,569	97.25%
26-Jul	907	10,552	27.31%	1-Sep	277	37,846	97.97%
27-Jul	601	11,153	28.87%	2-Sep	90	37,936	98.20%
28-Jul	787	11,940	30.91%	3-Sep	41	37,977	98.31%
29-Jul	369	12,309	31.86%	4-Sep	83	38,060	98.52%
30-Jul	735	13,044	33.77%	5-Sep	66	38,126	98.69%
31-Jul	448	13,492	34.93%	6-Sep	6	38,132	98.71%
1-Aug	819	14,311	37.05%	7-Sep	191	38,323	99.20%
2-Aug	995	15,306	39.62%	8-Sep	57	38,380	99.35%
3-Aug	1,784	17,090	44.24%	9-Sep	85	38,465	99.57%
4-Aug	1,511	18,601	48.15%	10-Sep	145	38,610	99.95%
5-Aug	1,042	19,643	50.85%	11-Sep	15	38,625	99.98%
6-Aug	1,930	21,573	55.84%	12-Sep	6	38,631	100.00%
7-Aug	2,357	23,930	61.95%	12-Sep	weir pulled		
8-Aug	1,633	25,563	66.17%				
9-Aug	1,291	26,854	69.51%				
10-Aug	944	27,798	71.96%				
11-Aug	633	28,431	73.60%				
12-Aug	1,159	29,590	76.60%				

	% enhanced	Hatchery[a]	Wild	Total
Total Counted		14,970	23,661	38,631
Fish removed for broodstock	0.388	1,672	2,643	4,315
Fish removed for otolith samples	0.306	52	121	173
Total Spawners		13,245	20,898	

Appendix A. 20. Daily counts of sockeye salmon smolt migrating through Tahltan Lake smolt weir, 2016.

		Cumulative				Cumulative	
Date	Count	Count	Percent	Date	Count	Count	Percent
6-May	weir in			1-Jun	4,756	2,073,483	98.99%
6-May	22,574	22,574	1.08%	2-Jun	7,400	2,080,883	99.35%
7-May	36,968	59,542	2.84%	3-Jun	6,203	2,087,086	99.64%
8-May	27,525	87,067	4.16%	4-Jun	1,935	2,089,021	99.73%
9-May	103,805	190,872	9.11%	5-Jun	1,949	2,090,970	99.83%
10-May	19,949	210,821	10.07%	6-Jun	1,686	2,092,656	99.91%
11-May	15,870	226,691	10.82%	7-Jun	721	2,093,377	99.94%
12-May	27,894	254,585	12.15%	8-Jun	737	2,094,114	99.98%
13-May	68,001	322,586	15.40%	9-Jun	478	2,094,592	100.00%
14-May	136,492	459,078	21.92%	9-Jun	weir pulled		
15-May	177,731	636,809	30.40%				
16-May	81,272	718,081	34.28%				
17-May	78,095	796,176	38.01%				
18-May	280,114	1,076,290	51.38%	otolith samples			
19-May	59,467	1,135,757	54.22%	ehanced	wild		
20-May	188,807	1,324,564	63.24%	270	256		
21-May	182,180	1,506,744	71.93%	0.513	0.487		
22-May	201,597	1,708,341	81.56%				
23-May	152,429	1,860,770	88.84%				
24-May	47,841	1,908,611	91.12%				
25-May	30,188	1,938,799	92.56%				
26-May	76,435	2,015,234	96.21%				
27-May	15,389	2,030,623	96.95%				
28-May	6,300	2,036,923	97.25%				
29-May	9,000	2,045,923	97.68%				
30-May	9,368	2,055,291	98.12%	Wild	1,019,421		
31-May	13,436	2,068,727	98.77%	Hatchery	1,075,171		
Total					2,094,592		

Appendix A. 21. Daily counts of adult Chinook salmon passing through Little Tahltan weir, 2016.

	Large Chinook			nonlarge Chinook		
		Cumulative			Cumulative	
Date	Count	Count	Percent	Count	Count	Percent
22-Jun	weir in					
23-Jun	0	0	0.00%	0	0	0.00%
24-Jun	0	0	0.00%	0	0	0.00%
25-Jun	0	0	0.00%	0	0	0.00%
26-Jun	0	0	0.00%	0	0	0.00%
27-Jun	0	0	0.00%	0	0	0.00%
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	0	0	0.00%	0	0	0.00%
8-Jul	6	6	0.65%	0	0	0.00%
9-Jul	30	36	3.91%	4	4	1.26%
10-Jul	17	53	5.75%	3	7	2.20%
11-Jul	9	62	6.73%	4	11	3.46%
12-Jul	13	75	8.14%	4	15	4.72%
13-Jul	27	102	11.07%	17	32	10.06%
14-Jul	14	116	12.60%	4	36	11.32%
15-Jul	126	242	26.28%	43	79	24.84%
16-Jul	3	245	26.60%	1	80	25.16%
17-Jul	15	260	28.23%	10	90	28.30%
18-Jul	51	311	33.77%	23	113	35.53%
19-Jul	7	318	34.53%	2	115	36.16%
20-Jul	0	318	34.53%	0	115	36.16%
21-Jul	7	325	35.29%	1	116	36.48%
22-Jul	13	338	36.70%	5	121	38.05%
23-Jul	17	355	38.55%	2	123	38.68%
24-Jul	24	379	41.15%	2	125	39.31%
25-Jul	23	402	43.65%	3	128	40.25%
26-Jul	21	423	45.93%	6	134	42.14%
27-Jul	27	450	48.86%	4	138	43.40%
28-Jul	73	523	56.79%	23	161	50.63%
29-Jul	64	587	63.74%	12	173	54.40%
30-Jul	86	673	73.07%	37	210	66.04%
31-Jul	48	721	78.28%	14	224	70.44%
1-Aug	22	743	80.67%	16	240	75.47%
2-Aug	43	786	85.34%	10	250	78.62%
3-Aug	19	805	87.40%	10	260	81.76%
4-Aug	16	821	89.14%	10	270	84.91%
5-Aug	30	851	92.40%	12	282	88.68%
6-Aug	27	878	95.33%	17	299	94.03%
7-Aug	13	891	96.74%	8	307	96.54%
8-Aug	17	908	98.59%	3	310	97.48%
9-Aug	11	919	99.78%	4	314	98.74%
10-Aug	0	919	99.78%	0	314	98.74%
11-Aug	2	921	100.00%	3	317	99.69%
12-Aug	0	921	100.00%	1	318	100.00%
13-Aug	0	921	100.00%	0	318	100.00%
14-Aug	0	921	100.00%	0	318	100.00%
15-Aug	0	921	100.00%	0	318	100.00%
16-Aug	weir out					
Total Counted		921			318	
Broodstock		0			0	
Escapement		921			318	

To note: expected that a portion of the return failed to transit the Tahltan River rockslide

Appendix B. 1. Historic salmon harvest and effort in the Alaskan District 106 commercial gillnet fishery, 1960–2016.

	Harvest							Effort
							Days	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	127	31.0	2,111
1970	782	42,809	35,188	95,173	32,245	113	41.0	1,863
1971	1,336	53,262	48,085	528,737	37,682	166	50.0	2,773
1972	2,548	101,958	92,283	89,510	72,389	204	42.0	3,320
1973	1,961	72,025	38,447	304,536	87,704	245	26.0	3,299
1974	1,929	57,498	45,595	104,596	50,402	272	28.0	2,178
1975	2,587	32,099	30,962	203,031	24,047	168	17.0	1,648
1976	386	15,493	19,126	139,641	6,868	135	22.0	827
1977	671	67,394	8,389	422,955	13,311	168	28.0	1,381
1978	2,682	41,574	55,578	224,715	16,545	158	26.5	1,509
1979	2,720	66,373	31,454	648,212	35,507	238	25.0	2,702
1980	580	107,422	16,666	45,662	26,291	169	25.0	1,324
1981	1,565	182,001	22,614	437,573	34,296	221	26.0	2,925
1982	1,648	193,801	31,584	25,533	18,646	174	23.0	1,699
1983	567	48,842	62,442	208,290	20,144	140	32.0	1,452
1984	892	91,653	41,359	343,255	70,303	152	32.0	1,814
1985	1,687	264,987	91,188	584,953	69,673	186	32.0	2,672
1986	1,704	145,709	194,912	308,484	82,289	237	32.0	3,509
1987	836	136,427	34,534	243,482	42,025	199	20.0	1,766
1988	1,104	92,529	13,103	69,559	69,620	196	19.0	1,494
1989	1,544	192,734	92,385	1,101,194	67,351	185	34.0	3,221
1990	2,108	185,805	164,235	319,186	73,232	219	34.0	3,501
1991	2,055	144,104	198,160	133,566	124,630	213	39.0	3,620
1992	1,355	203,155	298,935	94,248	140,468	206	40.0	4,229
1993	992	205,955	231,038	537,960	134,601	239	38.0	4,352
1994	754	211,048	267,862	179,994	176,026	230	43.0	4,467
1995	951	207,298	170,561	448,163	300,078	187	34.0	3,656
1996	644	311,100	223,640	188,035	283,290	212	46.0	5,289
1997	1,075	168,518	77,550	789,051	186,456	202	39.0	3,667
1998	518	113,435	273,197	502,655	332,022	184	43.0	4,397
1999	518	104,835	203,301	491,179	448,409	199	49.0	4,854
2000	1,220	90,076	96,207	156,619	199,836	168	33.0	2,408
2001	1,138	164,013	188,465	825,447	283,462	183	50.0	3,853
2002	446	56,135	226,560	82,951	112,541	154	47.0	2,683
2003	422	116,904	212,057	470,697	300,253	157	59.0	3,803
2004	2,735	116,259	138,631	245,237	110,574	151	55.0	2,735
2005	1,572	110,192	114,440	461,187	198,564	152	53.0	2,963
2006	1,948	91,980	69,015	149,907	268,436	143	45.0	2,035
2007	2,144	92,481	80,573	383,355	297,998	153	49.0	2,740
2008	1,619	30,533	116,074	90,217	102,156	144	46.0	2,195
2009	2,138	111,984	144,569	143,589	287,707	170	45.0	3,252
2010	2,473	112,450	225,550	309,795	97,948	180	47.0	3,161
2011	3,008	146,069	117,860	337,169	158,096	164	41.0	2,647
2012	1,853	45,466	121,418	129,646	104,307	133	40.0	1,929
2013	2,202	49,223	160,659	474,551	94,260	146	62.0	3,276
2014	2,092	58,430	286,815	415,392	106,243	143	58.0	3,280
2015	2,723	121,921	112,561	224,816	232,390	130	47.0	2,402
2016	2,094	106,649	122,101	358,309	130,236	138	47.0	2,642
60-15	1,479	107,329	105,961	313,210	115,300		38.1	2,827
06-15	2,220	86,054	143,509	265,844	174,954	151	48.0	2,692

Appendix B. 2 Historic salmon harvest and effort in the Alaskan District 108 commercial gillnet fishery, 1962–2016.

	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	85	55	1,084
1970	3,199	15,121	18,529	20,523	12,304	94	54	1,222
1971	3,717	18,143	14,876	22,216	4,665	85	57	1,061
1972	9,342	51,725	38,440	17,197	17,442	146	64	2,094
1973	9,254	21,393	5,837	6,585	6,680	155	39	1,519
1974	8,199	2,428	16,021	4,188	2,107	140	31	1,240
1975	1,529	0	0	0	1	58	8	257
1976	1,123	18	6,074	722	124	70	20	372
1977	1,443	48,385	14,424	16,318	4,233	106	23	742
1978	531	56	32,650	1,157	1,001	112	12	565
1979	91	2,158	234	13,478	1,064	25	5	94
1980	631	14,053	2,946	7,224	6,910	62	22	327
1981	283	8,833	1,403	1,466	3,594	53	11	217
1982	1,052	7,136	20,003	16,174	734	96	21	494
1983	47	178	15,369	4,171	675	45	17	260
1984	14	1,290	5,141	4,960	1,892	15	16	88
1985	20	1,060	1,926	5,325	1,892	17	13	45
1986	102	4,185	7,439	4,901	5,928	48	25	216
1987	149	1,620	1,015	3,331	949	25	13	81
1988	206	1,246	12	144	3,109	21	8	60
1989	310	10,083	4,261	27,640	3,375	46	29	223
1990	557	11,574	8,218	13,822	9,382	55	34	359
1991	1,366	17,987	15,629	6,406	5,977	117	49	846
1992	967	52,717	22,127	66,742	15,458	135	51	1,812
1993	1,628	76,874	14,307	39,661	22,504	157	48	2,220
1994	1,996	97,224	44,891	35,405	27,658	179	58	3,011
1995	1,702	76,756	17,834	37,788	54,296	158	50	2,581
1996	1,717	154,150	19,059	37,651	135,623	190	57	3,228
1997	2,566	93,039	2,140	65,745	38,913	173	44	2,537
1998	460	22,031	19,206	39,246	41,057	119	45	1,073
1999	1,049	36,601	28,437	48,552	117,196	150	54	2,209
2000	1,671	15,833	5,651	9,497	40,337	100	35	714
2001	7	610	10,731	11,012	5,397	59	34	377
2002	25	208	21,131	4,578	2,017	42	30	323
2003	312	42,158	38,795	76,113	51,701	100	56	1,454
2004	7,410	103,392	26,617	20,439	37,996	124	53	2,058
2005	26,970	99,465	42,203	106,395	150,121	161	78	4,591
2006	30,033	61,298	34,430	56,810	343,827	160	64	4,032
2007	17,463	70,580	19,880	39,872	177,573	147	56	2,722
2008	14,599	35,679	34,479	18,105	81,876	171	58	3,083
2009	2,830	36,680	30,860	27,010	190,800	151	47	2,287
2010	2,359	32,737	42,772	58,610	51,005	146	45	1,557
2011	5,321	51,478	20,720	65,022	142,526	150	41	1,806
2012	8,027	21,997	20,100	16,374	240,569	128	43	1,642
2013	10,817	20,609	43,669	116,026	103,365	127	60	2,334
2014	8,023	19,808	30,184	33,830	84,771	107	62	1,501
2015	13,845	22,896	30,153	35,926	166,009	124	50	1,992
2016	10,024	70,143	22,146	35,250	200,653	141	58	2,341
60-15	4,325	30,359	17,953	29,006	45,990		39	1,375
06-15	11,332	37,376	30,725	46,759	158,232	141	53	2,296

Appendix B. 3. District 108 total Chinook salmon estimates in the US gillnet, troll, recreational, and subsistence fisheries, 2005–2016.

See Appendix B4 for estimates of large Stikine fish.

	Subsistence		Sport		Drift Gillnet			Troll	
Year	Large	nonlarge	Large	Large non-Stikine	Large	Large non-Stikine	nonlarge	Large	Large non-Stikine
2005	15	8	3,242	240	23,932	1,690	2,636	5,014	684
2006	37	17	4,058	1,028	26,864	4,717	2,951	2,915	1,021
2007	28	15	3,881	608	14,421	4,716	2,787	2,459	646
2008	26	6	1,984	632	12,682	5,667	1,673	1,742	131
2009	31	19	907	146	1,901	1,264	601	312	519
2010	53	18	1,072	107	1,107	759	978	946	519
2011	61	20	1,273	210	2,801	1,690	1,831	631	168
2012	46	20	1,396	286	4,884	2,869	2,825	859	353
2013	41	36	1,297	125	6,676	4,503	3,733	680	246
2014	44	28	1,968	352	4,753	4,616	2,704	1,585	908
2015	34	19	1,739	693	8,020	8,361	4,640	684	340
2016	20	26	1,442	227	4,824	4,126	4,232	1,028	460
Averages									
06-15	40	20	1,958	419	8,411	3,916	2,472	1,281	485

Appendix B. 4. Annual estimates of Stikine River large Chinook salmon in the U.S. gillnet, troll, recreational, and subsistence and estimates of Stikine River bound Chinook salmon in District 108, 2005–2016.

GSI used for sport and gillnet. Troll is based on GSI 2005-2008 and CWT 2009-present.
For detailed GSI stock comp estimates see Appendix G. 5.

		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
2013	41	636	455	434	1,566
2014	44	697	204	677	1,622
2015	34	781	378	306	1,499
2016	20	438	1,060	190	1,707

Appendix B. 5. Chinook salmon harvest in the Alaskan District 106 and 108 test fisheries, 1984–2016.

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. 6. Chinook salmon harvest in the Canadian commercial and recreational fisheries in the Stikine River, 1979–2016.

	LRCF						URCF		Telegraph Aboriginal		Tahltan sport fishery		Total	
			Large		NonLarge									
Year	Large	Nonlarge	Released	morts	Released	morts	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge	Large	Nonlarge
1972													0	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
2013	1,086	815	1	1	37	19	8	0	809	508	50		1,954	1,341
2014	896	511	15	8	8	4	0	0	1,020	103	50	0	1,974	618
2015	3,134	1,339	0	0	0	0	1	0	1,022	198	76	25	4,233	1,562
2016	2,116	655	0	0	0	0	0	0	615	139	0	0	2,731	794
Averages														
85-15	2,926	630					37	14	812	228	134	23	3,917	895
06-15	4,598	1,050					12	12	664	207	45	16	5,343	1,294

Appendix B. 7. Chinook salmon harvest in inriver test fisheries in the Stikine River, 1985–2016.

	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	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
2013	6	4	4	8	0	0	1,406	268	1	19	1,417	299
2014	18	12	5	6	0	0	1,319	127	19	5	1,361	150
2015	22	23	3	36	0	0	0	0	0	0	25	59
2016	16	12	5	4	0	0	483	39	0	0	504	55
Averages												
85-15	54	15	40	19	332	61					516	104
06-15	14	10	3	7	0	0					565	102

Appendix B. 8. Index counts of Stikine River large Chinook salmon escapements, 1979–2016.

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.

	Above border	Canadian		U.S.	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 survey 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
2013	20,154	3,371	16,783	1,566	21,720	0.052	878				920	Foot
2014[a]	27,701	3,335	24,366	1,622	29,323	0.007	169	121	514	15	1,261	Foot
2015	25,855	4,258	21,597	1,499	27,354	0.021	450	179	53	30	796	Foot
2016	13,789	3,235	10,554	1,707	15,496	0.087	921	107	95	25	402	Foot
Averages												
06-15	24,387	5,908	18,479	5,213	29,600	0.077	1,366				1,117	

[a]escapement includes an estimate of mortality that occurred at the Tahltan landslide: (24,459*0.5335(prop. Tahltan Chinook)*0.70(mortality at landslide)=9,134

Appendix B. 9. General stock proportions and harvest of sockeye salmon in the Alaskan commercial gillnet fishery; District 106 & 108, 1982–2016.

Estimates based on SPA 1982-2011; GSI 2012 to present.

	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
2013	0.754	0.246	0.655	0.345	0.939	0.061	0.254	0.746
2014	0.885	0.115	0.815	0.185	0.976	0.024	0.210	0.790
2015	0.885	0.115	0.817	0.183	0.979	0.021	0.297	0.703
2016	0.797	0.203	0.718	0.282	0.966	0.034	0.150	0.850
Averages								
83-15	0.829	0.171	0.775	0.225	0.931	0.069	0.293	0.707
06-15	0.738	0.262	0.646	0.354	0.919	0.081	0.223	0.777
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
2013	37,109	12,114	21,030	11,070	16,079	1,044	5,243	15,366
2014	51,720	6,710	26,791	6,087	24,929	623	4,162	15,643
2015	107,892	14,028	57,830	12,947	50,063	1,080	6,809	16,087
2016	84,955	21,694	52,395	20,559	32,560	1,135	10,521	59,622
Averages								
83-15	112,476	20,938	70,658	18,473	43,534	2,876	10,881	30,815
06-15	65,155	20,900	35,975	19,047	29,180	1,854	8,518	28,858

Appendix B. 10. Stikine River stock proportions and harvest of sockeye salmon in the Alaskan commercial gillnet fishery; Districts 106 & 108, 1982–2016.

Estimates based on SPA 1982-2011; GSI 2012 to present.

	D106			D106-41/42			D106-30			D108		
Year	All Tahltar	Tuya	Mainstem	All Tahltan	Tuya	Mainstem	All Tahltan	Tuya	Mainstem	All Tahltan	Tuya	Mainstem
1982												
1983	0.103		0.013									
1984	0.029		0.044									
1985	0.091		0.011	0.109		0.010	0.056		0.013	0.292		0.644
1986	0.014		0.004	0.024		0.006	0.000		0.002	0.094		0.683
1987	0.010		0.007	0.015		0.003	0.004		0.012	0.438		0.437
1988	0.020		0.001	0.019		0.001	0.021		0.000	0.178		0.571
1989	0.006		0.026	0.009		0.036	0.002		0.015	0.034		0.795
1990	0.005		0.016	0.008		0.018	0.001		0.013	0.111		0.366
1991	0.100		0.024	0.129		0.034	0.052		0.008	0.395		0.314
1992	0.070		0.102	0.088		0.089	0.022		0.138	0.258		0.528
1993	0.098		0.164	0.134		0.169	0.036		0.156	0.256		0.399
1994	0.142		0.025	0.166		0.032	0.069		0.006	0.362		0.103
1995	0.081	0.001	0.043	0.099	0.001	0.048	0.047	0.000	0.032	0.455	0.006	0.200
1996	0.166	0.028	0.007	0.228	0.039	0.009	0.008	0.001	0.001	0.622	0.069	0.125
1997	0.058	0.079	0.016	0.079	0.101	0.014	0.009	0.026	0.021	0.362	0.261	0.189
1998	0.015	0.080	0.000	0.017	0.096	0.000	0.010	0.043	0.000	0.189	0.244	0.343
1999	0.057	0.061	0.118	0.074	0.079	0.128	0.018	0.020	0.095	0.414	0.201	0.205
2000	0.020	0.085	0.019	0.028	0.116	0.023	0.007	0.027	0.012	0.132	0.261	0.275
2001	0.039	0.079	0.025	0.032	0.112	0.028	0.049	0.029	0.021	0.000	0.005	0.121
2002	0.037	0.072	0.035	0.049	0.087	0.034	0.009	0.039	0.037	0.000	0.000	0.005
2003	0.075	0.053	0.035	0.097	0.068	0.040	0.005	0.005	0.019	0.179	0.062	0.414
2004	0.241	0.020	0.018	0.315	0.026	0.018	0.031	0.005	0.017	0.613	0.018	0.239
2005	0.182	0.000	0.027	0.227	0.000	0.029	0.041	0.000	0.020	0.437	0.000	0.257
2006	0.203	0.056	0.016	0.304	0.078	0.016	0.027	0.017	0.015	0.588	0.081	0.135
2007	0.322	0.082	0.005	0.403	0.099	0.005	0.028	0.021	0.007	0.474	0.147	0.067
2008	0.165	0.238	0.152	0.168	0.336	0.169	0.158	0.033	0.118	0.352	0.291	0.159
2009	0.215	0.090	0.077	0.287	0.104	0.068	0.016	0.050	0.103	0.360	0.225	0.232
2010	0.047	0.051	0.026	0.084	0.088	0.036	0.005	0.011	0.015	0.356	0.178	0.234
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
2013	0.068	0.060	0.118	0.099	0.089	0.156	0.008	0.007	0.047	0.180	0.125	0.440
2014	0.053	0.031	0.031	0.090	0.053	0.043	0.006	0.003	0.015	0.335	0.140	0.315
2015	0.038	0.046	0.030	0.064	0.077	0.041	0.002	0.004	0.015	0.294	0.132	0.276
2016	0.119	0.040	0.044	0.172	0.058	0.052	0.006	0.001	0.027	0.583	0.123	0.145
Averages												
83-15	0.088	0.064	0.041	0.118	0.088	0.047	0.024	0.017	0.033	0.302	0.133	0.315
06-15	0.125	0.079	0.058	0.172	0.113	0.069	0.026	0.016	0.039	0.355	0.167	0.255
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
2013	3,326	2,978	5,810	3,192	2,866	5,013	134	112	797	3,720	2,582	9,065
2014	3,103	1,815	1,792	2,954	1,734	1,399	149	80	394	6,631	2,781	6,231
2015	4,676	5,652	3,699	4,562	5,460	2,925	114	193	773	6,728	3,033	6,326
2016	12,733	4,287	4,673	12,532	4,262	3,765	202	26	908	40,868	8,605	10,148
Averages												
83-15	11,521	6,196	4,968	10,962	5,637	3,692	1,054	559	1,444	17,087	5,559	9,962
06-15	10,971	5,933	3,997	10,522	5,479	3,046	449	453	951	15,060	5,998	7,800

Appendix B. 11. Tahltan sockeye salmon stock proportions and harvest of in the Alaskan commercial gillnet fishery; Districts 106 & 108, 1994–2016.

Estimates based on SPA through 2011; GSI 2012 to present.

	D106			D106-41/42			D106-30			D108		
Year	All Tahltan	TahltanEnhance	WildTahltan	All Tahltan	TahltanEnhance	WildTahltan	All Tahltan	TahltanEnhance	WildTahltan	All Tahltan	TahltanEnhance	WildTahltan
1994	0.142	0.033	0.108	0.166	0.040	0.127	0.069	0.015	0.055	0.362	0.116	0.246
1995	0.081	0.036	0.044	0.099	0.051	0.049	0.047	0.010	0.036	0.455	0.257	0.198
1996	0.166	0.019	0.147	0.228	0.025	0.203	0.008	0.002	0.006	0.622	0.070	0.552
1997	0.058	0.021	0.037	0.079	0.023	0.056	0.009	0.015	-0.006	0.362	0.102	0.260
1998	0.015	0.002	0.013	0.017	0.003	0.014	0.010	0.000	0.010	0.189	0.008	0.182
1999	0.057	0.003	0.054	0.074	0.004	0.070	0.018	0.001	0.017	0.414	0.024	0.390
2000	0.020	0.003	0.017	0.028	0.004	0.024	0.007	0.000	0.007	0.132	0.032	0.100
2001	0.039	0.010	0.029	0.032	0.015	0.017	0.049	0.002	0.047	0.000	0.000	0.000
2002	0.037	0.012	0.024	0.049	0.017	0.031	0.009	0.000	0.009	0.000	0.000	0.000
2003	0.075	0.036	0.039	0.097	0.047	0.050	0.005	0.001	0.004	0.179	0.087	0.092
2004	0.241	0.097	0.144	0.315	0.125	0.191	0.031	0.020	0.011	0.613	0.252	0.361
2005	0.182	0.094	0.088	0.227	0.123	0.104	0.041	0.002	0.039	0.437	0.258	0.179
2006	0.203	0.113	0.090	0.304	0.174	0.130	0.027	0.007	0.020	0.588	0.331	0.257
2007	0.322	0.200	0.122	0.403	0.251	0.152	0.028	0.015	0.013	0.474	0.324	0.150
2008	0.165	0.073	0.091	0.168	0.106	0.062	0.158	0.004	0.154	0.352	0.165	0.186
2009	0.215	0.063	0.152	0.287	0.084	0.203	0.016	0.004	0.012	0.360	0.097	0.262
2010	0.047	0.019	0.027	0.084	0.034	0.049	0.005	0.002	0.003	0.356	0.143	0.213
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
2013	0.068	0.032	0.035	0.099	0.048	0.051	0.008	0.002	0.006	0.180	0.093	0.088
2014	0.053	0.027	0.027	0.090	0.044	0.046	0.006	0.004	0.002	0.335	0.176	0.159
2015	0.038	0.016	0.023	0.064	0.026	0.038	0.002	0.001	0.001	0.294	0.130	0.164
2016	0.119	0.042	0.078	0.172	0.060	0.111	0.006	0.002	0.004	0.583	0.190	0.392
Averages												
94-15	0.107	0.044	0.063	0.142	0.061	0.081	0.025	0.005	0.020	0.333	0.133	0.200
06-15	0.125	0.061	0.064	0.172	0.088	0.084	0.026	0.004	0.021	0.355	0.171	0.184
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
2013	3,326	1,583	1,743	3,192	1,551	1,640	134	32	102	3,720	1,909	1,811
2014	3,103	1,553	1,550	2,954	1,446	1,508	149	107	42	6,631	3,484	3,147
2015	4,091	1,680	2,411	4,703	1,920	2,783	75	38	37	6,728	2,968	3,760
2016	12,733	4,452	8,282	12,532	4,401	8,131	202	51	151	40,868	13,355	27,514
Averages												
94-15	13,264	4,822	8,442	12,416	4,630	7,786	879	205	674	22,093	8,411	13,683
06-15	10,912	5,342	5,570	10,536	5,253	5,282	445	116	329	15,060	7,682	7,378

Appendix B. 12. Stikine River sockeye salmon harvest in the U.S. Subsistence fishery, 2004–2016.

Stocks were proportioned based on using inriver stock comps

	Stikine								
Year	All Tahltan	Tuya	Mainstem	Total	All Tahltan	Tuya	Mainstem	TahltanEnhance	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
2013	0.346	0.166	0.489	1,655	572	274	809	231	341
2014	0.523	0.255	0.223	1,527	798	389	340	381	418
2015	0.435	0.279	0.286	1,844	803	515	527	277	525
2016	0.611	0.144	0.245	2,126	1,298	307	521	383	916

Appendix B. 13. Stock proportions of sockeye salmon in the Alaskan District 106 and 108 test fisheries, 1984–2016.

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

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

1994	0.500	0.250	0.250		0.000	0.250	0.083	0.167
Sub-district 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		
Sub-district 106-30 (Clarence Strait) Proportions								
1986	0.726	0.272	0.000		0.002	0.002		
1987	0.844	0.140	0.004		0.012	0.016		
1988	0.746	0.254	0.000		0.000	0.000		
1989	0.514	0.486	0.000		0.000	0.000		
Subdistrict 106-30 (Clarence Strait) harvest								
1986	263	99	0		1	1		
1987	758	126	3		11	15		
1988	12	4	0		0	0		
1989	19	18	0		0	0		
District 106 Proportions								
1984	0.658	0.269	0.029		0.044	0.074		
1985	0.480	0.401	0.109		0.010	0.119		
1986	0.805	0.182	0.006		0.007	0.013		
1987	0.823	0.160	0.012		0.006	0.017		
1988	0.867	0.100	0.033		0.000	0.033		
1989	0.622	0.307	0.016		0.055	0.071		
1990	0.548	0.416	0.014		0.022	0.035		

1994	0.500	0.250	0.250		0.000	0.250	0.000	0.250
District 106 harvest								
1984	901	368	40		61	101		
1985	2,085	1,741	475		44	519		
1986	1,082	245	8		9	17		
1987	2,928	568	42		20	62		
1988	898	104	35		0	35		
1989	1,293	639	34		114	148		
1990	1,237	939	31		49	80		

1994	6	3	3		0	3	0	3
District 108 Proportions								
1985	0.064	0.000	0.292		0.644	0.936		
1986	0.134	0.044	0.486		0.336	0.822		
1987	0.125	0.000	0.438		0.437	0.875		
1988	0.205	0.049	0.132		0.614	0.746		
1989	0.132	0.084	0.072		0.712	0.784		
1990	0.417	0.172	0.094		0.318	0.411		
1991	0.128	0.128	0.494		0.251	0.745		
1992	0.149	0.076	0.333		0.442	0.774		
1993	0.168	0.109	0.475		0.248	0.719		

1998	0.064	0.041	0.353	0.438	0.104	0.895	0.016	0.336
1999	0.162	0.019	0.481	0.298	0.041	0.820	0.028	0.453
2000	0.110	0.116	0.302	0.321	0.150	0.774	0.062	0.240
District 108 harvest								
1985	81	0	367		810	1,177		
1986	76	25	274		190	464		
1987	36	0	127		127	254		
1988	93	22	59		277	336		
1989	137	87	75		739	814		
1990	361	149	81		275	356		
1991	114	114	441		224	665		
1992	194	99	432		574	1,006		
1993	51	33	144		75	219		

1998	224	145	1,238	1,538	365	3,141	57	1,181
1999	776	89	2,309	1,430	197	3,936	135	2,174
2000	516	544	1,416	1,505	705	3,626	291	1,125

Appendix B. 14. All harvest of sockeye salmon in Canadian commercial and assessment fisheries, 1972–2016.

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	to sample
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
2013	24,290	876	7,528	32,694	294	1,008	24	2,144	3,470		0		207
2014	30,487	548	9,951	40,986	362	1,410	15	883	2,670		400		0
2015	51,660	202	8,184	60,046	468	1,397	0	0	1,865		0		0
2016	75,739	333	10,644	86,716	460	1,287	13	0	1,760		173		0
Averages													
85-15	36,681	932	5,440	43,053	419	1,332			2,471				
06-15	44,275	869	6,077	51,221	388	1,219			3,126		217		142

[a] The lower river commercial Harvest in 1979 includes the upper river commercial harvest

Appendix B. 15. Sockeye salmon stock proportions and harvest by stock in the Canadian commercial and assessment fishery in the Stikine River, 1979–2016.

Stock compositions based on: scale circuli counts 1970-1983; SPA in 1985; average of SPA and GPA 1986; SPA in 1987 and 1988;
and egg diameter and otolith thermal marks in 1989-2011. Tuya stock comp comes from sampling at this terminal fishing site, except in 2013; used 2012 as a proxy.

	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
2013	0.347	0.193	0.460	0.578	0.279	0.143	0.505	0.290	0.205	0.236	0.016	0.748	0.136	0.722	0.142
2014	0.547	0.243	0.210	0.564	0.379	0.057	0.584	0.353	0.064	0.450	0.243	0.306	0.490	0.480	0.030
2015	0.444	0.290	0.266	0.812	0.186	0.002	0.804	0.194	0.002	0.516	0.312	0.172			
2016	0.687	0.166	0.147	0.812	0.186	0.002	0.804	0.194	0.002	0.539	0.182	0.279			
Averages															
79-14	0.461		0.422	0.746	0.168	0.086	0.751	0.159	0.090						
05-14	0.533	0.228	0.239	0.670	0.259	0.071	0.660	0.248	0.092	0.332	0.138	0.529			
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
2013	8,430	4,679	11,182	506	244	126	3,804	2,183	1,540	313	21	992	292	1,547	305
2014	16,678	7,418	6,391	309	207	31	5,809	3,508	634	805	435	547	433	424	26
2015	22,924	15,000	13,736	119	76	7	4,780	3,239	165	962	582	321			
2016	52,021	12,568	11,151	270	62	1	8,561	2,062	21	949	320	492			
Averages															
79-15	17,799		11,120	660		73	3,741		424						
06-15	24,271	10,763	9,241	556	253	61	3,726	1,889	463	529	292	795			

Appendix B. 16. Tahltan sockeye salmon stock proportions and harvest by stock in the Canadian commercial and assessment fishery in the Stikine River, 1979–2016.

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	All Tahltan	TahltanEnhance	WildTahltan	All Tahltan	TahltanEnhance	WildTahltan	All Tahltan	TahltanEnhance	WildTahltan	All Tahltan	TahltanEnhance	WildTahltan	All Tahltan	TahltanEnhance	WildTahltan
1994	0.616	0.000	0.616	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
2013	0.347	0.140	0.207	0.578	0.227	0.351	0.505	0.216	0.289	0.236	0.029	0.207	0.136	0.067	0.069
2014	0.547	0.261	0.286	0.564	0.233	0.332	0.584	0.238	0.346	0.450	0.199	0.252	0.490	0.120	0.370
2015	0.444	0.153	0.290	0.587	0.242	0.345	0.584	0.225	0.359	0.516	0.207	0.309			
2016	0.687	0.202	0.484	0.812	0.223	0.589	0.804	0.238	0.567	0.539	0.185	0.353			
Averages															
06-15	0.502	0.208	0.293	0.633	0.225	0.408	0.623	0.219	0.404	0.330	0.130	0.199			
1994	23,678	0	23,678	2,219	315	1,904	3,750	533	3,217	1,228	0	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
2013	8,430	3,401	5,028	506	199	307	3,804	1,628	2,176	313	38	275	292	143	149
2014	16,678	7,953	8,725	309	127	182	5,809	2,369	3,440	805	355	450	433	106	327
2015	22,924	7,922	15,002	119	49	70	4,780	1,839	2,941	962	385	577			
2016	52,021	15,332	36,688	270	74	196	8,561	2,529	6,031	949	326	622			
Averages															
06-15	24,271	10,664	13,607	556	183	372	3,726	1,347	2,378	529	208	321			

Appendix B. 17. Tahltan Lake weir data with enhanced and wild Tahltan fish, 1979–2016.

	Weir count				Actual escapement				Broodstock taken				Sockeye otolith samples				Total spawners			
Year	Total Count	Tahltan	Enhance	Wild Tahltan	Total	Escapement	Tahltan	Enhance	Wild Tahltan	Total	Tahltan	Enhance	Wild Tahltan	Total	Tahltan	Enhance	Wild Tahltan	Total	Tahltan	Enhance	Wild Tahltan
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	2,521	9,962		12,105	2,445	9,660			2,294	463	1,831		378	76	302		9,811	1,982	7,829	
1998	12,658	717	11,941		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	
2013	15,828	8,026	7,802		15,828	8,026	7,802			3,196	1,643	1,553		0	0	0		12,632	6,383	6,249	
2014	40,145	19,189	20,956		39,745	18,998	20,747			2,881	1,622	1,259		400	191	209		36,864	17,376	19,488	
2015	33,159	16,204	16,955		33,159	16,204	16,955			3,871	1,892	1,979		0	0	0		29,288	14,312	14,976	
2016	38,631	14,970	23,661		38,458	14,918	23,540			4,315	1,672	2,643		173	52	121		34,143	13,245	20,898	
Averages																					
06-15	27,639	11,637	16,002		27,421	11,552	15,869			3,456	1,550	1,905		217	85	133		23,966	10,002	13,964	

[a] excludes an estimated mortality of 3,970 Tahltan Lake sockeye as a result of the Tahltan River rockslide.

Appendix B. 18. Sockeye salmon harvest by stock in the Stikine River under Canadian ESSR licenses, 1992–2016.

	Tahltan Area ESSR License			Tuya Area ESSR		
Year	All Tahltan	Tahltan Enhance	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	14,555	
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
2013						207
2014						0
2015						
2016						

Appendix B. 19. Estimated proportion of inriver run comprised of Tahltan, Tuya, and mainstem sockeye salmon, 1979–2016.

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	LRCF
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
2013	0.346	0.166	0.489	average
2014	0.523	0.255	0.223	average
2015	0.435	0.279	0.286	LRCF
2016	0.611	0.144	0.245	LRCF
Averages				
79-15	0.441		0.444	
06-15	0.457	0.233	0.309	

Appendix B. 20. Aerial survey counts of Mainstem sockeye salmon stocks in the Stikine River drainage, 1984–2016.

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
2013	2	22	151			6	16	94	291
2014	52	332	22			0	172	67	645
2015	high dirty water--all spawning areas								
2016	2	16	6			0	46	6	76
Averages									
84-15	137	324	81			33	161	94	791
06-15	71	131	63			1	102	116	405

Appendix B. 21. Stikine River sockeye salmon run size, 1979–2016.

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

	Stikine River					All Tahltan				
Year	Above border Run	Canadian Harvest	Escapement	U.S. Harvest	Terminal Run	Above border Run	Canadian Harvest	Escapement	U.S. 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
2013	84,380	36,371	48,009	29,136	113,515	29,173	13,345	15,828	7,618	36,791
2014	129,442	44,056	81,892	23,881	153,323	71,167	24,434	43,239	10,533	78,206
2015	142,334	61,911	80,423	31,958	174,292	61,944	28,785	33,159	12,207	74,151
2016	164,451	88,649	75,802	83,441	247,892	100,431	61,973	38,458	54,900	155,331
Averages										
79-15	110,556	42,769	67,693	47,594	158,151	52,198	23,583	28,520	26,398	78,501
06-15	119,784	54,706	64,728	50,909	170,693	57,831	29,711	27,771	26,525	84,007

	Stikine Mainstem					Tuya				
Year	Above border Run	Canadian Harvest	Escapement	U.S. Harvest	Terminal Run	Above border Run	Canadian Harvest	Excess	U.S. 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
2013	41,236	14,144	27,091	15,684	56,920	13,972	8,882	5,090	5,833	19,805
2014	25,315	7,630	17,685	8,363	37,172	32,961	11,992	20,969	4,984	37,945
2015	40,661	14,229	26,432	10,552	51,212	39,729	18,897	20,832	9,200	48,929
2016	40,310	11,665	28,646	15,343	55,653	23,709	15,011	8,698	13,199	36,908
Averages										
79-15	45,741	12,072	33,669	14,325	60,160					
06-15	34,805	10,701	24,104	12,176	47,331	27,147	14,294	12,854	12,207	39,355

Appendix B. 22. Tahltan wild and enhanced sockeye salmon run size, 1994-2016.

	All Tahltan					Enhanced Tahltan					Wild Tahltan				
Year	Above border Run	Canadian Harvest	Escapement	U.S. Harvest	Terminal Run	Above border Run	Canadian Harvest	Escapement	U.S. Harvest	Terminal Run	Above border Run	Canadian Harvest	Escapement	U.S. Harvest	Terminal Run
1994	77,239	37,728	39,511	65,101	142,340	8,767	2,018	6,749	18,305	27,072	68,471	35,709	32,762	46,793	115,264
1995	82,290	50,713	31,577	51,665	133,955	27,677	15,740	11,937	27,259	54,936	54,612	34,972	19,640	24,406	79,018
1996	95,706	57,545	38,161	147,435	243,141	11,608	7,159	4,449	16,568	28,176	84,098	50,386	33,712	130,867	214,965
1997	37,319	25,214	12,105	43,408	80,727	7,560	5,115	2,445	12,983	20,543	29,759	20,099	9,660	30,425	60,184
1998	27,941	15,673	12,268	7,086	35,027	1,620	929	691	428	2,048	26,321	14,744	11,577	6,658	32,979
1999	35,918	25,599	10,319	23,449	59,367	1,666	976	690	1,300	2,966	34,252	24,623	9,629	22,149	56,401
2000	13,803	8,133	5,670	5,340	19,143	2,177	1,029	1,148	1,051	3,228	11,626	7,104	4,522	4,289	15,915
2001	20,985	6,224	14,761	6,339	27,324	7,027	1,182	5,845	1,592	8,619	13,958	5,042	8,916	4,747	18,705
2002	25,680	8,340	17,340	2,055	27,735	7,037	1,940	5,097	680	7,717	18,643	6,400	12,243	1,375	20,018
2003	81,808	28,275	53,533	16,298	98,106	32,157	8,737	23,420	7,852	40,009	49,651	19,538	30,113	8,446	58,097
2004	125,677	62,725	62,952	91,535	217,213	56,627	25,383	31,244	37,444	94,071	69,050	37,342	31,708	54,091	123,142
2005	110,903	67,857	43,046	63,714	174,617	47,828	30,058	17,770	36,047	83,875	63,075	37,799	25,276	27,667	90,741
2006	130,174	76,719	53,455	54,923	185,097	68,202	42,430	25,772	30,768	98,970	61,972	34,289	27,683	24,155	86,127
2007	59,537	38,663	20,874	63,330	122,867	28,080	19,199	8,881	41,440	69,520	31,457	19,464	11,993	21,890	53,347
2008	28,592	18,176	10,416	17,743	46,335	12,927	7,632	5,295	8,219	21,146	15,666	10,544	5,121	9,524	25,190
2009	60,428	30,104	30,324	37,664	98,092	12,489	7,518	4,971	10,714	23,203	47,939	22,586	25,353	26,950	74,889
2010	48,521	25,819	22,702	17,565	66,086	17,353	7,757	9,596	6,990	24,342	31,168	18,062	13,106	10,575	41,743
2011	65,226	30,978	34,248	37,480	102,706	23,547	11,530	12,017	17,592	41,138	41,680	19,449	22,231	19,888	61,568
2012	23,550	10,087	13,463	6,188	29,738	9,404	3,640	5,764	2,337	11,740	14,146	6,447	7,699	3,851	17,998
2013	29,173	13,345	15,828	7,618	36,791	13,435	5,409	8,026	3,723	17,158	15,738	7,935	7,802	3,895	19,633
2014	64,179	24,434	39,745	10,533	78,206	30,100	11,102	18,998	5,418	35,518	34,079	13,332	20,747	5,115	39,194
2015	61,944	28,785	33,159	12,207	74,151	26,399	10,195	16,204	5,203	31,602	35,545	18,590	16,955	7,106	42,651
2016	100,431	61,973	38,458	54,900	155,331	33,232	18,314	14,918	18,189	51,421	67,200	43,659	23,540	36,711	103,910
Averages															
06-15	57,132	29,711	27,421	26,525	84,007	24,193	12,641	11,552	13,240	37,434	32,939	17,070	15,869	13,295	46,234

Appendix B. 23. Coho salmon harvest in the Alaskan District 106 and 108 test fisheries, 1984–2016.

Table only includes years when test fisheries were operated.

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

2009				0

Appendix B. 24. Annual harvest of coho salmon in the Canadian lower and upper river commercial, Telegraph Aboriginal and the Canadian test fisheries, 1979–2016.

	Commercial				Telegraph	Canada total	Test			
Year	LRCF	Before SW 35	SW 35 to end	URCF	Aboriginal	Stikine harvest	drift	set	additional	test total
1972					0	0				0
1973					0	0				0
1974					0	0				0
1975				45	5	50				0
1976				13	0	13				0
1977				0	0	0				0
1978				0	0	0				0
1979	10,720				0	10,720				0
1980	6,629			40	100	6,769				0
1981	2,667			0	200	2,867				0
1982	15,904			0	40	15,944				0
1983	6,170			0	3	6,173				0
1984					1	1				0
1985	2,172			0	3	2,175				0
1986	2,278			0	2	2,280	226			226
1987	5,728			0	3	5,731	162	620		782
1988	2,112			0	5	2,117	75	130		205
1989	6,092			0	6	6,098	242	502		744
1990	4,020			0	17	4,037	134	271		405
1991	2,638			0	10	2,648	118	127		245
1992	1,850			0	5	1,855	75	193	0	268
1993	2,616			0	0	2,616	37	136	2	175
1994	3,377			0	4	3,381	71	0	0	71
1995	3,418			0	0	3,418	35	166	26	227
1996	1,402			0	2	1,404	55	0	0	55
1997	401			0	0	401	11			11
1998	726			0	0	0	207			207
1999	181	76	105	0	0	181	312	64	16	392
2000	298	235	63	0	3	301	60	181	195	436
2001	233	99	134	0	0	233	257	1,078	426	1,761
2002	82	82	0	0	0	82	306	1,323	1,116	2,745
2003	190	135	55	0	0	190	291	525	883	1,699
2004	271	242	29	0	4	275	352	135	0	487
2005	276	276	0	0	0	276	444	271	0	715
2006	72	72	0	0	0	72	343	181	0	524
2007	50	45	0	0	2	47	89	99	0	188
2008	2,398	61	2,337	0	0	2,398	321	216	0	537
2009	5,981	898	5,061	0	0	5,959	348	146	0	494
2010	5,301	349	4,952	0	0	5,301	488	253	0	741
2011	5,821	1,015	4,703	0	0	5,718	280	130	0	410
2012	6,188	440	5,748	0	0	6,188	393	43	0	436
2013	6,757	1,922	4,835	0	0	6,757	249	1,094	0	1,343
2014	5,409	417	4,992	0	0	5,409	83	259	0	342
2015	5,619	696	4,923	0	0	5,619	21	12	0	33
2016	5,346	389	4,957	0	0	5,346	36	104	0	140
Averages										
85-15	2,708			0	2	2,683	203	302	121	545
06-15	4,360			0	0	4,347	262	243	0	505

Appendix B. 25. Index counts of Stikine River coho salmon escapements, 1984–2016.

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	11/03[a]	37	237	31	363		130	953		1,751
2011	11/04	182	689	459	309		437	468		2,542
2012	11/05[c]	aborted	aborted	aborted	aborted		3	336		
2013	11/05	449	191	675	249		23	53		1,640
2014	11/06	7	255	212	74		138	509		1,195
2015	11/07	15	168	608	66		61	263		1,181
2016	11/03	0	0	10	152		90	40		292
Average										
84-15		203	653	819	399		380	530		2,870
06-15		165	371	471	274		114	371		1,722

[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. 26. Effort in the Canadian fisheries, including assessment fisheries in the Stikine River, 1979–2016.

Chinook assessment/test fishery prosecuted with the commercial fleet								
	Commercial license		LRCF		URCF		Test Fisheries	
	Chinook assessment						standard test fisheries	
		Permit		Permit		Permit		Set
Year	Days	Days	Days	Days	Days	Days	# of Drift	hours
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	8	94	37.3	349	12.0	15.0	860	468
2011	3	57	44.7	641	9.0	12.0	882	335
2012	1	18	36.6	19.6	6.0	12.0	936	239
2013	9	100	25.4	430.8	6.0	6.0	294	408
2014	8	94	28.2	280.0	4.0	4.0	315	696
2015	0	0	31.0	530.0	9.0	4.0	308	192
2016	1	18	46.9	696	18.0	3.0	322	396
Averages								
85-15			43	395	15	22	604	1,030
06-15			45	492	12	13	604	372

Appendix B. 27. Counts of adult sockeye salmon migrating through Tahltan Lake weir, 1959–2016.

	Weir	Date of Arrival			Weir	Total	Total		Samples	Otolith	Spawners			2014 Landslide mortality		
Year	Installed	First	50%	90%	Pulled	Count	escapement	Broodstock	or ESSR	Samples	Total	Enhanced	Wild	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[a]	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	14,289	3,799	10,490			
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			
2013	07-Jul	16-Jul	20-Jul	02-Aug	08-Sep	15,828	15,828	3,196		0	12,632	6,383	6,249			
2014[a]	16-Jul	22-Jul	25-Jul	31-Jul	11-Sep	40,145	39,745	2,881		400	36,864	17,376	19,488	3,494	1,656	1,838
2015	09-Jul	15-Jul	07-Aug	23-Aug	13-Sep	33,159	33,159	3,871		0	29,288	14,312	14,976			
2016	07-Jul	11-Jul	05-Aug	22-Aug	12-Sep	38,631	38,458	4,315		173	34,143	13,245	20,898			
Averages																
59-15	09-Jul	18-Jul	29-Jul	11-Aug	06-Sep	25,170	24,484									
06-15	09-Jul	15-Jul	26-Jul	10-Aug	10-Sep	27,639	27,421	3,456		217	23,966	10,002	13,964			

2014 it is presumed that 9% of the escapement died as a result of the Tahltan landslide

Appendix B. 28. Estimates of sockeye salmon smolt migrating through Tahltan Lake smolt weir, 1984–2016.

	Weir	Date of Arrival			Total	Total	Date and	Smolt	
Year	Installed	First	50%	90%	Count	Estimate	Expansion	Natural	Hatchery
1984	10-May	11-May	23-May	06-Jun		218,702			
1985	25-Apr	23-May	31-May	28-May		613,531			
1986	08-May	10-May	31-May	07-Jun		244,330			
1987[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
2013	08-May	10-May	23-May	28-May		2,387,669		1,671,368	716,301
2014	11-May	16-May	24-May	30-May	1,461,359	1,531,823	6/05 95.4%	980,367	551,456
2015	07-May	12-May	20-May	26-May	2,096,350	2,123,168		966,041	1,157,127
2016	06-May	10-May	18-May	24-May	2,094,592	2,094,592		1,019,421	1,075,171
Averages									
84-15	06-May	11-May	23-May	02-Jun		1,245,122		909,485	514,347
06-15	07-May	13-May	23-May	31-May		1,427,120		898,280	528,840

[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. 29. Weir counts of Chinook salmon at Little Tahltan River, 1985–2016.

	Weir	Date of Arrival			Total	Broodstock	Natural	Landslide
Year	Installed	First	50%	90%	Count	and Other	Spawners	mortality
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	
2013	20-Jun	9-Jul	27-Jul	5-Aug	878	0	878	
2014	23-Jun	18-Jul	28-Jul	31-Jul	169		169	394
2015	19-Jun	14-Jul	24-Jul	27-Jul	450		450	
2016	22-Jun	8-Jul	28-Jul	5-Aug	921		921	
Averages								
85-15	21-Jun	28-Jun	21-Jul	01-Aug	4,765		4,762	
06-15	21-Jun	04-Jul	24-Jul	02-Aug	1,436	0	1,436	
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	
2013	20-Jun	13-Jul	27-Jul	3-Aug	183		183	
2014[a]	23-Jun	18-Jul	28-Jul	31-Jul	39		39	91
2015	19-Jun	14-Jul	24-Jul	27-Jul	490		490	
2016	22-Jun	9-Jul	28-Jul	6-Aug	318		318	
Averages								
85-15	21-Jun	03-Jul	23-Jul	03-Aug	213		213	
06-15	22-Jun	11-Jul	24-Jul	01-Aug	152		152	

[a]Landslide mortality estimate of Little Tahltan Chinook salmon 70% of reduction of 12% of harvest in FN fishery

Appendix C. 1. Weekly Chinook salmon estimates in the U.S. fisheries in D111, 2016.

ONLY weekly reference see the historcial Appendix D3 for final postseason estimate. All weekly estimates of Taku River large Chinook salmon are based on ASL and CWT data (small expansions may lead to negative numbers)

	PU	D111sport			D111 gillnet				D111 troll			US large	Amalga Seine
SW	LargeTaku	Largetotal	Large non-Taku	Large Taku	Nonlarge	Large total	Large non-Taku	Large Taku	Largetotal	Large non-Taku	LargeTaku	Taku	non-Taku
18		32	0	32									
19		66	0	66									
20		107	47	60									
21		169	4	165									
22		104	0	104									
23		47	43	4									
24		112	0	112									
25		168	118	50				0					
26		144	70	74	63	71	27	44					
27		100	162	-62	72	91	53	38					
28		32	0	32	22	50		50					
Total	30	1,081	444	637	157	212	80	132	0	0	0	799	0

Appendix C. 2. Weekly Chinook salmon abundance estimates of above border run and harvest in the Canadian fisheries in the Taku River 2016.

	Above	Commercial		Assesment/Test fishery		Aboriginal			Total large	Spawning
SW	Border Run	Large	nonlarge	Large	nonlarge	Large	nonlarge	Rec	Harvest	Escapement
19				119	7				119	
20				208	39				208	
21				201	22				201	
22				242	39				242	
23	6,544			251	37				251	
24									0	
25	11,447								0	
26	11,901	106	41						106	
27	14,869	185	65						185	
28		115	35						115	
29	14,517	45	16						45	
30		22	10						22	
31		18	14						18	
32		12	10						12	
33		3	3							
34		1	1							
35		1								
Inseason Estimate		508	195	1,021	144				1,529	
Postseason estimate										
	14,011	508	195	1,021	144	91	10	10	1,630	12,381

Appendix C. 3. Weekly sockeye salmon harvest of Alaskan D111 traditional and terminal hatchery access common property commercial drift gillnet fishery, 2016.

	D111 Commercial gillnet						
	Gillnet	Traditional StatArea specific harvests				Speel Arm SHA	Amalga Seine
SW	D111 Total	111-32	111-31/90	111-20	111-34	111-33	111-55
25	0						
26	1,721	1,587	134				
27	3,471	3,271	200				
28	3,963	3,709	254				
29	5,387	4,187	1,200				340
30	23,160	20,268	2,892				1,507
31	14,382	11,085	3,297				837
32	47,511	41,238	6,273				
33	65,418	8,563	5,879		13,163	37,813	
34	26,939	8,228	1,563		1,571	15,577	
35	18,633	3,967	1,815		2,558	10,293	
36	4,307	1,090	168			3,049	
37	135	117	18				
38	18	17	1				
39	4	4					
40	0						
41	0						
Total	215,049	107,331	23,694	0	17,292	66,732	2,684

Appendix C. 4. Weekly stock proportions of sockeye salmon harvested in the Alaskan District 111 traditional commercial drift gillnet fishery, 2016.

Does not inlcude Port Snettisham harvests. Taku River wild stock composition estimates are based on GSI; see Appendix G. 4 for GSI details.

	D111 Commercial gillnet												Amalga seine	
	Taku harvest proportions												Taku	
			Tatsamenie		King Salmon	Taku	Total	Wild Snet/	U.S.	Stikine	Total	Total		
SW	Taku Lakes	Mainstem	Wild	Enhanced	Enhanced	Wild	Taku	other	Enhanced	Enhanced	Enhanced	Wild	Wild	Enhance
25						0.000	0.000				0.000	0.000		
26	0.688	0.201	0.000	0.000	0.025	0.889	0.914	0.049	0.000	0.037	0.062	0.938		
27	0.621	0.273	0.000	0.003	0.050	0.894	0.946	0.046	0.000	0.008	0.060	0.940		
28	0.551	0.326	0.000	0.000	0.060	0.877	0.938	0.030	0.033	0.000	0.093	0.907		
29	0.292	0.353	0.036	0.010	0.016	0.681	0.706	0.059	0.229	0.005	0.260	0.740		
30	0.160	0.344	0.095	0.026	0.004	0.599	0.629	0.117	0.254	0.000	0.285	0.715		
31	0.074	0.210	0.152	0.042	0.002	0.436	0.481	0.032	0.486	0.002	0.532	0.468		
32	0.025	0.282	0.219	0.075	0.000	0.525	0.599	0.031	0.369	0.000	0.444	0.556		
33	0.017	0.199	0.119	0.040	0.000	0.335	0.375	0.057	0.568	0.000	0.608	0.392		
34	**0.009**	**0.176**	**0.134**	**0.038**	**0.000**	0.319	0.357	**0.053**	**0.590**	**0.000**	0.628	0.372		
35	0.001	0.153	0.148	0.037	0.000	0.303	0.340	0.049	0.611	0.000	0.649	0.351		
36	**0.001**	**0.153**	**0.148**	**0.037**	**0.000**	0.303	0.340	**0.049**	**0.611**	**0.000**	0.649	0.351		
37	**0.001**	**0.153**	**0.148**	**0.037**	**0.000**	0.303	0.340	**0.049**	**0.611**	**0.000**	0.649	0.351		
38	**0.001**	**0.153**	**0.148**	**0.037**	**0.000**	0.303	0.340	**0.049**	**0.611**	**0.000**	0.649	0.351		
39	**0.001**	**0.153**	**0.148**	**0.037**	**0.000**	0.303	0.340	**0.049**	**0.611**	**0.000**	0.649	0.351		
40	**0.001**	**0.153**	**0.148**	**0.037**	**0.000**	0.303	0.340	**0.049**	**0.611**	**0.000**	0.649	0.351		
41	**0.001**	**0.153**	**0.148**	**0.037**	**0.000**	0.303	0.340	**0.049**	**0.611**	**0.000**	0.649	0.351		
Total	0.102	0.264	0.145	0.046	0.005	0.511	0.562	0.054	0.383	0.001	0.435	0.565		0.000
25	0	0	0	0	0	0	0	0	0	0	0	0		0
26	1,184	346	0	0	42	1,530	1,573	84	0	64	107	1,614		0
27	2,156	946	0	9	173	3,102	3,284	161	0	26	208	3,263		0
28	2,182	1,294	1	0	239	3,476	3,716	117	130	0	369	3,594		0
29	1,574	1,901	194	52	84	3,669	3,806	318	1,235	28	1,400	3,987		0
30	3,695	7,972	2,194	607	102	13,861	14,570	2,702	5,887	1	6,596	16,563		0
31	1,070	3,024	2,182	608	28	6,276	6,912	459	6,983	28	7,647	6,735		0
32	1,167	13,375	10,388	3,551	1	24,929	28,481	1,488	17,541	1	21,094	26,417		0
33	240	2,880	1,718	571	1	4,837	5,409	829	8,202	2	8,775	5,666		0
34	85	1,728	1,309	375	1	3,121	3,496	519	5,773	2	6,150	3,640		0
35	4	887	858	214	1	1,749	1,964	281	3,535	1	3,751	2,030		0
36	1	193	187	47	0	381	427	61	769	0	816	442		0
37	0	21	20	5	0	41	46	7	83	0	88	47		0
38	0	3	3	1	0	5	6	1	11	0	12	6		0
39	0	1	1	0	0	1	1	0	2	0	3	1		0
40	0	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		0
Total	13,357	34,570	19,053	6,039	671	66,980	73,690	7,027	50,150	154	57,014	74,007		0

Appendix C. 5. Weekly sockeye salmon abundance estimates of above border run and harvest in the Canadian fisheries in the Taku River, 2016.

Based on postseason mark-recapture estimate apportioned by fish wheel CPUE.

	Above Border	Commercial		Assesment/		Above Border
SW	Run	All	Taku	Test	Aboriginal	Escapement
22						
23				1		
24					4	
25						
26	10,885	450	441			
27	8,261	2,014	2,003			
28	11,630	2,727	2,727		7	
29	20,742	3,462	3,444		2	
30	9,722	1,469	1,469		1	
31	27,006	3,689	3,650		6	
32	30,455	5,671	5,671			
33	30,567	6,384	6,346			
34	34,024	5,212	5,181		167	
35	15,044	3,538	3,517			
36	10,628	2,179	2,166		1	
37	2,955	497	494			
38		9	9	73		
39				41	1	
40				8	2	
Postseaso	213,851	37,301	37,120	123	191	176,417
Expanded	213,851	37,301	37,120	123	191	176,417

Appendix C. 6. Estimates of wild and enhanced sockeye salmon stock harvested in the Canadian commercial fishery in the Taku River by week, 2016.

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

	King Salmon	Tatsamenie	Stikine	US	Taku	King Salmon	Tatsamenie	Stikine	US	Taku
SW	Enhanced	Enhanced	Enhanced	Enhanced	Wild	Enhanced	Enhanced	Enhanced	Enhanced	Wild
26	0.016	0.000	0.021	0.000	0.964	7	0	9	0	434
27	0.037	0.000	0.005	0.000	0.958	74	0	11	0	1,930
28	0.140	0.000	0.000	0.000	0.860	382	0	0	0	2,345
29	0.031	0.005	0.005	0.000	0.958	109	18	18	0	3,317
30	0.010	0.042	0.000	0.000	0.948	15	61	0	0	1,392
31	0.000	0.068	0.005	0.005	0.921	0	251	19	19	3,399
32	0.010	0.109	0.000	0.000	0.880	59	620	0	0	4,992
33	0.000	0.135	0.000	0.006	0.859	0	864	0	38	5,483
34	0.000	0.135	0.000	0.006	0.859	0	705	0	31	4,476
35	0.000	0.135	0.000	0.006	0.859	0	479	0	21	3,039
36	0.000	0.135	0.000	0.006	0.859	0	295	0	13	1,871
37	0.000	0.135	0.000	0.006	0.859	0	67	0	3	427
38	0.000	0.135	0.000	0.006	0.859	0	1	0	0	8
Total	0.017	0.090	0.002	0.003	0.888	646	3,361	57	124	33,112

Appendix C. 7. Weekly coho salmon harvest in the traditional Alaskan District 111 and StatArea 111-32 (Taku Inlet), commercial drift gillnet fishery, 2016.

	D111 Total			111-32
SW	Total	Hatchery	Wild	
25			0	
26	59		59	56
27	246		246	205
28	398		398	234
29	1,538		1,538	498
30	1,710		1,710	943
31	982		982	633
32	1,879		1,879	1,578
33	2,287		2,287	771
34	2,400		2,400	2,063
35	5,118		5,118	3,336
36	6,760	3,723	3,037	5,978
37	4,831	1,278	3,553	4,007
38	3,454	818	2,636	3,402
39	1,863	1,336	527	1,857
40	870	171	699	870
41	50	30	20	50
Total	34,445	7,356	27,089	26,481

Appendix C. 8. Weekly coho salmon abundance estimates of above border run and harvest in the Canadian fisheries in the Taku River, 2016.

	Above border	Harvest				Above border
SW	Run	Commercial	Aboriginal	Recreational	Assesment/test	Escapement
18						
19						
20						
21						
22						
23						
24						
25						
26						
27		3	2			
28		37	1			
29		114				
30		136				
31		210	1			
32		747				
33		736				
34	20,888	813	39			
35	27,730	1,238				
36	35,803	2,072				
37	47,768	1,424				
38	57,802	275			339	
39	68,646	653	3		664	
40	85,951	778			504	
41	99,224	230			500	
42			1			
Before SW34		1,983				
SW34 to end		7,483				
Postseason Estimate	99,224	9,466	47	0	2,007	87,704

Appendix C. 9. Weekly effort in the Alaskan traditional District 111 and StatArea 111–32 (Taku Inlet), commercial drift gillnet fishery, 2016.

		D111			D111-32		
SW	Start Date	Boats	Days Open	Boat Days	Boats	Days Open	Boat Days
25	12-Jun			0			0
26	19-Jun	29	2.0	58	28	2.0	56
27	26-Jun	47	3.0	141	46	3.0	138
28	3-Jul	54	3.0	162	50	2.0	100
29	10-Jul	70	4.0	280	57	3.0	171
30	17-Jul	103	4.0	412	89	3.0	267
31	24-Jul	76	4.0	304	62	3.0	186
32	31-Jul	69	4.0	276	65	4.0	260
33	7-Aug	114	4.0	456	53	4.0	212
34	14-Aug	52	3.0	156	43	3.0	129
35	21-Aug	54	3.0	162	35	3.0	105
36	28-Aug	43	3.0	129	36	3.0	108
37	4-Sep	34	3.0	102	30	3.0	90
38	11-Sep	27	4.0	108	25	4.0	100
39	18-Sep	15	4.0	60	14	4.0	56
40	25-Sep	10	4.0	40	10	4.0	40
41	2-Oct	1	4.0	4	1	4.0	4
Total			56.0	2,850		52.0	2,022

Appendix C. 10. Weekly effort in the Canadian commercial and assessment fisheries in the Taku River, 2016.

		Commercial			Assesment/test		
SW	Start Date	Average Permits	Days Fished	Permit Days	Average Permits	Days Fished	Permit Days
18	24-Apr						
19	1-May				4.00	1.00	4.00
20	8-May				4.33	2.25	9.75
21	15-May				2.75	3.50	9.63
22	22-May				4.67	2.25	10.50
23	29-May				4.67	1.25	5.83
24	5-Jun						
25	12-Jun						
26	19-Jun	5.00	1.00	5.00			
27	26-Jun	7.00	3.00	21.00			
28	3-Jul	7.00	3.00	21.00			
29	10-Jul	7.00	3.00	21.00			
30	17-Jul	7.00	3.00	21.00			
31	24-Jul	7.00	3.00	21.00			
32	31-Jul	7.25	4.00	29.00			
33	7-Aug	7.25	4.00	29.00			
34	14-Aug	7.60	5.00	38.00			
35	21-Aug	7.00	4.00	28.00			
36	28-Aug	5.80	5.00	29.00			
37	4-Sep	5.40	5.00	27.00			
38	11-Sep	1.00	5.00	5.00			
39	18-Sep	1.75	4.00	7.00			
40	25-Sep	1.67	6.00	10.00			
41	2-Oct	1.00	2.00	2.00			
Total			60	314		10	40

Appendix C. 11. Daily counts of adult sockeye salmon passing through Tatsamenie Lake weir, 2016.

Date	Count	Cumulative Count	Cumulative Percent
8-Aug	Weir installed		
15-Aug	32	32	0.1
16-Aug	72	104	0.3
17-Aug	32	136	0.4
18-Aug	29	165	0.5
19-Aug	32	197	0.6
20-Aug	54	251	0.8
21-Aug	82	333	1.0
22-Aug	201	534	1.6
23-Aug	495	1,029	3.1
24-Aug	671	1,700	5.2
25-Aug	1,469	3,169	9.6
26-Aug	869	4,038	12.3
27-Aug	1,090	5,128	15.6
28-Aug	459	5,587	17.0
29-Aug	399	5,986	18.2
30-Aug	647	6,633	20.1
31-Aug	343	6,976	21.2
1-Sep	303	7,279	22.1
2-Sep	503	7,782	23.6
3-Sep	868	8,650	26.3
4-Sep	1,161	9,811	29.8
5-Sep	3,794	13,605	41.3
6-Sep	3,641	17,246	52.4
7-Sep	2,527	19,773	60.0
8-Sep	1,467	21,240	64.5
9-Sep	1,277	22,517	68.4
10-Sep	1,053	23,570	71.6
11-Sep	917	24,487	74.4
12-Sep	1,087	25,574	77.7
13-Sep	0	25,574	77.7
14-Sep	1,356	26,930	81.8
15-Sep	402	27,332	83.0
16-Sep	270	27,602	83.8
17-Sep	335	27,937	84.8
18-Sep	240	28,177	85.6
19-Sep	112	28,289	85.9
20-Sep	359	28,648	87.0
21-Sep	313	28,961	87.9
22-Sep	145	29,106	88.4
23-Sep	536	29,642	90.0
24-Sep	408	30,050	91.2
25-Sep	807	30,857	93.7
26-Sep	208	31,065	94.3
27-Sep	233	31,298	95.0
28-Sep	411	31,709	96.3
29-Sep	206	31,915	96.9
30-Sep	454	32,369	98.3
1-Oct	191	32,560	98.9
2-Oct	122	32,682	99.2
3-Oct	140	32,822	99.7
4-Oct	112	32,934	100.0
5-Oct	0	32,934	100.0
6-Oct	0	32,934	100.0
7-Oct	Weir removed		

	Total	Wild	enhanced
Holding below weir			
Weir count	32,934	26,890	6,044
Outlet spawners			
Biological otolith sam	94	82	12
broodstock otolith sa	391	314	77
Broodstock a	1,500	1,205	295
Natural Spawners	31,434		

a Broodstock included 548 females and 498 males from which gametes were collected,
28 female and 12 male mortalities, and 324 females and 90 males which were held and released unspawn
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, 2016.

		Cumulative	
Date	Count	Count	Percent
22-Jul	Weir installed		
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	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	2	4	0.1
4-Aug	0	4	0.1
5-Aug	80	84	1.1
6-Aug	934	1,018	13.1
7-Aug	1,212	2,230	28.7
8-Aug	560	2,790	35.9
9-Aug	700	3,490	44.9
10-Aug	421	3,911	50.3
11-Aug	654	4,565	58.7
12-Aug	369	4,934	63.5
13-Aug	172	5,106	65.7
14-Aug	352	5,458	70.2
15-Aug	216	5,674	73.0
16-Aug	164	5,838	75.1
17-Aug	121	5,959	76.7
18-Aug	125	6,084	78.3
19-Aug	77	6,161	79.3
20-Aug	116	6,277	80.8
21-Aug	76	6,353	81.8
22-Aug	70	6,423	82.7
23-Aug	115	6,538	84.1
24-Aug	152	6,690	86.1
25-Aug	63	6,753	86.9
26-Aug	76	6,829	87.9
27-Aug	144	6,973	89.7
28-Aug	126	7,099	91.4
29-Aug	69	7,168	92.2
30-Aug	73	7,241	93.2
31-Aug	48	7,289	93.8
1-Sep	60	7,349	94.6
2-Sep	40	7,389	95.1
3-Sep	21	7,410	95.4
4-Sep	193	7,603	97.8
5-Sep	32	7,635	98.2
6-Sep	51	7,686	98.9
7-Sep	48	7,734	99.5
8-Sep	25	7,759	99.8
9-Sep	12	7,771	100.0
10-Sep	0	7,771	100.0
10-Sep	Weir removed		

	Total	Wild enhanced
Holding below weir		
Escapement to lake	7,771	
Outlet spawners		
otolith samples		
Broodstock	177	
Natural Spawners	7,594	

Appendix C. 13. Daily counts of adult sockeye salmon passing through the King Salmon Lake weir, 2016.

		Cumulative	
Date	Count	Count	Percent
12-Jul	Weir installed		
12-Jul	27	27	0.4
13-Jul	0	27	0.4
14-Jul	285	312	4.9
15-Jul	371	683	10.7
16-Jul	209	892	13.9
17-Jul	246	1,138	17.8
18-Jul	157	1,295	20.2
19-Jul	200	1,495	23.3
20-Jul	0	1,495	23.3
21-Jul	170	1,665	26.0
22-Jul	150	1,815	28.3
23-Jul	178	1,993	31.1
24-Jul	146	2,139	33.4
25-Jul	253	2,392	37.4
26-Jul	212	2,604	40.7
27-Jul	148	2,752	43.0
28-Jul	336	3,088	48.2
29-Jul	186	3,274	51.1
30-Jul	184	3,458	54.0
31-Jul	150	3,608	56.3
1-Aug	152	3,760	58.7
2-Aug	195	3,955	61.8
3-Aug	168	4,123	64.4
4-Aug	111	4,234	66.1
5-Aug	159	4,393	68.6
6-Aug	130	4,523	70.6
7-Aug	464	4,987	77.9
8-Aug	423	5,410	84.5
9-Aug	310	5,720	89.3
10-Aug	163	5,883	91.9
11-Aug	178	6,061	94.6
12-Aug	118	6,179	96.5
13-Aug	223	6,402	100.0
14-Aug	2	6,404	100.0
15-Aug	0	6,404	100.0
16-Aug	0	6,404	100.0
17-Aug	0	6,404	100.0
18-Aug	0	6,404	100.0
19-Aug	0	6,404	100.0
20-Aug	0	6,404	100.0
21-Aug	0	6,404	100.0
22-Aug	0	6,404	100.0
23-Aug	0	6,404	100.0
24-Aug	0	6,404	100.0
25-Aug	0	6,404	100.0
4-Sep	Weir removed		
Total	6,404		
Escapement to lake		6,404	
Broodstock		0	
Spawners		6,404	
Helicopter survey		none	

Appendix C. 14. Daily counts of adult sockeye salmon passing through the Kuthai Lake weir, 2016.

		Cumulative	
Date	Count	Count	Percent
9-Jul	Weir installed		
12-Jul	1	1	0.1
13-Jul	0	1	0.1
14-Jul	0	1	0.1
15-Jul	0	1	0.1
16-Jul	0	1	0.1
17-Jul	35	36	2.4
18-Jul	476	512	34.7
19-Jul	266	778	52.7
20-Jul	175	953	64.6
21-Jul	88	1,041	70.5
22-Jul	50	1,091	73.9
23-Jul	87	1,178	79.8
24-Jul	50	1,228	83.2
25-Jul	41	1,269	86.0
26-Jul	61	1,330	90.1
27-Jul	28	1,358	92.0
28-Jul	13	1,371	92.9
29-Jul	36	1,407	95.3
30-Jul	20	1,427	96.7
31-Jul	0	1,427	96.7
1-Aug	0	1,427	96.7
2-Aug	0	1,427	96.7
3-Aug	0	1,427	96.7
4-Aug	47	1,474	99.9
5-Aug	1	1,475	99.9
6-Aug	1	1,476	100.0
7-Aug	0	1,476	100.0
8-Aug	0	1,476	100.0
9-Aug	0	1,476	100.0
10-Aug	0	1,476	100.0
11-Aug	0	1,476	100.0
12-Aug	0	1,476	100.0
13-Aug	0	1,476	100.0
14-Aug	0	1,476	100.0
15-Aug	0	1,476	100.0
16-Aug	0	1,476	100.0
17-Aug	0	1,476	100.0
18-Aug	0	1,476	100.0
19-Aug	0	1,476	100.0
20-Aug	0	1,476	100.0
21-Aug	0	1,476	100.0
22-Aug	0	1,476	100.0
23-Aug	0	1,476	100.0
24-Aug	0	1,476	100.0
25-Aug	0	1,476	100.0
26-Aug	0	1,476	100.0
27-Aug	0	1,476	100.0
28-Aug	0	1,476	100.0
2-Sep	Weir removed		
Total count		1,476	
Harvest above weir		0	
Escapement		1,476	

Appendix C. 15. Daily counts of large Chinook salmon carcasses at the Nakina River weir, 2016.

	Count (all sizes)				Cumulative Count		Size (sex combined)		
Date	Female	Male	Unknown	Combined	Count	Percent	Large	nonlarge	unknown
3-Aug	Weir installed			0	0	0.0			
4-Aug	0	0	0	0	0	0.0	0	0	0
5-Aug	2	2	0	4	4	0.7	2	2	0
6-Aug	3	6	0	9	13	2.3	4	5	0
7-Aug	3	4	0	7	20	3.5	3	4	0
8-Aug	0	8	0	8	28	4.9	3	5	0
9-Aug	2	11	1	14	42	7.3	6	8	0
10-Aug	5	9	0	14	56	9.7	7	7	0
11-Aug	2	12	0	14	70	12.2	8	6	0
12-Aug	3	25	1	29	99	17.2	12	17	0
13-Aug	4	50	3	57	156	27.1	20	36	1
14-Aug	10	24	0	34	190	33.0	18	16	0
15-Aug	13	34	0	47	237	41.2	18	29	0
16-Aug	19	49	1	69	306	53.2	31	38	0
17-Aug	1	36	1	38	344	59.8	7	31	0
18-Aug	11	50	1	62	406	70.6	24	38	0
19-Aug	8	39	1	48	454	79.0	13	35	0
20-Aug	4	39	3	46	500	87.0	14	32	0
21-Aug	2	16	0	18	518	90.1	4	14	0
22-Aug	3	13	1	17	535	93.0	7	10	0
23-Aug	1	15	0	16	551	95.8	4	12	0
24-Aug	1	4	0	5	556	96.7	1	4	0
25-Aug	1	9	9	19	575	100.0	3	7	0
26-Aug	Weir removed								
Total	98	455	22	575			209	356	1

Appendix D. 1. All historic harvest and effort of salmon in the D111 gillnet fishery, 1960–2016.

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	105,893	188,501	401,525	214,171	5,078	66
1995	4,660	103,362	83,606	41,228	349,949	4,034	49
1996	2,659	199,014	33,633	12,660	354,463	3,229	46
1997	2,804	94,745	3,515	51,424	176,864	2,107	33
1998	794	69,677	28,713	168,283	296,111	3,070	48
1999	1,949	79,686	17,608	59,316	429,359	2,841	59
2000	1,154	185,956	7,828	58,696	669,994	2,919	40
2001	1,698	293,043	22,646	123,026	237,122	4,731	54
2002	1,850	204,103	40,464	78,624	231,936	4,095	62
2003	1,467	238,160	24,338	114,166	170,874	3,977	78
2004	2,345	283,756	45,769	154,640	131,757	3,342	63
2005	23,301	106,048	21,289	182,778	93,700	3,734	68
2006	11,261	262,527	60,145	191,992	382,952	4,052	89
2007	1,452	112,241	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	2,832	54
2011	2,510	163,896	28,574	344,766	667,929	3,481	46
2012	1,291	140,898	24,115	193,969	566,741	2,608	43
2013	1,224	207,231	51,441	127,343	726,849	3,655	62
2014	1,471	126,738	54,186	29,190	291,409	3,343	65
2015	1,150	83,431	23,572	296,575	475,456	2,391	44
2016	595	215,049	35,037	46,604	448,284	2,850	56
average							
60-15	3,852	99,369	41,429	118,037	209,185	3,034	
06-15	3,104	135,233	40,063	156,396	588,285	3,242	

Appendix D. 2. District 111 total Chinook salmon harvest in the US gillnet, sport, and personal use fisheries, 2005–2016.

See Appendix D3 for estimates of Taku River large Chinook salmon.

	PU	Sport		Drift Gillnet		
Year	Large	Large	Large non-Taku	Large	Large non-Taku	nonlarge
2005	32	2,967		17,952	850	5,056
2006	18	2,396		10,233	808	948
2007	22	1,411		616	32	619
2008	46	1,255		920	332	893
2009	25	1,287		5,673	814	886
2010	36	2,173	849	975	235	308
2011	48	1,261	198	641	86	941
2012	34	1,407	449	762	68	309
2013	20	2,171	1,327	473	90	496
2014	21	2,045	927	769	124	375
2015	29	953		493	82	392
2016	30	1,081	444	212	80	157
Averages						
06-15	30		750		267	617

Appendix D. 3. Annual estimates of Taku River large Chinook salmon in the D111 fisheries, 2005–2016.

Estimates based on GSI for gillnet and sport; troll is CWT.
For detailed GSI stock comp estimates see Appendix G. 6.

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	34	671	668	8	1,380
2013	20	257	356	0	632
2014	21	714	488	0	1,223
2015	29	463	292	0	784
2016	30	635	*159*	0	824
Averages					
06-15	30	957	3,086	4	4,077

Appendix D. 4. Annual Chinook Salmon harvest in the Canadian fisheries in the Taku River, 1979–2016.

	Commerical		Aboriginal		Assesment/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
2013	579	653	54	16	There were no aasesment/test fisheries			105	738
2014	1,041	579	96	16	1,230	62		105	2,472
2015	868	305	117	12	1,357	87		105	2,447
2016	508	195	91	10	1,021	144		10	1,630
Averages									
85-15	2,042	329	91					168	2,783
06-15	3,211	559	126	12	756	85		105	4,129

Appendix D. 5. Taku River large Chinook salmon run size, 1979–2016.

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 M-R					Above Border		
	Spawning		Confidence Intervals		Canadian	Run	U.S.	Terminal
Year	Escapement	Method	Lower	Upper	Harvest	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	1,380	23,883
2013	18,002	Aerial expansion	4,500	31,504	738	18,740	632	19,372
2014	23,532	Mark-recapture	19,187	27,877	2,472	26,004	1,223	27,227
2015	28,827	Mark-recapture	20,853	36,848	2,447	31,274	784	32,058
2016	12,381	Mark-recapture	9,513	15,249	1,630	14,011	824	14,835
Averages								
95-15	38,804				3,479	42,283	4,259	46,542
06-15	25,254				3,770	29,024	2,583	31,607

Appendix D. 6. Aerial survey index escapement counts of large (3-ocean and older) Taku River Chinook salmon, 1975–2016.

Year	Kowatua	Tatsamenie	Dudidontu	Tseta	Nakina[a] added fish for index 4	Nakina[a] Total fish	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	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
2013	708	438	166		148	1,623	527	3,462
2014	384	376	193		100	1,040	304	2,297
2015	622	434	289		134	1,340	612	3,297
2016	303	92	156		80	800	379	1,730
Averages								
85-15	739	956	536	358	116	3,380	1,431	6,945
05-15	575	666	279	216	116	1,494	738	3,603
	0.53	0.14	0.56	0.00	0.69	0.54	0.51	0.48

[a] Stopped flying index area 4 on the Nakina after 2009.

Appendix D. 7. 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, 1967–2016.

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

	D111 Gillnet harvest				D111 Amalga Seine harvest			PU Taku harvest		
	All	D111 Gillnet without 111-34 for stock comp			All					
Year	D111 Gillnet	harvest	Wild Taku	EnhancedTaku	D111 Seine	Wild Taku	EnhancedTaku	All Taku	Wild Taku	EnhancedTaku
1967	17,735	15,282						103	103	
1968	19,501	17,721						41	41	
1969	41,169	40,053						122	122	
1970	50,922	49,951						304	304	
1971	66,181	62,593						512	512	
1972	80,404	76,478						554	554	
1973	85,317	81,149						1,227	1,227	
1974	38,670	33,934						1,431	1,431	
1975	32,513	32,271						170	170	
1976	61,749	54,456						351	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	920	
1986	73,061	72,713								
1987	75,212	76,377								
1988	38,923	38,885								
1989	74,019	73,991						562	562	
1990	126,884	126,876						793	793	
1991	109,877	111,002						800	800	
1992	135,411	132,669						1,217	1,217	
1993	171,556	171,373						1,201	1,201	
1994	105,861	105,758						1,111	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
2013	207,231	137,739	84,567	12,779	4,429	1,054	372	1,371	1,152	219
2014	126,738	84,529	30,672	859	1,440	536	26	1,133	1,098	35
2015	83,431	51,286	40,904	194	912	0	0	955	948	7
2016	215,049	131,025	66,980	6,710	2,684		0	1,184	1,051	133
Averages										
95-15	136,372	121,062	79,938	3,218				1,106	1,059	47
06-15	114,643	94,589	53,330	4,220				1,013	940	72

Appendix D. 8. Stock proportions and harvest of sockeye salmon in the traditional Alaska District 111 commercial drift gillnet fishery, 1983–2016.

Data based on SPA, otolith marks, and incidence of brain parasites 1983-2011; based on GSI 2012 to present; does not include harvest inside Port Snettisham; Wild Snet = Crescent+Speel

	D111 Gillnet harvest											Amalga Seine harvest	
			Tatsamenie		Little Trapper	King Salmon	Taku	Total	Wild Snet/	U.S.	Stikine	Taku	
Week	Taku Lakes	Mainstem	Wild	Enhanced	Enhanced	Enhanced	Wild	Taku	other	Enhanced	Enhanced	Wild	Enhance
1983							0.755	0.755					
1984							0.758	0.758					
1985							0.838	0.838					
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]							0.849	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	0.152	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		0.028	0.005		0.364	0.396	0.090	0.512	0.002		
2013	0.322	0.292		0.090	0.003		0.614	0.707	0.135	0.154	0.004	0.238	0.084
2014	0.079	0.268	0.016	0.010	0.000		0.363	0.373	0.176	0.448	0.003	0.372	0.018
2015	0.219	0.575	0.004	0.004	0.000		0.798	0.801	0.063	0.131	0.005		0.000
2016	0.102	0.264	0.145	0.046		0.005	0.511	0.562	0.054	0.383	0.001		0.000
Averages													
86-15	0.239	0.339	0.137				0.709	0.727	0.107				
06-15	0.137	0.362	0.103				0.582	0.619	0.105				
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	12,069				
1987	23,851	28,724	2,388				54,963	54,963	21,414				
1988	10,741	11,854	3,191				25,785	25,785	13,100				
1989[a]							62,804	62,804	11,210				
1990	29,489	42,673	36,330				108,492	108,492	18,384				
1991	37,359	41,376	25,736				104,471	104,471	6,531				
1992	35,625	59,004	25,329				119,959	119,959	12,709				
1993	66,952	52,820	21,116				140,888	140,888	30,485				
1994	49,234	38,142	9,576				96,952	96,952	6,172	2,634			
1995	26,893	44,271	15,765	3,049	1,017		86,929	90,994	9,641	2,727			
1996	36,917	98,876	45,983	2,849	1,913		181,776	186,538	8,928	2,838			
1997	22,389	26,621	27,033	1,003	1,028		76,043	78,074	5,054	11,358			
1998	16,775	14,306	16,743	246	560		47,824	48,630	2,244	17,588			
1999	33,780	18,231	9,194	358	241		61,205	61,804	5,556	10,155			
2000	68,500	35,025	25,042	1,285	276		128,567	130,128	9,592	26,528			
2001	58,736	76,418	58,937	8,880	0		194,091	202,971	13,166	68,649			
2002	61,922	30,397	22,141	651	0		114,460	115,111	8,224	52,708			
2003	58,280	70,801	5,876	767	0		134,957	135,724	9,983	32,196			
2004	26,314	41,366	7,505	676	0		75,186	75,862	9,157	92,810			
2005	8,909	32,591	2,860	579	0		44,360	44,939	10,371	16,161			
2006	10,995	35,993	15,825	2,210	0		62,814	65,024	5,940	28,659			
2007	13,311	38,084	9,484	3,684	0		60,879	64,563	11,353	31,213			
2008	13,833	31,170	17,999	11,680	0		63,002	74,682	9,544	32,467			
2009	7,050	21,275	6,796	240	0		35,121	35,361	8,674	17,888	148		
2010[a]	2,833	32,407	9,597	760	150		44,837	45,747	9,390	6,759	79		
2011	11,799	39,743	13,548	4,047	1,557		65,090	70,694	4,473	24,595	288		
2012	15,221	30,189	0	3,453	587		45,410	49,449	11,210	63,963	208		
2013	44,412	40,155	0	12,373	406		84,567	97,346	18,641	21,172	580	1,054	372
2014	6,694	22,622	1,356	859	0		30,672	31,531	14,868	37,880	250	536	26
2015	11,254	29,467	183	194	0		40,904	41,099	3,238	6,698	250	0	0
2016	13,357	34,570	19,053	6,039		671	66,980	73,690	7,027	50,150	154	0	0
Average[a]													
86-13	30,220	39,014	17,262				85,093	87,083		28,521			
04-13	13,506	32,423	7,747	3,988	270		53,675	57,934		28,076			

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

Appendix D. 9. Proportion of wild Taku River sockeye salmon in the Alaskan District 111 commercial drift gillnet harvest by week, 1983–2016.

Data based on SPA and incidence of brain parasites 1983-2011; based on GSI 2012 to present. 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	0.988	0.979	0.953	0.979	0.951	0.933	0.936	0.890	0.885	0.875	0.941
1993	0.988	0.979	0.953	0.979	0.951	0.933	0.936	0.890	0.885	0.875	0.941
1994	0.988	0.979	0.953	0.979	0.951	0.933	0.936	0.890	0.885	0.875	0.941
1995	0.988	0.979	0.953	0.979	0.951	0.933	0.936	0.890	0.885	0.875	0.941
1996	0.988	0.979	0.953	0.979	0.951	0.933	0.936	0.890	0.885	0.875	0.941
1997	0.988	0.979	0.953	0.979	0.951	0.933	0.936	0.890	0.885	0.875	0.941
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	0.828	0.632	0.321	0.389	0.085	0.298	0.298	0.364
2013	0.960	0.927	0.865	0.794	0.467	0.477	0.457	0.457	0.457	0.457	0.614
2014	0.756	0.825	0.695	0.355	0.568	0.445	0.206	0.199	0.107	0.014	0.363
2015	0.000	0.910	0.969	0.927	0.830	0.815	0.823	0.723	0.693	0.693	0.798
2016	0.000	0.889	0.894	0.877	0.681	0.599	0.436	0.525	0.335	0.319	0.511
Average											
83-15		0.955	0.914	0.874	0.816	0.765	0.774	0.742	0.715	0.688	0.820
06-15		0.908	0.859	0.764	0.675	0.605	0.595	0.528	0.510	0.508	0.678

Appendix D. 10. Annual sockeye salmon harvest estimates of wild and enhanced fish in the Canadian fisheries in the Taku River, 1979–2016.

	Total harvest					Wild			Enhanced		
	Commercial										
Year	Allharvest	TakuOnly	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	16,589	159	376		14,988	143	337	1,726	16	39
2008	19,284	19,147	215	10	32	17,241	192	9	2,043	23	1
2009	10,980	10,955	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
2013	25,125	25,074	99	0		21,107	83	0	3,966	16	0
2014	17,645	17,568	219	8		17,106	212	8	462	7	0
2015	19,747	19,715	85	49		19,592	84	49	123	1	0
2016	37,301	37,120	191	123		33,112	170	109	4,007	21	14
Averages											
86-15	24,023	20,340	182			23,293	177				
06-15	20,489	20,340	145	170		18,973	134	160	1,472	10	10

Appendix D. 11. Annual sockeye salmon stock proportions and harvest by stock in the Canadian commercial fishery on the Taku River, 1986–2016.

Data based on SPA, brain parasite, and thermal mark analyses 1986-2011;based on GSI 2012 to present.

											Wild lake stocks based on SPA		
	Taku		Tatsamenie		Little Trapper	King Salmon	Taku		Stikine	US		King	Little Trapper
Year	Lakes other	Mainstem	Wild	Enhance	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]							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	[a]
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				
2013	0.246	0.395	0.199	0.157	0.002		0.840	0.158	0.000	0.002			
2014				0.026	0.000		0.969	0.026	0.004	0.001			
2015				0.006	0.000		0.992	0.006	0.002	0.000			
2016				0.090		0.017	0.888	0.107	0.002	0.003			
Averages													
86-15							0.970						
06-15				0.060	0.004		0.933	0.064					
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]	0		0				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[a]	3,950	12,235	3,369	334	290		19,554	624	31	0	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	0			
2013	6,189	9,922	4,997	3,934	40		21,107	3,974	11	40			
2014				462	0		17,106	462	66	11			
2015				123	0		19,592	123	32	0			
2016				3,361		646	33,112	4,007	57	124			
Averages													
86-15							23,293						
06-15				1,344	99		18,973	1,444					

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

Appendix D. 12. Annual sockeye salmon weir counts, escapements, and samples at the Tatsamenie Lake weir, 1984–2016.

Broodstock taken includes all fish used for gametes, holding mortalities, and fish held and released unspawned.
Generally ototlith samples are a proportion of the broodstock samples. Biological samples are part of spawning escapement used for otolith samples to provide wild/enhanced data.

	Weir	Spawning	Spawning Escapement		otolith samples			broodstock taken		
Year	Count	Escapement	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	5,995	2,389	276	110	386	2,004	799	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
2013	10,246	8,946	4,844	4,102	209	177	386	704	596	1,300
2014	2,106	1,348	776	572	201	148	349	437	321	758
2015	1,537	939	530	409	188	145	333	338	260	598
2016	32,934	31,434	25,666	5,768	396	89	485	1,225	275	1,500
Averages										
06-15	8,556	6,990	4,927	2,064	263	122	386	1,081	484	1,565

[a] Weir count plus spawning ground survey; Trapper 1983, 1985, 1987

Appendix D. 13. Annual sockeye salmon weir counts, escapements, and samples at the Little Trapper weir, 1983–2016.

Broodstock estimate is based on commercial ratio with Tatsamenie River weir data							
	Weir	Spawning	Trapper spawning esc		Broodstock		
Year	Count	Escapement	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	5,295	188	0		
1997	5,924	5,924	5,550	374	0		
1998	8,717	8,717	7,698	1,019	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	9,531	484			
2013	4,840	4,840	4,809	31			
2014	6,607	6,707	6,707	0			
2015	13,253	13,253	13,253				
2016	7,771	7,594	7,594				
Averages							
83-15	11,498	11,217					
06-15	8,367	8,114					

Appendix D. 14. Annual sockeye salmon weir counts, escapements, and samples at the King Salmon weir, 1983–2016.

Spawning escapement is based harvest rates and projections of King Salmon inriver run estimate

	Weir	Spawning	King Salmon spawning esc	
Year	Count	Escapement	wild	enhanced
2004	5005	5005	5,005	
2005	1046	1046	1,046	
2006	2177	2177	2,177	
2007	5	5	5	
2008	888	888	888	
2009	55	55	55	
2010	2977	2977	2,977	
2011	2899	2899	2,899	
2012	5413	5263	5,413	
2013	485	485	485	
2014	1061	910	1,061	
2015	1683	1683	1,683	
2016	6404	6404	3,378	3,026

Appendix D. 15. Taku River sockeye salmon run size, 1984–2016.

Run estimate does not include spawning escapements below the U.S./Canada border.

The early season sockeye salmon expansion is based on the proportion of fish wheel sockeye salmon catch that occurs before the fishery opens.

	Above Border M-R				Expanded					Total
	Run	Start	Expansion		Above Border	Canadian		U.S.	Terminal	Harvest
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	36,232	119,329	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%
2013	96,928	15-May	FW CPUE for SW 23,24, and 37	0.089	106,350	25,173	81,177	100,144	206,493	61%
2014	109,984	25-Apr	No Expansion		109,984	17,795	92,189	33,226	143,210	36%
2015	150,483	25-Apr	FW CPUE for SW 23 and 24	0.012	152,372	19,849	132,523	42,054	194,426	32%
2016	213,851	25-Apr	FW CPUE for SW 23 and 24		213,851	37,434	176,417	74,874	288,725	39%
Averages										
84-15	125,210	24-May			128,136	24,139	103,997	83,876	212,012	49%
06-15	119,568	8-May			121,781	20,760	101,021	58,761	180,542	43%

Appendix D. 16. The terminal run reconstruction of Taku wild and enhanced sockeye salmon, 1984–2016.

	Wild Terminal Run					Enhanced Terminal Run				
	Canadian			US	Terminal	Canadian			US	Terminal
Year	harvest	test	escapement	harvest	Run	Commercial	test	escapement	harvest	Run
1984	27,292	0	113,962	57,619	198,873					
1985	14,411	0	109,563	74,287	198,261					
1986	14,939	0	100,106	60,644	175,689					
1987	13,650	237	82,136	54,963	150,986					
1988	12,259	708	79,674	25,785	118,427					
1989	18,598	207	95,263	63,366	177,434					
1990	21,189	285	96,099	109,285	226,858					
1991	25,217	163	129,493	105,271	260,143					
1992	29,824	38	137,514	121,176	288,551					
1993	33,357	166	108,625	142,089	284,236					
1994	29,001	0	102,579	98,063	229,642					
1995	31,374	0	112,048	87,878	231,300	1,337	0	1,692	4,106	7,134
1996	41,287	0	91,994	182,944	316,225	738	0	632	4,783	6,154
1997	23,685	0	70,481	77,067	171,233	667	0	605	2,060	3,332
1998	18,681	0	69,560	48,989	137,230	596	0	1,155	843	2,594
1999	20,761	87	92,473	62,441	175,761	302	1	82	617	1,003
2000	27,711	314	86,225	129,683	243,933	438	5	1,000	1,579	3,022
2001	45,994	237	140,375	195,496	382,101	1,876	10	3,753	8,938	14,577
2002	31,159	517	102,848	115,747	250,271	49	1	659	653	1,362
2003	32,728	27	159,026	136,165	327,946	269	0	1,340	777	2,386
2004	20,001	90	105,974	76,321	202,386	267	1	714	692	1,673
2005	21,599	241	119,384	45,496	186,720	259	3	669	593	1,524
2006	20,376	252	143,660	63,587	227,875	808	10	2,491	2,241	5,550
2007	15,131	337	84,575	61,387	161,429	1,742	39	3,188	3,742	8,712
2008	17,433	9	63,892	63,905	145,239	2,066	1	4,167	11,787	18,021
2009	10,980	172	71,489	35,984	118,625	106	2	348	248	704
2010	19,732	287	87,364	45,824	153,207	632	10	1,003	943	2,588
2011	22,259	480	113,022	66,113	201,875	1,762	41	2,362	5,691	9,856
2012	26,981	5	120,038	46,559	193,583	3,126	1	6,726	4,177	14,029
2013	21,190	0	76,448	86,773	184,411	3,982	0	4,729	13,371	22,082
2014	17,318	8	91,296	32,306	140,929	468	0	893	919	2,281
2015	19,676	49	131,854	41,852	193,431	124	0	669	202	995
2016	33,282	109	167,348	68,031	268,770	4,029	14	9,069	6,843	19,955
Averages										
84-15	23,306	154	102,782	81,721	207,963					
06-15	19,108	160	98,364	54,429	172,060	1,482	10	2,658	4,332	8,482

Appendix D. 17. Annual sockeye salmon escapement estimates of Taku River and Port Snettisham sockeye salmon stocks, 1979–2016.

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.	count	escape	Weir	Weir	Count	Escape.	Count	Escape.
1980									1,658					
1981									2,299					
1982														
1983	7,402	7,402									19,422	19,422	10,484	10,484
1984	13,084	13,084									6,707	6,707	9,764	9,764
1985	14,889	14,889	13,093	13,093							7,249	7,249	7,073	7,006
1986	13,820	13,820	11,446	11,446							3,414	3,414	5,857	5,457
1987	12,007	12,007	2,794	2,794		25					7,839	7,839	9,319	9,319
1988	10,637	10,637	2,063	2,063						**138**	**1,199**	1,199	969	710
1989	9,606	9,606	3,039	3,039							**1,109**	775	12,229	10,114
1990	9,443	7,777	5,736	4,929						2,515	**1,262**	757	**18,064**	16,867
1991	22,942	21,001	8,381	7,585							**9,208**	8,666	299	299
1992	14,372	12,732	6,576	5,681					**1,457**	**297**	**22,674**	21,849	9,439	8,136
1993	17,432	16,685	5,028	4,230					**6,312**	2,463				
1994	13,438	12,691	4,371	3,578					5,427	960				
1995	11,524	11,524			5,780	4,387			3,310	3,711			**16,208**	14,260
1996	5,483	5,483			10,381	8,026			4,243	2,538			20,000	18,610
1997	5,924	5,924			8,363	5,981			5,746	1,857			**4,999**	
1998	8,717	8,717			5,997	4,735			1,934	345			**13,358**	
1999	11,805	11,805			2,104	1,888			10,042				**10,277**	
2000	11,551	11,551			7,575	5,570			4,096				**6,764**	
2001	16,860	16,860			22,575	19,579			1,663	935			**8,060**	
2002	**7,973**	**7,973**			**5,495**	**4,379**			7,697				**5,016**	
2003	31,227	31,227			4,515	2,965			7,769				**7,014**	
2004	9,613	9,613			1,951	1,357	5,005	5,005	1,578		na	na	**7,813**	
2005	16,009	16,009			3,372	2,445	1,046	1,046	6,004		na	na	**7,538**	
2006	25,265	24,557			22,475	19,820	2,177	2,177	1,015		na	na	**4,163**	
2007	7,153	6,340			11,187	8,384	5	5	204		na	na	**3,099**	
2008	3,831	2,791			8,976	6,176	888	888	1,547		na	na	**1,763**	
2009	5,552	5,443			2,032	1,292	55	55	1,442		na	na	3,689	3,689
2010	3,347	3,387			3,513	2,113	2,977	2,977	1,626		na	na	5,643	5,643
2011	3,809	3,809			7,880	6,580	**2,899**	**2,899**	811		na	na	4,777	4,777
2012	10,015	10,015			15,605	**14,305**	5,413	5,263	182		na	na	5,681	5,681
2013	4,840	4,840			10,246	8,946	485	485	1,195		na	na	6,427	6,427
2014	6,607	6,707			2,106	1,348	1,061	910	208				5,062	5,062
2015	13,253	13,253			1,537	939	1,683	1,683	341				4,888	4,888
2016	7,771	7,594			32,934		6,404	6,404	1,476				5,538	5,538
Averages														
83-15	11,498	11,217											7,540	
06-15	8,367	8,114			8,556	6,990			857				4,519	

Appendix D. 18. Historical Taku River coho salmon harvested in D111 terminal fisheries, 1992–2016.

Sportfish estimate is based on all landings made in Juneau (not just District 111)						
	D111 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	101,292
1995	51,286	7,263	7,857	2,920	97	59,240
1996	14,491	2,762	2,461	1,162	67	17,019
1997	1,489	412	4,963	1,674	27	6,479
1998	12,972	2,015	3,984	1,084	86	17,042
1999	5,572	913	3,393	997	44	9,009
2000	7,352	1,355	4,137	1,148	31	11,520
2001	9,212	1,523	2,505	813	22	11,739
2002	26,981	4,257	6,189	1,346	68	33,238
2003	19,659	6,937	5,421	1,727	59	25,139
2004	13,058	2,937	12,720	3,528	120	25,898
2005	18,011	5,679	3,573	1,830	134	21,718
2006	32,051	4,020	3,985	1,017	134	36,170
2007	15,753	2,416	804	488	60	16,617
2008	23,806	5,028	493	362	91	24,390
2009	36,757	5,033	5,949	2,445	240	42,946
2010	41,695	8,703	13,301	4,491	258	55,254
2011	4,829	1,237	4,340	977	224	9,393
2012	10,760	2,674	662	465	132	11,554
2013	23,269	3,330	1,793	716	238	25,300
2014	28,297	5,127	2,628	1,445	224	31,149
2015	6,239	2,163	3,063	1,699	256	9,558
2016	12,717	2,737	1,044	604	169	13,930
average						
06-15	22,346		3,702		186	26,233

Appendix D. 19. Historical coho salmon in the Canadian fisheries in the Taku River, 1987–2016.

	Commercial					
Year	Total	Before SW34	SW34 to end	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	
2013	10,264	2,406	7,858	111	0	
2014	14,464	2,696	11,768	104	2,000	
2015	7,886	2,427	5,459	299	1,998	
2016	9,466	1,983	7,483	47	2,007	
Averages						
83-15	6,010			172		
06-15	8,632			160	2,364	

Appendix D. 20. Historic Taku River coho salmon run size, 1987–2016.

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

	Above Border MR							Terminal			
	Run	End	Expansion		Expanded	Canadian		U.S.		Harvest	Total
Year	Estimate	Date	Method	Factor	Estimate	Harvest	Escape.	Harvest	Run	Rate	Run
1987	43,750	20-Sep	Test Fish CPUE	1.42	61,976	6,519	55,457				
1988	43,093	18-Sep		1.00	43,093	3,643	39,450				
1989	60,841	1-Oct		1.00	60,841	4,033	56,808				
1990	75,881			1.00	75,881	3,685	72,196				
1991	132,923			1.00	132,923	5,439	127,484				
1992	49,928	5-Sep	District 111-32 CPUE	1.79	89,270	5,541	83,729	74,745	164,015	0.490	212,798
1993	67,448	11-Sep	District 111-32 CPUE	1.84	123,964	4,634	119,330	35,703	159,667	0.253	249,320
1994	98,643	24-Sep	District 111-32 CPUE	1.13	111,036	14,693	96,343	101,292	212,328	0.546	339,736
1995	61,738	30-Sep	District 111-32 CPUE	1.12	69,448	13,738	55,710	59,240	128,688	0.567	181,116
1996	44,172	28-Sep	District 111-32 CPUE	1.12	49,687	5,052	44,635	17,019	66,706	0.331	94,283
1997	35,035	27-Sep	District 111-32 CPUE	1.00	35,035	2,690	32,345	6,479	41,514	0.221	50,886
1998	49,290	26-Sep	District 111-32 CPUE	1.35	66,472	5,090	61,382	17,042	83,514	0.265	119,925
1999	59,052	3-Oct	Troll CPUE	1.12	66,343	5,575	60,768	9,009	75,352	0.194	117,176
2000	70,147	2-Oct	no expansion	1.00	70,147	5,447	64,700	11,520	81,667	0.208	109,148
2001	107,493	5-Oct	no expansion	1.00	107,493	3,099	104,394	11,739	119,232	0.124	162,777
2002	223,162	7-Oct	no expansion	1.00	223,162	3,802	219,360	33,238	256,400	0.144	303,275
2003	186,755	8-Oct	no expansion	1.00	186,755	3,643	183,112	25,139	211,894	0.136	265,090
2004	139,011	8-Oct	no expansion	1.00	139,011	9,684	129,327	25,898	164,909	0.216	251,537
2005	143,817	8-Oct	no expansion	1.00	143,817	8,259	135,558	21,718	165,535	0.181	222,997
2006	134,053	8-Oct	no expansion	1.00	134,053	11,669	122,384	36,170	170,223	0.281	226,694
2007	82,319	8-Oct	no expansion	1.00	82,319	8,073	74,246	16,617	98,936	0.250	133,301
2008	99,199	8-Oct	no expansion	1.00	99,199	3,973	95,226	24,390	123,589	0.229	174,070
2009	113,716	8-Oct	no expansion	1.00	113,716	9,766	103,950	42,946	156,662	0.336	224,010
2010	141,238	8-Oct	no expansion	1.00	141,238	14,408	126,830	55,254	196,492	0.355	246,822
2011	83,349	9-Oct	no expansion	1.00	83,349	12,478	70,871	9,393	92,742	0.236	129,939
2012	61,797	15-Sep	CYI run timing	1.37	84,847	14,072	70,775	11,554	96,401	0.266	112,947
2013	55,161	12-Sep	CYI run timing	1.42	78,492	10,375	68,117	25,300	103,792	0.344	143,410
2014	140,739	9-Oct	no expansion	1.00	140,739	16,568	124,171	31,149	171,888	0.278	189,655
2015	70,361	9-Oct	no expansion	1.00	70,361	10,183	60,178	9,558	79,919	0.247	104,344
2016	99,224	9-Oct	no expansion	1.00	99,224	11,520	87,704	13,930	113,154	0.225	125,323
Averages											
87-15	92,211	30-Jan		1.13	99,471	7,787	91,684	29,671	134,253	0.279	179,623
06-15	98,193	3-Oct		1.08	102,831	11,157	91,675	26,233	129,064	0.282	168,519

Appendix D. 21. Historical effort in the Alaskan District 111 and Subdistrict 111-32 (Taku Inlet) commercial drift gillnet fishery, 1960–2016.

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

	D111		D111-32		
Year	Boat Days	Days Open	Boat Days	Days Open	PU Permits
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	2,524	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
2013	3,311	62.00	2,375	61.00	158
2014	3,164	65.00	2,422	65.00	135
2015	2,096	44.00	1,745	43.00	119
2016	2,850	56.00	2,022	52.00	138
Averages					
60-15	2,990	48	2,248	46	
06-15	3,068	58	2,335	56	125

Appendix D. 22. Historical effort in the Canadian commercial fishery in the Taku River, 1979–2016.

	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
2013	346	53
2014	437	53
2015	271	35
2016	314	60
Averages		
79-15	340	43
06-15	375	58

Appendix D. 23. Canyon Island fish wheel salmon counts and periods of operation on the Taku River, 1984–2016.

Total counts from both fishwheels and suppentmental gillnets when water is low

		Catch												
	Period of	Traditional - CYI Fish Wheel 1 and 2					Current - CYI Fish Wheels and Downriver Fish Wheel					Pink		
Year	Operation	Chinook	Sockeye	Coho	Pink	Chum	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
2013	6/16-9/9	796	4,240	1,132	4,666	269							4,666	11
2014	4/25-10/3	609	5,342	3,646	2,436	310						2,436		
2015	4/29-10/3	627	5,069	1,889	24,246	95							24,246	47
2016	5/3-9/27	142	4,942	981	1,369	66	164	1,419	148	1,838	15			
Averages														
84-15		941	5,154	2,278	14,270	428						11,928	16,611	75
06-15		710	4,623	2,179	11,189	271						8,712	13,663	63

Appendix E. 1. Weekly salmon harvest and effort in the lower Alsek River fisheries, 2016.

							Effort	
SW	Chinook	Sockeye	Coho	Pink	Chum	Boats	Days Open	Boat Days
	No Test fishery in 2015							
Commercial Fishery								
23								0.0
24	28	136	0	0	0	11	1.0	11.0
25	22	799	0	0	0	16	1.0	16.0
26	21	1,067	0	0	0	15	1.0	15.0
27	3	809	0	0	0	12	1.0	12.0
28	5	1,196	0	0	0	12	1.0	12.0
29	53	1,161	0	0	0	11	1.0	11.0
30	0	365	0	0	0	8	1.0	8.0
31	0	684	0	0	0	9	2.0	18.0
32	0	284	0	0	0	7	1.0	7.0
33	0	105	1	0	0	3	2.0	6.0
34-35	0	101	24	0	1	4	4.0	10.0
36	0	0	0	0	0	0	3.0	0.0
37	0	1	309	0	0	4	4.0	16.0
38-43	0	1	321	0	2	4	37	24.0
44	0	0	0	0	0	0	5.5	0.0
Total	132	6,709	655	0	3		66	166

Appendix E. 2. Weekly salmon harvest and effort in the Canadian Aboriginal and sport fisheries in the Alsek River, 2016.

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
Village Creek food fish			NA				NA				NA	
Harvest at Klukshu weir			0				37					
Food fish above Klukshu Weir			5				156					
24												
25												
26												
27												
28	Weekly		Weekly		Weekly		Weekly		Weekly		Weekly	
29	Data		Data		Data		Data		Data		Data	
30	Not		Not		Not		Not		Not		Not	
31	Available		Available		Available		Available		Available		Available	
32												
33												
34												
35												
36												
37												
38												
39												
40												
Total	80	24	10	90	0	24	815	815	0	0	0	0

Appendix E. 3. Daily counts of salmon passing through Klukshu River weir, 2016.

	All Chinook			Sockeye			Coho		
		Cumulative			Cumulative			Cumulative	
Date	Daily	Daily	Prop.	Daily	Daily	Prop.	Daily	Daily	Prop.
15-Jun	weir installed	0	0.000	weir installed	0	0.000	weir installed	0	0.000
15-Jun	2	2	0.003	0	0	0.000	0	0	0.000
16-Jun	0	2	0.003	0	0	0.000	0	0	0.000
17-Jun	0	2	0.003	0	0	0.000	0	0	0.000
18-Jun	2	4	0.006	0	0	0.000	0	0	0.000
19-Jun	1	5	0.008	0	0	0.000	0	0	0.000
20-Jun	2	7	0.011	0	0	0.000	0	0	0.000
21-Jun	3	10	0.015	0	0	0.000	0	0	0.000
22-Jun	2	12	0.018	0	0	0.000	0	0	0.000
23-Jun	3	15	0.023	0	0	0.000	0	0	0.000
24-Jun	3	18	0.028	0	0	0.000	0	0	0.000
25-Jun	2	20	0.031	0	0	0.000	0	0	0.000
26-Jun	0	20	0.031	0	0	0.000	0	0	0.000
27-Jun	2	22	0.034	0	0	0.000	0	0	0.000
28-Jun	6	28	0.043	0	0	0.000	0	0	0.000
29-Jun	0	28	0.043	0	0	0.000	0	0	0.000
30-Jun	0	28	0.043	0	0	0.000	0	0	0.000
1-Jul	2	30	0.046	0	0	0.000	0	0	0.000
2-Jul	0	30	0.046	0	0	0.000	0	0	0.000
3-Jul	3	33	0.051	0	0	0.000	0	0	0.000
4-Jul	1	34	0.052	0	0	0.000	0	0	0.000
5-Jul	3	37	0.057	0	0	0.000	0	0	0.000
6-Jul	5	42	0.065	0	0	0.000	0	0	0.000
7-Jul	4	46	0.071	1	1	0.000	0	0	0.000
8-Jul	7	53	0.081	0	1	0.000	0	0	0.000
9-Jul	11	64	0.098	0	1	0.000	0	0	0.000
10-Jul	7	71	0.109	2	3	0.000	0	0	0.000
11-Jul	4	75	0.115	29	32	0.004	0	0	0.000
12-Jul	7	82	0.126	0	32	0.004	0	0	0.000
13-Jul	17	99	0.152	23	55	0.007	0	0	0.000
14-Jul	19	118	0.181	0	55	0.007	0	0	0.000
15-Jul	14	132	0.203	2	57	0.008	0	0	0.000
16-Jul	4	136	0.209	26	83	0.011	0	0	0.000
17-Jul	6	142	0.218	0	83	0.011	0	0	0.000
18-Jul	1	143	0.220	2	85	0.011	0	0	0.000
19-Jul	18	161	0.247	90	175	0.023	0	0	0.000
20-Jul	102	263	0.404	5	180	0.024	0	0	0.000
21-Jul	21	284	0.436	4	184	0.024	0	0	0.000
22-Jul	5	289	0.444	7	191	0.025	0	0	0.000
23-Jul	10	299	0.459	0	191	0.025	0	0	0.000
24-Jul	29	328	0.504	4	195	0.026	0	0	0.000
25-Jul	93	421	0.647	8	203	0.027	0	0	0.000
26-Jul	14	435	0.668	2	205	0.027	0	0	0.000
27-Jul	32	467	0.717	18	223	0.029	0	0	0.000
28-Jul	26	493	0.757	16	239	0.032	0	0	0.000
29-Jul	16	509	0.782	90	329	0.043	0	0	0.000
30-Jul	52	561	0.862	16	345	0.045	0	0	0.000
31-Jul	6	567	0.871	0	345	0.045	0	0	0.000
1-Aug	3	570	0.876	1	346	0.046	0	0	0.000
2-Aug	5	575	0.883	56	402	0.053	0	0	0.000
3-Aug	16	591	0.908	35	437	0.058	0	0	0.000
4-Aug	7	598	0.919	0	437	0.058	0	0	0.000
5-Aug	1	599	0.920	152	589	0.078	0	0	0.000
6-Aug	13	612	0.940	185	774	0.102	0	0	0.000
7-Aug	6	618	0.949	75	849	0.112	0	0	0.000
8-Aug	4	622	0.955	52	901	0.119	0	0	0.000
9-Aug	4	626	0.962	110	1,011	0.133	0	0	0.000

- Continued –

Appendix E.3. Page 2 of 2.

	All Chinook			Sockeye			Coho		
		Cumulative			Cumulative			Cumulative	
Date	Daily	Daily	Prop.	Daily	Daily	Prop.	Daily	Daily	Prop.
10-Aug	7	633	0.972	139	1,150	0.152	0	0	0.000
11-Aug	3	636	0.977	157	1,307	0.172	0	0	0.000
12-Aug	2	638	0.980	40	1,347	0.178	0	0	0.000
13-Aug	2	640	0.983	0	1,347	0.178	0	0	0.000
14-Aug	1	641	0.985	34	1,381	0.182	0	0	0.000
15-Aug	1	642	0.986	24	1,405	0.185	0	0	0.000
16-Aug	1	643	0.988	193	1,598	0.211	0	0	0.000
17-Aug	1	644	0.989	70	1,668	0.220	0	0	0.000
18-Aug	0	644	0.989	0	1,668	0.220	0	0	0.000
19-Aug	3	647	0.994	122	1,790	0.236	0	0	0.000
20-Aug	0	647	0.994	49	1,839	0.242	0	0	0.000
21-Aug	2	649	0.997	389	2,228	0.294	0	0	0.000
22-Aug	0	649	0.997	202	2,430	0.320	0	0	0.000
23-Aug	0	649	0.997	24	2,454	0.324	0	0	0.000
24-Aug	1	650	0.998	119	2,573	0.339	0	0	0.000
25-Aug	0	650	0.998	728	3,301	0.435	0	0	0.000
26-Aug	0	650	0.998	255	3,556	0.469	0	0	0.000
27-Aug	0	650	0.998	59	3,615	0.477	0	0	0.000
28-Aug	0	650	0.998	53	3,668	0.484	0	0	0.000
29-Aug	0	650	0.998	272	3,940	0.520	0	0	0.000
30-Aug	1	651	1.000	297	4,237	0.559	0	0	0.000
31-Aug	0	651	1.000	54	4,291	0.566	0	0	0.000
1-Sep	0	651	1.000	203	4,494	0.593	0	0	0.000
2-Sep	0	651	1.000	201	4,695	0.619	0	0	0.000
3-Sep	0	651	1.000	212	4,907	0.647	0	0	0.000
4-Sep	0	651	1.000	182	5,089	0.671	0	0	0.000
5-Sep	0	651	1.000	248	5,337	0.704	0	0	0.000
6-Sep	0	651	1.000	177	5,514	0.727	0	0	0.000
7-Sep	0	651	1.000	16	5,530	0.729	0	0	0.000
8-Sep	0	651	1.000	26	5,556	0.733	0	0	0.000
9-Sep	0	651	1.000	175	5,731	0.756	0	0	0.000
10-Sep	0	651	1.000	590	6,321	0.833	3	3	0.001
11-Sep	0	651	1.000	10	6,331	0.835	0	3	0.001
12-Sep	0	651	1.000	114	6,445	0.850	0	3	0.001
13-Sep	0	651	1.000	123	6,568	0.866	12	15	0.007
14-Sep	0	651	1.000	45	6,613	0.872	10	25	0.012
15-Sep	0	651	1.000	55	6,668	0.879	0	25	0.012
16-Sep	0	651	1.000	18	6,686	0.882	0	25	0.012
17-Sep	0	651	1.000	46	6,732	0.888	0	25	0.012
18-Sep	0	651	1.000	55	6,787	0.895	0	25	0.012
19-Sep	0	651	1.000	130	6,917	0.912	0	25	0.012
20-Sep	0	651	1.000	44	6,961	0.918	0	25	0.012
21-Sep	0	651	1.000	69	7,030	0.927	0	25	0.012
22-Sep	0	651	1.000	134	7,164	0.945	16	41	0.019
23-Sep	0	651	1.000	77	7,241	0.955	1	42	0.020
24-Sep	0	651	1.000	54	7,295	0.962	9	51	0.024
25-Sep	0	651	1.000	52	7,347	0.969	5	56	0.026
26-Sep	0	651	1.000	31	7,378	0.973	6	62	0.029
27-Sep	0	651	1.000	52	7,430	0.980	63	125	0.058
28-Sep	0	651	1.000	13	7,443	0.981	68	193	0.090
29-Sep	0	651	1.000	36	7,479	0.986	106	299	0.140
30-Sep	0	651	1.000	22	7,501	0.989	143	442	0.206
1-Oct	0	651	1.000	28	7,529	0.993	185	627	0.293
2-Oct	0	651	1.000	7	7,536	0.994	233	860	0.402
3-Oct	0	651	1.000	9	7,545	0.995	134	994	0.464
4-Oct	0	651	1.000	8	7,553	0.996	165	1,159	0.541
5-Oct	0	651	1.000	22	7,575	0.999	770	1,929	0.901
6-Oct	0	651	1.000	9	7,584	1.000	212	2,141	1.000
6-Oct	weir removed	651	1.000	weir removed	7,584	1.000	weir removed	2,141	1.000
Total Count		651			7,584			2,141	
Adjustments									
Harvest at weir					37				
Harvest above weir									
Total Escapement		651			7,547			2,141	

Appendix E. 4. Chinook salmon harvest in the U.S. fisheries in the Alsek River, 1960–2016.

Year	Commercial	Test	Subsistence
1960			
1961	2,120		
1962			
1963	131		
1964	591		
1965	719		
1966	934		
1967	225		
1968	215		
1969	685		
1970	1,128		
1971	1,222		
1972	1,827		
1973	1,757		
1974	1,162		
1975	1,379		
1976	512		13
1977	1,402		18
1978	2,441		
1979	2,525		80
1980	1,382		57
1981	779		32
1982	532		87
1983	94		31
1984	60		
1985	213		16
1986	481		22
1987	347		27
1988	223		13
1989	228		20
1990	78		85
1991	103		38
1992	301		15
1993	300		38
1994	805		60
1995	670		51
1996	772		60
1997	568		38
1998	550		63
1999	482		44
2000	677		73
2001	541		19
2002	700		60
2003	937		24
2004	656		51
2005	286	423	31
2006	530	135	47
2007	400	347	79
2008	128	465	34
2009	602	421	57
2010	273		70
2011	546		42
2012	510	251	50
2013	469		13
2014	1,074		23
2015	243		5
2016	132		8
Averages			
61-15	713		41
06-15	478		42

Appendix E. 5. Klukshu River weir counts, harvest, and escapement of all Chinook salmon, 1976-2016.

A portion of Klukshu River Chinook salmon harvested below weir are accounted for in drainagewide see estimate E.6.

	Weir	Harvest		
Year	Count	At weir	Above weir	Escapement
1976	1,278		125	1,153
1977	3,144		250	2,894
1978	2,976		300	2,676
1979	4,404		1,950	2,454
1980	2,637		150	2,487
1981	2,113		150	1,963
1982	2,369		400	1,969
1983	2,537		300	2,237
1984	1,672		100	1,572
1985	1,458		175	1,283
1986	2,709		102	2,607
1987	2,616		125	2,491
1988	2,037		43	1,994
1989	2,456		167	2,289
1990	1,915		173	1,742
1991	2,489		241	2,248
1992	1,367		125	1,242
1993	3,302		82	3,220
1994	3,727		99	3,628
1995	5,678		284	5,394
1996	3,599		217	3,382
1997	2,989		160	2,829
1998	1,364		17	1,347
1999	2,193		25	2,168
2000	1,365		44	1,321
2001	1,825		87	1,738
2002	2,240		106	2,134
2003	1,737		76	1,661
2004	2,525		80	2,445
2005	1,070		107	963
2006	568		2	566
2007	677		1	676
2008	466		0	466
2009	1,571	1	52	1,518
2010	2,358	0	99	2,259
2011	1,671	3	58	1,610
2012	693	0	0	693
2013	1,261	0	34	1,227
2014	841	0	9	832
2015	1,432	0	44	1,388
2016	651	0	5	646
Averages				
76-15	2,133		164	1,969
06-15	1,154		30	1,124

2012 weir count was adjusted to account for high water years when weir was disable

Appendix E. 6. Chinook salmon harvest in the Canadian Aboriginal and recreational fisheries in the Alsek River, 1998–2004.

All Klukshu harvest is included in the Alsek River harvest totals.

			CI		Harvest				Total
Year	Above border run	Method[a]	Lower	Upper	Aboriginal	Recreational	Total	Escapement	Inriver run
1998	7,179	Mark-recapture	3,027	9,765	171	175	346	6,833	7,929
1999	15,027	Mark-recapture	8,243	22,035	238	174	412	14,615	15,587
2000	8,047	Mark-recapture	6,805	14,308	65	77	142	7,905	8,807
2001	6,982	Mark-recapture	9,146	14,303	120	157	277	6,705	7,943
2002	5,886	Mark-recapture	8,345	10,790	120	197	317	5,569	6,593
2003	6,132	Mark-recapture	4,302	6,310	90	138	228	5,904	6,872
2004	7,268	Mark-recapture			139	46	185	7,083	7,980

Appendix E. 7. Aerial survey index counts of Alsek River Chinook salmon escapements, 1984–2016.

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	No survey	158	34
1990	No survey	325	32
1991	121	86	63
1992	86	77	16
1993	326	351	50
1994	349	342	67
1995	338	260	[a]
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		
2013	No surveys conducted		
2014	No surveys conducted		
2015	No surveys conducted		
2016	No surveys conducted		

[a] Late survey date which missed the peak of spawning.

Appendix E. 8. Sockeye salmon harvest in the U.S. fisheries in the Alsek River, 1960–2016.

Year	Commercial	Test	Subsistence
1960			
1961	23,339		
1962			
1963	6,055		
1964	14,127		
1965	28,487		
1966	29,091		
1967	11,108		
1968	26,918		
1969	29,259		
1970	22,654		
1971	25,314		
1972	18,717		
1973	26,523		
1974	16,747		
1975	13,842		
1976	19,741		51
1977	40,780		113
1978	50,580		
1979	41,449		35
1980	25,522		41
1981	23,641		50
1982	27,443		75
1983	18,293		25
1984	14,326		
1985	5,792		95
1986	24,791		241
1987	11,393		173
1988	6,286		148
1989	13,513		131
1990	17,013		144
1991	17,542		104
1992	19,298		37
1993	20,043		96
1994	19,639		47
1995	33,112		167
1996	15,182		67
1997	25,879		273
1998	15,007		158
1999	11,441		152
2000	9,522		146
2001	13,995		72
2002	16,918		232
2003	39,698		176
2004	18,030		224
2005	7,572	222	63
2006	9,842	224	272
2007	19,795	367	298
2008	2,815	55	200
2009	12,906		245
2010	12,668		259
2011	24,169	157	175
2012	18,217	90	167
2013	7,517		102
2014	33,668		60
2015	16,104		111
2016	6,709		922
Averages			
61-14	19,948		138
05-14	14,917		184

Appendix E. 9. Klukshu River sockeye salmon weir count, weir harvest, and escapement, 1976–2016.

A portion of Klukshu River sockeye salmon harvested below weir are accounted for in drainagewide estimate see E.10.

			Weir	Harvest		
Year	Early (to August 16)	Late	Count	At weir	Above weir	Escapement
1976	181	11,510	11,691		3,750	7,941
1977	8,931	17,860	26,791		11,350	15,441
1978	2,508	24,359	26,867		7,850	19,017
1979	977	11,334	12,311		5,260	7,051
1980	1,008	10,742	11,750		900	10,850
1981	997	19,351	20,348		1,900	18,448
1982	7,758	25,941	33,699		4,800	28,899
1983	6,047	14,445	20,492		2,475	18,017
1984	2,769	9,958	12,727		2,500	10,227
1985	539	18,081	18,620		1,361	17,259
1986	416	24,434	24,850		1,914	22,936
1987	3,269	7,235	10,504		1,158	9,346
1988	585	8,756	9,341		1,604	7,737
1989	3,400	20,142	23,542		1,906	21,636
1990	1,316	24,679	25,995		1,388	24,607
1991	1,924	17,053	18,977		1,332	17,645
1992	11,339	8,428	19,767		1,498	18,269
1993	5,369	11,371	16,740		1,819	14,921
1994	3,247	11,791	15,038		1,146	13,892
1995	2,289	18,407	20,696		879	19,817
1996	1,502	6,818	8,320		429	7,891
1997	6,565	4,931	11,496		193	11,303
1998	597	12,994	13,591		11	13,580
1999	371	5,010	5,381		280	5,101
2000	237	5,314	5,551		129	5,422
2001	908	9,382	10,290		961	9,329
2002	11,904	13,807	25,711		2,124	23,587
2003	3,084	31,278	34,362		2,242	32,120
2004	3,464	11,884	15,348		1,627	13,721
2005	994	2,379	3,373		206	3,167
2006	247	13,208	13,455		565	12,890
2007	2,725	6,231	8,956		646	8,310
2008	43	2,698	2,741		0	2,741
2009	1,247	4,484	5,731	75	128	5,528
2010	5,073	13,887	18,960	91	323	18,546
2011	5,635	15,767	21,402	262	358	20,782
2012	5,969	11,725	17,694	214	304	17,176
2013	312	3,581	3,893	0	101	3,792
2014	2,732	9,652	12,384	10	226	12,148
2015	2,604	8,984	11,588	10	215	11,363
2016	1,405	6,179	7,584	37	156	7,391
Averages						
76-15	3,027	12,747	15,774			14,061
06-15	2,659	9,022	11,680			11,328

2012 weir count was adjusted to account for high water years when weir was disabled

Appendix E. 10. Sockeye salmon harvest in the Canadian Aboriginal and recreational fisheries in the Alsek River, 1976–2016.

Harvest of Klukshu River sockeye salmon below the weir is included in harvest estimates

	Harvest		
Year	Aboriginal	Recreational	Total
1976	4,000	600	4,600
1977	10,000	500	10,500
1978	8,000	500	8,500
1979	7,000	750	7,750
1980	800	600	1,400
1981	2,000	808	2,808
1982	5,000	755	5,755
1983	2,550	732	3,282
1984	2,600	289	2,889
1985	1,361	100	1,461
1986	1,914	307	2,221
1987	1,158	383	1,541
1988	1,604	322	1,926
1989	1,851	319	2,170
1990	2,314	392	2,706
1991	2,111	303	2,414
1992	2,592	582	3,174
1993	2,361	329	2,690
1994	1,745	261	2,006
1995	1,745	682	2,427
1996	1,204	157	1,361
1997	484	36	520
1998	567	18	585
1999	554	0	554
2000	745	0	745
2001	1,173	4	1,177
2002	2,194	61	2,255
2003	2,734	61	2,795
2004	1,875	247	2,122
2005	581	13	594
2006	1,321	6	1,327
2007	1,330	10	1,340
2008	0	0	0
2009	715	2	717
2010	1,704	12	1,716
2011	2,053	57	2,110
2012	1,734	52	1,786
2013	508	0	508
2014	1,140	0	1,140
2015	1,084	0	1,084
2016	815	0	815
Averages			
76-15	2,160	256	2,416
06-15	1,159	14	1,173

Appendix E. 11. Alsek River sockeye salmon escapement, 2000–2006, 2012–2016.

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.

	Above border Run	CI		Canadian	Spawning	U.S.	Total	Spawning Escapement
Year	Estimate	Lower	Upper	Harvest	Escapement	Harvest	Inriver Run	Percent Klukshu
2000	37,887	23,410	52,365	745	37,142	9,668	47,555	14.6%
2001	31,164	23,143	39,185	1,177	29,987	14,067	45,231	31.1%
2002	95,427	55,893	134,961	2,255	93,172	17,150	112,577	25.3%
2003	103,507	74,350	132,664	2,795	100,712	39,874	143,381	31.9%
2004	83,703	39,566	127,841	2,122	81,581	18,254	101,957	16.8%
2005	57,817	21,907	93,727	594	57,223	7,857	65,674	5.5%
2006	48,901	41,234	56,569	1,327	47,574	10,338	59,239	27.1%
2011	86,009	72,970	99,049	2,110	83,899	24,501	110,510	24.8%
2012	78,384	64,311	92,456	1,786	76,598	18,474	96,858	22.4%
2013	84,279	16,466	152,091	508	83,771	7,619	91,898	4.5%
2014	88,233	69,508	106,958	1,140	87,093	33,728	121,961	13.9%
2015	64,793	47,474	82,111	1,084	63,709	16,215	81,008	17.8%
2016	59,651	43,558	75,743	815	58,836	7,631	67,282	12.6%
Averages								
11-15	80,340			1,326	79,014	20,107	100,447	16.7%

Appendix E. 12. Alsek River sockeye counts from U.S. and Canada, 1985–2016.

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

	U.S. Aerial Surveys				Canada Aerial Surveys		
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[a]	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[a]	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**
2013	No surveys flown						129
2014	No surveys flown					700	**189**
2015	No surveys flown						Not conducted
2016	No surveys flown						410
Averages							
86-14							2,596
06-14							1,985

[a]No counts due to malfunction of the counter

Appendix E. 13. Coho, pink, and chum salmon harvest in the U.S. fisheries in the Alsek River, 1960–2016.

				Effort		Subsistence
	Coho	Pink	Chum	Boat Days	Days Open	coho
1960						
1961	7,679	84	86	1,436	80.0	
1962						
1963	7,164	42	34	692	68.0	
1964	9,760	144	367	592	68.0	
1965	9,638	10	72	1,016	72.0	
1966	2,688	22	240	500	64.0	
1967	10,090	107	30	600	68.0	
1968	10,586	82	240	664	68.0	
1969	2,493	38	61	807	61.0	
1970	2,188	6	26	670	52.3	
1971	4,730	3	120	794	60.5	
1972	7,296	37	280	640	65.0	
1973	4,395	26	283	894	52.0	
1974	7,046	13	107	699	46.0	
1975	2,230	16	261	738	58.0	
1976	4,883	0	368	550	58.5	5
1977	11,817	689	483	882	57.0	0
1978	13,913	59	233	929	57.0	
1979	6,158	142	263	1,110	51.0	70
1980	7,863	21	1,005	773	42.0	62
1981	10,232	65	816	588	40.0	74
1982	6,534	6	358	552	33.0	50
1983	5,253	20	432	487	38.0	50
1984	7,868	24	1,610	429	33.0	
1985	5,490	3	427	277	33.0	0
1986	1,344	13	462	517	34.0	45
1987	2,517	0	1,924	388	40.5	31
1988	4,986	7	908	324	34.0	9
1989	5,972	2	1,031	378	38.0	34
1990	1,437	0	495	374	38.0	12
1991	5,956	0	105	530	49.0	0
1992	3,116	1	120	372	46.0	44
1993	1,215	0	49	372	40.0	28
1994	4,182	0	32	403	61.0	20
1995	14,184	13	347	879	53.5	53
1996	5,514	0	165	419	51.0	28
1997	11,427	0	34	611	59.0	26
1998	4,925	1	145	358	41.0	42
1999	5,660	0	112	319	44.0	21
2000	5,103	5	130	307	37.0	31
2001	2,909	8	17	234	50.0	45
2002	9,525	0	1	270	73.0	35
2003	47	0	0	271	60.0	27
2004	2,475	0	2	280	76.5	21
2005	1,196	0	0	171	41.0	62
2006	701	2	3	248	45.0	23
2007	134	0	0	199	47.0	27
2008	2,668	0	0	177	34.0	28
2009	3,454	0	20	200	44.0	17
2010	1,884	0	9	192	37.0	0
2011	1,614	0	11	235	46.0	18
2012	536	0	1	459	39.0	22
2013	17	0	5	285	46.0	14
2014	3	0	12	239	47.0	0
2015	11	0	0	227	57.0	6
2016	655	0	3	166	65.5	18
Averages						
76-15	5,050	32	266	510	50.6	28
06-15	1,102	0	6	246	44.2	16

Appendix E. 14. Klukshu River weir count, harvest, and escapement of coho salmon, 1976–2016.

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

Year	Count	harvest	Escape
1976	1,572		
1977	2,758		
1978	30		
1979	175		
1980	704		
1981	1,170		
1982	189		
1983	303		
1984	1,402		
1985	350		
1986	71		
1987	202		
1988	2,774		
1989	2,219		
1990	315		
1991	8,540	62	8,478
1992	1,145	0	1,145
1993	788	0	788
1994	1,232	0	1,232
1995	3,614	50	3,564
1996	3,465	0	3,465
1997	307	5	302
1998	1,961	0	1,961
1999	2,531	0	2,531
2000	4,832	41	4,791
2001	748	2	746
2002	9,921	0	9,921
2003	3,689	0	3,689
2004	750	0	750
2005	683	20	663
2006	420	0	420
2007	300	1	299
2008	4,275	26	4,249
2009	424	3	421
2010	2,365	4	2,361
2011	2,119	9	2,110
2012	1,272	0	1,272
2013	7,322	0	7,322
2014	341	0	341
2015	1,810	0	1,810
2016	2,141	0	2,141
Averages			
76-15	1,977		
06-15	2,065	4	2,061

2012 weir count was adjusted to account for high water years when weir was disabled

Appendix F. 1. Tahltan Lake egg collection, fry plants, and survivals, 1989–2016.

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 Mark
Brood Year	Target	Collected	Tahltan	Planted	Green to Eyed Egg	Eyed Egg to Fry	Green Egg to Fry	Pattern
1989	3.000	2.955	2.955	1.042	70%	0.501	0.353	1:1.4
1990	5.000	4.511	4.511	3.585	82%	0.964	0.795	1:1.3
1991	5.000	4.246	1.514	1.415	95%	0.759	0.935	1:1.4
1992	5.400	4.901	2.154	1.947	92%	0.869	0.904	1:1.4+2.3
1993	6.000	6.140	0.969	0.904	92%	0.994	0.933	1:1.6+2.5n
1994	6.000	4.183	1.418	1.143	89%	0.916	0.806	1:1.6
1995	6.000	6.891	3.008	2.296	84%	0.821	0.763	1:1.7
1996	6.000	6.402	3.169	2.248	93%	0.818	0.709	1:1.6
1997	6.000	3.221	2.700	1.900	83%	0.875	0.704	2:1.6
1998	6.000	4.022	1.998	1.671	91%	0.891	0.836	1:1.7
1999	6.000	3.826	2.773	2.228	92%	0.883	0.804	2:1.6
2000	6.000	2.388	2.388	1.873	92%	0.853	0.784	1:1.7
2001	6.000	3.306	3.306	2.533	83%	0.924	0.766	2:1.6
2002	6.000	4.050	2.780	2.623	92%	1.006	0.943	1:1.7
2003	6.000	5.391	2.661	2.226	91%	0.949	0.836	1:1.6&1:1.5+2.4
2004	6.000	5.701	1.966	1.226	88%	0.882	0.624	1:1.6+2.6
2005	6.000	4.552	1.809	1.280	86%	0.872	0.708	1:1.4+2.2
2006	6.000	4.364	2.954	2.466	91%	0.923	0.835	1:1.3n,2.2
2007	6.000	4.060	2.209	1.540	80%	0.946	0.697	1,2n,3H
2008	6.000	3.386	2.398	1.395	85%	0.774	0.582	1,4H
2009	6.000	4.469	2.609	1.830	78%	0.802	0.701	5,2H
2010	6.000	5.949	3.097	1.230	82%	0.507	0.397	4,3H
2011	6.000	6.481	3.383	2.130	86%	0.669	0.630	3,2n,2H
2012[a]	6.000	5.597	3.674	1.349	72%	0.525	0.367	1,4H
2013	6.000	4.218	3.517	2.066	75%	0.794	0.587	4,3H&6,3H
2014[b]	6.000	3.898	3.898	2.684	76%	0.911	0.689	3,2n,2H&3,2n,2H3
2015[c]	6.000	4.509	4.509	3.399	84%	0.899	0.754	1,4H &14H4
2016	4.910	5.310	5.310	3.136	76%	0.780	0.591	4,3H & 3n,3H
Averages								
89-16	5.761	4.605	2.844	1.977	0.850	0.832	0.715	
07-16	5.891	4.788	3.460	2.076	0.794	0.761	0.599	

[a] A low weir count resulted in a bilateral inseason adjustment of the egg take target to 5.5 million

[b] The original goal of 6.0 million eggs at Tahltan Lake was reduced to 5.0 million by Canada due to domestic issues

[c] The original goal of 6.0 million eggs at Tahltan Lake was reduced to 5.5 million by Canada due to domestic issues

Appendix F. 2. Tuya Lake fry plants and survivals, 1991–2016.

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	gg 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 Lake.					
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
2012	1.924	0.755	0.816	0.481	0.392	4n,3H
2013	0.701	0.462	0.737	0.894	0.659	3n,3H
2014	0.000	0				
2015	0.000	0				
2016	0.000	0				
Averages						
91-13	2.347	1.718	0.880	0.830	0.734	
04-13	2.116	1.394	0.848	0.784	0.669	

Appendix F. 3. Tatsamenie Lake egg collection, fry plants, and survivals, 1989–2016.

Numbers for eggs and fry are millions.

	Egg Take			Fry	Percent	Survival		Thermal Mark	Last Date
Brood Year	Target	Collected	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[ab]	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[ab]	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[ab]	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[ab]	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
2013	2.000	1.812	1.325	1.321	0.758	0.590	0.587	2,1,2H & 2,2,3H	6-Jun
2014	2.000	1.289	0.918	0.918	0.869	0.716	0.712	3n,5H&6,2H	30-May
2015	2.000	0.731	0.471	0.471	0.801	0.646	0.644	3,2H & 3,3H	27-May
2016	2.000	1.773	1.201	1.201	0.734	0.923	0.678	2,1,2H & 2,2,3H	27-Jul
Averages									
90-16	3.261	2.300	1.690	1.658	0.865	0.750	0.714		
07-16	2.900	2.133	1.616	1.575	0.858	0.769	0.717		

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 unfed early north	1.897	13-Jun
2007	1,3n,2	unfed early midlake	0.971	6-Jun	2n3	2,3n1 unfed early north	1.150	5-Jun
2007	3,2n,1	extended rearing[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
2013	2,1,2H	unfed early north	1.136	6-Jun	2,2,3H	extended rearing	0.185	8-Aug
2014	3n,5H	unfed early north	0.731	22-May	6,2H	extended rearing	0.187	30-May
2015	3n,2H	unfed early north	0.384	14-May	3,3H	extended rearing	0.086	27-May
2016	2,1,2H	unfed early north	1.019	29-May	2,2,3H	net pen rearing	0.144	27-Jul
Averages								
98-16			1.106				0.556	
07-16			0.884				0.176	

[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, 1990–2016.

Numbers for eggs and fry are millions.

		Egg Take			Fry	Percent	Survival		Thermal	Last
							Fertilized	Green	Mark	Date
Brood Year	Lake	Target	Collect	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
2014	King Salmon	0.250	0.199	0.169	0.169	0.893	0.930	0.893	6,3H	23-May
2016	Trapper	0.250	0.271	0.212	0.212	0.873	0.782	0.683	4,4n,3H	29-May

Appendix G. 1. Annual stock proportion estimates (mean) of Chinook salmon harvested in the Alaskan District 108 commercial drift gillnet, 2016.

			Reporting Groups	
Year	Sample Size		Taku/Stikine	Other
2004	119	Estimate	0.299	0.701
		SD	0.052	0.052
		Lo	0.216	0.614
		Hi	0.386	0.784
2005	254	Estimate	0.887	0.113
		SD	0.026	0.026
		Lo	0.842	0.073
		Hi	0.927	0.158
2006	350	Estimate	0.642	0.358
		SD	0.034	0.034
		Lo	0.585	0.304
		Hi	0.696	0.415
2007	292	Estimate	0.489	0.511
		SD	0.036	0.036
		Lo	0.430	0.451
		Hi	0.549	0.570
2008	293	Estimate	0.387	0.613
		SD	0.035	0.035
		Lo	0.330	0.555
		Hi	0.445	0.670
2009	177	Estimate	0.128	0.872
		SD	0.031	0.031
		Lo	0.080	0.817
		Hi	0.183	0.920
2010	72	Estimate	0.215	0.785
		SD	0.067	0.067
		Lo	0.109	0.669
		Hi	0.331	0.891
2011	70	Estimate	0.346	0.654
		SD	0.067	0.067
		Lo	0.239	0.540
		Hi	0.460	0.761
2012	202	Estimate	0.248	0.752
		SD	0.036	0.036
		Lo	0.189	0.691
		Hi	0.309	0.811
2013	164	Estimate	0.068	0.932
		SD	0.029	0.029
		Lo	0.025	0.879
		Hi	0.121	0.975
2014	273	Estimate	0.043	0.957
		SD	0.018	0.018
		Lo	0.019	0.927
		Hi	0.073	0.981
2015	272	Estimate	0.047	0.953
		SD	0.021	0.021
		Lo	0.016	0.916
		Hi	0.084	0.984
2016	293	Estimate	0.220	0.780
		SD	0.029	0.029
		Lo	0.173	0.731
		Hi	0.269	0.827

Appendix G. 2. Annual stock proportion estimates (mean) of Chinook salmon harvested in the Alaskan District 108 sport fisheries, 2016.

			Reporting Groups	
Year	Sample Size		Taku/Stikine	Other
2004	189	Estimate	0.655	0.345
		SD	0.043	0.043
		Lo	0.583	0.276
		Hi	0.724	0.417
2005	226	Estimate	0.738	0.262
		SD	0.038	0.038
		Lo	0.674	0.201
		Hi	0.799	0.326
2006	201	Estimate	0.718	0.282
		SD	0.042	0.042
		Lo	0.648	0.216
		Hi	0.784	0.352
2007	200	Estimate	0.604	0.396
		SD	0.043	0.043
		Lo	0.532	0.326
		Hi	0.674	0.468
2008	200	Estimate	0.614	0.386
		SD	0.045	0.045
		Lo	0.539	0.314
		Hi	0.686	0.461
2009	190	Estimate	0.517	0.483
		SD	0.044	0.044
		Lo	0.445	0.412
		Hi	0.588	0.555
2010	201	Estimate	0.546	0.454
		SD	0.043	0.043
		Lo	0.475	0.382
		Hi	0.618	0.525
2011	199	Estimate	0.509	0.491
		SD	0.050	0.050
		Lo	0.427	0.407
		Hi	0.593	0.573
2012	201	Estimate	0.423	0.577
		SD	0.045	0.045
		Lo	0.350	0.502
		Hi	0.498	0.650
2013	223	Estimate	0.490	0.510
		SD	0.042	0.042
		Lo	0.422	0.442
		Hi	0.558	0.578
2014	205	Estimate	0.354	0.646
		SD	0.043	0.044
		Lo	0.285	0.575
		Hi	0.425	0.715
2015	297	Estimate	0.449	0.551
		SD	0.036	0.036
		Lo	0.390	0.492
		Hi	0.508	0.610
2016	251	Estimate	0.304	0.696
		SD	0.038	0.038
		Lo	0.242	0.634
		Hi	0.366	0.758

Appendix G. 3. Annual stock proportion estimates (mean) of Chinook salmon harvested in the Alaskan District 108 commercial troll, 2016.

			Reporting Groups	
Year	Sample Size		Taku/Stikine	Other
2004		Estimate		
		SD		
		Lo		
		Hi		
2005	118	Estimate	0.592	0.408
		SD	0.059	0.059
		Lo	0.494	0.313
		Hi	0.687	0.506
2006	166	Estimate	0.487	0.513
		SD	0.047	0.047
		Lo	0.410	0.436
		Hi	0.564	0.590
2007	217	Estimate	0.640	0.360
		SD	0.041	0.041
		Lo	0.572	0.294
		Hi	0.706	0.428
2008	200	Estimate	0.546	0.454
		SD	0.047	0.047
		Lo	0.469	0.377
		Hi	0.623	0.531
2009		Estimate		
		SD		
		Lo		
		Hi		
2010		Estimate		
		SD		
		Lo		
		Hi		
2011		Estimate		
		SD		
		Lo		
		Hi		
2012		Estimate		
		SD		
		Lo		
		Hi		
2013		Estimate		
		SD		
		Lo		
		Hi		
2014		Estimate		
		SD		
		Lo		
		Hi		
2015		Estimate		
		SD		
		Lo		
		Hi		
2016	197	Estimate	0.184	0.816
		SD	0.034	0.034
		Lo	0.131	0.758
		Hi	0.242	0.869

Appendix G. 4. Annual stock proportion estimates (mean) of Chinook salmon harvested in the Alaskan District 111 commercial drift gillnet, 2016.

			Reporting Groups	
Year	Sample Size		Taku/Stikine	Other
2004	111	Estimate	0.859	0.141
		SD	0.036	0.036
		Lo	0.795	0.085
		Hi	0.915	0.205
2005	247	Estimate	0.919	0.081
		SD	0.021	0.021
		Lo	0.882	0.050
		Hi	0.950	0.118
2006	209	Estimate	0.905	0.095
		SD	0.024	0.024
		Lo	0.863	0.059
		Hi	0.941	0.137
2007	96	Estimate	0.492	0.508
		SD	0.054	0.054
		Lo	0.404	0.419
		Hi	0.581	0.596
2008	104	Estimate	0.483	0.517
		SD	0.053	0.053
		Lo	0.397	0.430
		Hi	0.570	0.603
2009	257	Estimate	0.813	0.187
		SD	0.027	0.027
		Lo	0.766	0.145
		Hi	0.855	0.234
2010	152	Estimate	0.539	0.461
		SD	0.042	0.042
		Lo	0.469	0.391
		Hi	0.609	0.531
2011	70	Estimate	0.809	0.191
		SD	0.052	0.052
		Lo	0.718	0.113
		Hi	0.887	0.282
2012	206	Estimate	0.876	0.124
		SD	0.027	0.027
		Lo	0.830	0.082
		Hi	0.918	0.170
2013	86	Estimate	0.753	0.247
		SD	0.051	0.051
		Lo	0.666	0.167
		Hi	0.833	0.334
2014	78	Estimate	0.635	0.365
		SD	0.060	0.061
		Lo	0.534	0.268
		Hi	0.732	0.466
2015	88	Estimate	0.592	0.408
		SD	0.055	0.055
		Lo	0.500	0.319
		Hi	0.681	0.500
2016	*49*	*Estimate*	*0.749*	*0.251*
		SD	*0.065*	*0.065*
		Lo	*0.636*	*0.150*
		Hi	*0.850*	*0.364*

Appendix G. 5. Annual stock proportion estimates (mean) of Chinook salmon harvested in the Alaskan District 111 sport fisheries, 2016.

			Reporting Groups	
Year	Sample Size		Taku/Stikine	Other
2004	159	Estimate	0.538	0.462
		SD	0.043	0.043
		Lo	0.467	0.392
		Hi	0.608	0.533
2005	264	Estimate	0.578	0.422
		SD	0.035	0.035
		Lo	0.521	0.366
		Hi	0.634	0.479
2006	269	Estimate	0.652	0.348
		SD	0.032	0.032
		Lo	0.599	0.295
		Hi	0.705	0.401
2007	237	Estimate	0.451	0.549
		SD	0.035	0.035
		Lo	0.394	0.491
		Hi	0.509	0.606
2008	218	Estimate	0.226	0.774
		SD	0.032	0.032
		Lo	0.176	0.720
		Hi	0.280	0.824
2009	239	Estimate	0.255	0.745
		SD	0.030	0.030
		Lo	0.206	0.694
		Hi	0.306	0.794
2010	200	Estimate	0.453	0.547
		SD	0.038	0.038
		Lo	0.391	0.484
		Hi	0.516	0.609
2011	200	Estimate	0.454	0.546
		SD	0.040	0.040
		Lo	0.389	0.480
		Hi	0.520	0.611
2012	200	Estimate	0.494	0.506
		SD	0.039	0.039
		Lo	0.429	0.441
		Hi	0.559	0.571
2013	224	Estimate	0.125	0.875
		SD	0.025	0.025
		Lo	0.086	0.831
		Hi	0.169	0.914
2014	221	Estimate	0.396	0.604
		SD	0.036	0.037
		Lo	0.338	0.544
		Hi	0.456	0.662
2015	297	Estimate	0.486	0.514
		SD	0.031	0.031
		Lo	0.435	0.463
		Hi	0.537	0.565
2016	211	Estimate	0.587	0.413
		SD	0.036	0.036
		Lo	0.527	0.354
		Hi	0.646	0.473

Appendix G. 6. Weekly stock proportion estimates (mean) of sockeye salmon harvested in the Alaskan Subdistrict 106-41/42 (Sumner Strait) commercial drift gillnet fishery, 2016.

	Sample Sizes									
SW	Total	Genotyped	Aged (not genotyped)	Otolith Marked (not genotyped)	Reporting Group	mean	sd	CI 5%	CI 95%	P0
25	240	45	140	55	Other	0.464	0.059	0.367	0.560	0.000
25					Stikine/TakuMainstem	0.064	0.032	0.016	0.120	0.004
25					Tahltan	0.244	0.052	0.161	0.333	0.000
25					EnhancedTahltan	0.121	0.021	0.088	0.157	0.000
25					EnhancedTuya	0.108	0.020	0.077	0.142	0.000
26	280	104	100	76	Other	0.391	0.038	0.329	0.454	0.000
26					Stikine/TakuMainstem	0.075	0.021	0.044	0.112	0.000
26					Tahltan	0.263	0.035	0.208	0.322	0.000
26					EnhancedTahltan	0.146	0.021	0.113	0.181	0.000
26					EnhancedTuya	0.124	0.020	0.094	0.158	0.000
27	139	109	1	29	Other	0.494	0.044	0.421	0.567	0.000
27					Stikine/TakuMainstem	0.060	0.023	0.027	0.102	0.000
27					Tahltan	0.238	0.036	0.180	0.300	0.000
27					EnhancedTahltan	0.114	0.027	0.073	0.160	0.000
27					EnhancedTuya	0.093	0.024	0.056	0.137	0.000
28	*61*	*41*	*1*	*19*	*Other*	*0.415*	*0.066*	*0.308*	*0.524*	*0.000*
28					*Stikine/TakuMainstem*	*0.029*	*0.028*	*0.000*	*0.083*	*0.059*
28					*Tahltan*	*0.250*	*0.056*	*0.163*	*0.346*	*0.000*
28					*EnhancedTahltan*	*0.145*	*0.044*	*0.080*	*0.223*	*0.000*
28					*EnhancedTuya*	*0.162*	*0.047*	*0.092*	*0.244*	*0.000*
29	210	162	16	32	Other	0.625	0.036	0.564	0.683	0.000
29					Stikine/TakuMainstem	0.080	0.022	0.046	0.119	0.000
29					Tahltan	0.144	0.025	0.105	0.188	0.000
29					EnhancedTahltan	0.076	0.018	0.049	0.108	0.000
29					EnhancedTuya	0.076	0.018	0.048	0.108	0.000
30	300	287	4	9	Other	0.900	0.020	0.866	0.930	0.000
30					Stikine/TakuMainstem	0.036	0.014	0.015	0.061	0.000
30					Tahltan	0.034	0.010	0.019	0.053	0.000
30					EnhancedTahltan	0.020	0.008	0.009	0.035	0.000
30					EnhancedTuya	0.010	0.006	0.003	0.021	0.000
31	298	209	83	6	Other	0.891	0.023	0.851	0.926	0.000
31					Stikine/TakuMainstem	0.075	0.020	0.044	0.110	0.000
31					Tahltan	0.014	0.008	0.004	0.029	0.000
31					EnhancedTahltan	0.007	0.005	0.001	0.016	0.000
31					EnhancedTuya	0.013	0.007	0.005	0.026	0.000
32	302	203	96	3	Other	0.934	0.018	0.903	0.961	0.000
32					Stikine/TakuMainstem	0.051	0.016	0.027	0.080	0.000
32					Tahltan	0.005	0.005	0.000	0.014	0.001
32					EnhancedTahltan	0.003	0.003	0.000	0.010	0.000
32					EnhancedTuya	0.007	0.005	0.001	0.016	0.000
33	300	104	195	1	Other	0.974	0.021	0.934	0.999	0.000
33					Stikine/TakuMainstem	0.023	0.021	0.000	0.062	0.081
33					Tahltan	0.000	0.001	0.000	0.000	0.902
33					EnhancedTahltan	0.000	0.000	0.000	0.000	0.955
33					EnhancedTuya	0.003	0.003	0.000	0.010	0.000
34	218	71	147	0	Other	0.982	0.017	0.948	0.999	0.000
34					Stikine/TakuMainstem	0.017	0.017	0.001	0.052	0.011
34					Tahltan	0.000	0.001	0.000	0.000	0.899
34					EnhancedTahltan	0.000	0.000	0.000	0.000	0.955
34					EnhancedTuya	0.000	0.000	0.000	0.000	0.955
35					Other					
35					Stikine/TakuMainstem					
35					Tahltan					
35					EnhancedTahltan					
35					EnhancedTuya					
36	136	30	106	0	Other	0.996	0.011	0.980	1.000	0.000
36					Stikine/TakuMainstem	0.003	0.010	0.000	0.018	0.333
36					Tahltan	0.000	0.003	0.000	0.000	0.894
36					EnhancedTahltan	0.000	0.001	0.000	0.000	0.953
36					EnhancedTuya	0.000	0.001	0.000	0.000	0.952

Appendix G. 7. Weekly stock proportion estimates (mean) of sockeye salmon harvested in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 2016.

	Sample Sizes									
SW	Total	Genotyped	Aged (not genotyped)	Otolith Marked (not genotyped)	Reporting Group	mean	sd	CI 5%	CI 95%	P0
25	10	10	0	0	Other	0.984	0.042	0.904	1.000	0.000
25					Stikine/TakuMain:	0.015	0.040	0.000	0.088	0.274
25					Tahltan	0.001	0.009	0.000	0.000	0.878
25					EnhancedTahltan	0.000	0.006	0.000	0.000	0.940
25					EnhancedTuya	0.001	0.007	0.000	0.000	0.938
26	120	51	68	1	Other	0.900	0.038	0.830	0.954	0.000
26					Stikine/TakuMain:	0.092	0.038	0.039	0.160	0.000
26					Tahltan	0.000	0.002	0.000	0.000	0.892
26					EnhancedTahltan	0.000	0.001	0.000	0.000	0.950
26					EnhancedTuya	0.008	0.008	0.000	0.025	0.000
27	289	119	169	1	Other	0.911	0.033	0.852	0.961	0.000
27					Stikine/TakuMain:	0.085	0.033	0.035	0.144	0.000
27					Tahltan	0.000	0.001	0.000	0.000	0.906
27					EnhancedTahltan	0.003	0.003	0.000	0.010	0.000
27					EnhancedTuya	0.000	0.000	0.000	0.000	0.959
28	*304*	124	*179*	*1*	*Other*	*0.906*	*0.032*	*0.853*	*0.960*	*0.000*
28					*Stikine/TakuMain:*	*0.075*	*0.030*	*0.024*	*0.124*	*0.009*
28					*Tahltan*	*0.016*	*0.011*	*0.003*	*0.037*	*0.000*
28					*EnhancedTahltan*	*0.000*	*0.000*	*0.000*	*0.000*	*0.955*
28					*EnhancedTuya*	*0.003*	*0.003*	*0.000*	*0.010*	*0.000*
29	300	199	100	1	Other	0.969	0.022	0.923	0.992	0.000
29					Stikine/TakuMain:	0.013	0.020	0.000	0.057	0.211
29					Tahltan	0.015	0.009	0.004	0.032	0.000
29					EnhancedTahltan	0.003	0.003	0.000	0.010	0.000
29					EnhancedTuya	0.000	0.000	0.000	0.000	0.956
30	300	171	128	1	Other	0.985	0.013	0.958	0.999	0.000
30					Stikine/TakuMain:	0.012	0.013	0.000	0.038	0.114
30					Tahltan	0.000	0.001	0.000	0.000	0.907
30					EnhancedTahltan	0.003	0.003	0.000	0.010	0.000
30					EnhancedTuya	0.000	0.000	0.000	0.000	0.958
31	300	252	47	1	Other	0.988	0.010	0.968	0.999	0.000
31					Stikine/TakuMain:	0.009	0.009	0.000	0.027	0.095
31					Tahltan	0.000	0.000	0.000	0.000	0.908
31					EnhancedTahltan	0.003	0.003	0.000	0.010	0.000
31					EnhancedTuya	0.000	0.000	0.000	0.000	0.954
32	300	274	26	0	Other	0.992	0.006	0.980	0.999	0.000
32					Stikine/TakuMain:	0.008	0.006	0.001	0.020	0.003
32					Tahltan	0.000	0.000	0.000	0.000	0.912
32					EnhancedTahltan	0.000	0.000	0.000	0.000	0.955
32					EnhancedTuya	0.000	0.000	0.000	0.000	0.954
33	300	107	193	0	Other	0.998	0.004	0.991	1.000	0.000
33					Stikine/TakuMain:	0.001	0.004	0.000	0.009	0.348
33					Tahltan	0.000	0.001	0.000	0.000	0.902
33					EnhancedTahltan	0.000	0.000	0.000	0.000	0.955
33					EnhancedTuya	0.000	0.000	0.000	0.000	0.954
34	300	98	202	0	Other	0.997	0.006	0.986	1.000	0.000
34					Stikine/TakuMain:	0.002	0.006	0.000	0.014	0.321
34					Tahltan	0.000	0.001	0.000	0.000	0.903
34					EnhancedTahltan	0.000	0.000	0.000	0.000	0.954
34					EnhancedTuya	0.000	0.000	0.000	0.000	0.954
35	263	57	206	0	Other	0.986	0.018	0.950	1.000	0.000
35					Stikine/TakuMain:	0.014	0.018	0.000	0.049	0.140
35					Tahltan	0.000	0.002	0.000	0.000	0.899
35					EnhancedTahltan	0.000	0.000	0.000	0.000	0.954
35					EnhancedTuya	0.000	0.000	0.000	0.000	0.956
36	91	26	65	0	Other	0.969	0.039	0.888	1.000	0.000
36					Stikine/TakuMain:	0.031	0.039	0.000	0.111	0.144
36					Tahltan	0.000	0.003	0.000	0.000	0.889
36					EnhancedTahltan	0.000	0.001	0.000	0.000	0.948
36					EnhancedTuya	0.000	0.001	0.000	0.000	0.948

Appendix G. 8. Weekly stock proportion estimates (mean) of sockeye salmon harvested in the Alaskan District 108 commercial drift gillnet fishery, 2016.

	Sample Sizes									
SW	Total	Genotyped	Aged (not genotyped)	Otolith Marked (not genotyped)	Reporting Group	mean	sd	CI 5%	CI 95%	P0
25	117	65	6	46	Other	0.091	0.028	0.050	0.141	0.000
25					Stikine/TakuMainstem	0.180	0.037	0.123	0.244	0.000
25					Tahltan	0.350	0.044	0.278	0.424	0.000
25					EnhancedTahltan	0.229	0.038	0.168	0.293	0.000
25					EnhancedTuya	0.149	0.032	0.099	0.206	0.000
26	528	162	170	196	Other	0.080	0.016	0.055	0.109	0.000
26					Stikine/TakuMainstem	0.066	0.014	0.044	0.091	0.000
26					Tahltan	0.481	0.026	0.439	0.522	0.000
26					EnhancedTahltan	0.230	0.019	0.200	0.261	0.000
26					EnhancedTuya	0.143	0.016	0.118	0.170	0.000
27	540	280	64	196	Other	0.141	0.017	0.115	0.169	0.000
27					Stikine/TakuMainstem	0.036	0.009	0.022	0.052	0.000
27					Tahltan	0.460	0.023	0.423	0.497	0.000
27					EnhancedTahltan	0.200	0.018	0.172	0.231	0.000
27					EnhancedTuya	0.163	0.017	0.136	0.191	0.000
28	510	270	70	170	Other	0.131	0.016	0.105	0.159	0.000
28					Stikine/TakuMainstem	0.108	0.015	0.084	0.133	0.000
28					Tahltan	0.432	0.023	0.393	0.470	0.000
28					EnhancedTahltan	0.212	0.018	0.183	0.242	0.000
28					EnhancedTuya	0.117	0.014	0.095	0.141	0.000
29	520	132	242	146	Other	0.150	0.024	0.113	0.190	0.000
29					Stikine/TakuMainstem	0.288	0.032	0.237	0.340	0.000
29					Tahltan	0.279	0.030	0.230	0.329	0.000
29					EnhancedTahltan	0.194	0.019	0.164	0.225	0.000
29					EnhancedTuya	0.090	0.012	0.070	0.111	0.000
30	370	93	202	75	Other	0.238	0.034	0.185	0.295	0.000
30					Stikine/TakuMainstem	0.355	0.041	0.288	0.422	0.000
30					Tahltan	0.237	0.037	0.178	0.300	0.000
30					EnhancedTahltan	0.107	0.016	0.082	0.135	0.000
30					EnhancedTuya	0.062	0.013	0.043	0.084	0.000
31	420	169	181	70	Other	0.150	0.024	0.113	0.192	0.000
31					Stikine/TakuMainstem	0.544	0.033	0.490	0.598	0.000
31					Tahltan	0.156	0.025	0.117	0.198	0.000
31					EnhancedTahltan	0.092	0.014	0.071	0.116	0.000
31					EnhancedTuya	0.057	0.011	0.040	0.076	0.000
32	460	182	241	37	Other	0.385	0.030	0.336	0.434	0.000
32					Stikine/TakuMainstem	0.463	0.030	0.414	0.513	0.000
32					Tahltan	0.086	0.020	0.055	0.121	0.000
32					EnhancedTahltan	0.046	0.010	0.031	0.063	0.000
32					EnhancedTuya	0.021	0.006	0.011	0.032	0.000
33	185	81	95	9	Other	0.532	0.038	0.465	0.590	0.000
33					Stikine/TakuMainstem	0.395	0.041	0.331	0.464	0.000
33					Tahltan	0.047	0.019	0.020	0.082	0.000
33					EnhancedTahltan	0.006	0.004	0.001	0.015	0.000
33					EnhancedTuya	0.020	0.014	0.005	0.049	0.000
34	*168*	*64*	*96*	*8*	*Other*	*0.453*	*0.072*	*0.330*	*0.569*	*0.000*
34					*Stikine/TakuMainstem*	*0.509*	*0.074*	*0.391*	*0.633*	*0.000*
34					*Tahltan*	*0.024*	*0.013*	*0.007*	*0.048*	*0.000*
34					*EnhancedTahltan*	*0.010*	*0.005*	*0.003*	*0.018*	*0.000*
34					*EnhancedTuya*	*0.005*	*0.004*	*0.001*	*0.011*	*0.000*

Appendix G. 9. Weekly stock proportion estimates (mean) of sockeye salmon harvested in the Alaskan District 111 traditional commercial drift gillnet fishery by week, 2016.

		Sample Sizes								
			Aged	Otolith Marked						
SW	Total	Genotyped	(not genotyped)	(not genotyped)	Reporting Group	mean	sd	CI 5%	CI 95%	P0
26	*80*	74	*1*	*5*	*Speel*	*0.000*	*0.002*	*0.000*	*0.000*	*0.896*
					Stikine/TakuMainstem	*0.201*	*0.046*	*0.129*	*0.281*	*0.000*
					TakuLakes	*0.688*	*0.051*	*0.602*	*0.770*	*0.000*
					Tatsamenie	*0.000*	*0.001*	*0.000*	*0.000*	*0.948*
					EnhancedSnettisham	*0.000*	*0.001*	*0.000*	*0.000*	*0.899*
					EnhancedStikine	*0.037*	*0.021*	*0.010*	*0.076*	*0.000*
					EnhancedTatsamenie	*0.000*	*0.001*	*0.000*	*0.000*	*0.950*
					EnhancedKingSalmon	*0.025*	*0.017*	*0.005*	*0.057*	*0.000*
					EnhancedLittleTrapper	*0.000*	*0.001*	*0.000*	*0.000*	*0.948*
27	*400*	105	*271*	*24*	*Other*	*0.046*	*0.021*	*0.018*	*0.084*	*0.000*
					Speel	*0.000*	*0.001*	*0.000*	*0.000*	*0.900*
					Stikine/TakuMainstem	*0.273*	*0.036*	*0.215*	*0.333*	*0.000*
					TakuLakes	*0.621*	*0.038*	*0.558*	*0.683*	*0.000*
					Tatsamenie	*0.000*	*0.001*	*0.000*	*0.000*	*0.952*
					EnhancedSnettisham	*0.000*	*0.000*	*0.000*	*0.000*	*0.916*
					EnhancedStikine	*0.008*	*0.004*	*0.002*	*0.016*	*0.000*
					EnhancedTatsamenie	*0.003*	*0.002*	*0.000*	*0.007*	*0.000*
					EnhancedKingSalmon	*0.050*	*0.011*	*0.033*	*0.069*	*0.000*
					EnhancedLittleTrapper	*0.000*	*0.000*	*0.000*	*0.000*	*0.956*
28	377	139	201	37	Other	0.028	0.014	0.010	0.055	0.000
					Speel	0.001	0.004	0.000	0.008	0.641
					Stikine/TakuMainstem	0.326	0.038	0.265	0.389	0.000
					TakuLakes	0.551	0.038	0.488	0.612	0.000
					Tatsamenie	0.000	0.002	0.000	0.000	0.888
					EnhancedSnettisham	0.033	0.008	0.020	0.047	0.000
					EnhancedStikine	0.000	0.000	0.000	0.000	0.845
					EnhancedTatsamenie	0.000	0.000	0.000	0.000	0.916
					EnhancedKingSalmon	0.060	0.012	0.041	0.082	0.000
					EnhancedLittleTrapper	0.000	0.000	0.000	0.000	0.914
29	560	186	216	158	Other	0.049	0.014	0.030	0.075	0.000
					Speel	0.010	0.005	0.003	0.019	0.000
					Stikine/TakuMainstem	0.353	0.031	0.302	0.403	0.000
					TakuLakes	0.292	0.030	0.243	0.342	0.000
					Tatsamenie	0.036	0.012	0.018	0.058	0.000
					EnhancedSnettisham	0.229	0.016	0.203	0.256	0.000
					EnhancedStikine	0.005	0.003	0.001	0.011	0.000
					EnhancedTatsamenie	0.010	0.004	0.004	0.018	0.000
					EnhancedKingSalmon	0.016	0.005	0.008	0.025	0.000
					EnhancedLittleTrapper	0.000	0.000	0.000	0.000	0.920
30	476	331	3	142	Other	0.100	0.015	0.076	0.126	0.000
					Speel	0.017	0.008	0.006	0.031	0.000
					Stikine/TakuMainstem	0.344	0.024	0.306	0.384	0.000
					TakuLakes	0.160	0.019	0.130	0.191	0.000
					Tatsamenie	0.095	0.014	0.073	0.119	0.000
					EnhancedSnettisham	0.254	0.019	0.223	0.287	0.000
					EnhancedStikine	0.000	0.000	0.000	0.000	0.841
					EnhancedTatsamenie	0.026	0.007	0.015	0.039	0.000
					EnhancedKingSalmon	0.004	0.003	0.001	0.010	0.000
					EnhancedLittleTrapper	0.000	0.000	0.000	0.000	0.918
31	600	172	77	351	Other	0.023	0.008	0.011	0.037	0.000
					Speel	0.009	0.004	0.005	0.016	0.000
					Stikine/TakuMainstem	0.210	0.021	0.177	0.244	0.000
					TakuLakes	0.074	0.015	0.051	0.101	0.000
					Tatsamenie	0.152	0.017	0.125	0.181	0.000
					EnhancedSnettisham	0.486	0.019	0.454	0.517	0.000
					EnhancedStikine	0.002	0.002	0.000	0.006	0.000
					EnhancedTatsamenie	0.042	0.009	0.029	0.058	0.000
					EnhancedKingSalmon	0.002	0.002	0.000	0.006	0.000
					EnhancedLittleTrapper	0.000	0.000	0.000	0.000	0.920
32	400	217	5	178	Other	*0.006*	*0.005*	*0.001*	*0.015*	*0.000*
					Speel	*0.026*	*0.009*	*0.013*	*0.042*	*0.000*
					Stikine/TakuMainstem	*0.282*	*0.023*	*0.244*	*0.320*	*0.000*
					TakuLakes	*0.025*	*0.008*	*0.013*	*0.039*	*0.000*
					Tatsamenie	*0.219*	*0.021*	*0.185*	*0.254*	*0.000*
					EnhancedSnettisham	*0.369*	*0.024*	*0.330*	*0.409*	*0.000*
					EnhancedStikine	*0.000*	*0.000*	*0.000*	*0.000*	*0.916*
					EnhancedTatsamenie	*0.075*	*0.013*	*0.055*	*0.098*	*0.000*
					EnhancedKingSalmon	*0.000*	*0.000*	*0.000*	*0.000*	*0.956*
					EnhancedLittleTrapper	*0.000*	*0.000*	*0.000*	*0.000*	*0.956*
33	270	69	1	200	Other	0.037	0.013	0.019	0.062	0.000
					Speel	0.020	0.015	0.000	0.048	0.040
					Stikine/TakuMainstem	0.199	0.034	0.145	0.258	0.000
					TakuLakes	0.017	0.017	0.000	0.050	0.201
					Tatsamenie	0.119	0.028	0.076	0.168	0.000
					EnhancedSnettisham	0.568	0.036	0.510	0.628	0.000
					EnhancedStikine	0.000	0.001	0.000	0.000	0.827
					EnhancedTatsamenie	0.040	0.016	0.017	0.070	0.000
					EnhancedKingSalmon	0.000	0.001	0.000	0.000	0.910
					EnhancedLittleTrapper	0.000	0.001	0.000	0.000	0.908
35	*53*	*18*	*0*	*35*	*Other*	*0.048*	*0.037*	*0.007*	*0.121*	*0.000*
					Speel	*0.000*	*0.002*	*0.000*	*0.000*	*0.895*
					Stikine/TakuMainstem	*0.153*	*0.054*	*0.072*	*0.248*	*0.000*
					TakuLakes	*0.001*	*0.004*	*0.000*	*0.002*	*0.791*
					Tatsamenie	*0.148*	*0.048*	*0.078*	*0.234*	*0.000*
					EnhancedSnettisham	*0.611*	*0.065*	*0.502*	*0.717*	*0.000*
					EnhancedStikine	*0.000*	*0.002*	*0.000*	*0.000*	*0.895*
					EnhancedTatsamenie	*0.037*	*0.025*	*0.007*	*0.086*	*0.000*
					EnhancedKingSalmon	*0.000*	*0.001*	*0.000*	*0.000*	*0.946*
					EnhancedLittleTrapper	*0.000*	*0.001*	*0.000*	*0.000*	*0.946*