PACIFIC SALMON COMMISSION JOINT
TRANSBOUNDARY TECHNICAL COMMITTEE

ESTIMATES OF TRANSBOUNDARY RIVER SALMON PRODUCTION, HARVEST AND ESCAPEMENT AND A REVIEW OF JOINT ENHANCEMENT ACTIVITIES IN 2005

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ACRONYMS

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

CALENDAR OF STATISTICAL WEEKS

Week	Date		Week	Date	
	Begin	End		Begin	End
1	1-Jan	1-Jan	28	3-Jul	9-Jul
2	2-Jan	8-Jan	29	10-Jul	16-Jul
3	9-Jan	15-Jan	30	17-Jul	23-Jul
4	16-Jan	22-Jan	31	24-Jul	30-Jul
5	23-Jan	29-Jan	32	31-Jul	6-Aug
6	30-Jan	5-Feb	33	7-Aug	13-Aug
7	6-Feb	12-Feb	34	14-Aug	20-Aug
8	13-Feb	19-Feb	35	21-Aug	27-Aug
9	20-Feb	26-Feb	36	28-Aug	3-Sep
10	27-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

Estimates of harvests and escapements of Pacific salmon returning to the transboundary Stikine, Taku, and Alsek Rivers for 2005 are presented and compared with historical patterns. Average, unless stated differently, refers to the 1995-2004 average. Relevant information pertaining to the management of appropriate U.S. and Canadian fisheries is presented and the use of inseason management models is discussed. Preliminary results from transboundary river sockeye salmon *Oncorhynchus nerka* enhancement projects are also reviewed.

Stikine River

The 2005 Stikine River sockeye salmon run is estimated at 260,000 fish, of which approximately 180,000 fish were harvested in various fisheries including test fisheries. An estimated 76,000 Stikine River fish escaped to spawn, including 1,600 fish which migrated to the Tuya River block and were not harvested. The run and harvest were above average. The Tahltan Lake sockeye salmon weir count of 43,000 fish was above the upper bound of the goal range (18,000 to 30,000 fish). The estimated U.S. commercial catch of Stikine River sockeye salmon in Districts 106 and 108, including the Stikine River subsistence fishery, was 92,000 fish. The Canadian inriver commercial and aboriginal fishery catches were 80,000 and 5,000, fish, respectively. The inriver test fishery harvested 1,600 sockeye salmon and there was no marine test fishery in 2005. The Stikine Management Model (SMM) predicted a run substantially less than the preseason forecast of 478,000 fish throughout the course of the fishery. Weekly inseason model projections ranged from 174,000 to 275,000 sockeye salmon; the final inseason model prediction was 274,000 fish, with a total allowable catch (TAC) of 218,000 fish. Based on the postseason run size estimates and TAC calculations of 100,000 Stikine River fish for each country, Canada harvested 84% and the U.S. harvested 92% of their respective TACs. Broodstock collection and otolith sampling removed 3,400 and 400 sockeye salmon respectively from the escapement to Tahltan Lake leaving a spawning escapement of 39,600 fish. The estimated spawning escapement of 35,000 mainstem Stikine River sockeye salmon was within the goal range of 20,000 to 40,000 fish for this stock group. The total sockeye salmon run calculated from mark–recapture study was 268,000 sockeye salmon, close to the final SMM estimate of 275,000 fish.

The 2005 Stikine River Chinook salmon (non jack salmon) run is estimated at 90,000 fish, of which approximately 48,000 fish were harvested in various fisheries including test fisheries. An estimated 42,000 Stikine River fish escaped to spawn, above the 2005 escapement goal of 21,000 large Chinook salmon. The run and harvest were above average. The Little Tahltan River Chinook salmon escapement of 7,300 fish was above both the 2005 escapement goal of 4,000 fish and the upper bound of the goal range (2,700 to 5,300 fish). The estimated U.S. commercial catch of Stikine River Chinook salmon in Districts 106 and 108 gillnet, troll, subsistence, and sport fisheries was 29,000 fish. The Canadian commercial, aboriginal, and sport fisheries catches totaled were 19,000. The inriver test fishery harvested <50 large and jack Chinook salmon. There was no marine

test fishery in 2005. The Stikine Chinook salmon Management Model (SCMM) was persistent throughout the course of the fishery in predicting a total run size close to that of the preseason forecast. Weekly inseason run projections from the model ranged from 71,000 to 78,000 Chinook salmon. The weekly mark-recapture estimates ranged from 80,700 to 84,500 fish. The final inseason model prediction was 77,000 to 78,000 fish with a total allowable catch (TAC) of 56,000 fish. Based on the mark-recapture preliminary postseason terminal run size estimate (79,600) and TAC calculations of 21,500 Stikine River fish for the Canada and 35,200 for the U.S., Canada harvested 85% and the U.S. harvested 86% of their respective TACs.

The 2005 run size of Stikine River coho salmon cannot be quantified. The U.S. marine harvest of Stikine River coho salmon *O. kisutch* is also unknown since there is no stock identification program for this species. Mixed stock coho salmon harvest in Districts 106 and 108 were 114,000 and 42,000 fish, respectively. Alaskan hatchery fish comprised approximately 27% and 21% of the coho salmon harvest from the two districts. The Canadian inriver coho salmon catch of 276 fish was below average. The aerial survey count of 3,200 fish from six index sites combined was below the 1995-2004 average. The lower Stikine coho salmon test fishery cumulative CPUE, however, was above average.

Taku River

The postseason estimate of the 2005 Taku River sockeye salmon run is 189,000 fish, including an estimated catch of 69,000 fish and an above-border spawning escapement of 120,000 sockeye salmon. The run size was above the 1995-2004 average and the escapement was above the goal range of 71,000 to 80,000 fish. An estimated 45,000 Taku River sockeye salmon were harvested in the District 111 commercial fishery, below the 1995-2004 average, and an estimated 1,000 sockeye salmon were harvested in the U.S. inriver personal use fishery. Canadian inriver commercial and aboriginal fishery harvest included 22,000 and 200 sockeye salmon, respectively, compared to the 1995-2004 average inriver harvest of 30,000 fish. The U.S. harvested an estimated 41% of the TAC and Canada harvested an estimated 19% of the TAC.

The harvest of large Chinook salmon in the Canadian commercial fishery in the Taku River was 7,400 fish, compared to the 1995-2004 average of 2,600 fish. The Canadian aboriginal fishery in the Taku River harvested 200 large Chinook salmon. District 111 mixed stock gillnet fishery harvest of 22,000 Chinook salmon compared to the 1995-2004 average of 4,000. Approximately 4% of the harvest was estimated to be of Alaska hatchery origin. The above-border mark–recapture estimate for Chinook salmon is 47,000 fish.

The estimated above border run of Taku River coho salmon in 2005 is 100,000 fish, which is average for 1995-2004. The Canadian inriver commercial harvest included 5,000 coho salmon, compared to an average of 6,000 (1995-2004). After upriver Canadian harvest and test fishery catches are subtracted from the inriver run, the above-border-spawning escapement is estimated at 92,000 coho salmon, which exceeds the minimum escapement goal of 38,000 fish. The U.S. harvest of 20,000 coho salmon in the

District 111 mixed stock fishery was below the 1995-2004 average of 45,000 fish. Alaskan hatcheries contributed an estimated 2% of the District 111 harvest, or 500 fish. The harvest of 182,000 pink salmon *O. gorbuscha* in District 111 was above the 1995-2004 average of 85,000 fish. Pink salmon were not retained in the Canadian commercial inriver fishery in 2005. The escapement of pink salmon to the Taku River was likely above average as evidenced by the fish wheel catch and release of 15,840 fish that is 32% above average.

The catch of chum salmon *O. keta* in the District 111 fishery was 93,000 fish; composed of 90,000 summer run fish (prior to mid-August) and 3,500 fall run fish. The harvest of summer chum salmon, primarily Alaskan hatchery stocks, was below the 1995-2004 average of 300,000 fish. The harvest of fall chum salmon, composed of wild Taku River and Port Snettisham stocks, was close to the average of 4,000 fish. As with pink salmon, there was non-retention of chum salmon in the Canadian inriver fishery and the reported catch was 0 fish in 2005. Although spawning escapement is not known the Canyon Island fish wheel catch of 256 chum salmon was 14% below average.

Alsek River

The Alsek River sockeye salmon harvest of 7,500 fish in the U.S. commercial fishery was below the 1995-2004 average of 20,000 fish. The Canadian inriver harvest of 600 fish was below the 1995-2004 average of 1,500 fish. The Klukshu River weir count of 3,400 sockeye salmon was the lowest on record and below the goal range of 7,500 to 15,000 fish. The count of 1,000 early run sockeye salmon (count through August 15) was below the 1995-2004 average of 3,100 fish. The late run count of 2,400 fish was below the average of 12,000 fish for the same period. The mark–recapture program was not run in 2005.

The Chinook salmon run to the Alsek River appeared to be below average. The U.S. Dry Bay catch of 240 large Chinook salmon was below the average of 650 fish. The combined Canadian sport and aboriginal fishery catch of 110 Chinook salmon was below the average of 520 fish. The 1,100 Chinook salmon counted through the Klukshu River weir was below the 1995-2004 average of 2,600 fish and the lowest on record. Of the total count, 960 Chinook salmon were estimated to have spawned, below the goal range of 1,100 to 2,300 Chinook salmon. The mark-recapture program was not run in 2005.

Current stock assessment programs prevent an accurate comparison of the Alsek River coho salmon run with historical runs. The U.S. Dry Bay catch of 1,200 coho salmon was below the average of 6,200 fish, while the combined Canadian inriver aboriginal and sport fishery catch of 70 fish was below the average of 160 fish. The operation of the Klukshu weir does not provide a complete enumeration of coho salmon into this system since it is removed before the run is over; however, it does provide an annual index. The count of 700 coho salmon was below the average of 3,200 fish.

Enhancement

Eggs and milt were collected from the year 2005 sockeye salmon escapements at Tahltan and Tatsamenie Lakes. A total of 4.5 million eggs were collected at Tahltan Lake. At Tatsamenie Lake, 1.9 million eggs were collected for the hatchery.

Outplants of 2004 brood-year sockeye salmon fry in May and June 2005 included, 1.2 million fry into Tahltan Lake, 3.2 million fry into Tuya Lake, and .6 million fry into Tatsamenie Lake. Green-egg to planted-fry survivals were 62%, 86%, and 84% for the Tahltan, Tuya and Tatsamenie outplants, respectively. Survival to emergence was above average.

The egg incubation and thermal-marking program was continued at Snettisham Hatchery in 2005. Snettisham hatchery is operated by DIPAC (Douglas Island Pink and Chum, Inc.), a private aquaculture organization in Juneau. A co-operative agreement between ADF&G and DIPAC provides for Snettisham hatchery to serve the needs of the joint TBR enhancement projects.

Adult sockeye salmon otoliths were processed inseason by the ADF&G otolith lab to estimate the weekly contribution of fish from US/Canada TBR fry planting programs to the District 106, 108, and 111 gillnet fisheries and to Canadian commercial fisheries in the Stikine and Taku Rivers. Preliminary contribution estimates of planted fish to Alaskan harvest were 36,000 planted Stikine River fish to District 106 and 108, and 650 planted Taku River fish to District 111. Estimates of contributions to Canadian fisheries included 31,000 planted fish to Stikine River fisheries and 260 planted fish to the Taku River fisheries.

INTRODUCTION

This report presents estimates of the 2005 catch and escapement data for Pacific salmon runs to the transboundary Stikine, Taku, and Alsek Rivers and discusses management actions taken during the season. Catch and effort data are presented by management week (U.S. statistical week), hereafter referred to as week, for each river for both U.S. and Canadian fisheries. Spawning escapement data for most species are reported from weir counts or other escapement monitoring techniques. Joint enhancement activities on the Stikine and Taku Rivers are also summarized.

The Transboundary Technical Committee (TTC) met prior to the season to update joint management, stock assessment and enhancement plans and determine preseason forecasts and outlooks for run strengths and initial total allowable catch TAC estimates for the various species and rivers. The results of this meeting are summarized in: Pacific Salmon Commission Transboundary Technical Committee, 2005 *Salmon Management and Enhancement Plans for the Stikine, Taku and Alsek Rivers, 2005 in prep.*

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

STIKINE RIVER

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

2002 this area was excluded and another small portion of District 108 was included in the experimental fishery. In 2003, the new area included in 2002 was excluded.

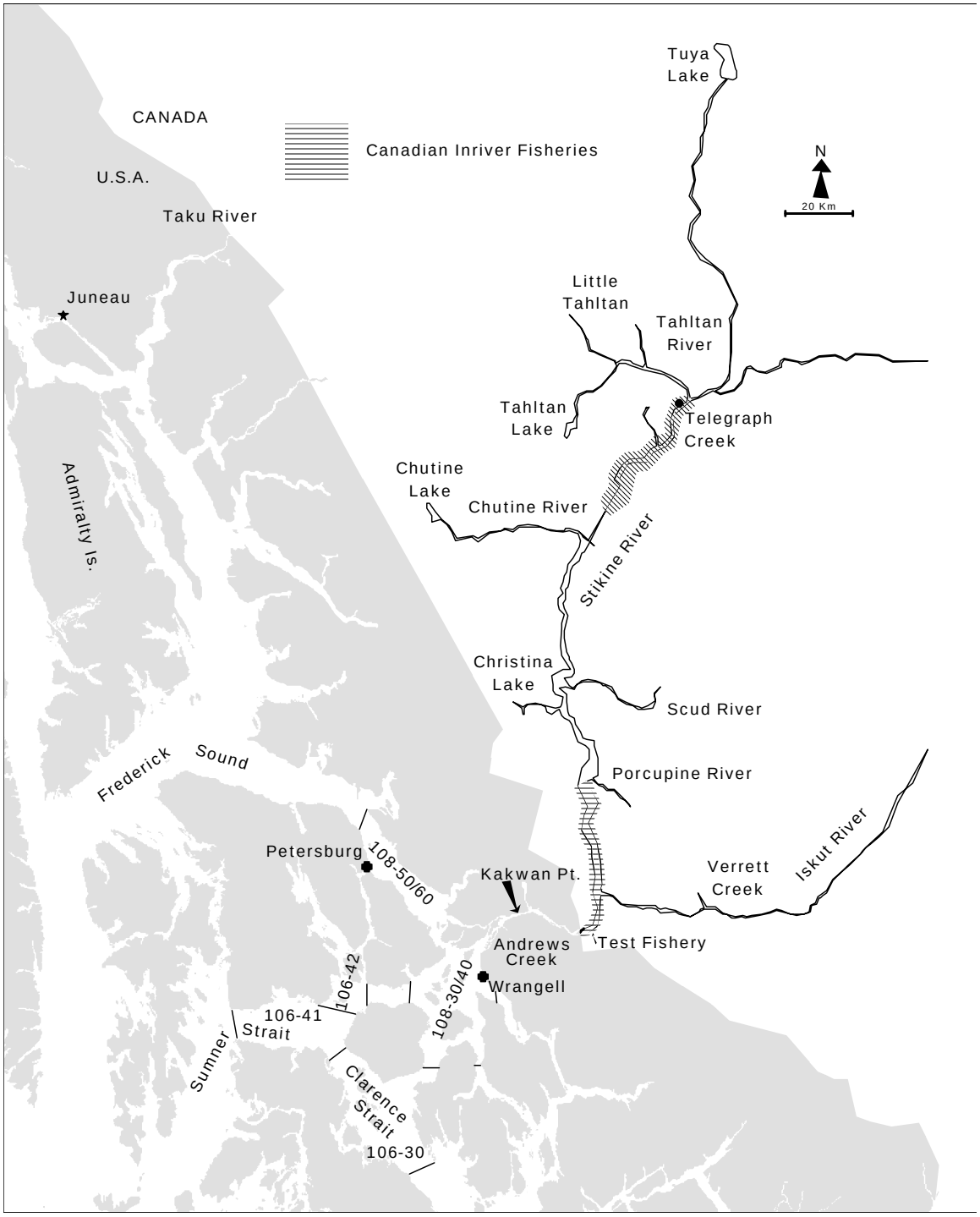

Figure 1. The Stikine River and principal U.S. and Canadian fishing areas.

Harvest Regulations and the Joint Management Model

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

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

Chinook Salmon

The SCMM model is based on the linear regression (correlation) between weekly cumulative catch per unit effort (CPUE) of large Chinook salmon observed at the tagging site and total run size based on mark-recapture studies conducted in 1996-2004. Each CPUE and run size data set is significantly correlated. In season model estimates were available commencing week 22. Mark-recapture estimates based on the cumulative ratio of tagged-to-untagged fish observed in the in river commercial fishery, were generated post week 23. In order to honor 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. Guideline harvests were derived from historical run timing data from the Kakwan Point tagging site (located 24 km downstream from the Canadian commercial fishery) applied to either the preseason forecast of terminal run, or inseason run projections. Run timing information was also garnered from the historical CPUE observed in US District 108 Chinook salmon drift gillnet fishery, 1969-1978.

The preseason Chinook salmon forecast was used during week 19) through week 21. After week 21, inseason forecasts of total run size and TAC, produced by the SCMM and based on Kakwan Point tagging site CPUE data, were used to assist in determining weekly fishing plans (Table 1). After week 23, mark-capture estimates were generated to complement the SCMM estimate. The weekly inputs to the model included: the catch and

effort data from Kakwan Point, the District 108 sport, troll, and gillnet catch. The Canadian sport and gillnet catches were also added to the model.

Table 1. Stikine River large Chinook run size based on a model (SCMM) and mark-recapture estimates, weekly AC, and weekly catch estimates from the District 108 drift gillnet, sport, and troll fisheries and the Canadian gillnet and sport fisheries, 2005.

Stat	Start	Total	TAC		Estimated Harvest	
Week	Date	Run	Total	Weekly	Weekly	Cum.
Canada Estimates						
19	1-May	80,285	22,519	132		
20	8-May	80,285	22,519	1,384	390	390
21	15-May	80,285	22,519	2,477	194	584
22	22-May	71,711	19,719	1,940	1,627	2211
23	29-May	72,388	19,719	3,334	2,019	4230
24	5-Jun	72,966	20,419	2,334	3,333	7563
25	12-Jun	75,161	20,819	2,717	3,415	10978
26	19-Jun	75,309	20,819	3,300	3,273	14251
27	26-Jun	78,063	22,219	1,987	2,222	16473
28	3-Jul	76,599	21,500	1,140	1,602	18075
29						
Final		90,106				18,636
U.S. Estimates						
19	1-May	80,258	27,250	2,190	700	771
20	8-May	80,258	27,250	3,011	2,389	3,243
21	15-May	61,244	27,250	3,400	3,255	5,984
22	22-May	59,427	19,450	3,380	3,286	8,512
23	29-May	77,371	18,150	2,102	7,940	17,472
24	5-Jun	84,317	29,850	3,914	10,561	27,233
25	12-Jun	78,710	34,400	3,836	1,880	27,351
26	19-Jun	83,221	29,850	2,261	1,217	29,431
27	26-Jun	78,539	35,700	865	656	30,087
28	3-Jul	78,052	30,500	302	315	30,402
29	10-Jul	78,052	30,500	0	163	30,565
Final		90,106				29,491

Weekly guideline quotas were established in District 108 based on the historical run timing curve generated from the 1969-1978 CPUE tempered by the historical run timing observed at the Kakwan Point tagging site, 1996-04. [Note: the historical District 108 run timing curve peaked almost two weeks later than the peak run timing observed at Kakwan Point]. It was decided, therefore, to advance the District 108 historical run timing one week from the original 1969-1978 average. The run timing and weekly quotas for the Canadian lower Stikine fishery were based on the historical run timing at Kakwan Point advanced three days to reflect the three day travel time from the Kakwan to the lower Stikine fishery site. This adjustment was based on a daily migration rate of 9.3 km/day as determined from radio tagged Chinook salmon tracked upstream of the international border in 1997.

The preseason forecast for the terminal Stikine River large Chinook salmon run was approximately 80,300 fish (Table 1), which indicated a run size characterized as well

above average. Unlike the sockeye salmon forecast, the preseason forecast of large Chinook salmon was not separated into run components or stock groupings, i.e. run size estimates for the Little Tahltan River (principal stock) or Iskut River or mainstem Chinook salmon were not forecast. The requisite data is not yet available to generate stock specific predictions. Canadian inseason predictions of terminal run size ranged from 71,700 to 78,000 Chinook salmon; U.S. projections ranged from 49,400 to 84,300 Chinook salmon (Table 1). Managers had daily run projections due to the prompt transmission of catch and effort from the Kakwan Point tagging site. Typically the projections calculated late in the week (Thursday or Friday) were used in decisions governing the following week's fishery openings. Managers also utilized weekly mark-recapture estimates after week 23 in the formulation of weekly management plans. All projections generated by both the SCMM and the M-R study indicated an above average run. Based on M-R data, the final post season estimated terminal run size of Stikine Chinook salmon was 90,100, close to the final inseason estimate of 77,000 to 78,000 large Chinook salmon, and the preseason forecast of 80,300 fish, Table 1.

Sockeye Salmon

The sockeye salmon model (SMM) was upgraded to provide inseason projections of the total Stikine River sockeye salmon run as well as the following components of the run: the Tahltan stock (wild and planted combined); the planted Tuya stock; and the mainstem stocks. The model for 2005 was based on CPUE data from 1985 to 2004 from the Alaska District 106 fishery and the Canadian commercial fishery in the lower river and from 1986 to 2004 from the lower Stikine River test fishery. Linear regression was used to predict run size from cumulative CPUE for each week of the fisheries beginning in week 25 for District 106 and week 26 for the inriver fisheries. As in 1999-2004, the intercept was forced to be zero in order to correct for a tendency to overestimate the run size in the early weeks during years of low abundance. Each CPUE and run size data set is significantly correlated.

In 2005, the preseason forecasts were used during weeks 25-27. After week 27, inseason forecasts of total run size and TAC, produced by the SMM and based on CPUE data in the lower river commercial fishery, were used to assist in determining weekly fishing plans (Table 2). The weekly inputs to the model included: the catch, effort and stock composition (proportion Tahltan/Tuya from egg diameters, proportion planted Tuya from thermal mark analyses of otoliths) in the Canadian lower river test (when in operation) and commercial fisheries; the upper river catch in the aboriginal fishery (AF) and upper river commercial fishery; the catch, effort and assumed stock composition in Subdistrict 106-41 (Sumner Strait); and, the catch and assumed stock composition in District 108 and Subdistrict 106-30 (Clarence Strait). Preliminary results of thermal mark analyses were available inseason for the marine and lower river fisheries to account for Tuya production in the model and reduce the risk of over-estimating the TAC of Tahltan sockeye salmon. Initially in 2005 the inriver test fishery CPUE was the primary forecast used however, the CPUE from the commercial fishery was used after week 26 (extended fishery openings provided more data than the limited or absent test fishery). Calculations for the lower Stikine River commercial CPUE excluded catch and effort data from the Flood Glacier

area, i.e., the new area introduced in 1997 and fished through the 2000 season and again opened in 2004 and 2005. In addition, the annual weekly CPUE values for 1994 through 2000 were decreased by a factor of 0.75 for the extra gear allowed in the commercial fishery during that period. This made the historical CPUE data for that period more comparable with the 2005 fishing season and the pre-1994 era.

Table 2. Weekly forecasts of run size and total allowable catch for Stikine River sockeye salmon as estimated inseason by the Stikine Management Model, 2005.

Stat.	Start	Forecast	TAC			Cumulative Catches [a]	
Week	Date	Run Size	Total	U.S.	Canada	U.S.	Canada
Model runs generated by Canada							
26	19-Jun	477,120	422,909	211,455	211,455	18,115	659
27	26-Jun	477,120	422,909	211,455	211,455	37,535	14,401
28	3-Jul	191,917	134,297	67,148	67,148	60,270	30,944
29	10-Jul	189,540	132,564	66,282	66,282	80,783	51,654
30	17-Jul	223,762	167,090	83,545	83,545	91,020	66,465
31	24-Jul	237,574	180,919	90,459	90,459	94,582	75,337
32	31-Jul	253,786	197,199	98,599	98,599	96,695	82,795
33	7-Aug	253,350	196,760	98,380	98,380	100,046	85,782
34	14-Aug	273,724	217,179	108,590	108,590	100,735	85,863
Model runs generated by the U.S.							
25	12-Jun	477,120	421,096	210,548	210,548	464	0
26	19-Jun	477,120	421,096	210,548	210,548	4,063	832
27	26-Jun	477,120	421,096	210,548	210,548	24,197	6,822
28	3-Jul	174,037	116,068	58,034	58,034	43,838	18,409
29	10-Jul	178,491	132,433	66,221	66,221	70,674	32,351
30	17-Jul	222,687	166,052	83,026	83,026	100,790	52,368
31	24-Jul	247,178	191,640	95,820	95,820	93,645	67,617
32	31-Jul	237,385	180,695	90,348	90,348	95,961	75,888
33	7-Aug	253,791	197,174	98,587	98,587	98,348	79,408
34	14-Aug	274,896	109,154				
Postseason estimate (from Table 3).							
		264,138	208,382	103,585	103,585		

[a] does not include test fishery catches

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

The preseason forecast for the Stikine River sockeye salmon run was approximately 477,100 fish (Table 2), which indicated a run size characterized as well above average and a potentially record run. The forecast included approximately 214,500 natural Tahltan sockeye salmon (45%), 184,000 planted Tahltan fish (39%), 3,500 planted Tuya sockeye salmon (1%), and 75,100 mainstem fish (16%). Canadian inseason predictions of

total run ranged from 190,000 to 274,000 sockeye salmon; U.S. forecasts ranged from 174,000 to 275.000 (Table 2). All forecasts indicated an above average run. Differences in U.S. and Canadian weekly predictions are due only to different catch data inputs being used for the updates. The inseason forecast tended to under-predict the run during the peak weeks of the fishery, in part, due to evidently delayed migratory timing. The inseason forecasts increased throughout the duration of the run and by the end of the fishery were approximately 10,000 fish above the preliminary postseason estimate (Table 2, 3).

U.S. Fisheries

The 2005 gillnet harvest in District 106 included 1,526 large Chinook, , 46 jack Chinook, 110,192 sockeye, 114,410 coho salmon, 461,187 pink, and 198,564 chum salmon (Appendix A.1). Chinook and pink salmon harvests were above average, while the other salmon harvests were below average. The postseason estimate of the contribution of Stikine River sockeye salmon to the District 106 total sockeye salmon harvest was 23,048 or 21% of the harvest (Appendix A.2). Sockeye salmon of Neck Lake and Hugh Smith Lake origin contributed the bulk of the domestic hatchery catch of 2,500 fish (2%) to the District 106 fishery. An estimated 657 Chinook salmon in the District 106 harvest (42%) were of Alaska hatchery origin (Appendix A.1). An estimated 30,727 coho salmon in the District 106 harvest were of Alaska hatchery origin, 27% of the total coho salmon harvest. The District 106 drift gillnet fishery was open for 53 days from June 12 through October 5 (Appendix A.1). This was slightly above the average fishing time of 46 days. Sections 6-A, 6-B, and 6-C were open simultaneously each week throughout the season. Weekly fishing effort in number of vessels fishing in District 106 was below average for all but the last three weeks of the season. The greatest effort in vessels fishing, 95 boats, occurred in week 29. However, the greatest effort in boat days (300) occurred two weeks earlier in week 27 (Appendix A.1). The total season effort was 2,964 boat days (Appendix A.1).

The Sumner Strait fishery (Subdistricts 106-41 & 42) harvested an estimated 21,426 Stikine River sockeye salmon (Appendix A.4), 26% of the total sockeye salmon harvest in that subdistrict. The Clarence Strait fishery (Subdistrict 106-30) harvested an estimated 1,622 Stikine River sockeye salmon (Appendix A.6), 6% of the total sockeye salmon harvest in that subdistrict.

In District 108, 24,293 large Chinook, 2,676 jack Chinook, 99,465 sockeye, 42,203 coho salmon, 106,395 pink, and 150,121 chum salmon were harvested for the season (Appendix A.7). The total harvest of Chinook salmon was almost three times the highest historical harvest (9,342 fish in 1972) due to the reopening of the directed Chinook salmon fishery in District 108. Total sockeye salmon harvest in District 108 was the third highest on record with coho salmon and pink salmon harvests each the second highest and chum salmon the highest on record. The District 108 fishery harvested an estimated 69,062 Stikine River sockeye salmon (Appendix A.8), 69% of the District 108 sockeye salmon harvest. The District 108 fishery started on May 2nd and had six weeks of directed Chinook salmon fishing before the usual sockeye salmon opening occurred in week 25. District 108 closed concurrently with District 106 on October 5th. The 78 days the district

was open is the highest on record (Appendix A.7). Excluding the directed Chinook salmon fishery, the district was open for 57 days of fishing, well above average. District 108 was open for at least three days a week with the exception of weeks 22, 31, 32, and 38 when two-day openings occurred. An estimated 21% of the District 108 coho salmon harvest (8,986 fish) was of Alaskan hatchery origin (Appendix A.7). The Alaska hatchery Chinook salmon contribution in District 108 was estimated at 1,816 fish, 7% of the total

Table 3. Terminal run reconstruction for Stikine River sockeye salmon, 2005.

					Tahltan		Total	All	All
	Tahltan	Main	Total	Tuya	Wild	Planted	Stikine	Planted	Wild
Escapement[a]	43,446	34,788	78,234	1,796	25,441	18,005	80,030	19,801	60,229
ESSR Catch[b]				148			148	148	0
Biological Samples	400		400		242	158	400	158	242
Broodstock	3,424		3,424		2,074	1,350	3,424	1,350	2,074
Natural Spawning	39,622	34,788	74,410		23,202	16,420	74,410	16,420	57,990
Excess[c]				1,648			1,648	1,648	
Canadian Harvest									
Indian Food	5,099	164	5,263	71	3,845	1,254	5,334	1,325	4,009
Upper Commercial	582	10	592	13	437	145	605	159	447
Lower Commercial	60,881	17,634	78,515	1,437	32,707	28,174	79,952	29,611	50,341
Total	66,562	17,807	84,370	1,521	36,989	29,573	85,891	31,095	54,796
% Harvest	51.1%	38.3%	47.7%	99.7%					
Test Fishery Catch	895	748	1,643	8	568	327	1,651	335	1,316
Inriver Run	110,903	53,343	164,246	3,325	62,998	47,905	167,572	51,230	116,341
U.S. Harvest[ad]									
106-41&42	18,979	2,447	21,426	0	8,687	10,292	21,426	10,292	11,134
106-30	1,101	521	1,622	0	1,037	64	1,622	64	1,558
108	43,467	25,595	69,062	0	17,853	25,614	69,062	25,614	43,448
Subsistence	167	80	247	5	90	77	252	82	170
Total	63,714	28,643	92,357	5	27,666	36,048	92,362	36,053	56,309
% Harvest	48.9%	61.7%	52.3%	0.3%					
Test Fishery Catch	0	0	0	0	0	0	0	0	0
Total Run	174,617	81,986	256,603	3,330	90,664	83,953	259,934	87,283	172,651
Escapement Goal	24,000	30,000	54,000	0					
Terminal Excess[e]				475					
Total TAC	149,722	51,238	200,960	2,855			203,816		
Total Harvest[f]	131,171	47,198	178,370	1,682			180,052	67,630	112,422
Canada TAC	74,861	25,619	100,480	1,428			101,908		
Actual Catch[gh]	66,562	17,807	84,370	1,521			85,891	31,095	54,796
% of total TAC	88.9%	69.5%	84.0%				84.3%		
U.S. TAC	74,861	25,619	100,480	1,428			101,908		
Actual Catch[gh]	63,714	28,643	92,357	5			92,362	36,053	56,309
% of total TAC	85.1%	111.8%	91.9%				90.6%		

[a] Escapement into terminal and spawning areas from traditional fisheries.
[b] Catch 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] Analysis of thermal marks indicated that 434 Tuya fish were harvested in U.S. marine catches. Numbers were insufficient to classify with SPA.
[e] 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.
[f] Includes traditional, ESSR, and test fishery catches.
[g] Does not include ESSR or test fishery catches.
[h] U.S. harvest estimate differs from Joint Interception Committee estimate because no estimates are made for catches other than in the listed fisheries.

harvest. The weekly fishing effort in number of vessels fishing in District 108 during the usual fishery (weeks 25 through 41) was above average every week with the exception of weeks 26 and 27. The season effort of 2,781 boat-days, during the usual fishery, in District 108 was more than twice the 1995-2004 average of 1,297 boat-days.

The District 108 test fishery did not take place in 2005.

The 2005 season was the second season a U.S. Federal subsistence sockeye salmon fishery was conducted on the Stikine River, and was the first season that U.S. Federal subsistence Chinook and coho salmon fisheries were conducted. The fisheries were managed by the United States Forest Service. A permit issued by the USFS to federally qualified users was required. The fisheries took place on the Stikine River upriver from marine waters to the U.S./Canadian border. Fishing in "clearwater" tributaries or side channels and at stock assessment sites was prohibited. The Guideline Harvest Levels for Chinook, sockeye, and coho salmon were set at 125, 600, and 400 fish, respectively. The open dates were May 15 to June 20 for the Chinook salmon fishery, July 1 to July 31 for the sockeye salmon fishery, and August 15 to October 1 for the coho salmon fishery. The allowable fishing gear for the fishery was dipnets, spears, gaffs, rod and reel, beach seine, or gillnets not exceeding 15 fathoms in length with mesh size no larger than 5½ inches. A total of 34 permits were issued and the estimated harvests included 20 Chinook, 252 salmon, and 53 coho salmon.

Successful negotiations between the U.S. and Canada in February of 2005 resulted in the first commercial directed Stikine River Chinook salmon drift gillnet fishery in almost 30 years. The preseason forecast run forecast was approximately 80,000 large Chinook salmon. The U.S. allowable catch based on this forecast was 27,250 fish. The fishery was limited to the waters in District 108 in order to target large Stikine Chinook salmon. One hundred thirteen gillnetters made landings of Chinook salmon over the course of this six-week fishery from weeks 19 through 24. A total of 21 days were fished within this time period. The gillnet fleet harvested an estimated 22,173 large Stikine Chinook salmon in District 108. The sport fishery was open continuously from weeks 19-29 with liberalized bag and gear limits. The sport fishery harvested an estimated 3,002 Stikine Chinook salmon during this time period. The troll fishery was open continuously in three hatchery access areas in 8-B from weeks 19-26 and was open for 5 days in week 27. The spring troll fishery was closed by regulation on June 30. The troll fishery harvested 4,296 large Stikine Chinook salmon. The final cumulative U.S. harvest of large Stikine Chinook salmon through week 29 was 29,491 fish. The final estimate of the total terminal run was 90,106 large Chinook and was based upon mark-recapture information.

The District 108 directed Stikine Chinook gillnet fishery began at 8:00 am on Monday, May 2 (week 19) for a four-day period. An initial four-day opening occurred due to a very large Stikine Chinook preseason forecast combined with expected relatively low effort. District 108 was opened west of a line from Indian Point to Point Rothsay with several specific area closures that were established by the Petersburg and Wrangell Advisory Committees. The closures were intended to reduce conflicts between commercial and sport fishers and for steelhead conservation. The sport fish closures around Wrangell remained in effect throughout the six weeks of the fishery, while all but

one of the Petersburg closures were dropped after Memorial Day. Thirty-six gillnetters made landings in District 108 during this week. The majority of boats fished in Section 8-B, and this trend remained throughout the directed Stikine Chinook gillnet fishery. A unique dynamic of the fishery was the proximity to town, and few fishermen spent entire openings without tying to the dock. The first inseason run estimate was week 21; therefore the preseason forecast was used for the first three weeks of the directed Stikine Chinook fishery. The estimated District 108 harvest for week 19 was 700 large kings.

During weeks 20-21, District 108 was opened the same area and time as week 19. Gillnet effort increased steadily as the season progressed with 53 boats making landings in week 20 and 66 boats in week 21. The cumulative harvest of large Stikine Chinook by the U.S. fisheries was estimated to be approximately 6,000 fish by the end of week 21. The first inseason forecast was estimated at 61,243 large Chinook salmon in week 21. With a forecast of this size, the U.S. allowable catch was 19,450 fish. This first inseason run estimate was smaller than the preseason forecast.

During weeks 22-23, time was reduced due to the Petersburg and Wrangell Sport Fish Derbies occurring over Memorial Day Weekend. District 108 was open for two days in week 22 and three days in week 23. Effort continued to increase to 76 boats in week 22 and 89 boats in week 23. Harvest of large Chinook salmon increased each of these weeks with an estimated 3,255 fish harvested in week 22 and 7,940 fish harvested in week 23. The estimated cumulative harvest was 17,472 fish by the end of week 23. The inseason forecast dropped to 59,472 fish in week 22 and increased to 77,371 fish in week 23. The U.S. allowable catch based on the week 23 forecast increased substantially to 29,850 fish.

During week 24, District 108 was open for four days. The four-day opening was warranted due to a large increase in the U.S. allowable catch, and a shift in run timing later than normal. The effort was unexpectedly large with 104 boats making landings. The catch rates during this week were very similar to the high catch rates in the prior week. The large effort combined with the continued high catch rates resulted in an estimated U.S. harvest of 10,561 large Stikine Chinook. The estimated harvest from week 24 brought the cumulative harvest up to an estimated 27,233 fish. The inseason forecast also increased this week to 84,317 fish. The U.S. allowable catch derived from this forecast was 34,400 fish. This was the last directed Stikine Chinook opening.

During weeks 25-27 an area closure was implemented that closed a large portion of District 8 adjacent to the Stikine River mouth. The area closure was implemented to reduce harvest of Chinook salmon while still allowing for harvest of sockeye salmon. The U.S. Stikine Chinook harvest from weeks 25 through 29 accounted for an additional 2,153 fish.

The District 106 gillnet season began, and the District 108 season continued into sockeye salmon management, at 12:00 noon on Sunday, June 12 (week 25) for a three-day period. In District 108 the closed waters were expanded out from the Indian Point-Point Rothsay line to the old Stikine closure line in Section 8-A that closes off the Frederick Sound portion of the Stikine flats, and a further expanded line in Section 8-B that ran from Blind Slough to Two Tree Island Light to Neal Point Light to South Craig Point Light to Reef

Point to the northwest tip of Etolin Island. These closures, particularly the closure in Section 8-B, were placed in effect to reduce the harvest of Chinook salmon late into the run based on cumulative US allowable catch estimates at that time. The first sockeye salmon opening is normally two days and any decision to extend fishing is based on fishery harvest rates estimated by management biologists on site in the fishery. However, an initial three days were given due to the large forecast of Tahltan sockeye salmon. The estimated sockeye salmon CPUE in both districts for week 25 was below average for this week (Appendix A.2). However, the fishery was open in week 25 in only seven years in District 106 and four years in District 108 during the 1995-2004 period. There were 12 boats fishing in Sumner Strait (106-41) and three boats fishing in Clarence Strait (106-30) during this opening. District 108 had a well above-average number of boats fishing with 48 boats making landings (Appendices A.3 and A.5). The inseason otolith readings for District 106 indicated that the harvest in Sumner Strait consisted of 8.7% marked Tahltan bound fish and no Tuya fish. The District 108 fishery had a higher proportion of marked Tahltan (21.7%) and no Tuya fish. The preseason SMM forecasted a total Stikine River TAC of 477,120 fish and a Tahltan TAC of 372,997 (Table 2). This would allow the U.S. fisheries to harvest a total of 211,455 Stikine River fish, including 186,498 Tahltan fish. The preseason forecast was used for weeks 25-27, while the inriver commercial fishery CPUE was used for the remainder of the sockeye salmon season. Normally, the inriver test fishery CPUE data is used in conjunction with the commercial fishery CPUE data, but the test fishery was only operated for the first week (week 27) and a couple of days of the next week. Therefore, the commercial fishery CPUE data was used almost exclusively.

During week 26, there were 44 boats fishing in Sumner Strait, 9 boats fishing in Clarence Strait and 45 boats fishing in District 8 for the four days fishing occurred (Appendices A.3 and A.5). The sockeye salmon CPUE in both districts was above average for this week during the initial three-day opening. The above-average catch rates stimulated the decision to extend both District 106 and 108 for an additional 24-hour period. The expanded closure in Section 8-B remained in effect during this opening in attempt to comply with the US Chinook salmon allowable catch estimate.

During week 27, there were 56 boats fishing in Sumner Strait, 21 boats fishing in Clarence Strait and 72 boats fishing in District 108 (Appendices A.3 and A.5). The District 106 and 108 sockeye salmon harvest and CPUE were below the respective 1995-2004 averages. The inseason otolith readings for sub-district 106-41 for week 27 indicated that 24.0% of the catch was comprised of thermally marked Tahltan fish while no Tuya fish were indicated. The District 108 reading indicated 35.8% thermally marked Tahltan fish and 0.3% thermally marked Tuya fish. The estimated U.S. total Tahltan sockeye salmon harvest by the end of this week was 32,035 fish.

During week 28, District 106 and 108 were opened for an initial three days (Appendix A.7). There were 14 boats fishing in Clarence Strait and 64 boats in Sumner Strait, and a total of 98 boats fishing in District 108 for the week (Appendices A.3, A.5, and A.7). Surveys on the fishing grounds showed that the CPUE for the three-day opening was near the ten-year average in District 106 and was above the ten-year average in District 108.

The above-average District 108 catch rates demonstrated solid run strength as the effort in the district was above average. A 24-hour midweek opening occurred in District 108. The percentage of thermally marked Tahltan sockeye salmon in District 106 (11.9%) started falling off this week. On average, the peak Tahltan abundance occurs in District 106 in week 27 and this year did not seem to be an exception. This week the SMM switched from the preseason forecast to a forecast based on the Canadian inriver commercial fishery CPUE (Table 2). The estimated cumulative U.S. harvest of Tahltan sockeye salmon in District 108 was 29,258 fish while 18,615 fish were estimated in District 106 making a total estimated U.S. Tahltan sockeye salmon harvest of 47,873 fish through week 28. The week 28 U.S. TAC from the SMM was 58,162 Tahltan sockeye salmon. The SMM forecast of the total Tahltan sockeye salmon run decreased markedly this week from the pre-season forecast (from 398,500 fish to 141,828 fish), while the forecast for the mainstem Stikine sockeye salmon run decreased to a lesser extent (from 75,120 fish to 62,330 fish).

During week 29, 95 boats fished in District 106 and 105 boats fished in District 108 (Appendices A.1 and A.7). Indices of inriver run strength of Tahltan sockeye salmon continued to be good with high catch rates in the lower river commercial fishery in Canada. Both districts were open for an initial three days of fishing time. Fishing ground surveys showed that sockeye salmon CPUE for the three-day opening was generally below average in District 106 and just above average in District 108. The effort in District 108 this week was significantly above average, and a number of boats in the district were starting to target returning Anita Bay chum salmon. The continued solid catch rates of sockeye salmon in District 108, even when some boats were beginning to target chum salmon, signified a strong sockeye salmon run. A 48-hour midweek opening occurred in District 108. Another factor considered in deciding upon the extended fishing time in District 108 was the historical run timing of Tahltan sockeye salmon. The week 29 opening would most likely be the last time to fish on a significant Tahltan component. The inseason otolith readings for week 29 indicated that the marked Tahltan fish contributed 16.8% of the District 106 catch and 26.9% of the District 108 catch. The SMM run prediction increased for Tahltan sockeye salmon and continued to decrease for mainstem sockeye salmon. The estimated U.S. Tahltan harvest by the end of this week was 58,989 sockeye salmon with a U.S. TAC of 65,433 fish. The estimated U.S. harvest of mainstem sockeye salmon was 21,378 fish with a U.S. remaining TAC of 0 fish. The total mainstem run was estimated to be 45,976 sockeye salmon. It was generally believed that the SMM was under forecasting the mainstem run size, as was the case last year, due to the Tahltan sockeye salmon run being stronger and later than normal. An enlarged closure around Salmon Bay was implemented to increase sockeye salmon escapement into that lake system.

During week 30, there were 88 boats fishing in District 106 and 88 boats fishing in District 108 (Appendices A.1 and A.7). Both districts were open for an initial three days. The sockeye salmon CPUE in District 106 was below average. The sockeye salmon catch rates in District 108 were near average even with a large amount of effort shifted to the south part of the district to concentrate on chum salmon. A 24-hour midweek opening occurred in District 108. The extended opening was a difficult decision and was based on solid sockeye salmon catches in District 108 and a mainstem component that appeared to

be slowly increasing. The U.S. catch of Tahltan sockeye salmon was estimated at 62,785 fish with a U.S. TAC of 78,684 fish. The inseason otolith readings for week 30 indicated that marked Tahltan fish contributed to 11.8% of the District 106 catch and 15.4% of the District 108 catch. The SMM estimated a total U.S. mainstem catch of 27,818 sockeye salmon with a remaining U.S. TAC of 0 fish. The mainstem run size estimate dropped to 30,095 sockeye salmon even though catch rates in the lower river commercial fishery remained high. The proportion of Tahltan fish to mainstem fish in the inriver commercial fishery remained high and signified a sustained Tahltan sockeye salmon run.

During week 31, there were 53 boats fishing in District 106 and 71 boats fishing in District 108. Both districts were open for an initial two days. The reduced opening was due to concern for McDonald Lake sockeye salmon as well as mainstem Stikine sockeye salmon. The District 108 sockeye salmon CPUE was above average while the District 106 CPUE was below average. There was no extended fishing time in either district this week. The U.S. catch of Tahltan sockeye salmon was estimated at 63,696 fish with a U.S. TAC of 80,729 fish. The SMM estimated a total U.S. mainstem catch of 30,470 fish with a U.S. remaining TAC of 0 fish. The mainstem run size estimate increased slightly this week to 32,273 sockeye salmon. The marked Tahltan component in District 108 remained relatively high at 17.7% of the catch according to the inseason otolith readings. This was the last week of the on-grounds gillnet survey.

During week 32, there were 55 boats fishing in District 106 and 50 boats fishing in District 108. Both districts were opened for an initial two days. Again, the reduced opening was due to concerns for both McDonald Lake sockeye salmon as well as mainstem Stikine sockeye salmon. As a result of concerns over these sockeye salmon stocks, the sockeye salmon management regime stayed in effect rather than switching into pink salmon management this week. The sockeye salmon catch rates in both districts were at or above average for the week. There was no extended fishing time in either district this week. The SMM estimated a U.S. harvest of 64,576 Tahltan sockeye salmon with a U.S. TAC of 84,099 fish. The mainstem harvest by the U.S. was estimated to be 31,703 sockeye salmon with a remaining U.S. TAC of 0 fish. The inseason otolith readings for week 32 indicated that marked Tahltan fish contributed to 21.5% of the District 108 catch. This is a large proportion of Tahltan fish for this time of year. The final model run was extended out to week 33 this year due to the later run timing of Stikine sockeye salmon. The final SMM run estimated a total U.S. catch of 98,348 Stikine sockeye salmon with 65,069 Tahltan fish and 32,863 mainstem fish estimated. The final mainstem run size was estimated at 60,968 fish, which still left the U.S. well over the mainstem TAC. The total Stikine sockeye salmon run estimate based on the SMM was 274,896 fish (Table 2).

During weeks 33 through 35, both Districts 106 and 108 were managed for pink salmon. Both districts were open four days a week through week 35. Section D of District 106 was closed from week 33 through week 36. Pink salmon harvests in both districts are not always a true reflection of abundance because low prices for pink salmon and catches of other more valuable species may affect the fishing patterns and methods. During the 2005 season, the fishing effort was substantially less than average in District 106, however, in

District 108 the effort was well above average for this time period. Total pink salmon harvest was above average in both districts with the harvest in District 108 being the second highest on record.

Coho salmon management typically commences in late August or early September in both the District 106 and 108 gillnet fisheries. During week 36 (August 28 – September 3) the management emphasis changed from pink to coho salmon. Prior to the change to coho salmon management the District 106 fishery harvested 61,068 coho salmon, approximately 53% of the total District 106 coho salmon catch. The Alaska coho salmon hatchery contribution to the District 106 fishery was below average every week of the season with the exception of weeks 25 and 40. Catch rates during the fall coho salmon season were generally below average in both districts. One exception to the lackluster catch rates was in week 38 when both districts had above-average coho salmon CPUE. Districts 106 and 108 were open three days per week from week 36 through 41 except in week 38 when they were only open for two days. Troll coho salmon catch rates across the region were high. Abnormal weather patterns may have contributed to the poor gillnet catches. The weekly coho salmon harvest in District 108 was well above average for the fall coho salmon season, but this was due to increased effort rather than increased catch rates. The season ended with a final three-day opening during week 41 (October 2-8).

Canadian Fisheries

Catches from the combined Canadian commercial and aboriginal gillnet fisheries, and sport fishery in the Stikine River in 2005 included: 19,192 large Chinook, 1,982 jack Chinook, 85,890 sockeye, 276 coho salmon, 0 pink, and 39 chum salmon (Appendices A.10, A.12 and A.13). In addition to these catches, 148 sockeye salmon were taken in a terminal fishery located at the mouth of the Tuya River (Table 3). Because of the new targeted Chinook salmon commercial fishery, the catches of large Chinook salmon were above average and represented a record catch. Catches of jack Chinook salmon were average, while the relatively minor catches of chum and coho salmon were below average. The catch of 85,890 sockeye salmon was also a record. The estimate of the total contribution of sockeye salmon from the Canada/U.S. fry-planting program to the combined Canadian aboriginal and commercial fisheries is 31,095 fish, 36% of the catch (Table 3).

Two test fisheries (sockeye and coho salmon) were conducted for stock assessment purposes in the lower Stikine River in 2005. The test fisheries were located immediately upstream from the Canada/U.S. border. Combined test fishery catches included: 21 large Chinook, 33 jack, 1,651 sockeye, 715 coho salmon, 71 pink, 93 chum salmon, and 72 steelhead trout (all steelhead trout and most of the coho salmon were released (Appendix A.15)). One objective of the sockeye salmon test fishery was to obtain data for the mark–recapture study. Additional objectives of the sockeye salmon test fishery were similar to those in previous years: to provide inseason catch, stock ID and effort data for input into the SMM to estimate the inriver run size; and, to determine migratory timing and stock composition of the sockeye salmon run for use in the postseason estimations of the inriver sockeye and coho salmon run sizes. The objectives of the coho salmon test

fishery were to provide: a measure of run timing through the fishery; age and gender profiles; and, to assess the relative run size (relative to the sockeye salmon run size for which estimates are generated) based on catch per unit.

Lower Stikine River Commercial Fishery

Canadian commercial fishers in the lower Stikine River harvested 19,070 large Chinook, 1,181 jack Chinook, 79,952 sockeye, 276 coho salmon, and 39 chum salmon in 2005 (Appendix A.10). All pink salmon and steelhead trout were released. The sockeye salmon catch was a record high. The catch of large Chinook salmon in the new, targeted fishery was also a record high catch. The catch of jack salmon was above average, while the catch of coho salmon and chum salmon were below average.

The estimates of the stock composition of the lower river sockeye salmon catch (Table 3) was as follows: 28,174 planted Tahltan fish, which accounted for 35% of the sockeye salmon catch; 32,707 wild Tahltan fish accounting for 41% of the catch; 17,807 mainstem fish accounting for 22% of the catch; and 1,437 planted Tuya fish which accounted for 2% of the catch.

Stock compositions of the commercial catch taken in the targeted Chinook and coho salmon fishery are not available; however, assuming that the Chinook salmon catch reflects the contribution of the Little Tahltan and 'other' stocks to the total inriver escapement, the commercial catch of Chinook salmon of Little Tahltan origin is estimated at 3,300 large Chinook salmon, the catch of large Chinook salmon originating from 'other' stocks is estimated at 15,800 fish.

Weekly Chinook and sockeye salmon guideline harvests, based on SCMM and SMM forecasts of the total allowable catch (TAC) apportioned by average run timing and domestic and international allocation agreements, were developed each week to guide management decisions during the Chinook and sockeye salmon season. For purposes of managing the lower river catch, it was assumed catches of 2,000 large Chinook salmon would occur in the upper Stikine: 400, 200, and 1400 large Chinook salmon in the sport, upper commercial and Aboriginal fishery, respectively. For sockeye salmon, it was assumed the upper Stikine commercial and aboriginal fishery would take a combined harvest of 6,500 sockeye salmon. The balance of the Chinook and sockeye salmon TAC were managed in association with the lower Stikine commercial fishery. Particular attention was directed at weekly Chinook salmon guideline harvests and the inriver run and escapement projections of the various sockeye salmon stock groupings. Management through week 26 was focused primarily on the harvest of large Chinook salmon. From week 27 through week, management emphasis switched to the Tahltan Lake sockeye salmon stock after which time the sole focus was the management of mainstem sockeye salmon stocks through the end of August. Coho salmon management focus commenced near the end of August.

The new, targeted Chinook salmon fishery commenced at noon May 07 (week 20) for a scheduled opening of three days. The opening was based on a preseason Canadian guideline harvest for week 20 of 1,500 large Chinook salmon. Water levels were

extremely low resulting in substantial damage to gear. This, in concert with an obvious paucity of fish in the river, resulted in relatively modest effort and a minor catch of 288 large fish. Several licensees left the fishing grounds early. No fishery extensions were granted.

The fishery was posted for four days in week 21 with a weekly target of 2,700 large Chinook salmon. Extremely high water, which was twice the average, affected the efficiency of the fishery and it was probable that the number of fish available to catch was substantially lower than calculated. The final weekly catch of only 141 fish was well below goal. As in week 20, effort was relatively modest. The licensees that left the fishing site in the previous week did not return this week. No fishery extensions were granted. A model estimate, based on the Kakwan Point catch data, was produced late in the week. The projected run size was ~ 50,000 fish; however, it was believed that the Kakwan Point catches were also unduly affected by the extremely high water and, therefore, potentially would have depressed the run size estimate.

The fishery was posted for five days in week 22 with a weekly target of ~1,800 large Chinook salmon. The catches at Kakwan Point tagging site improved resulting in an estimated projected run size of 72,000 large Chinook salmon. The full complement of licenses fished this week and harvested ~1500 large Chinook salmon. The water level dropped during the course of the fishery, resulting in improved fishing conditions. No fishery extensions were granted. The number of boats fishing District 108 continued to increase this week as it had since the start of the fishery; however, the US catches were below weekly guideline harvests.

The fishery was posted for five days in week 23 with a weekly target of ~3,000 large Chinook salmon. Based on the fishing performance in the previous week in which the total catch for five days was only 1,500 fish, it seemed highly likely extensions would be granted in order to harvest ~3,000 fish. The run size projection held at ~72,000 fish and the catches taken early in the opening were relatively good. In addition, catches at the Kakwan Point tagging site were above average. A two-day extension was granted after three days of fishing yet the total catch of 1,900 large Chinook salmon this week was well below the weekly guideline. This may have been associated with increased fishing pressure in District 108 where catches and effort continued to grow and the weekly US guideline harvest was exceeded this week.

It became apparent that the effort and fishing area in the lower Stikine fishery would have to be increased in order to harvest at weekly guideline levels. Accordingly, starting week 24, the fishing zone was extended upriver an additional 24 km to the mouth of the Flood River, and each licensee was permitted to fish two nets. The fishery was posted for five days in week 24 with a weekly target of ~2,100 large Chinook salmon. Catches were good at the outset of the fishery suggesting the weekly guideline harvest would likely be achieved this week. The Kakwan Point data indicated a total run size of ~73,000 fish and showed the run was continuing to build over week 23, which was historically the peak week of abundance. This suggested that this component of the inriver run was probably late. The weekly guideline harvest based on late run timing for this week was ~3,100

large Chinook salmon. The final catch for week 24 was ~3,200 fish. The first mark-recapture projection of the season showed the terminal run at ~82,000 large Chinook salmon, approximately 10,000 fish above the model estimate. The U.S. District 108 catch this week was reported in at ~10,000 large Chinook salmon with up to 100 boats fishing. The catch was almost three times the weekly guideline raising concerns in Canada. In response, the U.S. reduced the fishing zone by approximately 75% for week 25 in order to curb catches and deliver the requisite fish to Canadian fisheries and the spawning grounds.

The fishery was posted for three days in week 25 with a weekly guideline of ~ 2,700 fish. After two days of fishing and near record daily catches, the fishery was extended one day. The final catch for this week was ~3,300 fish, 600 fish above the guideline. It appeared that the run may have peaked this week. U.S. District 108 catches dropped significantly with only 1,800 taken as a result of the reduced fishing zone and a major reduction in the effort which had dropped from 100 boats in week 24 to 35 boats in week 25. In addition, the US management emphasis shifted from Chinook to sockeye salmon this week and the fleet was using primarily sockeye salmon gear. Sockeye salmon catches in District 108 were below average, whereas the catches in District 106, which opened this week, were above average. This observation indicated that the run was probably late.

The fishery was posted for three days in week 26 with a weekly guideline of ~3,000 large Chinook salmon. The guideline harvest was based on run timing adjusted approximately one week late as indicated by the Kakwan Point CPUE. The management regime remained focused on Chinook salmon harvests, notwithstanding that typically the Canadian sockeye salmon fishery starts in week 26. The fishery was extended one day after two days of fishing. The Chinook salmon model indicated the run to be ~75,000, while the mark-recapture estimate was ~81,000. The final catch for this week of 3,200 large Chinook salmon was close to the weekly guideline. Sockeye salmon catches were low for the first three days of the opening but showed an improvement in day four. The total sockeye salmon catch for the week was 650 fish. The majority of the fishers used Chinook salmon gear this week. No further extensions were granted. District 108 sockeye salmon catches improved and were slightly above average although District 106 catches were below average. The preseason forecast of a record run of ~500,000 sockeye salmon was in doubt based on early indictors.

Management emphasis switched to sockeye salmon in week 27. The fishery was initially posted for five days with a guideline catch of Tahltan Lake sockeye salmon of 11,500 fish. After three days of fishing it was decided to extend the opening to six days. The total catch for the week included ~12,200 Tahltan Lake sockeye salmon. The catch of Tuya bound fish was minor and not of any consequence in management decisions this week nor in subsequent weeks. The SMM, based on commercial CPUE, indicated a total Tahltan Lake sockeye salmon run of ~106,000; this was below the preseason expectation of ~400,000 fish, but still above average. The SMM based on the test fishery catches indicated a run of ~130,000 fish. A third method of projecting run size, using regression analyses independent of the SMM, indicated that the run was close to 153,000 sockeye salmon. As projected in the preseason estimates, the Tuya run was very weak. The

Chinook salmon catch was ~2,100 fish, slightly above the weekly guideline of 2,000 large Chinook salmon. The U.S. reported poor sockeye salmon catches in Districts 106 and 108 this week.

In week 28, the fishery was only posted for a three-day initial opening based on the poor catches reported in U.S. District 108 during week 26. However, the model and mark-capture estimate indicated an above average run. Using the model estimate, the guideline catch was ~16,000 sockeye salmon. The CPUE during the early part of the opening was below average, but improved as the week progressed. Subsequently, the fishery was extended in two, two-day announcements increasing the total weekly opening to seven days. The total catch of Tahltan Lake sockeye salmon was ~13,800 fish. Although management emphasis remained trained on Tahltan abundance, the catch of mainstem fish was ~1,700 and the CPUE of mainstem fish was below average as was the mainstem run estimate of ~48,000 fish. The catch of large Chinook salmon was ~1,400 fish, slightly above the weekly guideline. U.S. District 108 catches improved this week and were well above average. District 106 CPUE, however, was below average.

The fishery was posted for three days for week 29 with an initial guideline harvest of ~13,000 Tahltan sockeye salmon. The CPUE was well above average for the first two days of the opening and updated SMM outputs resulted in the TAC increasing to close to 30,000 Tahltan Lake fish. The mark-capture estimate generated concurrently with the SMM also indicated a major increase in sockeye salmon abundance. As a result, the fishery was extended in two, two-day announcements. The total catch of Tahltan Lake sockeye salmon after seven days of fishing was ~15,000 fish. The contribution of mainstem stock to the catch was estimated at 3,000 fish. The run size projection of mainstem fish remained below average this week. It was assumed that, similar to the Tahltan run, the mainstem run timing was at least one week late which, if true, would boost the run size projection. The catches of Tahltan Lake sockeye salmon remained above average in District 108. A relatively high number of thermally marked Tahltan fish were present in the fishery last week and it was, therefore, assumed that the presence of Tahltan Lake fish would persist this week. The US extended their fishery two days in District 108 this week.

The fishery was posted for three days for week 30 with an initial guideline catch of ~27,000 Tahltan Lake sockeye salmon. The mainstem TAC, however, indicated that catches to date exceeded the allowed cumulative TAC. Management emphasis, however, remained focused on Tahltan Lake sockeye salmon abundance and the fishery was extended one day and then three days due to the unusually high number of Tahltan Lake sockeye salmon in the fishery and the assumption that the mainstem run was late in arriving. The CPUE of Tahltan Lake sockeye salmon was above average for the first four days of the opening, but dropped to below average in days six and seven. The CPUE of mainstem sockeye salmon was approximately half the average. The total catch after a seven day fishery was ~9,000 Tahltan Lake sockeye salmon and ~4,100 mainstem fish. The Tahltan Lake weir count projection this week was ~39,000 fish. Surprisingly, catches in the Aboriginal fishery were only average. The weir count and both the SMM and the mark-recapture projections indicated that the Tahltan Lake run was above average. The

mark-recapture estimate also showed the inriver run of mainstem fish was close to double the inriver run projection of mainstem as indicated by the SMM. The US catches in both Districts 106 and 108 were slightly above average. Tahltan bound sockeye salmon remained prevalent in the US fishery, which was very unusual for this week; normally the Tahltan Lake run would have already passed through the fishery by this time.

The fishery was posted for three days for week 31. Tahltan Lake sockeye salmon remained in the fishery in unusually high numbers with the CPUE of this stock more than twice the average. The CPUE of mainstem fish improved slightly, but was still below average. The fishery was extended one day to harvest primarily the surplus Tahltan Lake sockeye salmon available. The total weekly catch was ~5,500 Tahltan, and ~2,700 mainstem fish. According to the SMM, the Canadian cumulative catch of the mainstem stock was ~18,000 fish, whereas the estimated US catch of this stock totaled ~ 30,000 fish. These estimates seemed unrealistically high given the SMM inriver projection of mainstem fish was only ~12,000 fish. The implied overall harvest rate on the mainstem stock grouping was at least 80% not including projections of catches yet to occur. Since mainstem projections derived from the SMM seemed unreasonable, attention had gravitated more towards the inriver mark-recapture estimates which indicated a mainstem inriver run size of ~35,000. The projected Tahltan weir count was ~28,000 fish. Again, it was assumed that the mainstem run was late and that the bulk of the mainstem run was in transit. The CPUE in both US Districts 106 and 108 was above average that bolstered the assumption that the mainstem run was late.

The fishery was posted for three days for week 32. As was observed in week 31, Tahltan Lake sockeye salmon remained in the fishery in unusually high numbers. The CPUE of Tahltan sockeye salmon was almost seven times average. The CPUE of mainstem fish was approximately 30% above average and the mark-recapture estimate generated after two days of fishing showed that the inriver run projection of mainstem fish increased by ~ 20,000 fish, to ~ 56,000 mainstem sockeye salmon. Consequently, the fishery was extended one day. The total weekly catch was ~3,400 Tahltan and ~1,700 mainstem fish. It became apparent that the mainstem run was indeed late due to the increase in CPUE from that observed in week 31, when on average the mainstem run peaked. Both US Districts 106 and 108 had an above average CPUE that supported the assumption that the mainstem run was late.

The fishery was posted for three days for week 33. The CPUE of mainstem fish was over three times average. The inriver mark-recapture estimate held at ~ 50,000 mainstem sockeye salmon. As a result, and in concert with a major reduction in the number of fishers present, the fishery remained opened for the remainder of the season. No fishing occurred after the 13 August even though the CPUE was well above the seasonal average. The projected Tahltan weir count was ~ 35,000 fish and the projected escapement of mainstem fish was estimated at ~ 30,000 sockeye salmon.

The new Stikine River Chinook salmon fishery was prosecuted with relative success. The escapement goal was met, in fact exceeded, and the harvest was close to the negotiated catch share. Inseason management was challenging particularly with respect

to managing to weekly harvest guideline catches particularly during the latter part of the Chinook salmon run when the Canadian fleet was targeting the early component of the sockeye salmon run. In the U.S., problems were encountered in limiting catches to weekly guidelines, due primarily to the difficulty in projecting effort/boats fishing District 108.

In general, both Tahltan Lake and mainstem sockeye salmon entered the lower Stikine commercial fishing grounds later than normal when compared with the average. The Tahltan Lake run did not show a distinct peak in week 28 in the lower Stikine as it normally does. Rather, the peak occurred from week 27 through to week 29. The mainstem run peaked during weeks 32 and 33, up to two weeks later than average.

There was no terminal fishery on Tuya River sockeye salmon in 2005. The season was assigned to experimental operations only. A floating fish ladder/trap was installed and fished from mid-July to late August. The catch of the few returning Tuya sockeye salmon was minor. The experiment in 2005 provided valuable recommendation for the redesign of the fish trap for the 2006 season.

Out of 18 licenses available for the lower river commercial fishery, 12 licenses were issued in 2005 with a maximum of 12 licenses being active in any one week (Appendix A.10). The total effort was 803 permit-days, well above average largely due to the prosecution of the new Chinook salmon fishery. Gear was restricted to one drift or set gill net up to and including week 23. Fishers were permitted two nets for the balance of the fishery. After week 23, the commercial fishing zone was extended upstream approximately 25 km upstream from the standard upper boundary, located at the mouth of the Porcupine River, to the confluence of the Flood and Stikine rivers. This extension encompassed the fishing zone fished in 1997-2000 and 2004.

Upper Stikine River Commercial Fishery

A small commercial fishery has existed near Telegraph Creek on the upper Stikine River since 1975. A total of 60 sockeye salmon was caught in 2005, which was average. One jack Chinook salmon and 28 large Chinook salmon were harvested which were also both below average. The fishing effort was also below average with only 13 boat-days fished. Generally fishery openings were based on the lower Stikine commercial fishery openings, lagged one week. The first opening, however, was concurrent with the lower fishery opening.

Aboriginal Fishery

The Stikine River aboriginal fishery, which is located near Telegraph Creek, harvested 800 large Chinook, 94 jack Chinook, and 5,333 sockeye salmon (Appendix A. 13 and B.15). The harvest of large Chinook salmon was close to average, while the jack salmon harvest was below average. The catch of sockeye salmon was slightly below average. As in 2004, sockeye salmon were up to two weeks late arriving to the fishing grounds. It appears that the run was relatively protracted and did not exhibit a distinct peak in week

29 as is the normal pattern. Chinook salmon catches were only average due to the unusually high water conditions that occurred during the Chinook salmon run.

Sport Fishery

The Stikine River salmon sport fishery targets primarily Chinook salmon and its principal fishing location is located at the mouth of the Tahltan River. Minor sport fishing activities occur in upper reaches of the Tahltan River and in some tributaries of the Iskut River, including Verrett and Craig River. The 2005 catches of 118 large and 25 jack Chinook salmon were below the averages. Effort too was characterized as below average. The 2005 sport fishery that occurs, in general, during the month of July and early August, was subject to unusually high water levels in both the Stikine and Tahltan rivers.

Escapement

Sockeye Salmon

A total of 43,446 sockeye salmon was counted through the Tahltan Lake weir in 2005. The count was above average and was the eleventh highest count since the enumeration of Tahltan sockeye salmon commenced in 1959. The count was ~13,000 fish above the upper end of the escapement goal range of 18,000-30,000 fish, and ~23,000 above the, escapement point target of 24,000 sockeye salmon. An estimated 18,005 fish (41%) originated from the fry-planting program, which is close to the 44% contribution of smolts observed in 2002, the principal cycle year contributing to the 2005 run. A total of 400 sockeye salmon was sacrificed at the weir for stock composition analysis. In addition, a total of 3,424 sockeye salmon was collected for broodstock, resulting in a spawning escapement of 39,622 sockeye salmon (Table 3).

The spawning escapements for the mainstem and the Tuya stock groups are estimated indirectly by computing the ratio of Tahltan to the mainstem and Tuya components in the total inriver sockeye salmon run. Stock identification data are collected in the lower river commercial and test fisheries. The ratios of Tahltan-to-mainstem and Tahltan-to-Tuya are applied to the estimated inriver Tahltan run size to develop an estimate of the total inriver sockeye salmon run. The escapements for Tuya and mainstem sockeye salmon stocks are estimated by subtracting the stock- specific inriver catches from the respective inriver run estimates.

The 2005 preliminary escapement estimates are 34,788 mainstem and 1,796 Tuya sockeye salmon. The mainstem sockeye salmon stocks spawn in tributaries and lakes other than Tahltan Lake, and in the mainstem and side sloughs of the Stikine River. The mainstem spawning escapement estimate is below average but is close to the mid-point of the escapement goal range of 20,000 to 40,000 fish. Aerial survey results were well below average with a count of only 558 fish. The Tuya River sockeye salmon are blocked from accessing potential spawning grounds of Tuya Lake by natural barriers located near the mouth of river. In most years, sockeye salmon are fished below these barriers under the authority of a terminal fishery license. There was no terminal fishery mounted in

2005; instead a field experiment occurred with the operation of a new floating fish ladder and trap designed, manufactured, and installed under the auspices of the Tuya Steering Committee and funded through the Northern Fund of the PSC. Trap catches were minor in scale. Staff also netted 143 sockeye salmon for sampling purposes and for fish marketing assessments. The field component of a research study, funded in 2004 under the Northern Fund of the PSC to investigate the behavior of Tuya River sockeye salmon, was completed in the spring of 2005. The final report is due in January 2005.

For the sixth consecutive year, a sockeye salmon mark–recapture program was conducted to develop an alternate abundance-based management regime for Stikine River sockeye salmon. The inriver run estimate using a Peterson estimate (marked=1,775, recovered=841, catch=79,552) is 165,920 (SE 3,921) and using a Darroch is 167,551 fish (SE 7,382, 95% CI 153,083-182,019). These are close to the final inseason SMM of 173,300 and the postseason estimate of 167,572 sockeye salmon.

Chinook Salmon

The 2005 Chinook salmon escapement enumerated at the Little Tahltan weir was 7,387 large fish and 231 jack Chinook salmon (Appendix A.19). The escapement of large Chinook salmon in the Little Tahltan River was above average and well above the mid-point escapement goal of 4,000 large Chinook salmon (escapement goal range: 2,700 to 5,300). The aerial count of 231 in Beatty Creek was above average. The peak aerial survey count at Andrew Creek was 1,700 fish, the second highest on record and above escapement goal range of 650-1,500 fish.

A mark–recapture study was conducted again in 2005 concurrent with the SCMM to assess the inriver Chinook salmon abundance. Mark-capture estimates were calculated after week 23 (week ending June 04). The system-wide spawning escapement estimate is 41,979 large Chinook salmon which is above average. The escapement to the Little Tahltan River represented approximately 17% of the total Stikine River escapement, which is below average.

Coho Salmon

Aerial surveys of eight index sites were conducted on 03 November. The combined count of 3,200 coho salmon, under relatively good viewing conditions, was below average.

A coho salmon test fishery was conducted from the September 03 to October 15. Utilizing a standard drift gillnet (33 metre by 30 mesh by 9cm mesh size) fishing a specific site, the test fishery cumulative weekly CPUE index was 6.6 coho salmon, which was above average and was fourth highest on record. No comparisons are available with the sockeye salmon test fishery in 2005. The sockeye salmon test fishery was conducted only sporadically in 2005 due to the protracted commercial fishery openings. In past studies, the relative inriver run size of coho salmon was calculated based on the sockeye salmon CPUE and the associated inriver abundance estimate. The general assumptions in the calculation were the test fish CPUE was correlated with inriver run size and that the

coho salmon test fishery efficiency was similar to that of the sockeye salmon test fishing efficiency.

Sockeye Salmon Run Reconstruction

The estimated terminal Stikine River sockeye salmon run size is approximately 260,000 fish. Of this number, approximately 175,000 were of Tahltan Lake origin (wild & planted), 3,300 were of Tuya origin (fry from Tahltan broodstock planted into Tuya Lake), and 82,000 were mainstem stocks (Table 3). These estimates are based on data including: otolith recovery and scale pattern analysis in the U.S. Districts 106 and 108 catches; otolith analysis, egg-diameter stock-composition estimates for inriver catches from the Canadian commercial, aboriginal, ESSR, and test fishery catches; and escapement data. The 2005 total run was well above average, but well below the preseason forecast of 477,000 fish.

TAKU RIVER

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

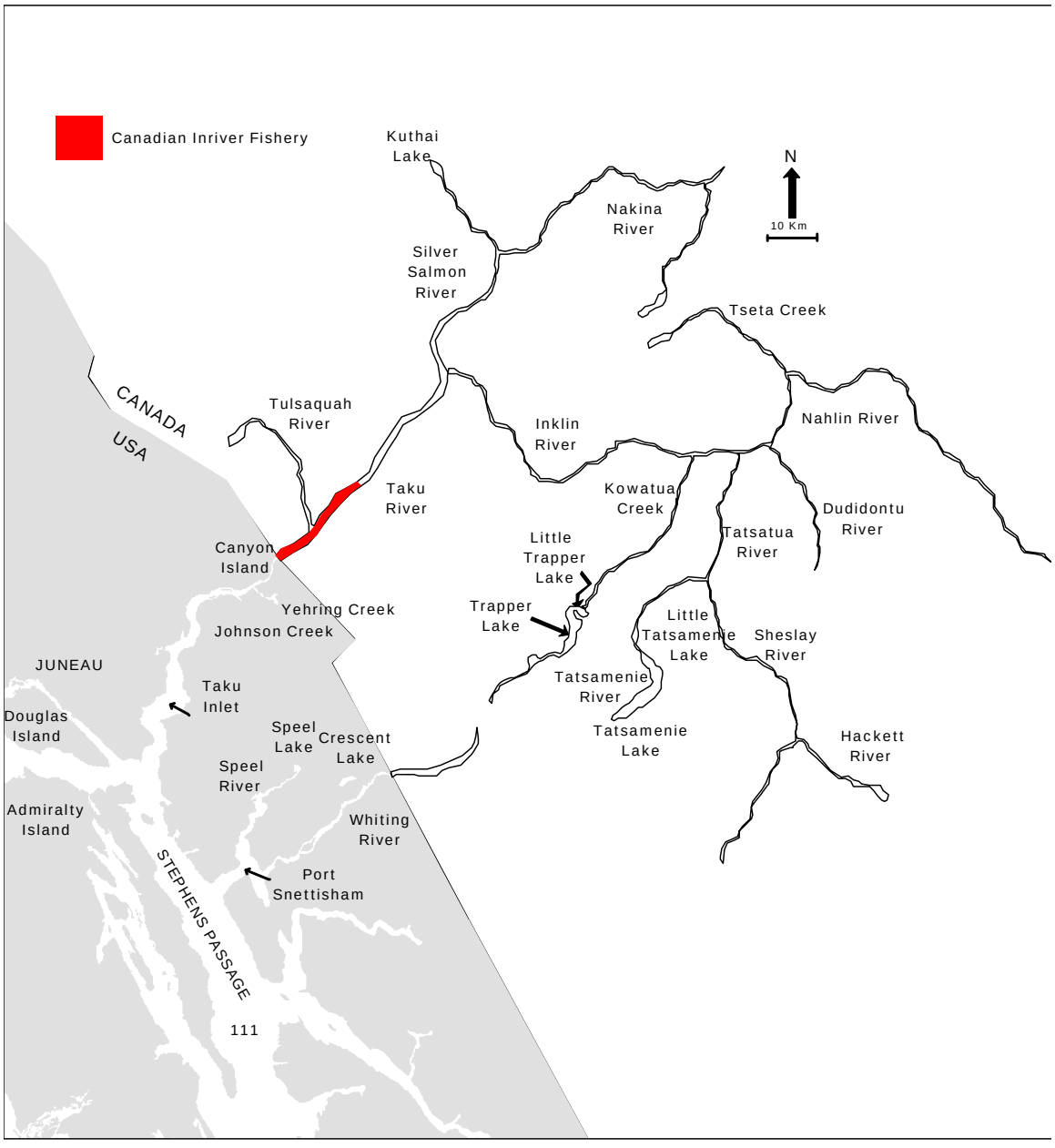

Figure 2. The Taku River and principal U.S. and Canadian fishing areas.

Harvest Regulations

New fishing arrangements were in place in 1999 as a result of negotiations between Canada and the United States of Annex IV, Chapter 1 of the Pacific Salmon Treaty. The arrangements that are expected to apply to the Taku River for the 1999 to 2008 period are as follows:

(1) Sockeye salmon:

(i) Except as noted below, Canada shall harvest no more than 18% of the TAC of the wild sockeye salmon originating in the Canadian portion of the Taku River each year;

(ii) If the projected inriver escapement is greater than 100,000 sockeye salmon, Canada may, in addition, harvest 20% of the projected inriver escapement above 100,000 sockeye salmon;

(iii) The Parties agree to manage the runs of Taku River sockeye salmon to ensure that each country obtains catches in their existing fisheries equivalent to each country's share of wild sockeye salmon and a 50% share of fish originating from Taku River fry plants;

(iv) The Parties agree to continue the existing joint Taku River enhancement program designed to produce annually 100,000 sockeye salmon run.

(2) Coho salmon:

(i) The Parties agree to develop and implement an abundance-based approach to managing coho salmon on the Taku River no later than May 1, 2004. The Parties commit to developing a revised MSY escapement goal to be implemented no later than May 1, 2004.

(ii) Until a new abundance-based approach is developed, the management intent of the United States is to ensure a minimum above-border inriver run of 38,000 coho salmon, and the following arrangements will apply:

a. no numerical limit on the Taku River coho salmon catch will apply in Canada during the directed sockeye salmon fishery (through week 33);

b. if inseason projections of above-border run size are less than 50,000 coho salmon, a directed Canadian harvest of up to 3,000 coho salmon is allowed for assessment purposes as part of the joint Canada/US Taku River mark–recapture program;

c. if inseason projections of above-border run size exceed 50,000 coho salmon, a directed Canadian harvest of 5,000 coho salmon is allowed;

d. if inseason projections of above-border run size exceed 60,000 coho salmon, a directed Canadian harvest of 7,500 coho salmon is allowed;

e. if inseason projections of above border run size exceed 75,000 coho salmon, a directed Canadian harvest of 10,000 coho salmon is allowed.

(3) Chinook salmon:

(i) This agreement shall apply in 2005 through 2008.

(ii) This agreement shall apply to large (greater than 659 mm mid-eye to fork length) Chinook salmon originating in the Taku River.

(iii) Both Parties shall take the appropriate management action to ensure that the necessary escapement goals for Chinook salmon bound for the Canadian portions of the Taku River are achieved. The Parties agree to share in the burden of conservation. Fishing arrangements must take biodiversity and eco-system requirements into account.

(iv) Consistent with paragraph 2 above, management of directed fisheries will be abundance-based through an approach developed by the Committee. The Parties agree to implement assessment programs in support of the abundance-based management regime.

(v) Unless otherwise agreed, directed fisheries on Taku River Chinook salmon will occur only in the Taku River drainage in Canada, and in District 111 in the U.S.

(vi) Management of Taku River Chinook salmon will take into account the conservation of specific stocks or conservation units when planning and prosecuting their respective fisheries. To avoid over-harvesting of specific components of the run, weekly guideline harvests will be developed by the Parties by apportioning their allowable harvest over the total Chinook salmon season based on historical weekly run timing.

(vii) By 2008, the Parties agree to develop and implement through the Committee an agreed Chinook salmon stock identification program to assist the management of Taku Chinook salmon.

(viii) The current MSY escapement goal point estimate (N_{MSY}) for above-border Taku River Chinook salmon is 36,000 fish (greater than 659 mm mid-eye to fork length) with a range of 30,000 to 55,000 fish. This goal is subject to periodic review by the Parties.

(ix) A preseason forecast of the Taku River Chinook salmon terminal run size will be made by the Committee by February 1 of each year.

(x) In 2005 and 2006, directed fisheries may be implemented based on preseason forecasts only if the preseason forecast terminal run size equals or exceeds the upper end of the MSY escapement goal range plus the combined Canada, U.S. and test fishery base level catches (BLCs) of Taku River Chinook salmon. The preseason forecast will only be used for management until inseason projections become available.

(xi) For the purposes of determining whether to allow directed fisheries using inseason information in 2005 and 2006, such fisheries will not be implemented unless the projected terminal run size exceeds the mid-point of the escapement goal range plus the combined Canada, U.S. and test fishery BLCs of Taku River Chinook salmon. The Committee shall determine when inseason projections can be used for management purposes and shall establish the methodology for inseason projections and update them weekly or at other agreed intervals.

(xii) If escapements in 2005 and 2006 are less than the escapement goal point estimate (N_{MSY}), the Parties agree to review the 2005 and 2006 directed fisheries and implement additional precautionary management measures intended to achieve the escapement goal point estimate (N_{MSY}) in 2007 and 2008.

(xiii) In 2007 and 2008, directed fisheries may be implemented based on preseason forecasts only if the preseason forecast terminal run size equals or exceeds the escapement goal point estimate (N_{MSY}) plus the combined Canada, U.S. and test fishery base level catches (BLCs) of Taku River Chinook salmon. The preseason forecast will only be used for management until inseason projections become available.

(xiv) For the purposes of determining whether to allow directed fisheries using inseason information in 2007 and 2008, such fisheries will not be implemented unless the projected terminal run size exceeds the escapement goal point estimate (N_{MSY}) plus the combined Canada, U.S. and test fishery BLCs of Taku River Chinook salmon. The Committee shall determine when inseason projections can be used for management purposes and shall establish the methodology for inseason projections and update them weekly or at other agreed intervals.

(xv) The allowable catch (AC) is calculated as follows:

[Base terminal run (BTR) = escapement target + test fishery BLC + U.S. BLC + Cdn BLC]

[Terminal run - (BTR) = AC]

(xvi) BLCs include the following:
a. U.S. Taku BLC: 3,500 large Chinook salmon
b. Canadian Taku BLC: 1,500 large Chinook salmon
c. Test fishery: 1,400 large Chinook salmon;

(xvii) Harvest sharing and accounting of the AC shall be as follows:

Allowable Catch Range		Allowable Catch Share			
		U.S.		Canada	
Lower	Upper	Lower	Upper	Lower	Upper
0	5,000	0	0	0	5,000
5,001	20,000	1	11,000	5,000	9,000
20,001	30,000	11,001	17,500	9,000	12,500
30,001	50,000	17,501	30,500	12,500	19,500
50,001	100,000	30,501	63,000	19,500	37,000

Within each Allowable Catch Range, each Party's Allowable Catch Share will be calculated proportional to where the AC occurs within the range.

(xviii) The U.S. catch of the Taku Chinook salmon AC will not count towards the SEAK AABM allocation. In particular:

a. non-Taku Treaty Chinook salmon harvested in District 111 will continue to count toward the SEAK AABM harvest limit;
b. the U.S. BLC of Taku Chinook salmon in District 111 will count toward the SEAK AABM harvest limit;
c. the U.S. catch of Taku Chinook salmon in District 111 above the U.S. BLC will not count towards the SEAK AABM allocation.

Accounting for the SEAK AABM Chinook salmon catches as pertains to transboundary rivers harvests will continue to be the responsibility of the Chinook Technical Committee as modified by (a) through (c) above.

(xix) The Parties shall determine the domestic allocation of their respective harvest shares.

(xx) When the terminal run is insufficient to provide for the Party's Taku Chinook salmon BLC and the lower end of the escapement goal range, the reductions in each Party's base level fisheries, i.e. the fisheries that contributed to the BLCs, will be proportionate to the Taku Chinook salmon BLC shares, excluding the test fishery.

(xxi) When the escapement of Taku River Chinook salmon is below the lower bound of the agreed escapement range for three consecutive years, the Parties will examine the management of base level fisheries and any other fishery which harvests Taku River Chinook salmon stocks, with a view to rebuilding the escapement.

U.S. Fisheries

The traditional District 111 commercial drift gillnet salmon fishery, including the new directed Chinook salmon fishery, was open for a total of 68 days from May 2, through October 5, 2005 (Appendix B.1). The harvest included 21,999 large Chinook, 1,311 jack Chinook, 87,254 sockeye, 20,725 coho salmon, 181,513 pink, and 93,210 chum salmon. Harvests of Chinook and pink salmon were above average, and the harvest of sockeye, coho salmon, and chum salmon were below average. Weekly commercial fishery harvests and stock composition estimates for these fisheries are provided in Appendices B.1-B.3.

Hatchery stocks contributed significantly to the numbers of both sockeye and chum salmon harvested, and minor numbers to the harvest of other species. The 2005 season was the sixth year of significant numbers of adult sockeye salmon returning to the Snettisham Hatchery inside Port Snettisham. These fish contributed significantly to the harvests primarily in Stephens Passage and to the Speel Arm Terminal Harvest Area (THA) fishery inside Port Snettisham.

The total traditional drift gillnet Chinook salmon harvest in District 111 in 2005 was 23,310 fish. The total number of Chinook salmon caught in the new directed Chinook

salmon fishery between weeks 19 and 28 totaled 23,023 fish. Of these, an estimated 21,722 were large fish. After subtracting out the Alaska and non-Alaska hatchery component, 20,911 fish were counted against the US AC. The Chinook salmon harvest after week 28 was 287 fish. As estimated by coded wire tag (CWT) analysis, Alaskan hatchery Chinook salmon contributed a total of 811 fish to the directed Chinook salmon fishery, for approximately 4% of the harvest. Overall, Alaska hatcheries contributed approximately 815 fish, or 4% of the total 2005 District 111 Chinook salmon harvest. Alaskan hatchery Chinook salmon do not count towards the US AC for the directed Chinook salmon fishery.

The Taku River stock assessment program at Canyon Island provided data to estimate the above-border Chinook salmon run. This data with the spawning ground mark-recapture data indicated a spawning escapement of 38,806 large Chinook salmon, near the mid-point of the escapement goal range of 42,500 large Chinook salmon.

The traditional District 111 sockeye salmon harvest of 87,254 fish was approximately half of the average (Appendix B.1). Weekly sockeye salmon harvests in District 111 were below average in weeks 26-31 and 39. Weekly sockeye salmon harvests were above average during weeks 32-38. Weekly sockeye salmon CPUE was below average in weeks 26-31 and above average for weeks 32-40. Domestic hatchery sockeye salmon stocks began to contribute to the traditional fishery in week 27 and added significant numbers to the harvests in weeks 30-33. Fishermen targeting these runs of hatchery sockeye salmon and the Limestone Inlet hatchery chum salmon increased the amount and percentage of fishing effort that occurred in Stephens Passage. Of the total traditional District 111 sockeye salmon harvest, 19% occurred in Stephens Passage, less than the average of 25%. Of the total sockeye salmon harvest 45,468 were of Taku River origin (including 627 from the Tatsamenie fry planting program, Table 4), 10,189 of wild Port Snettisham origin, and 15,183 of US domestic hatchery origin. These were predominately Port Snettisham hatchery sockeye salmon but also included a small number of thermally marked fish from a fry-planting program at Sweetheart Lake in Port Snettisham. An additional 18,781 sockeye salmon were harvested in the Speel Arm THA fishery inside Port Snettisham. The majority of these fish are from hatchery releases but a small portion of wild Speel Lake sockeye salmon stocks are also taken in this fishery.

The traditional District 111 chum salmon harvest of 93,210 fish was below average (Appendix B.1). The summer chum salmon harvest of 89,757 fish comprised 96% of the season's chum salmon harvest. The summer chum salmon run is considered to last through mid-August (week 33) and was comprised mostly of domestic hatchery fish, with small numbers of wild fish contributing to the harvest. Chum salmon runs to DIPAC hatcheries in Gastineau Channel and to the DIPAC remote release site at Limestone Inlet contributed a major portion of the harvest but quantitative contribution estimates were not available. Approximately 59% of the total traditional District 111 chum salmon harvest was made in Taku Inlet, 36% in Stephens Passage, and 3% inside Port Snettisham. The harvest of 3,453 fall chum salmon, week 34 and later, was below average. Most of these chum salmon are assumed to be wild fish of Taku and Whiting Rivers origin.

Table 4. Taku sockeye run reconstruction, 2005.

	Taku Stocks			Snettisham Stocks		
	Total	Wild	Planted	Total	Wild	Hatchery
Escapement	120,053	119,795	258			
Canadian Harvest						
Commercial	21,697	21,440	257			
Food Fishery	161	159	2			
Total	21,858	21,599	259			
Test Fishery Catch	244	241	3			
Above Border Run	142,155	141,636	519			
U.S. Harvest [a]						
District 111	45,468	44,841	627	26,002	10,189	15,813
Personal Use	1,150	1,136	14			
Total	46,618	45,977	641			
Test Fishery Catch	0					
Total Run	188,773	187,613	1,160			
Taku Harvest Plan	Total	Wild	Planted			
Escapement Goal	75,000	75,000	0			
TAC	113,773	112,613	1,160			
Canada						
Base Allowable	20,850	20,270	580			
Surplus Allowable	4,011	4,011				
Total	24,861	21,281	580			
Total %	21.9%	21.6%	50.0%			
Actual	21,858	21,599	259			
Actual %	19.2%	19.2%	22.3%			
U.S.						
Total	92,923	92,343	580			
Total %	81.7%	82.0%	50.0%			
Actual	46,618	45,977	641			
Actual %	41.0%	40.8%	55.2%			

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

The District 111 pink salmon harvest of 181,513 fish was twice the average (Appendix B.1).

Coho salmon stocks harvested in District 111 include runs to the Taku River, Port Snettisham, Stephens Passage, and local Juneau area streams as well as Alaskan hatcheries. The traditional District 111 coho salmon harvest of 20,725 fish was below average (Appendix B.1). Weekly coho salmon harvests were below average during all weeks but weeks 26 and 40. Coho salmon CPUE was above average during weeks 26-28, 30-31, and 40. CWT analyses indicate Alaskan hatchery coho salmon contributed 463

fish or 2% of the traditional District 111 harvest. For most of the season, weekly estimates of Taku River coho salmon abundance indicated a below average run size.

For the 2005 season, drift gillnet fishing time in the traditional District 111 areas during the new directed Chinook salmon fishery during weeks 19-25 was 20 days. During weeks 26-41, drift gillnet fishing time was 90% of average. The maximum number of boats participating in the fishery in a given week was 86 boats during week 23 in the directed Chinook salmon fishery, and 84 boats during week 33 during the remainder of the season (Appendix B.1). Fishing effort as measured by the total number of boats delivering fish each week times the number of days open to fishing was 1,387 boat-days for the directed Chinook salmon fishery, and 2,040 boat-days for the remainder of the season, which was below average.

Management actions for the 2005 drift gillnet directed Chinook salmon fishery were limited to time restrictions as the open area remained the same throughout the fishery. The open area includes the Taku Inlet area of Section 11-B north of the latitude of Cove Point and the area east of a line from Cove Point to Point Bishop. The US Allowed Catch (AC) was determined by a Pacific Salmon Commission bilaterally agreed on formula based, during the early season, on the pre-season Chinook salmon run forecast and revised inseason based on the inseason run projection estimate generated from the Canyon Island mark-recapture program. The AC applied only to large Taku River origin Chinook salmon, fish over 28 inches in length (660mm MEF). The US allowed catch was shared between gillnet, troll and sport fisheries, with no set allocation for each user group. The new regulations allow gillnetting May 1, through the third Sunday in June. This season the Taku drift gillnet directed Chinook salmon fishery occurred between weeks 19 and 28 (May 2 to July 6) although management emphasis shifted to sockeye salmon after week 25. The initial US AC was set at 22,850 large Chinook salmon, based on a preseason terminal run forecast of 99,600 large Chinook salmon. On May 26, week 22, the first U.S. inseason projection of 101,116 was announced. Using the inseason projection, the management objective switched from the upper end of the escapement goal range (55,000) to the midpoint of the escapement goal range (42,500) for large Chinook salmon. Thus, the revised allowable catch for U.S. and Canada was 52,216 Chinook salmon, of which the U.S. allowed harvest was 31,940 fish, and Canada allowed harvest was 20,276 fish. Weekly management decisions were based on Canyon Island fish wheel catches, run timing, fishery performance, and available AC. The lack of recent historic data did not allow for comparison with past fisheries.

In week 19 the fishery was open for two days, and 47 boats landed 1,243 Chinook salmon, of which 981 were large Taku River origin fish. Week 20 was open for 3 days with 64 boats landing 1,844 Chinook salmon, of which 1,617 were large Taku origin fish. Week 21 was open for 3 days with 73 boats landing 4,399 Chinook salmon, of which 3,952 fish were large Taku River origin fish. Week 22 was open for 4 days with 80 boats landing 5,364 Chinook salmon, of which 4,514 fish were large Taku River origin fish. The first bi-laterally agreed upon inseason estimate was generated in week 22, and with indications that the run was somewhat delayed, the projected ½ week late 101,000 fish terminal run compared favorably with the 99,600 preseason projection. Being past the peak of the run, week 23 was open for 3 days with 86 boats landing 4,313 Chinook

salmon, of which 3,483 fish were large Taku origin fish. In week 24, the inseason estimate projected an escapement of approximately 42,500 large Chinook salmon, the targeted midpoint of the escapement goal range, and the fishery was open for 3 days with 70 boats landing 3,028 Chinook salmon, of which 2,375 fish were large Taku origin fish. The fishery was open for two days in week 25 due to the increasing contributions of the smaller Taku tributary stocks as well as being past the period of peak abundance, and 47 boats landed 1,466 Chinook salmon, of which 1,286 were large Taku origin fish. The total harvest of Chinook salmon taken in the District 111 drift gillnet fishery during the directed Chinook salmon fishery (weeks 19-25) was 21,657 fish. The total all gear harvest of Taku origin large Chinook salmon taken during the directed Chinook salmon fishery in District 111 was 21,024 fish, including a commercial drift gillnet harvest of 18,098 fish, a commercial troll harvest of 21 fish, and the Juneau area sport harvest of 2,905 fish.

Management actions to conduct the Taku River directed sockeye salmon drift gillnet fishery were limited to imposing restrictions in time and area. Because there is no bi-laterally agreed forecast for Taku River sockeye salmon, early season management of the District 111 fishery is based on fishery CPUE and Canyon Island fish wheel catches. As the fishing season progresses sufficient data is acquired to estimate the inriver run size from the mark-recapture program at Canyon Island and to use that estimate in conjunction with migratory timing and historical fishery harvest data to forecast the entire Taku sockeye salmon run. In the first week of the season, week 26, which began June 19, three days of fishing time were allowed in both Taku Inlet (Subdistrict 111-32) and Stephens Passage (Subdistrict 111-31). The traditional District 111 sockeye salmon harvest in the first week was roughly 1/3 of average. During week 26, the projected inriver run was estimated to be 70,077 sockeye salmon (Table 5), and fishing time for week 27 was set for three days. The traditional District 111 sockeye salmon harvest in week 27 was roughly ¼ of average. Both Taku Inlet and Stephens Passage were opened for three days in week 28. The traditional District 111 sockeye salmon harvest for the week was again roughly 1/3 of average. Approximately 95% of the sockeye salmon harvested during the week came from Taku Inlet, while the remainder was harvested in Stephens Passage. Due to low CPUE and uncertain inriver estimates, Taku Inlet was open for two days, with Stephens Passage open for three days during week 29 to target returning Alaska hatchery chum salmon. The traditional District 111 harvest of 5,428 sockeye salmon was 1/5 of average with 65% of the harvest occurring in Taku Inlet.

During week 30, Taku Inlet north of the latitude of Circle Point was open for two days due to poor fishery CPUE with improving inriver indicators. Although quite variable, the projected inriver estimates indicated the 75,000 above border sockeye salmon escapement should be met. Stephens Passage was opened for three days. The traditional District 111 sockeye salmon harvest was 1/3 of average with 55% of the harvest taken in Taku Inlet. Analysis of otoliths revealed that 45% (71 of 157) of the samples processed from Stephens Passage during this week were Snettisham hatchery sockeye salmon.

During week 31 Taku Inlet north of the latitude of Circle Point was again open for two days due to low harvests and CPUE as well as uncertainty about the inriver estimates. Stephens Passage was open for three days. The traditional District 111 sockeye salmon

harvest of 8,074 fish was 1/3 of average for the week, with 73% of the harvest in Taku Inlet. Analysis of otoliths revealed that 51% (119 of 235) of the samples processed from Stephens Passage during this week were Snettisham hatchery sockeye salmon. The traditional District 111 coho salmon harvest was 858 fish for the week, 2/3 of average (Appendix B.1).

Table 5. U.S. inseason forecasts of terminal run size, TAC, inriver run size, and the U.S. harvest of Taku River sockeye salmon for 2005.

Stat Week	Inriver Run	Terminal Run	Total TAC	U.S. TAC	Projected U.S. Catch
27	141,620	163,349	88,349	72,446	21,729
28	102,405	127,996	52,996	41,758	25,591
29	83,746	109,097	31,097	25,244	22,352
30	111,304	138,808	63,808	52,111	27,504
31	129,752	157,355	82,355	67,251	27,603
32	137,746	173,846	98,846	80,809	36,100
33	134,359	172,814	97,814	79,708	38,455
Postseason	131,611	195,507	120,507	98,264	63,896

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

During week 32, Taku Inlet and Stephens Passage were open for three days. Inriver mark-recapture estimates indicate the PSC mandated 75,000 sockeye salmon escapement had been realized. With adequate Speel Lake weir sockeye salmon escapement, and Crescent Lake sonar counts, the entrance to Port Snettisham (Subdistrict 111-34) was opened for three days to target returning Snettisham Hatchery sockeye salmon. Section 11C (Subdistrict 111-20) was opened for three days in conjunction with Stephens Passage due to adequate pink salmon escapement in the area. The traditional District 111 drift gillnet sockeye salmon harvest of 22,769 fish was the highest of the season and 112% of average, with 30% (6,877 fish) harvested in Stephens Passage and Port Snettisham where the fleet was targeting hatchery sockeye salmon bound for Port Snettisham. Analysis of otoliths revealed that 67% (40 of 60) of the samples processed from Stephens Passage during this week were Snettisham hatchery sockeye salmon.

The week 33 traditional District 111 drift gillnet harvest of 15,516 sockeye salmon was 123% of average. Taku Inlet north of the latitude of Circle Point was open for the average of three days with below average fish wheel catches, but improving inriver escapement estimates. Stephens Passage and Port Snettisham were open for three days with adequate escapements to Speel and Crescent Lakes. Section 11C was open for 3 days. The Speel Arm THA (Subdistrict 111-33) was initially opened for three days due to adequate escapement through the Speel Lake weir. In the traditional District 111 fishing areas, 12% of the 5,650 sockeye salmon harvested in Taku Inlet, 63% of the 2,610 sockeye salmon harvested in Stephen's Passage, and 84% of the 7,256 sockeye salmon harvested inside Port Snettisham were of Port Snettisham hatchery origin. An additional 4,678 sockeye salmon were harvested in the Speel Arm THA in week 33.

The fall drift gillnet season in District 111 lasted eight weeks, beginning on August 14, week 34, and lasting until October 5, week 41. In the first week of the fall season, fishing time was set at three days in all the traditional drift gillnet areas to allow harvest of Taku River and local origin coho salmon and continued harvest of Port Snettisham hatchery sockeye salmon. The traditional District 111 sockeye salmon harvest for the week of 9,218 fish (Appendix B.1) was twice the average, with 70% of the sockeye salmon harvest taken in Stephens Passage and Port Snettisham. The week 34 traditional District 111 coho salmon harvest of 645 fish was ¼ of the average. Section 11C closed for the season at the end of the week 34 fishery. Taku Inlet, Stephens Passage, and Port Snettisham were open for three days during weeks 35-39. The traditional District 111 coho salmon harvest of 1,733 fish in week 35 was half the average, and the week 36 harvest of 3,010 fish was 60% of average. During week 37 the traditional District 111 harvest of 3,682 coho salmon was 82% of average. The week 37 traditional District 111 harvest of 699 chum salmon was 112% of average, the first week during the fall season with an above average catch. The week 38 traditional District 111 harvest of 2,850 coho salmon was 57% of average, while the harvest of 349 chum salmon was 102% of average. The Speel Arm THA was closed for the season concurrently with the rest of District 111, at the end of the week 39 fishery. The week 39 coho salmon harvest of 1,411 fish was half the average, as was the chum salmon harvest. Taku Inlet and Stephens Passage were open for three days in week 41 with less than three boats fishing. The District 111 drift gillnet fishery closed for the season on October 5.

Several other fisheries in the Juneau area harvested transboundary Taku River salmon stocks in 2005. Personal use permits were used to harvest an estimated 1,031 Taku River sockeye salmon. In 2005, an estimated 4,450 Chinook salmon were harvested by sport fisheries in the Juneau area. A number of stocks are known to contribute to the Juneau area sport fishery, including those from the Taku, Chilkat, and King Salmon rivers, and local hatchery stocks, but the major contributor of large, wild mature fish was believed to be the Taku River. Of the Chinook salmon harvested 2,950 were estimated to be of Taku River origin based on coded wire tag analysis and maturity data. The July Hawk Inlet shoreline commercial purse seine fishery in Chatham Strait opened for one 10-hour fishery in week 28, two 15-hour fisheries in week 29, and one 15-hour fishery in week 30. Point Marsden defined the southern boundary of these fisheries while the latitude of Point Couverden defined the northern boundary. The harvests for these fisheries totaled 180 Chinook, 18,647 sockeye, 3,799 coho salmon, 1,969,000 pink, and 137,585 chum salmon. A large number of stocks, including the Taku River, contribute to this pink salmon directed fishery. A purse seine test fishery was also conducted each week from weeks 27-30 between Hawk Inlet and Point Retreat, with harvests totaling 27 Chinook, 454 sockeye, 15 coho salmon, 11,956 pink and 3,743 chum salmon.

Canadian Fisheries

Taku River commercial fishers harvested 21,697 sockeye, 4,924 coho salmon, 7,399 large Chinook salmon (greater than 660 mm mid-eye to fork length, mostly 3-ocean or older) and 821 small Chinook salmon in 2005 (Appendix B.4). The sockeye catch was below average. Fish originating from fry plants contributed an estimated 257 fish to the catch, comprising 1% of the total sockeye salmon harvest. The coho salmon harvest was

average. The catch of adult Chinook salmon was about four times the average. The increased catch was a result of the new Chinook salmon agreement allowing directed Chinook salmon fishing. In concert with this, catch accounting for small salmon switched from a commercial weight-based designation (previously referred to "jacks" which were typically fish under 2.5 kg or 5 kg, depending on where they were being marketed), to a length-based designation (small Chinook salmon i.e. less than 660 mm in length from the middle of the eye to fork of tail (MEF)). Hence, comparisons with catches from previous years should be noted accordingly. There were 68 days of fishing; this was 1.6 times the average. The seasonal fishing effort of 561 boat-days was also 1.6 times the average. This increase in effort was due to the fishery commencing May 1 rather than mid-June, in order to allow directed Chinook salmon fishing. Excluding the directed Chinook salmon fishery, the number of days of fishing and boat days were 6% and 4% below average, respectively. As in recent years, both set and drift gill netting techniques were used with the majority of the catch taken in drift gillnets. Maximum allowable mesh size was increased from 15.0 cm to 20.4 cm to facilitate harvest of Chinook salmon.

In addition to the commercial catches, 212 Chinook, 161 sockeye, and 162 coho salmon were harvested in the aboriginal fishery in 2005. The average catches in the Taku aboriginal fishery have included 137 Chinook, 229 sockeye, 310 coho salmon, and two steelhead trout.

Recreational harvest figures are not available; however it is estimated that fewer than 300 adult Chinook salmon were taken and that the catches of other species were minimal.

A test fishery to capture coho salmon for stock assessment purposes took place from August 31 through October 8 (weeks 36-41) and landed 3,169 coho and 244 sockeye salmon.

The bilateral preseason Chinook salmon outlook was based on sibling relationships and forecast a terminal run of 99,610 fish, approximately 83% above the average run of approximately 54,400 fish (Canadian estimate). At a run size of this magnitude, the allowable catch (AC) for the Canadian fishery would have been 19,700 fish; the U.S. AC would have been 31,000 fish.

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

The commercial fishery commenced on May 1 (week 19), approximately seven weeks earlier than in previous years to accommodate the newly agreed-to directed Chinook salmon fishery. As per the agreement, the preseason forecast and the escapement target of 55,000 fish were used to calculate the allowable catch and guide weekly management

actions for the first three weeks of the season, i.e. through week 21. Thereafter, the inseason escapement target (42,500 fish) and inseason run projections based on the joint Canada/U.S mark-recapture project were used (Table 6). Weekly guideline harvests were calculated to guide the management of the commercial fishery; it was assumed that 500 and 300 Chinook salmon would be taken over the course of the season in Aboriginal and recreational fisheries, respectively.

The first four weekly openings were initially posted for three days. In week 19, although the weekly harvest was only 515 Chinook salmon, well below the weekly guideline (based on the pre-season forecast) of 1,658, the fishery closed as scheduled, as both fishery and Canyon Island CPUE indicated that few Chinook salmon had entered the river.

Table 6. Canadian inseason forecasts of terminal run size, total terminal allowable catch (TTAC), and spawning escapement of Taku Chinook salmon, 2005.

Stat Week	Terminal Run	TAC[a]	Projected Escapement	Cdn TAC	Weekly Guideline[b]	Actual Catch
19	99,610	43,210	55,000	18,550	1,658	515
20	99,610	43,210	55,000	18,550	2,001	281
21	99,610	43,210	55,000	18,550	3,012	525
22	84,405	40,505	58,010	17,850	2,866	1,255
23	81,687	37,787	51,619	16,800	2,431	1,457
24	71,663	27,763	39,402	13,300	1,705	1,371
25	64,805	20,905	33,727	10,850	752	763

[a] TTAC includes Canadian and U.S. base level catches but not potential test fishery catch.
[b] Does not include anticipated Aboriginal and recreational catches.

A total 281 large Chinook were caught in week 20. Water levels rose rapidly throughout the week. Consequently effort dropped (from nine licenses on day two to four on day three) and the fishery was not extended.

Water levels began to drop early in week 21. An extension of one day was posted due to a significant shortfall in the weekly guideline of 2,715 Chinook salmon. However, CPUE remained low, ranging from 11 fish per boat per day (fbd) on day one to 22 fbd on day four; the final weekly catch was 525 Chinook salmon.

The first bilateral inseason estimate of border escapement was made after day three in week 22 and amounted to 24,380 fish. Based on Canadian calculations this expanded to a terminal run size of 84,405 fish based on average run timing, translating to a weekly guideline harvest of 2,866 fish. An additional two days of fishing were granted, extending the opening to five days. The final harvest for the week was 1,255 fish.

A posting of four days was made for week 23. This was extended by one day based on a revised terminal run projection 51,241 fish and a balance of 1,347 fish in the weekly guideline after three days of fishing. Despite favorable fishing conditions, fishery CPUE averaged only 29 fbd and once again the weekly guideline harvest was not met.

The fishery was opened on four days in week 24. After day three, the terminal run projection was 49,870 large Chinook salmon translating to a weekly guideline of 1,466 fish and a spawning escapement of 39,402 fish, which had now fallen below the inseason escapement target of 42,500 fish. No extension was granted. The final catch for the week was 1,371 fish.

An opening of three days was posted for week 25, which was the final week prior to directed sockeye salmon management. After day one, the run projection was 54,126 translating to a weekly guideline of 646 fish. Since it appeared catches might exceed this guideline and the escapement projection was well below target (33,954 fish), the fishery closed as scheduled. The final catch for the week was 763 fish.

At the close of week 25, the terminal run projection was 53,937 Chinook salmon, the cumulative commercial guideline harvest was 7,838 Chinook salmon and the escapement projection was 33,727 fish, well below the escapement goal of 42,500 Chinook salmon. The actual cumulative commercial harvest was 6,167 Chinook salmon. The cumulative commercial fishery Chinook salmon CPUE was 172 fbd. CPUE ranged from a low of 13 fbd in week 20 to a high of 34 fbd in week 24.

A final inseason estimate of inriver run size was made in week 29. In total, an estimated 42,487 Chinook salmon had entered the river, and the terminal run size was estimated at 64,665 Chinook salmon. Based on the harvest sharing agreement, at a run of this magnitude the U.S AC should have been 7,832 plus base level catches (BLC) of 3,500 fish for a total of 11,332 fish. The corresponding Canadian figures were 7,933 AC and 1,500 BLC for a total of 9,433 fish. Total harvests for the U.S. and Canada were 22,178 and 7,374 Chinook salmon, respectively.

The Canadian preseason sockeye salmon forecast was for a total run of approximately 272,000 fish (Table 7), which was the average of a sibling-based forecast (297,394 sockeye salmon) and a stock recruitment-based forecast (246,818 sockeye salmon). The forecast was for an average run. The total run incorporates an assumed U.S. harvest of 5% in marine approach waters (outside District 111); the terminal run forecast was therefore approximately 259,000 fish.

The sockeye salmon commercial fishery commenced on June 19, week 26, for a scheduled opening of two days. Sockeye salmon CPUE was low in both the fishery and the fish wheels, and the fishery closed as scheduled.

Week 27 was opened on three days. The cumulative guideline harvest through this week based on the preseason forecast was 6,961 fish, of which 2,015 had been taken, leaving a balance of 4,496 fish. The Tulsequah flood occurred this week, peaking on Thursday June 30. Consequently the fishery was not extended since the guideline harvest was not attainable; the total weekly catch was 1,774 fish.

The week 28 fishery opened on three days starting July 3. An inseason projection made after day one indicated a total run size of 170,051 fish and a guideline harvest balance of 5,275 fish. A revised projection on the following day however was considerably less, giving a total run estimate of 131,552 and a guideline balance of 320 fish. Nevertheless, the fishery was extended (due in part to limited confidence in these estimates given it was still early in the season) and the catch for the opening was 1,019 sockeye salmon. An estimate made after day four was similar to the day two estimate and indicated that the cumulative catch was within 400 pieces of the cumulative guideline. CPUE averaged 29 fbd, 66% below average.

Week 29 opened on two days and closed as scheduled. Based on mark-recapture data, the run projection was 121,152 fish and the cumulative guideline harvest had been exceeded by 2,008 fish. The day one fishery CPUE was 46 fbd (compared to a weekly average of 101).

Week 30 opened on three days as fish wheel CPUE indicated a fairly strong pulse of fish into the river. The run projection after day one was 146,680 fish and there was a guideline balance of 1,849 fish. However, fishery performance on day one and day two was well below average and the fishery was closed as scheduled. A total of 1,809 sockeye salmon was caught this opening.

Table 7. Canadian inseason forecasts of total run size, total allowable catch (TAC), and spawning escapement of Taku sockeye salmon, 2005.

Stat. Week	Total Run	TAC	Projected Escapement	Canadian TAC	Inseason guideline	Actual Catch
25	272,106	197,106	75,000	35,479	2,402	272
26	272,106	197,106	75,418	35,479	5,044	1,252
27	177,700	102,700	142,160	26,918	6,666	3,148
28	119,285	44,285	82,005	7,971	2,898	4,317
29	118,892	43,892	75,146	7,901	3,812	6,015
30	164,993	89,993	116,884	19,576	11,864	7,868
31	173,642	98,642	119,247	21,605	15,452	11,060
32	183,840	108,840	124,094	24,410	20,095	15,152
33	188,849	113,849	116,454	23,784	21,365	17,749
34	188,270	113,270	111,500	22,689	21,397	19,846
35	188,165	113,165	110,105	22,391	21,770	21,066

Weeks 31-33 were all opened on three days. Extensions beyond three days were not made in part due to concern for the Tatsamenie stock. Guideline balances at the beginning of each week were 6,004 (week 31), 6,587 (week 32) and 3,333 (week 33). Harvests were 3,192, 4,092 and 2,597, respectively. Fishery CPUE increased from well below average to average in week 31, and above average in week 33.

Week 34 marked the beginning of coho salmon season. The preseason outlook was for a below average run due to poor smolt catches in the 2004 coded-wire-tagging program.

The fishery was opened on two days and extended first one day and then another due to a strong showing of sockeye salmon and low effort (five boats). Landings of sockeye and coho salmon were 2,100 and 1,010, fish respectively.

An opening of three days was posted for week 35. The catch of sockeye salmon again exceeded that of coho salmon (1,279 versus 1,019 fish). The inseason projection of coho salmon border escapement was 35,935 fish, translating to a TAC of 3,000 fish. The fishery was closed after three days to avoid exceeding the coho salmon limit.

Week 36 was opened on two days. The catch was 1,027 coho salmon for an average of 3.5 boats; the coho salmon CPUE was 146 fbd that was the highest on record. At the end of the opening the cumulative treaty catch was 3,052 coho salmon, which was 52 fish over the limit, based on the border escapement projection made at that time (46,166 fish). However, it was still relatively early in the run and there were strong indications (including the record CPUE) that the timing was later than usual; it was considered likely that the border escapement projection would increase to over 50,000 fish, bringing the TAC to at least the next level (5,000 fish). Given this and the need to keep a fishing interest on the river until a test fishery was underway, an opening of two days was posted for week 37. One boat fished and the catch was 176 coho salmon; CPUE was 88 fbd, 36% above average.

Test fishing commenced mid-way through week 37 in order to permit continued estimation of coho salmon abundance. Due to the fact that run projections did not increase to 50,000 fish, the commercial fishery was not opened in week 38, and remained closed until late in week 40. After two days of test fishing in week 40, the border escapement projection increased to 83,851 pieces, increasing the TAC to 10,000 coho salmon. As a result, the commercial fishery was re-opened, from September 29 through October 8, to coincide with end of the test fishery. There were five days of commercial fishing in this period (all in week 41, starting October 2) by one to two boats, landing 284 coho salmon.

The total treaty catch of coho salmon in the commercial fishery was 3,512 fish. The catch in the test fishery was 3,169 coho salmon. The final inseason abundance estimate of the inriver coho salmon run was 102**,**772 fish. Accordingly, as per PST provisions, the Canadian allowable catch after week 33 was 10,000 salmon.

The cumulative commercial fishery sockeye salmon CPUE for the season was 778 fbd, 12% below the average. As noted CPUE was well below average through week 31; after this it was average to well above average. Peak CPUE was observed in week 32, but the week 35 CPUE almost matched this, indicating that the run was significantly later than usual. Typically peak sockeye salmon CPUE occurs in week 31.

The cumulative coho salmon CPUE through week 41 was 450 fbd; within 1 fbd of average. CPUE peaked in week 36, which is the week in which CPUE has peaked the most frequently in the last ten years. It should be noted that CPUE data may not

accurately reflect run abundance and timing due to the sporadic nature of the coho salmon fishery.

Escapement

Sockeye Salmon

Spawning escapement of sockeye salmon into the Canadian portion of the Taku River drainage is estimated from the joint Canada/U.S. mark-recapture program. Enumeration weirs operated by DFO at Little Trapper and Tatsamenie lakes provide information on the distribution and abundance of discrete spawning stocks within the watershed. An additional sockeye salmon enumeration program is conducted at Kuthai Lake by the TRTFN, who expanded their operations to King Salmon Lake in 2005 for the third consecutive year.

The sockeye salmon mark-recapture program has been operated annually since 1984 to estimate the above-border run size (i.e., border escapement); spawning escapement is then estimated by subtracting the inriver catch. The estimated border and spawning escapement are 142,155 and 120,053 sockeye salmon, respectively. The spawning escapement was 16,000 above average and above the mid-point of the interim escapement goal range of 71,000 to 80,000 sockeye salmon.

The sockeye salmon count through the Kuthai Lake weir was 6,004 fish, 25% above the average count of 4,800 fish. The sex composition is estimated at 63% female. The mid-point of the run was on August 8, about two weeks later than average; this was due in part to a strong pulse of fish at the end of August.

The Little Trapper Lake weir count was 16,009 sockeye salmon, 29% above average of 12,400 fish; it should be noted however that the 2003 record high escapement of approximately 31,000 fish has a strong influence on this average. The sex composition is estimated at 35% female. Run timing was average, with the mid-point occurring on August 7.

The Tatsamenie Lake weir count in 2005 was 3,372 sockeye salmon. This was 44% of the average of 7,800 fish; as is the case with the Trapper Lake escapements, one year, 2001 with a weir count of 22,575 fish has a large influence on the average. Based on weekly sampling results, 65% of the run was female. The mid-point fell on September 5, which is within two days of average. Approximately 928 fish were held for gamete collection, leaving a spawning escapement of 2,445 sockeye salmon.

The King Salmon weir count was 1,046 fish, well below both the weir count of 5,005 in 2004 and the boat-based count of 2,970 fish in 2003. The 2005 escapement is estimated to have been 47% female.

Chinook Salmon

Spawning escapement of Chinook salmon in the Canadian portion of the Taku drainage was estimated from the joint Canada/U.S. mark-recapture program. Tag application occurred April 25 through mid-July. Tag recovery effort consisted of the commercial fishery from May 1 through October 8 (weeks 19 - 41) as well as spawning ground sampling in August and September. The postseason above-border run estimate is 46,364 large Chinook salmon. The spawning escapement was 38,806. These are lower than the averages of 53,488 run and 50,909 escapement. The escapement goal range is 30,000 to 55,000 fish.

Aerial surveys of large Chinook salmon to the six escapement index areas annually surveyed by ADF&G were as follows: Nakina, 1,213 fish; Kowatua, 833 fish; Tatsamenie, 1,146 fish; Dudidontu, 318 fish; Tseta, 215 fish; and Nahlin, 471 fish. Kowatua and Tatsatua were average while the other systems were less than half of average.

Chinook salmon carcass weirs were operated on the Nakina and Tatsatua rivers in order to obtain tag and age-length-sex data. Totals of 1,582 and 536 large Chinook salmon were encountered, 32% and 43% lower respectively than what was observed in 2004.

Coho Salmon

Spawning escapement of coho salmon in the Canadian portion of the Taku drainage was estimated from the joint Canada/U.S. mark-recapture program. Tag application occurred through October 4; recovery occurred through October 8 (week 41). The tag recovery effort consisted of commercial and test gillnet fisheries. The above border run estimate is 99,811 and the spawning escapement in 91,552 fish. Both are close to average and the spawning escapement is more than 2.5 times the upper end of the interim escapement goal range (27,500 to 35,000 fish).

Pink Salmon

There is no program to estimate the escapement of Taku River pink salmon; however, the Canyon Island fish wheels provide an index of annual variation in border escapement. A total of 15,839 pink salmon was captured the fish wheels in 2005; this was 5,000 fish greater than the odd-year average.

Chum Salmon

As with pink salmon, the Canyon Island fish wheels are used to determine annual variations in border escapement. A total of 258 chum salmon was captured in the wheels in 2005, 86% of average. The Taku River fall chum salmon run has been depressed since 1988. It is unlikely that the spawning escapement goal of 50,000 to 80,000 fish has been achieved in recent years.

Steelhead Trout

There was no program in place to estimate the system-wide steelhead trout escapement. An escapement goal has not been set for this species. A total of 79 steelhead trout were caught and released at Canyon Island in 2005, this count was below average.

Sockeye Salmon Run Reconstruction

An estimated 45,468 Taku sockeye salmon were caught in the U.S. District 111 fishery, including 627 fish originating from the Tatsamenie fry planting program. An additional 1,150 sockeye salmon were harvested in the U.S. inriver personal use fishery. Thus the total estimated U.S. harvest of Taku River sockeye salmon is 46,618 fish (Table 5).

In the Canadian commercial fishery harvested 21,697 sockeye salmon, including 257 fish originating from the Tatsamenie fry planting program. An additional 161 sockeye salmon were harvested in the food fishery. An estimated 102 wild sockeye salmon were taken in the Canadian aboriginal fishery. The total Canadian harvest was 21,858 sockeye salmon (Table 5).

The above border run was estimated to be 142,155 sockeye salmon with a spawning escapement of 120,153 fish. Based on the mid-range escapement goal of 75,000 fish, the TAC for wild fish was 112,613 sockeye salmon, of which the U.S. harvested 41% and Canada harvested 19% (Table 5). The TAC for the Tatsamenie planted fish was 1,160 fish of which the U.S. harvested 55% and Canada harvested 22%.

ALSEK RIVER

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

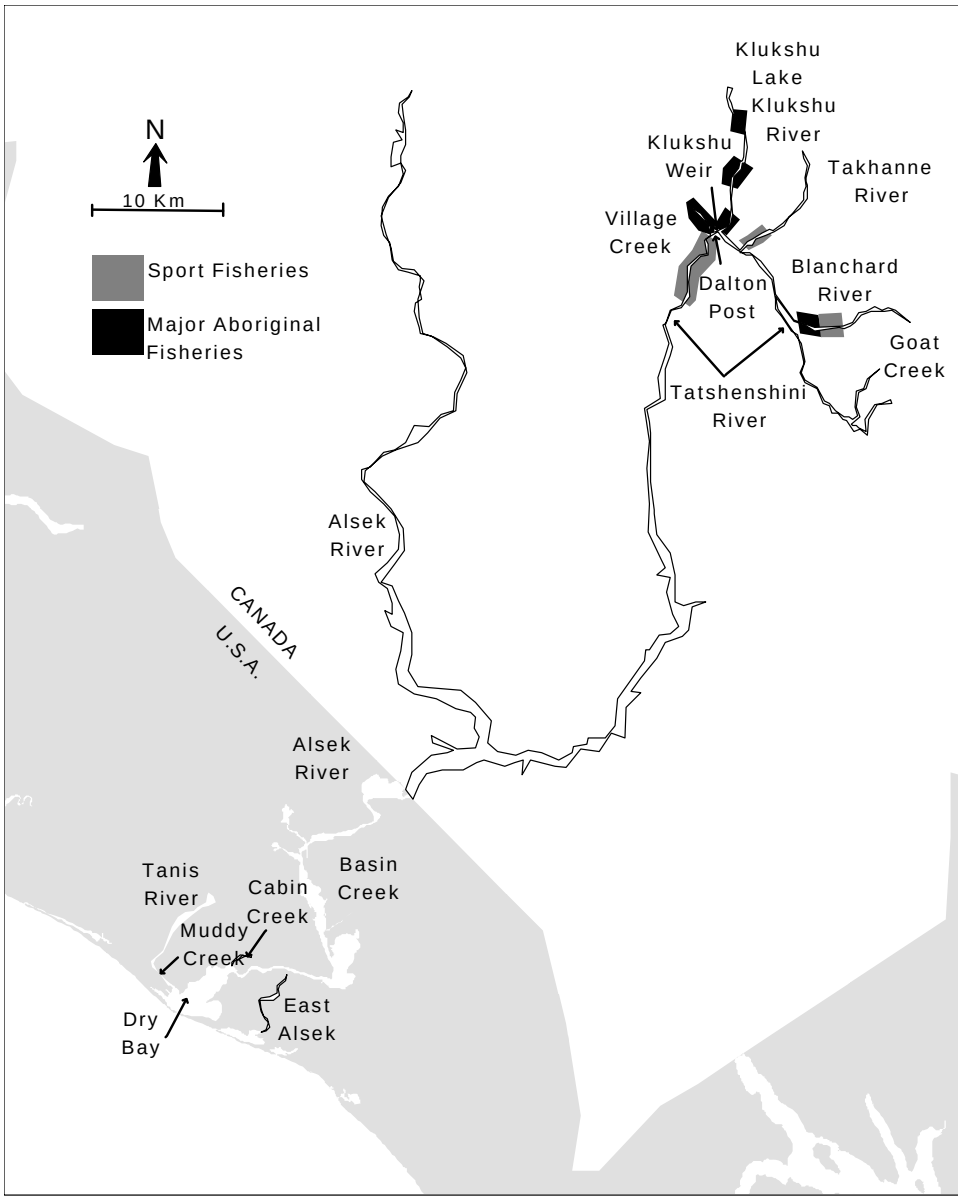

Figure 3. The Alsek River and principal U.S. and Canadian fishing areas.

Harvest Regulations & Management Objectives

Although catch sharing of Alsek River salmon stocks between Canada and the U.S. has not yet been specified, Annex IV does call for the development and implementation of cooperative abundance-based management plans and programs for Alsek River Chinook, sockeye and coho salmon. Interim escapement goal ranges for Alsek River sockeye and coho salmon were initially set by the TTC at 33,000 to 58,000 sockeye, and 5,400 to 25,000 coho salmon. The principle escapement-monitoring tool for Chinook, sockeye, and coho salmon stocks on the Alsek River is the Klukshu weir, operated by DFO and the Champagne-Aishihik First Nation (CAFN). The weir has been in operation since 1976. To make the management objectives of Chinook and sockeye salmon better defined in terms of Klukshu stocks, revised goals, expressed in terms of Klukshu stocks only, were established in 1999 and adopted again in 2004. Mark-recapture programs to estimate the total inriver abundance and the fraction of the escapement contributed by the Klukshu stocks were in operation since 1997 for Chinook salmon and since 2000 for sockeye salmon. These however were discontinued in 2005.

The initiative to establish a specific Klukshu Chinook salmon spawning goal began in 1991 when the TTC set an interim spawning objective of 4,700 Klukshu Chinook salmon. This goal was based more on manager's intuition than on science. From 1995 through 1997, the TTC reviewed this escapement level and concluded that goal of 4,700 Chinook salmon was not supported by the data. A new goal range of 1,100 to 2,300 fish was proposed based on joint analyses of stock-recruitment data. The Parties conducted independent internal reviews of these analyses. Although there was not unanimous support for the proposal, there was agreement on establishing a minimum goal consistent with the lower end of the proposed range. As a result, Canadian and U.S. managers agreed to a minimum spawning escapement goal of 1,100 Chinook salmon for the Klukshu system for 2000 and this was used again in the 2004 season.

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

Preseason Forecasts

The overall sockeye salmon run to the Klukshu River in 2005 was expected to be below average in strength. Principal contributing brood years to the 2005 run were expected to be 2000 (Klukshu escapement of 5,422 fish) and 2001 (Klukshu escapement of 9,329 fish); the average Klukshu escapement was 14,187 fish. Based on historical stock-recruitment analysis, the range of Klukshu escapements that appear most likely to produce maximum sustained yields is 7,500 to 15,000 sockeye salmon.

The 2005 overall Alsek River sockeye salmon run was expected to be approximately 54,862 fish. This estimate was based on: a predicted run of 12,890 Klukshu sockeye salmon derived from the average of the historical Klukshu stock-recruitment data and an

assumed Klukshu contribution of 27% (based on the 2001-2003 sockeye salmon radio tagging study). A run size of this magnitude is well below the 1995-2004 average run size estimate of approximately 77,200 fish (based on the Klukshu weir count expanded by 1/0.27 to account for other inriver escapement and an assumed U.S. harvest rate of 20%).

The Klukshu early sockeye salmon run escapements in 2000 and 2001 were 237 and 908, respectively (Appendix C.7). Both the 2000 and 2001 escapements were well below the optimum level of 2,500 sockeye salmon spawners as determined through separate stock-recruitment analyses by DFO of the early run. Due to the under escapement in 2000 and 2001, the early run was expected to be below average.

The Klukshu Chinook salmon escapements in 2000 and 2001, 1,321 and 1,738 fish, respectively. 2000 was well below average and 2001 was close to average (Appendix C.7). The escapements for 2000 and 2001 were near the lower end and the upper middle end of the optimum escapement range of 1,100 to 2,300 Chinook salmon estimated from current stock-recruitment analysis. As a result, the preliminary outlook was for an above average run. The 2005 overall Alsek River Chinook salmon run was expected to be approximately 16,433 Chinook salmon. This estimate was based on: a predicted run of 2,988 Klukshu Chinook salmon derived from the historical Klukshu stock-recruitment data; and an assumed Klukshu contribution to the total run of approximately 17%.

The coho salmon escapements observed at the Klukshu River in 2001 (746 coho salmon but incomplete count) and 2002 (9,921 coho salmon) suggests the run in 2005 would be above average (Appendix C.7). The 1995-2004 average escapement was approximately 3,172 coho salmon.

U.S. Fisheries

The Dry Bay commercial set-gillnet fishery harvested 239 large and 47 jack Chinook, 7,572 sockeye, and 1,196 coho salmon (Appendix C.1). No pink or chum salmon were harvested. A test fishery was conducted on the Alsek River for Chinook salmon in 2005, and that fishery produced another 222 sockeye and 423 Chinook salmon, for a total harvest of 7,794 sockeye and 662 Chinook salmon. The Chinook salmon harvest was near average, the sockeye salmon harvest was below average and the lowest harvest since 1988, and the coho salmon harvest was below average. Very little effort was recorded during the coho salmon season due to market conditions and the coho salmon harvest was the second lowest in the last 10 years. The number of fishing days was 41. The total effort expended in the fishery was 171 boat-days.

The Alsek River commercial fishery opened on the first Sunday in June, week 24 (June 5) (Appendix C.1). The initial opening remained at 24 hours. The fishery was extended to 48 hours during week 25 due to faulty catch reporting, and final CPUE for the week indicated the extension was not in order. Weekly openings remained at 24 hours for the next three weeks of the season. Fishing time was extended to 48 hours during the second week of July, and remained at 24 hours during the third week before again being

extended to 48 hours during the fourth week of July. Effort in the Alsek River became minimal from this point on. The fishery targeted coho salmon after mid-August and fishing times remained at three days per week for the first six weeks of the coho salmon season. With minimal effort and good coho salmon CPUE, fishing time was opened to four days per week for the last two weeks of the season. No effort was recorded on the Alsek from August 14 through September 10.

Historically, a set gillnet fishery targeting on Chinook salmon was conducted during May and early-June. Due to depressed runs, the directed fishery has been closed since 1963 and Chinook salmon have only been harvested incidentally during the sockeye salmon fishery in early June. From 1963 through 1997, the early June periods were limited in time in order to reduce the impact on Chinook salmon. With the advent of the new Chinook salmon escapement goal concern for incidentally caught Chinook salmon has diminished, therefore the management of the early June periods was based on sockeye salmon CPUE. Gillnet mesh size was restricted to a maximum of six inches through July 1.

The Transboundary River Panel agreed to a limited Chinook salmon test fishery in the lower Alsek River beginning in 2005 and continuing through 2008. The goal of the test fishery is to enable the department to develop a cost effective method for determining the abundance of Chinook salmon on an inseason basis using test fishery CPUE as an index of abundance. The test fishery commenced on May 23 and continued on a weekly basis through July 2. A total of 423 Chinook salmon were harvested in the test fishery. All fish were sampled for age, size, and sex, and 421 were sampled for genetics. A total of 222 sockeye salmon were harvested incidentally to the Chinook salmon harvest during the test fishery.

Canadian Fisheries

The aboriginal fishery harvested an estimated 58 Chinook, 581 sockeye, and 20 coho salmon (Appendix C.2). All catches were below average.

Catch estimates for the Tatshenshini recreational fishery were well below average for Chinook salmon with an estimated 35 retained and sockeye salmon with an estimated harvest of 20 sockeye salmon, and coho salmon with 54 being harvested. The low Chinook salmon catches may have been attributed to the changed river channel (i.e., fewer holding areas below the Tatshenshini/Klukshu rivers confluence) and to the relocation of the Klukshu weir in 2001, which has allowed migrating salmon to stage further up from Dalton Post in the Klukshu River. Retention of sockeye salmon in the Tatshenshini River was permitted starting on August 15th as per regulation. By early September, the sockeye salmon run forecast was not meeting the minimum escapement goal and it was decided to decrease the daily sockeye salmon limit to 0 starting on Sept 9th. The catch data was derived from a creel census in the Dalton Post area and a catch card program conducted by the Yukon Salmon Committee (YSC) and DFO. Weekly estimates are listed in Appendix C.2.

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

The 2005 Alsek-Tatshenshini management plan, adopted by CAFN, YSC, and DFO, was based on the objectives described in the ***Harvest Regulations & Management Objectives*** section above. For Chinook and early run sockeye salmon management, the status of the Klukshu weir counts was to be reviewed on or about July 18 to ensure weir and spawning escapement targets were on track. The status of the late run sockeye salmon would be reviewed the first week of September. Adjustments to inseason fishing regimes in the recreational and aboriginal fisheries would be made if deemed necessary. Other key elements of the plan are described below.

The center of aboriginal fishing activity in the 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 and traditional fish traps as the fish migrate up the Klukshu River into Klukshu Lake. The fishing plan for the aboriginal fishery in the Klukshu River for the period prior to August 15 allowed fishing by means of fish traps for 2 days per week. After August 15, it was planned that the traps would be fished 3 days per week. Conservation thresholds that might invoke restrictions in the Aboriginal fishery were projected Klukshu weir counts of <1,100 Chinook and <1,500 early sockeye salmon. Gaff 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 gaff fishery other than to reserve Goat Creek, Stanley Creek, and the Parton River for elders only.

The majority of the recreational fishing effort on this drainage occurs on the Tatshenshini River, at and just downstream of the mouth of the Klukshu River in the vicinity of the abandoned settlement of Dalton Post. The management plan prohibited the retention of sockeye salmon in the recreational fishery prior to August 15 unless the weir count projection for the early run was >4,500 sockeye salmon. The Chinook salmon daily catch limit was one fish and the possession limit was 2 Chinook salmon. For other salmon species, the daily catch and possession limits were 2, and 4 fish, respectively. However, the aggregate limit for all salmon combined was 2 salmon per day, 4 fish in possession. Starting in 2003, recreational salmon fishing was permitted in the Tatshenshini River seven days a week; this fishery had previously been open from 6:00 am Saturday to 12:00 noon Tuesday each week. Headwater areas upstream of the British Columbia/Yukon border were to be closed for the season to protect spawning Chinook salmon. Conservation thresholds that were expected to invoke additional restrictions in the

recreational fishery were projected Klukshu weir counts of <1,500 Chinook and < 10,600 sockeye salmon (early and late runs combined).

A mandatory Yukon Salmon Conservation Catch Card (YSCCC), introduced by the YSC in 1999, was required by all recreational salmon fishers in 2005. 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 implemented as part of the development of abundance-based management regimes and to accurately assess whether the system-wide escapement goals for Alsek River Chinook and sockeye salmon stocks are appropriate and if so, are being achieved. At this time, there are no programs in place to estimate the drainage-wide coho salmon escapement. A large and variable proportion of the escapement of each species is enumerated at the weir on the Klukshu River. Current escapement monitoring programs including the Klukshu weir, Village Creek electronic counter, and aerial surveys allow annual comparisons of escapement indices. The most reliable long-term comparative escapement index for Alsek River drainage salmon stocks is the Klukshu River weir count. Escapements for 2005 are shown in Table 8.

Sockeye Salmon

The weir count and escapement estimates of Klukshu River sockeye salmon were 3,373 and 3,036 fish respectively in 2005 (Table 7, Appendices E.3 and E.7). The count of 994 early run fish (count through August 15) was below average as was the count of 2,379 late run fish. The total escapement was the lowest on record, well below the average of 14,187 sockeye salmon, and was well below the upper end of the recommended escapement goal range of 7,500 to 15,000 fish. The sockeye salmon escapement estimate at the Village Creek counter of 1,398 fish in 2005 was also below average.

Chinook Salmon

The most reliable comparative Chinook salmon escapement index for the Alsek River drainage is the Klukshu River weir count. The Chinook salmon weir and escapement counts in 2005 were 1,070 and 963 fish respectively (Table 7), and were both below average. The 2005 escapement was near the revised interim escapement goal range of 1,100 to 2,300 Klukshu Chinook salmon.

Coho Salmon

The Klukshu weir count and escapement of 683 and 615 fish are also below average (Table 7). The weir is removed prior to the completion of the coho salmon run and does not include fish that migrate after mid-October.

Table 8. Catch and Klukshu index escapement data for Alsek River sockeye, Chinook, and coho salmon for 2005.

	Sockeye	Chinook	Coho
Escapement Index [a]			
Klukshu Weir Count	3,373	1,070	683
Klukshu Escapement	3,167	963	663
Harvest [b]			
U.S. Commercial	7,572	239	1,196
U.S. Subsistence	63	31	62
Canadian Sport	13	56	51
Canadian Aboriginal	581	58	20
Total Harvest	8,229	384	1,329

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

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

ENHANCEMENT ACTIVITIES

Egg Collection

In 2005, sockeye salmon eggs were collected at Tahltan Lake on the Stikine River for the eighteenth year, and in the Tatsamenie Lake system on the Taku River, for the sixteenth year of this program.

Tahltan Lake

The egg collection was contracted to Arc Environmental Ltd. for the ninth consecutive year. The egg-take goal at Tahltan Lake is 6.0 million eggs. In spite of the large escapement at Tahltan only 4.5 million eggs were collected. Some of the explanation for the low egg take was difficulty collecting brood stock for several reasons. It appeared that warm weather delayed spawning. The technical committee had agreed to collect no eggs after the 25th of September and this date was extended to the 29th to somewhat mitigate the delay in initiation of spawning. The contractor's crew also feels that the distribution of fish on the spawning area has changed over the years and fewer fish are available at the traditional collection site; other areas with fish do not look like they would be worth the effort of seining. The brood stock was collected by beach seine at the major spawning site as has been done in most years. There were 11 egg collections from September 9 to 29. Eggs collected on three different days were delayed in shipment to the hatchery due to weather; two of the shipments were delayed 48 hours. There is significantly lowered survival with shipments delayed more than 24 hours.

Tatsamenie Lake

B. Mercer and Associates Ltd was contracted to collect eggs. Tatsamenie Lake brood stock was captured for the eleventh year at an adult enumeration weir located at the outlet of Tatsamenie Lake. A total of 573 females and 369 males were held prior to the first egg take on September 19. An estimated 1.8 million eggs were collected from 499 females and milt was collected from 330 males during 5 egg collections. Mortality of held fish included 13 females and 16 males; the remaining 52 females and 18 males not used for gamete collection were released. The 573 females used for brood stock represented 26% of the estimated escapement of females in to the lake.

Incubation, Thermal Marking, and Fry Plants (2003 Brood Year)

The egg incubation and thermal-marking program at Snettisham Hatchery went smoothly in year 2004/2005. Snettisham hatchery is operated by DIPAC (Douglas Island Pink and Chum, Inc.), a private aquaculture organization in Juneau. A co-operative agreement between ADF&G and DIPAC provides for Snettisham hatchery to serve the needs of the joint TBR enhancement projects.

Incubation of 2004 brood eggs took place at Snettisham Hatchery and the resultant fry were transported to the appropriate systems from May 20 to June 20, 2004. There were no IHN virus losses of sockeye salmon fry from transboundary lakes.

Tahltan Lake

A total of 1.28 million fry from the 2004 Tahltan sockeye salmon egg take was planted back into Tahltan Lake in 2005. Survival from green-egg to outplanted fry was 71% (this low survival is because shipment of collected eggs was delayed due to weather). Fry outplanting took place from May 17 to May 20.

Tuya Lake

There were 3.20 (Appendix D.2) million fry planted in Tuya Lake from June 8 to June 15. These fish were from eggs collected at Tahltan Lake in the fall of 2004. Survival from green-egg to outplanted fry was 78%.

Tatsamenie Lake

A total of 1.47 million fry from the 2004 egg-take was released into Tatsamenie Lake in 2005. There were two treatment groups: one group was released at the North end and one at the South end of the lake; outplanting took place on May 20. Neither group was fed, however the fry were held for observation before release. Survival from green-egg to outplanted-fry was 81%.

The strategy behind releasing at two locations is to put fry in an area with little natural production. The south end of the lake traditionally has few fry along the shore. Past studies have indicated a protracted shore residence for hatchery and wild fry and we hope that fry release at the South end will enjoy less competition and better survival.

Outplant Evaluation Surveys

The Salmon Indexing Methods Unit of Stock Assessment Division of the Pacific Biological Station (PBS) and the Yukon/Transboundary Stock Assessment section of Fisheries and Oceans Canada, directed surveys in 2005. B. Mercer & Associates conducted limnological, beach seine, hydroacoustic and trawl surveys at Tatsamenie Lake. B. Mercer & Associates conducted limnological and beach seining surveys at Tuya Lake in the spring, and Tahltan Fisheries conducted an early August survey that included index netting. Fisheries and Oceans Canada (DFO) personnel performed limnological and beach seine surveys at Tahltan Lake.

DFO examined fry otoliths at their thermal mark lab in Whitehorse, Yukon. Data analyses will take place during the winter of 2005/2006. Limnetic fish population estimates (rounded to the nearest 100,000), density estimates, and beach seine catches will be presented in the annual report. Currently, beach seine catches serve as a

qualitative index of the abundance of fish in the littoral zone, provide samples to evaluate the proportion of wild to outplanted hatchery fry, and provide length and weight data

Thermal Mark Laboratories

ADF&G Thermal Mark Laboratory

During the 2005 season the ADFG thermal mark lab received otoliths from 11,600 sockeye salmon collected by ADFG and DFO staff as part of the U.S./Canada fry-planting evaluation program. These collections came from commercial and test fisheries in U.S. waters and in Canadian fisheries on the Taku and Stikine Rivers over a 12-week period. In addition, several escapement samples were examined. Combined, the laboratory processed 11,500 of the otoliths received (99%) and provided estimates on hatchery contributions for almost 100 distinct sampling collections. Of these totals, 2,000 otoliths were identified and classified as belonging to one of 30 marked groups. Estimates of the percentage of hatchery fish contributed to commercial fishery catches were provided to ADF&G and DFO fishery managers 24 to 48 hours after samples arrived at the lab.

Adult sockeye salmon otoliths were processed inseason by the ADF&G otolith lab to estimate the weekly contribution of planted sockeye salmon to the District 106, 108, and 111 gillnet fisheries and to Canadian commercial fisheries in the Stikine and Taku Rivers. Contributions of planted sockeye salmon stocks to catches were as follows: 36,053 planted Stikine River fish to District 106 and 108 and 641 planted Taku River fish to District 111 (includes inriver personal use fishery). Estimates of contributions to Canadian fisheries included 31,095 planted Stikine River fish to Stikine River fisheries and 259 planted Taku River fish to the Taku River fisheries.

Canadian Thermal Mark Laboratory

Sub-samples of juvenile and adult otolith samples collected at the study lakes during the 2005 season were analyzed at the DFO thermal mark lab in Whitehorse.

APPENDICES

Appendix A. 1. Weekly salmon catch in the Alaskan District 106 commercial drift gillnet fisheries, 2005.

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.

		Catch						Effort		
	Start	Chinook								Permit
Week	Date	Large	Jacks	Sockeye	Coho	Pink [a]	Chum	Permits	Days	Days
25	12-Jun	338	19	1,056	1,185	1,133	50	15	3.0	45
26	19-Jun	402	18	16,552	8,842	16,573	1,152	52	4.0	208
27	26-Jun	329	2	13,210	10,379	36,014	21,381	75	4.0	300
28	3-Jul	122	3	12,215	8,156	36,457	30,378	77	3.0	231
29	10-Jul	132	2	14,930	8,872	115,267	50,805	95	3.0	285
30	17-Jul	65	1	12,978	5,345	113,787	32,448	88	3.0	264
31	24-Jul	67	0	5,164	1,942	32,010	9,926	53	2.0	106
32	31-Jul	14	0	5,053	1,888	30,900	8,885	55	2.0	110
33	7-Aug	11	0	9,754	2,842	24,696	9,088	52	4.0	208
34	14-Aug	5	0	9,319	4,341	19,969	6,952	54	4.0	216
35	21-Aug	2	1	5,954	7,276	23,958	7,312	49	4.0	196
36	28-Aug	3	0	2,449	9,166	9,224	7,720	54	3.0	162
37	4-Sep	1	0	541	5,418	533	2,633	51	3.0	153
38	11-Sep	11	0	712	13,044	617	4,278	51	2.0	102
39	18-Sep	16	0	252	13,631	48	3,172	57	3.0	171
40	25-Sep	8	0	49	10,244	1	2,063	45	3.0	135
41	2-Oct	0	0	4	1,869	0	321	24	3.0	72
Total		1,526	46	110,192	114,440	461,187	198,564		53.0	2,964
Alaska Hatchery Contributions										
25	12-Jun	104	0		233		0			
26	19-Jun	63	0		1,469		2,138			
27	26-Jun	156	0		1,635		9,247			
28	3-Jul	166	0		1,741		17,790			
29	10-Jul	0	0		465		9,449			
30	17-Jul	168	0		204		5,169			
31	24-Jul	0	0		129		1,903			
32	31-Jul	0	0		26		639			
33	7-Aug	0	0		0		1,982			
34	14-Aug	0	0		0		1,367			
35	21-Aug	0	0		559		0			
36	28-Aug	0	0		2,694		4,112			
37	4-Sep	0	0		1,064		0			
38	11-Sep	0	0		1,593		0			
39	18-Sep	0	0		8,709		0			
40	25-Sep	0	0		8,354		0			
41	2-Oct	0	0		1,853		0			
Total		657			30,727		53,795			
Catches not including Alaska hatchery contributions										
25	12-Jun	234	19	1,056	952	1,133	50	15	3.0	45
26	19-Jun	339	18	16,552	7,373	16,573	-986	52	4.0	208
27	26-Jun	173	2	13,210	8,744	36,014	12,134	75	4.0	300
28	3-Jul	-44	3	12,215	6,415	36,457	12,588	77	3.0	231
29	10-Jul	132	2	14,930	8,407	115,267	41,356	95	3.0	285
30	17-Jul	-103	1	12,978	5,141	113,787	27,279	88	3.0	264
31	24-Jul	67	0	5,164	1,813	32,010	8,023	53	2.0	106
32	31-Jul	14	0	5,053	1,862	30,900	8,246	55	2.0	110
33	7-Aug	11	0	9,754	2,842	24,696	7,106	52	4.0	208
34	14-Aug	5	0	9,319	4,341	19,969	5,585	54	4.0	216
35	21-Aug	2	1	5,954	6,717	23,958	7,312	49	4.0	196
36	28-Aug	3	0	2,449	6,472	9,224	3,608	54	3.0	162
37	4-Sep	1	0	541	4,354	533	2,633	51	3.0	153
38	11-Sep	11	0	712	11,451	617	4,278	51	2.0	102
39	18-Sep	16	0	252	4,922	48	3,172	57	3.0	171
40	25-Sep	8	0	49	1,890	1	2,063	45	3.0	135
41	2-Oct	0	0	4	16	0	321	24	3.0	72
Total		869	46	110,192	83,713	461,187	144,769	947	53.0	2,964

[a] Data not available to estimate contributions of pink salmon from Alaska hatcheries.

Appendix A. 2. Weekly stock proportions of sockeye salmon harvested in the Alaskan District 106 commercial drift gillnet fisheries, 2005.

			Stikine				Planted	CPUE of Stikine Fish			
Week	Alaska	Canada	Tahltan [a]	Tuya	Mainstem	Total	Tahltan	Tahltan [a]	Tuya	Mainstem	Total
Proportions											
25	0.291	0.378	0.248	0.000	0.083	0.330	0.086	0.067	0.000	0.134	0.077
26	0.209	0.405	0.370	0.000	0.016	0.386	0.154	0.341	0.000	0.088	0.305
27	0.200	0.355	0.437	0.000	0.007	0.445	0.218	0.223	0.000	0.022	0.194
28	0.347	0.440	0.211	0.000	0.001	0.213	0.111	0.129	0.000	0.005	0.112
29	0.465	0.330	0.197	0.000	0.008	0.205	0.126	0.119	0.000	0.031	0.107
30	0.515	0.226	0.140	0.000	0.119	0.259	0.087	0.080	0.000	0.403	0.126
31	0.687	0.292	0.017	0.000	0.004	0.021	0.046	0.010	0.000	0.012	0.010
32	0.752	0.217	0.019	0.000	0.013	0.032	0.020	0.010	0.000	0.041	0.014
33	0.677	0.235	0.020	0.000	0.069	0.088	0.010	0.011	0.000	0.223	0.041
34	0.785	0.198	0.015	0.000	0.002	0.017	0.003	0.008	0.000	0.006	0.007
35	0.701	0.292	0.007	0.000	0.000	0.007	0.000	0.003	0.000	0.000	0.002
36	0.619	0.380	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.001	0.000
37	0.566	0.375	0.006	0.000	0.053	0.059	0.000	0.000	0.000	0.013	0.002
38	0.699	0.269	0.003	0.000	0.028	0.032	0.000	0.000	0.000	0.014	0.002
39	0.576	0.367	0.006	0.000	0.051	0.057	0.000	0.000	0.000	0.005	0.001
40	0.613	0.338	0.005	0.000	0.044	0.049	0.000	0.000	0.000	0.001	0.000
41	0.593	0.353	0.005	0.000	0.048	0.053	0.000	0.000	0.000	0.000	0.000
Total	0.474	0.317	0.182	0.000	0.027	0.209	0.094				
Catches											
25	308	399	262	0	87	349	90	5.8	0.0	1.9	7.8
26	3,454	6,705	6,128	0	265	6,393	2,551	29.5	0.0	1.3	30.7
27	2,640	4,695	5,779	0	96	5,874	2,886	19.3	0.0	0.3	19.6
28	4,237	5,378	2,582	0	18	2,600	1,354	11.2	0.0	0.1	11.3
29	6,937	4,927	2,940	0	126	3,066	1,886	10.3	0.0	0.4	10.8
30	6,679	2,939	1,822	0	1,538	3,360	1,129	6.9	0.0	5.8	12.7
31	3,547	1,508	90	0	18	108	236	0.8	0.0	0.2	1.0
32	3,797	1,096	95	0	65	160	99	0.9	0.0	0.6	1.5
33	6,605	2,288	191	0	670	861	95	0.9	0.0	3.2	4.1
34	7,317	1,842	143	0	17	160	29	0.7	0.0	0.1	0.7
35	4,171	1,741	43	0	0	43	0	0.2	0.0	0.0	0.2
36	1,517	930	0	0	2	2	0	0.0	0.0	0.0	0.0
37	306	203	3	0	29	32	0	0.0	0.0	0.2	0.2
38	498	192	2	0	20	23	0	0.0	0.0	0.2	0.2
39	145	93	1	0	13	14	0	0.0	0.0	0.1	0.1
40	30	17	0	0	2	2	0	0.0	0.0	0.0	0.0
41	2	1	0	0	0	0	0	0.0	0.0	0.0	0.0
Total	52,192	34,952	20,080	0	2,967	23,048	10,356	86.5	0.0	14.4	100.9

[a] Tahltan includes wild and thermally marked fish.

Appendix A. 3. Weekly salmon catch and effort in the Alaskan Subdistrict 106-41&42 (Sumner Strait) commercial drift gillnet fishery, 2005.

		Catch						Effort		
	Start	Chinook								Permit
Week	Date	Large	Jacks	Sockeye	Coho	Pink	Chum	Permits	Days	Days
25	12-Jun	238	19	1,044	1,109	1,111	50	12	3.0	36
26	19-Jun	361	18	15,914	6,056	14,828	1,082	44	4.0	176
27	26-Jun	200	2	12,047	6,087	31,025	20,564	56	4.0	224
28	3-Jul	82	3	11,387	4,829	35,178	29,647	64	3.0	192
29	10-Jul	41	0	11,318	5,584	67,304	37,992	63	3.0	189
30	17-Jul	24	1	9,566	3,040	75,058	20,933	64	3.0	192
31	24-Jul	5	0	3,171	1,244	15,636	7,084	34	2.0	68
32	31-Jul	3	0	2,674	1,171	13,066	5,810	36	2.0	72
33	7-Aug	3	0	5,095	1,717	9,269	4,473	28	4.0	112
34	14-Aug	2	0	4,130	1,958	7,606	2,955	17	4.0	68
35	21-Aug	0	0	4,366	5,863	16,298	5,382	30	4.0	120
36	28-Aug	2	0	1,932	7,506	5,913	6,590	37	3.0	111
37	4-Sep	1	0	448	4,550	415	2,249	39	3.0	117
38	11-Sep	6	0	316	7,133	268	2,648	28	2.0	56
39	18-Sep	12	0	202	11,390	41	2,594	39	3.0	117
40	25-Sep	8	0	34	6,407	1	1,460	31	3.0	93
41	2-Oct	0	0	3	1,415	0	272	19	3.0	57
Total		988	43	83,647	77,059	293,017	151,785		53.0	2,000

Appendix A. 4. Weekly stock proportions and catches of sockeye salmon harvested in the Alaskan Subdistrict 106-41&42 (Sumner Strait) commercial drift gillnet fishery, 2005.

Data based on SPA.

			Stikine				Planted	CPUE of Stikine Fish			
Week	Alaska	Canada	Tahltan [a]	Tuya	Mainstem	Total	Tahltan	Tahltan [a]	Tuya	Mainstem	Total
Proportions											
25	0.289	0.378	0.249	0.000	0.083	0.332	0.087	0.068	0.000	0.135	0.078
26	0.198	0.407	0.380	0.000	0.016	0.395	0.160	0.324	0.000	0.080	0.289
27	0.172	0.355	0.467	0.000	0.006	0.472	0.240	0.237	0.000	0.018	0.205
28	0.337	0.446	0.217	0.000	0.000	0.217	0.119	0.122	0.000	0.000	0.104
29	0.458	0.322	0.216	0.000	0.004	0.221	0.167	0.122	0.000	0.014	0.107
30	0.437	0.243	0.190	0.000	0.130	0.321	0.118	0.090	0.000	0.364	0.129
31	0.689	0.277	0.028	0.000	0.006	0.034	0.070	0.013	0.000	0.015	0.013
32	0.786	0.185	0.027	0.000	0.002	0.029	0.028	0.010	0.000	0.003	0.009
33	0.604	0.252	0.016	0.000	0.128	0.145	0.014	0.007	0.000	0.327	0.053
34	0.820	0.175	0.006	0.000	0.000	0.006	0.007	0.003	0.000	0.000	0.003
35	0.654	0.337	0.010	0.000	0.000	0.010	0.000	0.003	0.000	0.000	0.003
36	0.563	0.436	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.001	0.000
37	0.507	0.422	0.007	0.000	0.064	0.071	0.000	0.000	0.000	0.014	0.002
38	0.507	0.422	0.007	0.000	0.064	0.071	0.000	0.000	0.000	0.020	0.003
39	0.507	0.422	0.007	0.000	0.064	0.071	0.000	0.000	0.000	0.006	0.001
40	0.507	0.422	0.007	0.000	0.064	0.071	0.000	0.000	0.000	0.001	0.000
Total	0.405	0.338	0.227	0.000	0.029	0.256	0.123	0.856	0.000	0.144	1.000
Catches											
25	302	395	260	0	87	347	90	7.2	0.0	2.4	9.6
26	3,144	6,478	6,041	0	251	6,292	2,551	34.3	0.0	1.4	35.8
27	2,074	4,282	5,620	0	71	5,691	2,886	25.1	0.0	0.3	25.4
28	3,834	5,083	2,469	0	0	2,469	1,354	12.9	0.0	0.0	12.9
29	5,179	3,642	2,448	0	49	2,497	1,886	13.0	0.0	0.3	13.2
30	4,179	2,320	1,822	0	1,245	3,067	1,129	9.5	0.0	6.5	16.0
31	2,184	878	90	0	18	108	221	1.3	0.0	0.3	1.6
32	2,102	495	73	0	4	77	75	1.0	0.0	0.1	1.1
33	3,075	1,282	83	0	654	738	71	0.7	0.0	5.8	6.6
34	3,385	722	23	0	0	23	29	0.3	0.0	0.0	0.3
35	2,853	1,470	43	0	0	43	0	0.4	0.0	0.0	0.4
36	1,088	842	0	0	2	2	0	0.0	0.0	0.0	0.0
37	227	189	3	0	29	32	0	0.0	0.0	0.2	0.3
38	160	133	2	0	20	23	0	0.0	0.0	0.4	0.4
39	102	85	1	0	13	14	0	0.0	0.0	0.1	0.1
40	17	14	0	0	2	2	0	0.0	0.0	0.0	0.0
41	2	1	0	0	0	0	0	0.0	0.0	0.0	0.0
Total	33,909	28,312	18,979	0	2,447	21,426	10,292	105.8	0.0	17.8	123.6

[a] All Tahltan includes wild and thermally marked fish.

Appendix A. 5. Weekly salmon catch and effort in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 2005.

		Catch						Effort		
	Start	Chinook								Permit
Week	Date	Large	Jacks	Sockeye	Coho	Pink	Chum	Permits	Days	Days
25	19-Jun	100	0	12	76	22	0	3	3.0	9
26	26-Jun	41	0	638	2,786	1,745	70	9	4.0	36
27	3-Jul	129	0	1,163	4,292	4,989	817	21	4.0	84
28	10-Jul	40	0	828	3,327	1,279	731	14	3.0	42
29	17-Jul	91	2	3,612	3,288	47,963	12,813	33	3.0	99
30	24-Jul	41	0	3,412	2,305	38,729	11,515	26	3.0	78
31	31-Jul	62	0	1,993	698	16,374	2,842	20	2.0	40
32	7-Aug	11	0	2,379	717	17,834	3,075	19	2.0	38
33	14-Aug	8	0	4,659	1,125	15,427	4,615	25	4.0	100
34	21-Aug	3	0	5,189	2,383	12,363	3,997	38	4.0	152
35	28-Aug	2	1	1,588	1,413	7,660	1,930	20	4.0	80
36	4-Sep	1	0	517	1,660	3,311	1,130	17	3.0	51
37	11-Sep	0	0	93	868	118	384	13	3.0	39
38	18-Sep	5	0	396	5,911	349	1,630	23	2.0	46
39	25-Sep	4	0	50	2,241	7	578	18	3.0	54
40	2-Oct	0	0	15	3,837	0	603	14	3.0	42
41	9-Oct	0	0	1	454	0	49	5	3.0	15
Total		538	3	26,545	37,381	168,170	46,779		53.0	1,005

Appendix A. 6. Weekly stock proportions and catches of sockeye salmon harvested in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 2005.

			Stikine				Planted	CPUE of Stikine Fish			
Week	Alaska	Canada	Tahltan [a]	Tuya	Mainstem	Total	Tahltan	Tahltan [a]	Tuya	Mainstem	Total
Proportions											
25	0.487	0.356	0.136	0.000	0.021	0.158	0.000	0.012	0.000	0.004	0.010
26	0.487	0.356	0.136	0.000	0.021	0.158	0.000	0.166	0.000	0.051	0.126
27	0.487	0.356	0.136	0.000	0.021	0.158	0.000	0.129	0.000	0.039	0.099
28	0.487	0.356	0.136	0.000	0.021	0.158	0.000	0.184	0.000	0.056	0.141
29	0.487	0.356	0.136	0.000	0.021	0.158	0.000	0.341	0.000	0.104	0.260
30	0.733	0.182	0.000	0.000	0.086	0.086	0.000	0.000	0.000	0.498	0.170
31	0.684	0.316	0.000	0.000	0.000	0.000	0.008	0.000	0.000	0.000	0.000
32	0.713	0.253	0.009	0.000	0.026	0.035	0.010	0.039	0.000	0.212	0.098
33	0.758	0.216	0.023	0.000	0.003	0.027	0.005	0.074	0.000	0.021	0.056
34	0.758	0.216	0.023	0.000	0.003	0.027	0.000	0.054	0.000	0.015	0.041
35	0.830	0.170	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36	0.830	0.170	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
37	0.853	0.147	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
38	0.853	0.147	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
39	0.853	0.147	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40	0.853	0.147	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.853	0.147	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total	0.689	0.250	0.041	0.000	0.020	0.061	0.002	0.659	0.000	0.341	1.000
Catches											
25	6	4	2	0	0	2	0	0.2	0.0	0.0	0.2
26	311	227	87	0	14	101	0	2.4	0.0	0.4	2.8
27	566	414	158	0	25	183	0	1.9	0.0	0.3	2.2
28	403	294	113	0	18	131	0	2.7	0.0	0.4	3.1
29	1,758	1,284	492	0	78	569	0	5.0	0.0	0.8	5.8
30	2,500	619	0	0	293	293	0	0.0	0.0	3.8	3.8
31	1,363	630	0	0	0	0	15	0.0	0.0	0.0	0.0
32	1,695	601	22	0	61	82	25	0.6	0.0	1.6	2.2
33	3,530	1,006	108	0	16	123	24	1.1	0.0	0.2	1.2
34	3,931	1,120	120	0	17	138	0	0.8	0.0	0.1	0.9
35	1,318	270	0	0	0	0	0	0.0	0.0	0.0	0.0
36	429	88	0	0	0	0	0	0.0	0.0	0.0	0.0
37	79	14	0	0	0	0	0	0.0	0.0	0.0	0.0
38	338	58	0	0	0	0	0	0.0	0.0	0.0	0.0
39	43	7	0	0	0	0	0	0.0	0.0	0.0	0.0
40	13	2	0	0	0	0	0	0.0	0.0	0.0	0.0
41	1	0	0	0	0	0	0	0.0	0.0	0.0	0.0
Total	18,283	6,640	1,101	0	521	1,622	64	14.6	0.0	7.5	22.1

[a] Tahltan includes wild and thermally marked fish.

Appendix A. 7. Weekly salmon catch and effort in the Alaskan District 108 commercial drift gillnet fishery, 2005.

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

		Catch						Effort		
	Start	Chinook								Permit
Week	Date	Large	Jacks	Sockeye	Coho	Pink [a]	Chum	Permits	Days	Days
19	1-May	632	63	0	0	0	0	36	4.0	144.0
20	8-May	985	174	0	0	0	0	53	4.0	212.0
21	15-May	2935	154	0	2	0	0	66	4.0	264.0
22	22-May	2197	116	1	0	0	0	76	2.0	152.0
23	29-May	5899	444	16	10	0	0	89	3.0	267.0
24	5-Jun	8,117	611	171	8	0	5	104	4.0	416.0
25	12-Jun	1,160	272	554	30	4	4	48	3.0	144.0
26	19-Jun	722	241	9,948	838	803	116	42	4.0	168.0
27	26-Jun	596	281	14,680	994	4,908	1,795	72	4.0	288.0
28	3-Jul	388	183	23,625	1,369	15,029	9,132	98	4.0	392.0
29	10-Jul	295	103	22,734	2,212	36,177	34,246	105	5.0	525.0
30	17-Jul	226	25	11,692	1,561	28,226	39,076	88	4.0	352.0
31	24-Jul	67	8	4,601	711	9,545	21,006	71	2.0	142.0
32	31-Jul	17	1	2,616	1,070	4,091	19,386	50	2.0	100.0
33	7-Aug	14	1	4,371	1,859	2,893	17,529	47	4.0	188.0
34	14-Aug	8	0	2,618	2,858	2,900	2,455	36	4.0	144.0
35	21-Aug	2	0	675	2,706	292	1,003	30	4.0	120.0
36	28-Aug	3	0	626	6,290	1,386	1,381	46	3.0	138.0
37	4-Sep	2	0	321	4,893	137	1,375	56	3.0	168.0
38	11-Sep	10	0	196	7,656	4	975	47	2.0	94.0
39	18-Sep	6	0	13	2,739	0	222	27	3.0	81.0
40	25-Sep	12	0	6	2,090	0	171	18	3.0	54.0
41	2-Oct	0	0	1	2,307	0	244	13	3.0	39.0
Total		24,293	2,676	99,465	42,203	106,395	150,121		78.0	4,592
Alaska Hatchery Contributions										
19	1-May	42	0		0		0			
20	8-May	33	9		0		0			
21	15-May	117	1		0		0			
22	22-May	89	10		0		0			
23	29-May	181	44		0		0			
24	5-Jun	242	303		0		0			
25	12-Jun	92	21		0		0			
26	19-Jun	306	25		165		0			
27	26-Jun	178	0		0		3,136			
28	3-Jul	175	0		244		10,743			
29	10-Jul	186	14		340		11,157			
30	17-Jul	168	0		27		8,922			
31	24-Jul	0	0		0		6,662			
32	31-Jul	0	0		25		4,617			
33	7-Aug	0	0		79		11,157			
34	14-Aug	8	0		0		4,423			
35	21-Aug	0	0		43		0			
36	28-Aug	0	0		127		0			
37	4-Sep	0	0		1,680		0			
38	11-Sep	0	0		1,334		1,726			
39	18-Sep	0	0		2,554		0			
40	25-Sep	0	0		2,368		0			
41	2-Oct	0	0		0		0			
Total		1,816	426	0	8,986	0	62,543			
Catches not including Alaska hatchery contributions										
19	1-May	590	63	0	0	0	0	36	4.0	144
20	8-May	952	165	0	0	0	0	53	4.0	212
21	15-May	2,817	153	0	2	0	0	66	4.0	264
22	22-May	2,108	106	1	0	0	0	76	2.0	152
23	29-May	5,718	400	16	10	0	0	89	3.0	267
24	5-Jun	7,875	308	171	8	0	5	104	4.0	416
25	12-Jun	1,068	251	554	30	4	4	48	3.0	144
26	19-Jun	416	216	9,948	673	803	116	42	4.0	168
27	26-Jun	419	281	14,680	994	4,908	-1,341	72	4.0	288
28	3-Jul	214	183	23,625	1,125	15,029	-1,611	98	4.0	392
29	10-Jul	109	89	22,734	1,872	36,177	23,089	105	5.0	525
30	17-Jul	58	25	11,692	1,534	28,226	30,154	88	4.0	352
31	24-Jul	67	8	4,601	711	9,545	14,344	71	2.0	142

32	31-Jul	17	1	2,616	1,045	4,091	14,769	50	2.0	100
33	7-Aug	14	1	4,371	1,780	2,893	6,372	47	4.0	188
34	14-Aug	0	0	2,618	2,858	2,900	-1,968	36	4.0	144
35	21-Aug	2	0	675	2,663	292	1,003	30	4.0	120
36	28-Aug	3	0	626	6,163	1,386	1,381	46	3.0	138
37	4-Sep	2	0	321	3,213	137	1,375	56	3.0	168
38	11-Sep	10	0	196	6,322	4	-751	47	2.0	94
39	18-Sep	6	0	13	185	0	222	27	3.0	81
40	25-Sep	12	0	6	-278	0	171	18	3.0	54
41	2-Oct	0	0	1	2,307	0	244	13	3.0	39
Total		22,477	2,250	99,465	33,217	106,395	87,578		78.0	4,592

[a] Data not available to estimate contributions of pink salmon from Alaska hatcheries.

Appendix A. 8. Weekly stock proportions and stock-specific catch of sockeye salmon in the Alaskan District 108 commercial drift gillnet fishery, 2005.

			Stikine				Planted	CPUE of Stikine Fish			
Week	Alaska	Canada	Tahltan [a]	Tuya	Mainstem	Total	Tahltan	Tahltan [a]	Tuya	Mainstem	Total
Proportions											
20-24	0.082	0.101	0.470	0.000	0.347	0.817	0.213	0.000	0.000	0.000	0.000
25	0.082	0.101	0.470	0.000	0.347	0.817	0.213	0.013	0.000	0.013	0.013
26	0.083	0.339	0.373	0.000	0.205	0.578	0.230	0.156	0.000	0.114	0.138
27	0.079	0.116	0.714	0.000	0.090	0.805	0.343	0.256	0.000	0.043	0.165
28	0.168	0.205	0.513	0.000	0.114	0.627	0.363	0.218	0.000	0.064	0.152
29	0.086	0.128	0.480	0.000	0.307	0.787	0.267	0.146	0.000	0.125	0.137
30	0.190	0.163	0.262	0.000	0.384	0.647	0.161	0.061	0.000	0.120	0.086
31	0.013	0.083	0.256	0.000	0.648	0.905	0.161	0.058	0.000	0.197	0.118
32	0.113	0.251	0.337	0.000	0.298	0.635	0.265	0.062	0.000	0.073	0.067
33	0.378	0.145	0.163	0.000	0.314	0.477	0.030	0.027	0.000	0.068	0.045
34	0.083	0.201	0.018	0.000	0.698	0.716	0.005	0.002	0.000	0.119	0.052
35	0.034	0.286	0.009	0.000	0.672	0.681	0.014	0.000	0.000	0.035	0.015
36	0.323	0.475	0.009	0.000	0.193	0.202	0.014	0.000	0.000	0.008	0.004
37	0.179	0.314	0.007	0.000	0.500	0.507	0.014	0.000	0.000	0.009	0.004
38	0.179	0.314	0.007	0.000	0.500	0.507	0.014	0.000	0.000	0.010	0.004
39	0.179	0.314	0.007	0.000	0.500	0.507	0.014	0.000	0.000	0.001	0.000
40	0.179	0.314	0.007	0.000	0.500	0.507	0.014	0.000	0.000	0.001	0.000
41	0.179	0.314	0.007	0.000	0.500	0.507	0.014	0.000	0.000	0.000	0.000
Total	0.128	0.178	0.437	0.000	0.257	0.694	0.258	0.571	0.000	0.429	1.000
Catch											
20-24	15	19	88	0	65	154	40	0.1	0.0	0.0	0.1
25	46	56	260	0	192	452	118	1.8	0.0	1.3	3.1
26	822	3,374	3,714	0	2,037	5,751	2,293	22.1	0.0	12.1	34.2
27	1,167	1,703	10,482	0	1,328	11,810	5,038	36.4	0.0	4.6	41.0
28	3,964	4,848	12,118	0	2,695	14,813	8,578	30.9	0.0	6.9	37.8
29	1,953	2,899	10,905	0	6,976	17,881	6,061	20.8	0.0	13.3	34.1
30	2,226	1,906	3,064	0	4,496	7,559	1,883	8.7	0.0	12.8	21.5
31	58	381	1,179	0	2,984	4,162	739	8.3	0.0	21.0	29.3
32	296	658	881	0	781	1,662	693	8.8	0.0	7.8	16.6
33	1,654	633	713	0	1,371	2,084	133	3.8	0.0	7.3	11.1
34	219	525	47	0	1,828	1,874	13	0.3	0.0	12.7	13.0
35	23	193	6	0	453	459	9	0.1	0.0	3.8	3.8
36	202	298	6	0	121	126	9	0.0	0.0	0.9	0.9
37	57	101	2	0	160	163	4	0.0	0.0	1.0	1.0
38	35	62	1	0	98	99	3	0.0	0.0	1.0	1.1
39	2	4	0	0	6	7	0	0.0	0.0	0.1	0.1
40	1	2	0	0	3	3	0	0.0	0.0	0.1	0.1
41	0	0	0	0	0	1	0	0.0	0.0	0.0	0.0
Total	12,742	17,661	43,467	0	25,595	69,062	25,614	142.1	0.0	106.7	248.8

[a] Tahltan includes wild and thermally marked fish.

Appendix A. 9. Gillnet, troll, recreational, and subistence catch of Stikine River bound Chinook salmon in District 108, 2005.

		Salmon Harvest								
	Start	Gillnet			Troll					
Week	Date	Catch	Permits	Days	Catch	Permits	Days	Sport	Subsist.	Total
19	1-May	587	36	4	140	23	7	73		800
20	8-May	934	53	4	123	20	7	270		1,327
21	15-May	2,815	66	4	159	26	7	270		3,244
22	22-May	2,108	76	2	1,020	45	7	845		3,973
23	29-May	5,701	89	3	702	38	7	844	1	7,248
24	5-Jun	7,875	104	4	809	40	7	285	1	8,970
25	12-Jun	1,068	48	3	844	33	7	285	2	2,199
26	19-Jun	416	42	4	482	21	7	65	16	979
27	26-Jun	418	72	4	17	6	5	65		500
28	3-Jul	157	98	4						157
29	10-Jul	94	105	5						94
Total		22,173		41	4,296		61	3,002	20	29,491

Appendix A. 10. U.S. subsistence fishery harvest in the Stikine River, 2005.

		Salmon Harvest							
	Start	Chinook						Dolly	Permits
Week	Date	Large	Jacks	Sockeye	Coho	Pink	Chum	Varden	Fished
21	15-May			0	0	0	0	0	
22	22-May			2	0	0	0	0	
23	29-May	1		15	0	2	0	2	
24	5-Jun	1		1	0	2	0	0	
25	12-Jun	2		15	0	3	0	0	
26	19-Jun	16		121	0	16	6	2	
27	26-Jun			83	0	28	8	0	
28	3-Jul			11	0	14	6	0	
29	10-Jul								
30	17-Jul			3	1	4	2	0	
31	24-Jul								
32	31-Jul								
33	7-Aug			0	45	0	0	0	
34	14-Aug								
35	21-Aug			0	4	0	0	0	
36	28-Aug			1	2	0	0	0	
37	4-Sep								
38	11-Sep			0	1	0	0	0	
Total		20	0	252	53	69	22	4	22

Appendix A. 11. Weekly salmon and steelhead trout catch and effort in the Canadian commercial fishery in the lower Stikine River, 2005.

		Catch							Effort		
	Start	Chinook						Steel-			Permit
Week	Date	Large	Jacks[a]	Sockeye	Coho	Pink	Chum	head[b]	Permits	Days	Days
20	8-May	287	2	0	0	0	0	0	8.33	3.0	25.0
21	15-May	144	2	0	0	0	0	0	8.50	4.0	34.0
22	22-May	1,595	46	0	0	0	0	0	12.00	5.0	60.0
23	29-May	2,019	135	0	0	0	0	0	12.00	7.0	84.0
24	5-Jun	3,344	264	5	0	0	0	0	12.00	5.0	60.0
25	12-Jun	3,467	179	22	0	0	0	0	12.00	4.0	48.0
26	19-Jun	3,381	157	650	0	0	0	0	12.00	4.0	48.0
27	26-Jun	2,242	127	13,608	0	0	0	0	12.00	6.0	72.0
28	3-Jul	1,507	193	15,647	0	0	0	0	12.00	7.0	84.0
29	10-Jul	762	58	18,580	0	0	0	0	12.00	7.0	84.0
30	17-Jul	240	18	13,131	4	0	0	0	12.00	7.0	84.0
31	24-Jul	66	0	8,243	5	0	0	0	12.00	4.0	48.0
32	31-Jul	16	0	7,256	112	0	21	0	11.75	4.0	47.0
33	7-Aug	0	0	2,810	155	0	18	0	5.00	5.0	25.0
Total		19,070	1,181	79,952	276	0	39	0		72.0	803.0

[a] Jacks as reported by fishery and loosely based on "small" fish ~2.5-3.0 kg; the jack catch may not correspond with the estimated jack catch based on samplin, I.e. jack<660 mef or <735 fl.
[b] All steelhead were released

Appendix A. 12. Weekly sockeye salmon stock proportions and catch by stock in the Canadian commercial fishery in the lower Stikine River, 2005.

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

	Proportion				Planted	Catch			Tahltan	
Week	Sm. Egg	Tahltan [a]	Tuya	Main	Tahltan	Tahltan [a]	Tuya	Main	Wild	Planted
24	0.963	0.926	0.037	0.037	0.415	5	0	0	3	2
25	0.963	0.926	0.037	0.037	0.415	20	1	1	11	9
26	0.920	0.897	0.023	0.080	0.415	583	15	52	313	270
27	0.899	0.877	0.022	0.101	0.399	11,930	303	1,375	6,505	5,425
28	0.881	0.866	0.015	0.119	0.366	13,547	231	1,869	7,823	5,724
29	0.834	0.812	0.022	0.166	0.377	15,079	418	3,083	8,070	7,009
30	0.762	0.736	0.026	0.238	0.341	9,659	345	3,127	5,177	4,482
31	0.641	0.634	0.007	0.359	0.289	5,224	57	2,962	2,841	2,383
32	0.520	0.513	0.007	0.480	0.285	3,725	48	3,483	1,656	2,069
33	0.401	0.395	0.007	0.599	0.285	1,109	19	1,682	308	801
34 [c]	0.229	0.225	0.005	0.771	0.162					
35 [c]	0.136	0.136	0.000	0.864	0.099					
36 [c]	0.068	0.068	0.000	0.932	0.049					
37 [c]	0.000	0.000	0.000	1.000	0.000					
Total						60,881	1,437	17,634	32,707	28,174
Proportion						0.761	0.018	0.221	0.409	0.352

	Catch/Effort below Porcupine [b]		Total	CPUE				Tahltan	
Week	Sockeye	Permit Day	CPUE	Sm. Egg	Tahltan [a]	Tuya	Main	Wild	Planted
24	5	60	0.083	0.080	0.077	0.003	0.003	0.043	0.035
25	22	48	2.600	2.504	2.407	0.096	0.096	1.327	1.080
26	642	46	13.957	12.840	12.518	0.322	1.117	6.721	5.797
27	11,239	59	190.492	171.244	167.002	4.242	19.248	91.059	75.943
28	12,847	70	183.194	161.312	158.608	2.705	21.882	91.597	67.011
29	13,979	69	201.284	167.885	163.356	4.528	33.399	87.423	75.934
30	9,892	66	148.851	113.404	109.493	3.911	35.447	58.688	50.806
31	5,551	37	149.420	95.728	94.695	1.033	53.692	51.503	43.192
32	5,735	43	133.372	69.351	68.469	0.882	64.021	30.439	38.030
33	2,810	25	112.400	45.120	44.360	0.760	67.280	12.310	32.050
34 [c]			52.961	12.147	11.904	0.243	40.814		
35 [c]			52.983	7.225	7.225	0.000	45.758		
36 [c]			15.458	1.054	1.054	0.000	14.404		
37 [c]			4.361	0.000	0.000	0.000	4.361		
Total	62695	416.183	1261.33	859.814	841.092	18.722	401.520	431.067	389.842
Proportion				0.682	0.667	0.015	0.318	0.342	0.309

[a] Tahltan includes wild and thermally marked fish.

[b] Catch and effort data used to generate cpue by stock group excluded the catch and effort above Porcupine.

[c] Used egg diameters from test fishery and a linear regression of CPUE in District 108 vs lower river commercial CPUE to estimate weeks after commercial fishery ended.

Appendix A. 13. Weekly salmon and steelhead trout catch and effort in the Canadian commercial fishery in the upper Stikine River, 2005.

		Catch							Effort		
	Start	Chinook						Steel-			Permit
Week	Date	Large	Jacks[a]	Sockeye	Coho	Pink	Chum	head	Permits	Days	Days
29	10-Jul	16	1	343					1.0	1.0	1.0
30	17-Jul	12	0	131					1.0	7.0	7.0
31	24-Jul	0	0	131					1.0	5.0	5.0
Total		28	1	605	0	0	0	0	3.0	13.0	13.0

[a] Jacks as reported by fishery and loosely based on "small" fish ~2.5-3.0 kg; the jack catch may not correspond with the estimated jack catch based on samplin, I.e. jack<660 mef or <735 fl.

Appendix A. 14. Weekly salmon and steelhead trout catch and effort in the Canadian Aboriginal fishery located at Telegraph Creek, on the Stikine River, 2005.

		Catch							Effort		
	Start	Chinook						Steel-			Permit
Week	Date	Large	Jacks[a]	Sockeye	Coho	Pink	Chum	head [b]	Permits	Days	Days
21	15-May	15	5	0	0	0	0	0	3.67	3.0	11.0
22	22-May	24	0	0	0	0	0	0	1.43	7.0	10.0
23	29-May	63	1	0	0	0	0	0	2.57	7.0	18.0
24	5-Jun	53	2	2	0	0	0	0	3.00	7.0	21.0
25	12-Jun	159	13	3	0	0	0	0	5.29	7.0	37.0
26	19-Jun	134	2	4	0	0	0	0	2.86	7.0	20.0
27	26-Jun	53	7	134	0	0	0	0	4.07	7.0	28.5
28	3-Jul	62	14	896	0	0	0	0	9.50	7.0	66.5
29	10-Jul	64	0	1,787	0	0	0	0	12.21	7.0	85.5
30	17-Jul	121	6	1,549	0	0	0	0	13.50	7.0	94.5
31	24-Jul	24	5	498	0	0	0	0	4.86	7.0	34.0
32	31-Jul	0	0	202	0	0	0	0	2.00	1.0	2.0
33	7-Aug	29	40	177	0	0	0	0	2.57	7.0	18.0
34	14-Aug	0	0	81	0	0	0	0	3.0	3.0	9.0
Total		800	94	5,333	0	0	0	0		84	455.0

Tahltan Sport Fishery

	Start	Rod [c]	Chinook		
Week	Date	Hours	Retain	Release	Total
27	26-Jun	14	0	40	40
28	3-Jul	58	6	37	43
29	10-Jul	n/a	2	8	11
30	17-Jul	n/a	2	24	25
31	24-Jul	19	2	6	8
32	31-Jul	n/a	0	3	3
Total		91	12	118	129

[a] Jacks as reported by fishery and loosely based on "small" fish ~2.5-3.0 kg; the jack catch may not correspond with the estimated jack catch based on samplin, I.e. jack<660 mef or <735 fl.

[b] Estimated season catch (spring and autumn) is 75-100 fish.

[c] Weekly catches and effort were estimated to represent 75% of the catch. The catch was expanded to account for this estimate, which was based on the fact that the sport fishery was only monitored five days per week and that the, presumably minor, Iskut sport fishery was not monitored

Appendix A. 15. Catch by stock and week for sockeye salmon harvested in the Canadian upper river commercial and Aboriginal fisheries in the Stikine River, 2005.

	Start	Stock			Tahltan	
Week	Date	Tahltan[a]	Tuya	Mainstem	Wild	Planted
Proportion by stock for upper river fisheries						
24	5-Jun	1.000	0.000	0.000	0.778	0.222
25	12-Jun	1.000	0.000	0.000	0.778	0.222
26	19-Jun	1.000	0.000	0.000	0.778	0.222
27 [b]	26-Jun	1.000	0.000	0.000	0.794	0.210
28	3-Jul	0.887	0.000	0.112	0.769	0.118
29	10-Jul	0.960	0.012	0.028	0.747	0.214
30	17-Jul	0.992	0.008	0.000	0.737	0.256
31	24-Jul	0.940	0.060	0.000	0.645	0.295
32	31-Jul	0.901	0.037	0.066	0.634	0.267
33	7-Aug	1.000	0.000	0.000	0.520	0.480
34	14-Aug	1.000	0.000	0.000	0.333	0.667
Total						
Catch by stock for upper river commercial fishery						
29	10-Jul	329	4	10	256	73
30	17-Jul	130	1	0	97	33
31	24-Jul	123	8	0	84	39
Total		582	13	10	437	145
Catch by stock for upper river aboriginal fishery						
24	5-Jun	2	0	0	2	0
25	12-Jun	3	0	0	2	1
26	19-Jun	4	0	0	3	1
27	26-Jun	134	0	0	106	28
28	3-Jul	795	0	101	689	106
29	10-Jul	1,716	22	50	1,334	382
30	17-Jul	1,537	12	0	1,141	396
31	24-Jul	468	30	0	321	147
32	31-Jul	182	7	13	128	54
33	7-Aug	177	0	0	92	85
34	14-Aug	81	0	0	27	54
Total		5,099	71	164	3,845	1,254

[a] Tahltan includes wild and thermally marked fish.

[b] Used the proportion observed in stat week 27 as a proxy for weeks 24-26

Appendix A. 16. Weekly salmon and steelhead trout catch and effort in the Canadian test fishery in the Stikine River, 2005.

		Catch							
	Start	Chinook						Steel-	# Drifts/
Week	Date	Large	Jacks[a]	Sockeye	Coho	Pink	Chum	head[b]	Set Hours
Drift gillnet									
26	19-Jun	13	8	72	0	0	0	0	28
31[c]	24-Jul	0	0	58	2	0	0	0	28
32	31-Jul	0	0	51	5	0	0	0	28
33	7-Aug	0	0	14	6	1	1	0	14
34	14-Aug	0	0	51	20	2	6	4	42
35	21-Aug	0	0	52	26	4	16	4	56
36	28-Aug	0	0	13	66	0	4	6	42
37	4-Sep	0	0	14	77	0	11	2	84
38	11-Sep	1	0	9	70	2	5	3	98
39	18-Sep	0	0	1	79	0	0	5	98
40	25-Sep	0	0	0	42	0	0	0	98
41	2-Oct	0	0	4	35	0	0	1	87
42	9-Oct	0	0	0	16	0	0	2	77
Total		14	8	339	444	9	43	27	780
Set gillnet									
26	19-Jun	15	12	273	0	0	0	0	48
27[c]	26-Jun	2	1	63	0	0	0	0	12
31	24-Jul	1	0	231	1	0	0	0	48
32	31-Jul	1	0	289	10	0	0	0	60
33	7-Aug	0	0	97	10	4	1	0	36
34	14-Aug	0	0	124	43	25	18	10	60
35	21-Aug	0	0	166	120	30	29	14	72
36	28-Aug	0	0	69	87	3	2	21	60
Total		19	13	1,312	271	62	50	45	396
Additional Drifts --- were not fished in 2005									
Total Test Fishery Catch									
26	19-Jun	28	20	345	0	0	0	0	28
27[c]	26-Jun	2	1	63	0	0	0	0	0
31	24-Jul	1	0	289	3	0	0	0	28
32	31-Jul	1	0	340	15	0	0	0	28
33	7-Aug	0	0	111	16	5	2	0	14
34	14-Aug	0	0	175	63	27	24	14	42
35	21-Aug	0	0	218	146	34	45	18	56
36	28-Aug	0	0	82	153	3	6	27	42
37	4-Sep	0	0	14	77	0	11	2	84
38	11-Sep	1	0	9	70	2	5	3	98
39	18-Sep	0	0	1	79	0	0	5	98
40	25-Sep	0	0	0	42	0	0	0	98
41	2-Oct	0	0	4	35	0	0	1	87
42	9-Oct	0	0	0	16	0	0	2	77
Total		33	21	1,651	715	71	93	72	1,176

[a] Jacks as reported by fishery and loosely based on "small" fish ~2.5-3.0 kg; the jack catch may not correspond with the estimated jack catch based on samplin, I.e. jack<660 mef or <735 fl.

[b] All steelhead were released live.

[c] no drift fishery weeks 27-30 and no set fishery weeks 28-30 due to extended commercial fishery.

Appendix A. 17. Weekly catch, CPUE, and migratory timing of Tahltan, Tuya, and mainstem sockeye stocks in the Stikine test fishery, 2005.

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

	Proportions			Catch			CPUE				Migratory Timing		
Week	Tahl.	Tuya	Main	Tahl.	Tuya	Main	Tahl.	Tuya	Main	Total	Tahl.	Tuya	Main
Drift gillnet													
26	0.835	0.006	0.159	60	0	11	2.147	0.015	0.410	2.571	0.210	0.001	0.040
27[a]	0.810	0.000	0.190										
31	0.668	0.003	0.329	39	0	19	1.383	0.007	0.681	2.071	0.135	0.001	0.067
32	0.576	0.006	0.418	29	0	21	1.050	0.011	0.761	1.821	0.103	0.001	0.074
33	0.423	0.018	0.559	6	0	8	0.423	0.018	0.559	1.000	0.041	0.002	0.055
34	0.320	0.000	0.680	16	0	35	0.389	0.000	0.826	1.214	0.038	0.000	0.081
35	0.225	0.005	0.771	12	0	40	0.209	0.004	0.716	0.929	0.020	0.000	0.070
36	0.136	0.000	0.864	2	0	11	0.042	0.000	0.267	0.310	0.004	0.000	0.026
37	0.136	0.000	0.864	2	0	12	0.023	0.000	0.144	0.167	0.002	0.000	0.014
38	0.136	0.000	0.864	1	0	8	0.013	0.000	0.079	0.092	0.001	0.000	0.008
39	0.136	0.000	0.864	0	0	1	0.001	0.000	0.009	0.010	0.000	0.000	0.001
40	0.136	0.000	0.864	0	0	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000
41	0.136	0.000	0.864	1	0	3	0.006	0.000	0.040	0.046	0.001	0.000	0.004
Total				168	1	170	5.686	0.055	4.491	10.231			
Proportion				0.495	0.004	0.501					0.556	0.005	0.439
Set gillnet													
26	0.835	0.006	0.159	228	2	44	4.748	0.033	0.907	5.688	0.165	0.001	0.032
27[a]	0.810	0.000	0.190	51	0	12	4.250	0.000	1.000	5.250	0.148	0.000	0.035
31	0.668	0.003	0.329	154	1	76	3.214	0.017	1.582	4.813	0.112	0.001	0.055
32	0.576	0.006	0.418	167	2	121	2.777	0.028	2.012	4.817	0.096	0.001	0.070
33	0.423	0.018	0.559	41	2	54	1.141	0.049	1.505	2.694	0.040	0.002	0.052
34	0.320	0.000	0.680	40	0	84	0.661	0.000	1.405	2.067	0.023	0.000	0.049
35	0.225	0.005	0.771	37	1	128	0.518	0.011	1.777	2.306	0.018	0.000	0.062
36	0.136	0.000	0.864	9	0	60	0.157	0.000	0.993	1.150	0.005	0.000	0.035
Total				727	7	578	17.466	0.137	11.181	28.783			
Proportion				0.554	0.005	0.441					0.607	0.005	0.388

Additional Drifts ---- were not fished in 2005.

Total Test Fishery Catches							Tahltan			
							Wild	Plant	Wild	Plant
26	0.835	0.006	0.159	288	2	55	0.649	0.186	224	64
27[a]	0.810	0.000	0.190	51	0	12	0.413	0.397	26	25
31	0.668	0.003	0.329	193	1	95	0.405	0.263	117	76
32	0.576	0.006	0.418	196	2	142	0.332	0.244	113	83
33	0.423	0.018	0.559	47	2	62	0.207	0.216	23	24
34	0.320	0.000	0.680	56	0	119	0.166	0.154	29	27
35	0.225	0.005	0.771	49	1	168	0.119	0.106	26	23
36	0.136	0.000	0.864	11	0	71	0.091	0.045	7	4
37	0.136	0.000	0.864	2	0	12	0.091	0.045	1	1
38	0.136	0.000	0.864	1	0	8	0.091	0.045	1	0
39	0.136	0.000	0.864	0	0	1	0.091	0.045	0	0
40	0.136	0.000	0.864	0	0	0	0.091	0.045	0	0
41	0.136	0.000	0.864	1	0	3	0.091	0.045	0	0
Total				895	8	748			568	327
Proportion				0.542	0.005	0.453				

[a] no drift fishery weeks 27-30 and no set fishery weeks 28-30 due to extended commercial fishery.

Appendix A. 18. Daily counts of adult sockeye salmon passing through Tahltan Lake weir, 2005.

Date	Count [a]	Cumulative Count	Cumulative Percent	Date	Count	Cumulative Count	Cumulative Percent
11-Jul	4	4	0.0	14-Aug	736	33,403	76.9
12-Jul	12	16	0.0	15-Aug	831	34,234	78.8
13-Jul	7	23	0.1	16-Aug	999	35,233	81.1
14-Jul	11	34	0.1	17-Aug	993	36,226	83.4
15-Jul	0	34	0.1	18-Aug	847	37,073	85.3
16-Jul	24	58	0.1	19-Aug	355	37,428	86.1
17-Jul	511	569	1.3	20-Aug	141	37,569	86.5
18-Jul	3,588	4,157	9.6	21-Aug	537	38,106	87.7
19-Jul	1,647	5,804	13.4	22-Aug	507	38,613	88.9
20-Jul	1,364	7,168	16.5	23-Aug	228	38,841	89.4
21-Jul	1,534	8,702	20.0	24-Aug	167	39,008	89.8
22-Jul	1,053	9,755	22.5	25-Aug	169	39,177	90.2
23-Jul	1,333	11,088	25.5	26-Aug	185	39,362	90.6
24-Jul	950	12,038	27.7	27-Aug	388	39,750	91.5
25-Jul	1,888	13,926	32.1	28-Aug	292	40,042	92.2
26-Jul	1,096	15,022	34.6	29-Aug	207	40,249	92.6
27-Jul	1,217	16,239	37.4	30-Aug	151	40,400	93.0
28-Jul	1,090	17,329	39.9	31-Aug	221	40,621	93.5
29-Jul	1,164	18,493	42.6	1-Sep	332	40,953	94.3
30-Jul	639	19,132	44.0	2-Sep	159	41,112	94.6
31-Jul	355	19,487	44.9	3-Sep	254	41,366	95.2
1-Aug	938	20,425	47.0	4-Sep	399	41,765	96.1
2-Aug	620	21,045	48.4	5-Sep	57	41,822	96.3
3-Aug	594	21,639	49.8	6-Sep	162	41,984	96.6
4-Aug	894	22,533	51.9	7-Sep	482	42,466	97.7
5-Aug	677	23,210	53.4	8-Sep	187	42,653	98.2
6-Aug	798	24,008	55.3	9-Sep	25	42,678	98.2
7-Aug	663	24,671	56.8	10-Sep	91	42,769	98.4
8-Aug	716	25,387	58.4	11-Sep	222	42,991	99.0
9-Aug	1,959	27,346	62.9	12-Sep	278	43,269	99.6
10-Aug	1,713	29,059	66.9	13-Sep	0	43,269	99.6
11-Aug	1,467	30,526	70.3	14-Sep	23	43,292	99.6
12-Aug	1,238	31,764	73.1	15-Sep	154	43,446	100.0
13-Aug	903	32,667	75.2				

	Hatchery	Wild	Total	
Total Counted	17,928	25,518	43,446	
Fish removed for broodstock	-1,350	-2,074	-3,424	[a]
Fish removed for otolith samples	-158	-242	-400	[b]
Total Spawners	16,420	23,202	39,622	

[a] A total of 1,651 females and 1,669 males were taken for broodstock (104 rejects included in the broodstock total).
[b] 400 fish were sacrificed for otolith analysis.

Appendix A. 19. Daily counts of sockeye salmon smolt migrating through Tahltan Lake smolt weir, 2005.

		Cumulative				Cumulative	
Date	Count	Count	Percent	Date	Count	Count	Percent
6-May	0	0	0.0	30-May	11,761	1,784,302	96.8
7-May	5	5	0.0	31-May	8,987	1,793,289	97.3
8-May	2	7	0.0	1-Jun	3,106	1,796,395	97.4
9-May	6	13	0.0	2-Jun	16,554	1,812,949	98.3
10-May	70	83	0.0	3-Jun	4,822	1,817,771	98.6
11-May	9,681	9,764	0.5	4-Jun	2,126	1,819,897	98.7
12-May	108,119	117,883	6.4	5-Jun	3,562	1,823,459	98.9
13-May	491,005	608,888	33.0	6-Jun	1,576	1,825,035	99.0
14-May	58,494	667,382	36.2	7-Jun	5,930	1,830,965	99.3
15-May	883	668,265	36.2	8-Jun	2,740	1,833,705	99.5
16-May	239,658	907,923	49.2	9-Jun	1,781	1,835,486	99.5
17-May	112,121	1,020,044	55.3	10-Jun	958	1,836,444	99.6
18-May	21,470	1,041,514	56.5	11-Jun	240	1,836,684	99.6
19-May	33,049	1,074,563	58.3	12-Jun	860	1,837,544	99.7
20-May	103,402	1,177,965	63.9	13-Jun	555	1,838,099	99.7
21-May	261,314	1,439,279	78.1	14-Jun	172	1,838,271	99.7
22-May	104,762	1,544,041	83.7	15-Jun	72	1,838,343	99.7
23-May	23,640	1,567,681	85.0	16-Jun	455	1,838,798	99.7
24-May	42,485	1,610,166	87.3	17-Jun	3,657	1,842,455	99.9
25-May	74,675	1,684,841	91.4	18-Jun	951	1,843,406	100.0
26-May	45,823	1,730,664	93.9	19-Jun	353	1,843,759	100.0
27-May	7,190	1,737,854	94.3	20-Jun	45	1,843,804	100.0
28-May	30,236	1,768,090	95.9				
29-May	4,451	1,772,541	96.1	Wild		943,929	
				Hatchery		899,875	
Total						1,843,804	

Appendix A. 20. Daily counts of adult Chinook salmon passing through Little Tahltan weir, 2005

		Large Chinook			Chinook Jacks		
			Cumulative			Cumulative	
Date		Count	Count	Percent	Count	Count	Percent
18-Jun	Weir Installed						
19-Jun		0	0	0.0	0	0	0.0
20-Jun		0	0	0.0	0	0	0.0
21-Jun		3	3	0.0	0	0	0.0
22-Jun		35	38	0.5	0	0	0.0
23-Jun		1	39	0.5	0	0	0.0
24-Jun		2	41	0.6	0	0	0.0
25-Jun		1	42	0.6	0	0	0.0
26-Jun		45	87	1.2	0	0	0.0
27-Jun		86	173	2.3	0	0	0.0
28-Jun		133	306	4.1	0	0	0.0
29-Jun		277	583	7.9	5	5	2.2
30-Jun		134	717	9.7	0	5	2.2
1-Jul		25	742	10.0	4	9	3.9
2-Jul		105	847	11.5	2	11	4.8
3-Jul		65	912	12.3	4	15	6.5
4-Jul		112	1,024	13.9	2	17	7.4
5-Jul		180	1,204	16.3	1	18	7.8
6-Jul		121	1,325	17.9	3	21	9.1
7-Jul		101	1,426	19.3	2	23	10.0
8-Jul		194	1,620	21.9	4	27	11.7
9-Jul		86	1,706	23.1	2	29	12.6
10-Jul		0	1,706	23.1	0	29	12.6
11-Jul		144	1,850	25.0	3	32	13.9
12-Jul		160	2,010	27.2	9	41	17.7
13-Jul		492	2,502	33.9	19	60	26.0
14-Jul		170	2,672	36.2	2	62	26.8
15-Jul		103	2,775	37.6	3	65	28.1
16-Jul		104	2,879	39.0	11	76	32.9
17-Jul		361	3,240	43.9	11	87	37.7
18-Jul		95	3,335	45.1	9	96	41.6
19-Jul		106	3,441	46.6	1	97	42.0
20-Jul		113	3,554	48.1	5	102	44.2
21-Jul		32	3,586	48.5	1	103	44.6
22-Jul		124	3,710	50.2	5	108	46.8
23-Jul		265	3,975	53.8	11	119	51.5
24-Jul		197	4,172	56.5	12	131	56.7
25-Jul		147	4,319	58.5	2	133	57.6
26-Jul		335	4,654	63.0	12	145	62.8
27-Jul		313	4,967	67.2	19	164	71.0
28-Jul		869	5,836	79.0	31	195	84.4
29-Jul		62	5,898	79.8	3	198	85.7
30-Jul		142	6,040	81.8	3	201	87.0
31-Jul		145	6,185	83.7	1	202	87.4
1-Aug		83	6,268	84.9	2	204	88.3
2-Aug		78	6,346	85.9	0	204	88.3
3-Aug		135	6,481	87.7	3	207	89.6
4-Aug		174	6,655	90.1	4	211	91.3
5-Aug		323	6,978	94.5	3	214	92.6
6-Aug		161	7,139	96.6	9	223	96.5
7-Aug		133	7,272	98.4	6	229	99.1
8-Aug		115	7,387	100.0	2	231	100.0
Total Counted			7,387			231	
Broodstock			0	[a]			
Escapement			7,387			231	

[a]No broodstock collected in 2005

Appendix B. 1. Salmon catch and effort in the Alaskan District 106 commercial drift gillnet fisheries, 1960-2005.

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

	Catch							Effort	
	Chinook							Permit	Days
Year	Large	Jack	Sockeye	Coho	Pink [a]	Chum	Steelhead	Days	Open
1960	46		10,354	336	1,246	502		369	17.0
1961	416		20,614	14,934	124,236	64,479		1,737	57.0
1962	1,308		47,033	42,276	256,620	59,119		4,693	52.0
1963	1,560		80,767	52,103	514,596	90,103		5,589	51.0
1964	2,082		76,541	64,654	443,086	44,218		5,383	49.0
1965	1,802		87,749	75,728	625,848	27,658		4,507	50.8
1966	1,665		89,847	62,823	400,932	40,756		4,978	74.3
1967	1,318		86,385	17,670	91,609	26,370		2,511	27.0
1968	1,316		64,671	67,151	169,107	61,366		4,965	52.0
1969	877		70,318	10,280	197,073	10,903	559	2,112	31.0
1970	785		42,778	35,470	94,892	32,231	473	1,863	41.0
1971	1,336		53,202	48,085	527,975	37,680	585	2,774	47.0
1972	2,573		101,338	93,427	89,467	72,382	692	3,321	41.0
1973	1,931		71,995	38,447	303,621	87,729	500	3,300	26.0
1974	1,926		57,346	45,651	104,403	50,309	335	2,179	28.0
1975	2,587		32,051	30,962	203,015	23,968	222	1,649	18.0
1976	384		15,481	19,126	139,439	6,868	128	827	22.0
1977	671		67,023	8,401	419,107	13,300	65	1,381	28.0
1978	274		41,574	55,578	224,715	16,545	203	1,510	27.1
1979	2,720		66,373	28,083	648,212	35,507	319	2,703	31.4
1980	580		107,422	16,666	45,662	26,291	91	1,324	25.0
1981	1,565		182,001	22,614	437,573	34,296	187	2,926	26.0
1982	1,648		193,798	31,481	25,533	18,646	282	1,700	22.5
1983	567		48,842	62,442	208,290	20,144	261	1,453	31.4
1984	892		91,653	41,359	343,255	70,258	498	1,890	31.4
1985	1,687		264,987	91,188	584,953	69,673	1,003	2,673	31.4
1986	1,704		145,709	194,912	308,484	82,289	1,314	3,510	31.4
1987	836		136,427	34,534	243,482	42,025	489	1,767	19.5
1988	1,104		92,529	13,103	69,559	69,620	587	1,495	18.5
1989	1,544		192,734	92,385	1,101,194	67,351	394	3,222	34.0
1990	2,108		185,805	164,235	319,186	73,232	960	3,502	34.0
1991	2,055		144,104	198,160	133,566	124,630	198	3,620	39.0
1992	1,355		203,155	298,935	94,248	140,468	187	4,230	40.0
1993	992		205,955	231,038	537,960	134,601	125	4,353	38.0
1994	754		211,048	267,862	179,994	176,026	95	4,468	43.0
1995	951		207,298	170,561	448,163	300,078	110	3,657	34.0
1996	644		311,100	223,640	188,035	283,290	130	5,290	46.0
1997	1,075		168,518	77,550	789,051	186,456		3,668	39.0
1998	518		113,435	273,197	502,655	332,022		4,398	43.0
1999	518		104,878	203,262	490,716	448,367		4,943	50.0
2000	1,220		90,076	96,207	156,619	199,836		2,409	33.0
2001	1,057		164,013	188,465	825,330	282,910		3,854	50.0
2002	446		56,135	226,560	82,951	112,541		5,299	47.0
2003	422		116,904	212,057	470,697	300,253		6,744	59.0
2004	2,735		116,259	138,631	245,237	110,574		2,736	55.0
Averages									
60-04	1,257		111,961	97,383	320,258	100,175	393	3,188	37.6
95-04	959		144,862	181,013	419,945	255,633	120	4,300	45.6
2005	1,526	46	110,192	114,440	461,187	198,564		2,964	53.0
Alaska Hatchery Contribution									
1989	512			5,029		20,277			
1990	1,009		33	50,354		27,259			
1991	608		182	64,067		47,731			
1992	658		55	112,824		47,503			
1993	305		53	77,914		42,206			
1994	402		1,580	36,805		67,111			
1995	353		4,548	27,333		72,417			
1996	324		5,799	55,218		108,764			
1997	369		1,435	19,479		79,990			
1998	290		706	101,129		118,096			
1999	189		2,257	82,828		211,082			
2000	790		1,134	48,169		71,306			
2001	446		340	67,378		99,224			

2002	161		0	78,485		23,509			
2003	192		0	93,454		105,372			
2004	1,281		0	49,501		34,642			
Averages									
89-04	493		1,208	60,623		73,531			
2005	657	0	0	30,727		53,795			
Catches not including Alaska hatchery contributions									
1989	1,032		192,734	87,356	1,101,194	47,074	394	3,222	34.0
1990	1,099		185,772	113,881	319,186	45,973	960	3,502	34.0
1991	1,447		143,922	134,093	133,566	76,899	198	3,620	39.0
1992	697		203,100	186,111	94,248	92,965	187	4,230	40.0
1993	687		205,902	153,124	537,960	92,395	125	4,353	38.0
1994	352		209,468	231,057	179,994	108,915	95	4,468	43.0
1995	598		202,750	143,228	448,163	227,661	110	3,657	34.0
1996	320		305,301	168,422	188,035	174,526	130	5,290	46.0
1997	706		167,083	58,071	789,051	106,466	0	3,668	39.0
1998	228		112,729	172,068	502,655	213,926	0	4,398	43.0
1999	329		102,621	120,434	490,716	237,285	0	4,943	50.0
2000	430		88,942	48,038	156,619	128,530	0	2,409	33.0
2001	611		163,673	121,087	825,330	183,686	0	3,854	50.0
2002	285		56,135	148,075	82,951	89,032	0	5,299	47.0
2003	230		116,904	118,603	470,697	194,881	0	6,744	59.0
2004	1,454		116,259	89,130	245,237	75,932	0	2,736	55.0
Averages									
89-04	657		160,831	130,799	410,350	131,009	137	4,150	42.8
2005	869	46	110,192	83,713	461,187	144,769	0	2,964	53.0

[a] Data not available to estimate contributions of pink salmon from Alaska hatcheries.

Appendix B. 2. Stock proportions and catches of sockeye salmon in the Alaskan District 106 commercial drift gillnet fisheries, 1982-2005.

Catches do not include Blind Slough terminal area harvest.

			Stikine				Tahltan	
Year	Alaska	Canada	Tahltan [a]	Tuya	Mainstem	Total	Wild	Planted
Proportions								
1982	0.486	0.319				0.194		
1983	0.668	0.217	0.103		0.013	0.116		
1984	0.658	0.269	0.029		0.044	0.074		
1985	0.479	0.419	0.091		0.011	0.102		
1986	0.689	0.293	0.014		0.004	0.018		
1987	0.827	0.155	0.010		0.007	0.017		
1988	0.874	0.106	0.020		0.001	0.020		
1989	0.657	0.311	0.006		0.026	0.032		
1990	0.608	0.371	0.005		0.016	0.021		
1991	0.545	0.331	0.100		0.024	0.124		
1992	0.595	0.232	0.070		0.102	0.172		
1993	0.400	0.338	0.098		0.164	0.262		
1994	0.579	0.254	0.142		0.025	0.167	0.108	0.033
1995	0.316	0.560	0.081	0.001	0.043	0.124	0.044	0.036
1996	0.531	0.268	0.166	0.028	0.007	0.201	0.147	0.019
1997	0.576	0.271	0.058	0.079	0.016	0.153	0.037	0.021
1998	0.598	0.307	0.015	0.080	0.000	0.095	0.013	0.002
1999	0.671	0.092	0.057	0.061	0.118	0.237	0.054	0.003
2000	0.643	0.233	0.020	0.085	0.019	0.124	0.017	0.003
2001	0.525	0.332	0.039	0.079	0.025	0.143	0.029	0.010
2002	0.758	0.098	0.037	0.072	0.035	0.144	0.024	0.012
2003	0.742	0.096	0.075	0.053	0.035	0.162	0.039	0.036
2004	0.499	0.222	0.241	0.020	0.018	0.279	0.144	0.097
Averages								
83-04	0.611	0.263	0.067		0.034	0.127		
95-04	0.586	0.248	0.079	0.056	0.032	0.166	0.055	0.024
2005	0.474	0.317	0.182	0.000	0.027	0.209	0.088	0.094
Catches								
1982	94,275	61,853				37,670		
1983	32,603	10,589	5,020		631	5,650		
1984	60,278	24,624	2,673		4,078	6,751		
1985	126,914	111,015	24,045		3,013	27,058		
1986	100,337	42,685	2,081		606	2,687		
1987	112,893	21,190	1,376		968	2,344		
1988	80,868	9,784	1,813		64	1,877		
1989	126,603	59,959	1,111		5,061	6,172		
1990	112,983	68,921	915		2,986	3,901		
1991	78,533	47,707	14,364		3,501	17,864		
1992	120,977	47,207	14,187		20,784	34,971		
1993	82,300	69,617	20,204		33,833	54,037		
1994	122,118	53,683	29,876		5,371	35,247	22,857	7,019
1995	65,544	116,075	16,715	125	8,839	25,679	9,182	7,533
1996	165,221	83,271	51,598	8,821	2,189	62,608	45,826	5,772
1997	97,101	45,665	9,764	13,232	2,756	25,752	6,281	3,483
1998	67,890	34,811	1,678	9,020	36	10,734	1,477	201
1999	70,363	9,696	5,988	6,427	12,404	24,819	5,700	288
2000	57,935	20,996	1,827	7,612	1,706	11,145	1,573	254
2001	86,078	54,512	6,339	12,965	4,119	23,423	4,747	1,592
2002	42,573	5,487	2,055	4,058	1,962	8,075	1,375	680
2003	86,720	11,264	8,736	6,145	4,039	18,920	4,550	4,186
2004	58,006	25,787	28,027	2,382	2,058	32,467	16,721	11,306
Averages								
83-04	88,856	44,298	11,381		5,500	20,099		
95-04	83,595	41,932	14,782	7,079	4,134	25,352	10,935	3,847
2005	52,192	34,952	20,080	0	2,968	23,048	9,724	10,356

[a] Tahltan includes wild and thermally marked fish.

Appendix B. 3. Salmon catch and effort in the Alaskan Subdistrict 106-41/42 (Sumner Strait) commercial drift gillnet fishery, 1960-2005.

	Catch						Effort	
							Permit	Days
Year	Chinook	Sockeye	Coho	Pink	Chum	Steelhead	Days	Open
1960	24	9,005	277	1,103	362		251	17.0
1961	75	9,488	1,851	26,435	9,657		359	48.0
1962	131	19,692	6,548	45,987	9,544		811	44.0
1963	310	45,305	15,727	135,503	50,380		2,311	47.0
1964	316	52,943	27,338	183,402	22,913		2,344	49.0
1965	679	58,736	30,570	162,271	15,763		1,658	50.8
1966	690	65,721	30,792	96,287	24,235		2,080	74.3
1967	668	60,148	10,573	52,284	19,626		1,463	27.0
1968	1,010	50,212	46,111	82,012	39,001		2,997	52.0
1969	607	46,258	6,094	92,075	6,393	482	1,147	31.0
1970	420	26,812	15,153	29,102	18,092	366	905	41.0
1971	671	33,991	24,727	283,739	19,329	363	1,619	50.0
1972	1,747	74,745	60,827	40,644	46,511	515	2,152	41.0
1973	1,540	55,254	24,921	160,297	62,486	375	2,253	26.0
1974	1,342	46,760	28,889	57,296	38,045	238	1,579	28.0
1975	467	19,319	4,650	29,340	7,762	112	515	17.0
1976	237	9,319	10,367	20,251	2,301	71	366	19.0
1977	202	47,408	1,819	51,038	4,240	33	447	17.0
1978	274	1,422	26,762	9,546	3,142	70	389	26.5
1979	458	34,807	12,087	176,395	16,816	154	952	25.0
1980	205	48,434	10,894	17,068	15,176	39	596	16.0
1981	598	132,293	13,161	220,194	25,682	156	1,732	25.0
1982	648	121,563	21,193	10,392	11,891	199	1,083	22.0
1983	268	28,153	41,208	74,347	13,001	198	875	32.0
1984	136	27,372	19,124	99,807	28,461	268	587	32.0
1985	538	172,088	50,577	319,379	45,566	664	1,726	38.0
1986	421	85,247	104,328	105,347	48,471	684	1,896	32.0
1987	441	79,165	17,776	117,059	25,877	318	978	20.0
1988	452	57,337	6,349	10,894	42,210	341	815	18.0
1989	581	107,886	55,671	418,044	40,156	268	1,716	34.0
1990	759	104,922	94,526	84,543	42,474	767	1,827	34.0
1991	844	89,355	136,990	64,334	85,435	135	2,118	39.0
1992	743	146,608	190,885	38,483	100,666	138	2,630	40.0
1993	458	129,859	134,902	296,986	96,995	107	2,728	38.0
1994	456	157,526	191,695	66,225	125,826	59	2,988	43.0
1995	663	133,713	109,613	154,004	189,369	100	2,349	34.0
1996	487	223,784	159,319	70,620	162,872	97	3,623	46.0
1997	829	118,675	52,917	414,619	100,612		2,402	39.0
1998	334	79,052	175,124	196,403	200,892		2,999	43.0
1999	397	73,378	130,083	277,194	284,807		3,294	50.0
2000	558	57,863	54,232	80,014	120,111		1,522	33.0
2001	516	99,219	133,956	345,385	168,265		2,406	50.0
2002	216	39,030	163,727	41,086	71,333		1,844	47.0
2003	254	88,595	147,674	290,508	238,734		2,763	59.0
2004	1,508	85,929	80,083	132,627	72,317		1,845	55.0
Averages								
60-04	560	72,320	59,602	126,235	61,640	261	1,688	36.7
95-04	576	99,924	120,673	200,246	160,931	99	2,505	45.6
2005	988	83,647	77,059	293,017	151,785		2,000	53.0

Appendix B. 4. Stock proportions and catches of sockeye salmon in the Alaskan Subdistrict 106-41/42 (Sumner Strait) commercial commercial drift gillnet fishery, 1985-2005.

			Stikine				Tahltan	
Year	Alaska	Canada	Tahltan [a]	Tuya	Mainstem	Total	Wild	Planted
Proportions								
1985	0.480	0.401	0.109		0.010	0.119		
1986	0.662	0.308	0.024		0.006	0.030		
1987	0.816	0.166	0.015		0.003	0.018		
1988	0.868	0.112	0.019		0.001	0.020		
1989	0.653	0.303	0.009		0.036	0.044		
1990	0.579	0.395	0.008		0.018	0.026		
1991	0.460	0.377	0.129		0.034	0.163		
1992	0.582	0.241	0.088		0.089	0.177		
1993	0.369	0.327	0.134		0.169	0.304		
1994	0.531	0.271	0.166		0.032	0.198	0.127	0.040
1995	0.287	0.565	0.099	0.001	0.048	0.149	0.049	0.051
1996	0.479	0.245	0.228	0.039	0.009	0.276	0.203	0.025
1997	0.538	0.269	0.079	0.101	0.014	0.193	0.056	0.023
1998	0.550	0.337	0.017	0.096	0.000	0.113	0.014	0.003
1999	0.618	0.101	0.074	0.079	0.128	0.281	0.070	0.004
2000	0.611	0.223	0.028	0.116	0.023	0.167	0.024	0.004
2001	0.493	0.336	0.032	0.112	0.028	0.171	0.017	0.015
2002	0.730	0.101	0.049	0.087	0.034	0.169	0.031	0.017
2003	0.700	0.095	0.097	0.068	0.040	0.204	0.050	0.047
2004	0.413	0.227	0.315	0.026	0.018	0.359	0.191	0.125
Averages								
85-04	0.571	0.270	0.086	0.072	0.037	0.159		
95-04	0.542	0.250	0.102	0.072	0.034	0.208	0.070	0.032
2005	0.405	0.338	0.227	0.000	0.029	0.256	0.104	0.123
Catches								
1985	82,563	68,962	18,801		1,762	20,563		
1986	56,462	26,214	2,070		501	2,571		
1987	64,582	13,170	1,155		258	1,413		
1988	49,776	6,426	1,071		64	1,135		
1989	70,436	32,663	957		3,830	4,787		
1990	60,795	41,415	801		1,911	2,712		
1991	41,123	33,644	11,541		3,048	14,588		
1992	85,364	35,277	12,961		13,005	25,967		
1993	47,970	42,450	17,446		21,992	39,438		
1994	83,692	42,620	26,164		5,050	31,214	19,934	6,230
1995	38,343	75,505	13,292	125	6,448	19,865	6,514	6,778
1996	107,193	54,823	50,924	8,731	2,113	61,768	45,340	5,584
1997	63,827	31,892	9,327	11,937	1,692	22,956	6,594	2,733
1998	43,479	26,661	1,326	7,555	31	8,912	1,125	201
1999	45,335	7,420	5,425	5,786	9,412	20,623	5,159	266
2000	35,327	12,875	1,617	6,727	1,317	9,661	1,363	254
2001	48,906	33,309	3,164	11,063	2,777	17,004	1,723	1,441
2002	28,487	3,928	1,896	3,394	1,325	6,615	1,216	680
2003	62,037	8,446	8,595	6,016	3,501	18,112	4,434	4,161
2004	35,521	19,534	27,098	2,244	1,532	30,874	16,385	10,713
Averages								
85-04	57,561	30,862	10,782	6,358	4,078	18,039		
95-04	50,846	27,439	12,266	6,358	3,015	21,639	8,985	3,281
2005	33,909	28,312	18,979	0	2,447	21,426	8,687	10,292

[a] Tahltan includes wild and thermally marked fish.

Appendix B. 5. Salmon catch and effort in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 1960-2005.

	Catch						Effort	
							Permit	Days
Year	Chinook	Sockeye	Coho	Pink	Chum	Steelhead	Days	Open
1960	22	1,349	59	143	140		118	13.0
1961	341	11,126	13,083	97,801	54,822		1,378	57.0
1962	1,177	27,341	35,728	210,633	49,575		3,882	52.0
1963	1,250	35,462	36,376	379,093	39,723		3,278	51.0
1964	1,766	23,598	37,316	259,684	21,305		3,039	49.0
1965	1,123	29,013	45,158	463,577	11,895		2,849	50.8
1966	975	24,126	32,031	304,645	16,521		2,898	74.3
1967	650	26,237	7,097	39,325	6,744		1,048	27.0
1968	306	14,459	21,040	87,095	22,365		1,968	52.0
1969	270	24,060	4,186	104,998	4,510	77	1,026	31.0
1970	365	15,966	20,317	65,790	14,139	107	1,025	41.0
1971	665	19,211	23,358	244,236	18,351	222	1,517	50.0
1972	826	26,593	32,600	48,823	25,871	177	1,276	41.0
1973	391	16,741	13,526	143,324	25,243	125	1,303	26.0
1974	584	10,586	16,762	47,107	12,264	97	712	28.0
1975	2,120	12,732	26,312	173,675	16,206	110	1,159	8.5
1976	147	6,162	8,759	119,188	4,567	57	527	21.0
1977	469	19,615	6,582	368,069	9,060	32	940	21.0
1978		40,152	28,816	215,169	13,403	133	1,148	16.0
1979	2,262	31,566	15,996	471,817	18,691	165	1,848	25.0
1980	375	58,988	5,772	28,594	11,115	52	749	25.0
1981	967	49,708	9,453	217,379	8,614	31	1,321	26.0
1982	1,000	72,235	10,288	15,141	6,755	83	647	21.0
1983	299	20,689	21,234	133,943	7,143	63	589	37.0
1984	756	64,281	22,235	243,448	41,797	230	1,236	24.0
1985	1,149	92,899	40,611	265,574	24,107	339	1,372	36.0
1986	1,283	60,462	90,584	203,137	33,818	630	1,664	31.0
1987	395	57,262	16,758	126,423	16,148	171	799	20.0
1988	652	35,192	6,754	58,665	27,410	246	682	19.0
1989	963	84,848	36,714	683,150	27,195	126	1,583	34.0
1990	1,349	80,883	69,709	234,643	30,758	193	1,676	34.0
1991	1,211	54,749	61,170	69,232	39,195	63	1,505	39.0
1992	612	56,547	108,050	55,765	39,802	49	1,603	40.0
1993	534	76,096	96,136	240,974	37,606	18	1,646	38.0
1994	298	53,522	76,167	113,769	50,200	36	1,606	43.0
1995	288	73,585	60,948	294,159	110,709	10	1,422	34.0
1996	157	87,316	64,321	117,415	120,418	33	1,580	39.0
1997	246	49,843	24,633	374,432	85,844		1,329	38.0
1998	184	34,383	98,073	306,252	131,130		1,522	43.0
1999	121	31,500	73,179	213,522	163,560		1,766	49.0
2000	662	32,213	41,975	76,605	79,725		934	33.0
2001	541	64,794	54,509	479,945	114,645		1,573	50.0
2002	230	17,105	62,833	41,865	41,208		896	47.0
2003	168	28,309	64,383	180,189	61,519		1,158	59.0
2004	1,227	30,330	58,548	112,610	38,257		953	55.0
Averages								
60-04	713	39,641	37,781	194,023	38,535	131	1,439	36.6
95-04	382	44,938	60,340	219,699	94,702	22	1,313	45
2005	538	26,545	37,381	168,170	46,779		1,005	53.0

Appendix B. 6. Stock proportions and catches of sockeye salmon in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 1985-2005.

			Stikine				Tahltan	
Year	Alaska	Canada	Tahltan [a]	Tuya	Mainstem	Total	Wild	Planted
Proportions								
1985	0.477	0.453	0.056		0.013	0.070		
1986	0.726	0.272	0.000		0.002	0.002		
1987	0.844	0.140	0.004		0.012	0.016		
1988	0.883	0.095	0.021		0.000	0.021		
1989	0.662	0.322	0.002		0.015	0.016		
1990	0.645	0.340	0.001		0.013	0.015		
1991	0.683	0.257	0.052		0.008	0.060		
1992	0.630	0.211	0.022		0.138	0.159		
1993	0.451	0.357	0.036		0.156	0.192		
1994	0.718	0.207	0.069		0.006	0.075	0.055	0.015
1995	0.370	0.551	0.047	0.000	0.032	0.079	0.036	0.010
1996	0.665	0.326	0.008	0.001	0.001	0.010	0.006	0.002
1997	0.668	0.276	0.009	0.026	0.021	0.056	-0.006	0.015
1998	0.710	0.237	0.010	0.043	0.000	0.053	0.010	0.000
1999	0.795	0.072	0.018	0.020	0.095	0.133	0.017	0.001
2000	0.702	0.252	0.007	0.027	0.012	0.046	0.007	0.000
2001	0.574	0.327	0.049	0.029	0.021	0.099	0.047	0.002
2002	0.824	0.091	0.009	0.039	0.037	0.085	0.009	0.000
2003	0.872	0.100	0.005	0.005	0.019	0.029	0.004	0.001
2004	0.741	0.206	0.031	0.005	0.017	0.053	0.011	0.020
Average								
85-03	0.682	0.255	0.023	0.019	0.031	0.063		
94-03	0.694	0.241	0.024	0.019	0.024	0.065	0.018	0.006
2005	0.689	0.250	0.041	0.000	0.020	0.061	0.039	0.002
Catch								
1985	44,351	42,053	5,244		1,251	6,495		
1986	43,875	16,471	11		105	116		
1987	48,311	8,020	221		710	931		
1988	31,092	3,358	742		0	742		
1989	56,167	27,296	154		1,231	1,385		
1990	52,188	27,506	114		1,075	1,189		
1991	37,410	14,063	2,823		453	3,277		
1992	35,613	11,930	1,226		7,778	9,004		
1993	34,330	27,167	2,758		11,841	14,599		
1994	38,426	11,063	3,712		321	4,033	2,923	789
1995	27,201	40,570	3,423	0	2,391	5,814	2,668	755
1996	58,028	28,448	674	90	76	840	486	188
1997	33,274	13,773	437	1,295	1,064	2,796	-313	750
1998	24,411	8,150	352	1,465	5	1,822	352	0
1999	25,028	2,276	563	641	2,992	4,196	541	22
2000	22,608	8,121	210	885	389	1,484	210	0
2001	37,172	21,203	3,175	1,902	1,342	6,419	3,024	151
2002	14,086	1,559	159	664	637	1,460	159	0
2003	24,683	2,818	141	129	538	808	116	25
2004	22,485	6,253	929	138	526	1,593	336	593
Average								
85-04	35,537	16,105	1,353		1,736	3,450		
95-04	28,898	13,317	1,006	721	996	2,723	758	248
2005	18,283	6,640	1,101	0	521	1,622	1,037	64

[a] Tahltan includes wild and thermally marked fish.

Appendix B. 7. Salmon catch and effort in the Alaskan District 108 commercial drift gillnet fishery, 1960-2005.

Permit days are adjusted for boats which did not fish the entire opening and may total less than the sum of the permits times days open.

	Catch							Effort	
	Chinook							Permit	Days
Year	Large	Jack	Sockeye	Coho	Pink [a]	Chum	Steelhead	Days	Open
1960									
1961									
1962	618		4,430	3,921	2,889	2,035			27.0
1963	1,430		9,979	11,612	10,198	11,024			53.0
1964	2,911		20,299	29,388	114,555	10,771			62.0
1965	3,106		21,419	8,301	4,729	2,480			48.0
1966	4,516		36,710	16,493	61,908	17,730			62.0
1967	6,372		29,226	6,747	4,713	5,955			40.0
1968	4,604		14,594	36,407	91,028	14,537			61.0
1969	5,021		19,209	5,790	11,877	2,311	238	967	46.0
1970	3,207		15,120	18,403	20,523	12,305	109	1,222	51.0
1971	3,717		18,143	14,876	21,806	4,665	62	1,070	57.0
1972	9,332		51,734	38,520	17,153	17,363	193	2,095	64.0
1973	9,254		21,387	5,837	6,585	6,680	67	1,519	39.0
1974	8,199		2,428	16,021	4,188	2,107	57	1,178	28.5
1975	1,534		0	0	0	1	5	258	8.0
1976	1,123		18	6,056	722	124	20	372	19.0
1977	1,443		48,374	14,405	16,253	4,233	24	742	23.0
1978	531		56	32,650	1,157	1,001	60	565	12.0
1979	91		2,158	234	13,478	1,064	3	94	5.0
1980	631		14,053	2,946	7,224	6,910	8	327	22.0
1981	283		8,833	1,403	1,466	3,594	9	177	9.0
1982	1,033		6,911	19,971	16,988	741	32	494	21.0
1983	47		178	15,369	4,171	675	81	263	17.0
1984	14		1,290	5,141	4,960	1,892	4	56	8.6
1985	20		1,060	1,926	5,325	1,892		70	14.0
1986	102		4,185	7,439	4,901	5,928	5	246	25.0
1987	149		1,629	1,015	3,343	949	4	81	13.0
1988	206		1,246	12	144	3,109	9	66	8.0
1989	310		10,083	4,261	27,640	3,375	10	216	28.0
1990	557		11,574	8,218	13,822	9,382	29	359	34.0
1991	1,504		22,275	15,864	10,935	11,402	11	643	48.5
1992	967		52,717	22,127	66,742	15,458	27	1,246	51.0
1993	1,628		76,874	14,307	39,661	22,504	29	1,569	48.0
1994	1,996		97,224	44,891	35,405	27,658	47	2,199	57.0
1995	1,702		76,756	17,834	37,788	54,296	18	1,729	49.5
1996	1,717		154,150	19,059	37,651	135,623	40	2,396	56.5
1997	2,566		93,039	2,140	65,745	38,913		1,699	44.0
1998	460		22,031	19,206	39,246	41,057		947	45.0
1999	1,049		36,548	28,437	48,550	117,196		1,675	54.0
2000	1,671		15,833	5,651	9,497	40,337		606	35.0
2001	7		610	10,731	11,012	5,397		377	36.0
2002	25		208	21,131	4,578	2,017		323	35.0
2003	312		42,158	38,795	76,113	51,701		1,270	56.0
2004	7,410		103,392	26,439	20,439	37,996		1,830	53.0
Averages									
60-04	2,172		27,213	14,418	23,189	17,590	44	860	36.6
95-04	1,692		54,473	18,942	35,062	52,453	29	1,285	46.4
2005	24,293	2,676	99,465	42,203	106,395	150,121		4,592	78.0
Alaska Hatchery Contribution									
1989	83			55		257			
1990	249			2,536		813			
1991	490			3,442		141			
1992	439			7,067		500			
1993	762			890		282			
1994	594			2,043		2,159			
1995	757		268	1,087		18,334			
1996	839		420	1,269		41,706			
1997	731			161		14,461			
1998	302		62	3,042		15,016			
1999	361		792	6,361		21,640			

2000	934			2,801		4,556			
2001	0			2,565		1,829			
2002	0		0	1,449		0			
2003	209		0	7,260		6,729			
2004	1,890		0	2,447		0			
Averages									
94-04	602		220	2,771		11,494			
2005	1,816	426	0	8,986		62,543			
Catches not including Alaska hatchery contributions									
1989	227		10,083	4,206	27,640	3,118	10	216	28.0
1990	308		11,574	5,682	13,822	8,569	29	359	34.0
1991	1,014		22,275	12,422	10,935	11,261	11	643	48.5
1992	528		52,717	15,060	66,742	14,958	27	1,246	51.0
1993	866		76,874	13,417	39,661	22,222	29	1,569	48.0
1994	1,402		97,224	42,848	35,405	25,499	47	2,199	57.0
1995	945		76,488	16,747	37,788	35,962	18	1,729	49.5
1996	878		153,730	17,790	37,651	93,917	40	2,396	56.5
1997	1,835		93,039	1,979	65,745	24,452	0	1,699	44.0
1998	158		21,969	16,164	39,246	26,041	0	947	45.0
1999	688		35,756	22,076	48,550	95,556	0	1,675	54.0
2000	737		15,833	2,850	9,497	35,781	0	606	35.0
2001	7		610	8,166	11,012	3,568	0	377	36.0
2002	25		208	19,682	4,578	2,017	0	323	35.0
2003	103		42,158	31,535	76,113	44,972	0	1,270	56.0
2004	5,520		103,392	23,992	20,439	37,996	0	1,830	53.0
Averages									
94-04	1,118		58,219	18,530	35,093	38,706	10	1,368	47.4
2005	22,477	2,250	99,465	33,217	106,395	87,578		4,592	78.0

[a] Data not available to estimate contributions of pink salmon from Alaska hatcheries.

Appendix B. 8. Stock proportions and catches of sockeye salmon in the Alaskan District 108 commercial drift gillnet fishery, 1985-2005.

			Stikine				Tahltan	
Year	Alaska	Canada	Tahltan [a]	Tuya	Mainstem	Total	Wild	Planted
1985	0.064	0.000	0.292		0.644	0.936		
1986	0.206	0.017	0.094		0.683	0.777		
1987[b]	0.125	0.000	0.438		0.437	0.875		
1988	0.213	0.039	0.178		0.571	0.749		
1989	0.117	0.054	0.034		0.795	0.829		
1990	0.395	0.128	0.111		0.366	0.477		
1991	0.173	0.118	0.395		0.314	0.709		
1992	0.163	0.051	0.258		0.528	0.786		
1993	0.231	0.114	0.256		0.399	0.655		
1994	0.326	0.208	0.362		0.103	0.466	0.246	0.116
1995	0.135	0.204	0.455	0.006	0.200	0.661	0.198	0.257
1996	0.102	0.082	0.622	0.069	0.125	0.816	0.552	0.070
1997	0.058	0.131	0.362	0.261	0.189	0.812	0.260	0.102
1998	0.115	0.108	0.189	0.244	0.343	0.777	0.182	0.008
1999	0.144	0.036	0.414	0.201	0.205	0.820	0.390	0.024
2000	0.204	0.128	0.132	0.261	0.275	0.669	0.100	0.032
2001	0.775	0.098	0.000	0.005	0.121	0.126	0.000	0.000
2002	0.875	0.120	0.000	0.000	0.005	0.005	0.000	0.000
2003	0.227	0.118	0.179	0.062	0.414	0.655	0.092	0.087
2004	0.100	0.030	0.613	0.018	0.239	0.869	0.361	0.252
Averages								
85-04	0.237	0.089	0.269	0.113	0.348	0.673		
95-04	0.278	0.115	0.303	0.113	0.202	0.607	0.216	0.086
2005	0.128	0.178	0.437	0.000	0.257	0.694	0.179	0.258
Catch								
1985	68	0	310		683	992		
1986	862	71	393		2,858	3,252		
1987	204	0	714		712	1,425		
1988	265	48	222		711	933		
1989	1,180	545	341		8,017	8,358		
1990	4,576	1,479	1,280		4,239	5,519		
1991	3,859	2,622	8,807		6,987	15,794		
1992	8,604	2,696	13,599		27,818	41,417		
1993	17,758	8,742	19,688		30,686	50,374		
1994	31,715	20,250	35,222		10,037	45,259	23,936	11,286
1995	10,374	15,641	34,950	461	15,330	50,741	15,224	19,726
1996	15,755	12,618	95,837	10,621	19,319	125,777	85,041	10,796
1997	5,381	12,152	33,644	24,288	17,574	75,506	24,144	9,500
1998	2,541	2,376	4,170	5,383	7,561	17,114	4,000	170
1999	5,255	1,313	15,134	7,360	7,486	29,980	14,258	876
2000	3,226	2,019	2,097	4,138	4,353	10,588	1,591	506
2001	473	60	0	3	74	77	0	0
2002	182	25	0	0	1	1	0	0
2003	9,568	4,958	7,562	2,615	17,455	27,632	3,896	3,666
2004	10,375	3,136	63,347	1,869	24,666	89,882	37,274	26,073
Averages								
85-04	6,611	4,538	16,866	5,674	10,328	30,031		
95-04	6,313	5,430	25,674	5,674	11,382	42,730	18,543	7,131
2005	12,742	17,661	43,467	0	25,595	69,062	17,853	25,614

[a] Tahltan includes wild and thermally marked fish.

[b] There was no data available to determine the ratio of Tahltan to mainstem Stikine stocks; a 1:1 ratio was assumed.

Appendix B. 9. Salmon catch in the Alaskan District 106 and 108 test fisheries, 1984-2005.

Table only includes years when test fisheries were operated.

	Catch					Boat
Year	Chinook	Sockeye	Coho	Pink	Chum	Hours
Sub-district 106-41 (Sumner Strait)						
1984	13	1,370	101	975	793	142.51
1985	16	4,345	301	3,230	746	156.31
1986	23	982	177	60	248	99.45
1987	24	2,659	799	4,117	741	508.10
1988	11	1,020	89	137	772	121.00
1989	11	2,043	275	6,069	856	60.20
1990	13	2,256	432	372	552	7.00
1994	0	12	1	0	16	11.00
Sub-district 106-30 (Clarence Strait)						
1986	24	363	95	80	58	23.25
1987	1	899	589	1,705	467	384.00
1988	10	16	412	112	598	119.70
1989	4	37	464	431	329	
Total District 106						
1984	13	1,370	101	975	793	142.51
1985	16	4,345	301	3,230	746	156.31
1986	47	1,345	272	140	306	122.70
1987	25	3,558	1,388	5,822	1,208	892.10
1988	21	1,036	501	249	1,370	240.70
1989	15	2,080	739	6,500	1,185	60.20
1990	13	2,256	432	372	552	7.00
1994	0	12	1	0	16	11.00
District 108						
1984	37	641	11	822	813	
1985	33	1,258	11	465	381	71.67
1986	79	564	3	36	315	72.15
1987	30	290	13	1,957	488	76.87
1988	65	451	9	1,091	1,009	126.83
1989	15	1,038	45	2,459	283	63.47
1990	19	866	45	942	643	7.00
1991	21	893	18	390	455	154.99
1992	26	1,299	23	855	252	79.00
1993	30	303	0	18	31	45.00
1998	0	3,510	142	61	235	45.00
1999	29	4,801	217	429	1,368	45.00
2000	21	4,686	140	53	724	

Appendix B. 10. Stock proportions of sockeye salmon in the Alaskan District 106 and 108 test fisheries, 1984-2005.

Table only includes years when test fisheries were operated.

			Stikine				Tahltan	
Year	Alaska	Canada	Tahltan [a]	Tuya	Mainstem	Total	Wild	Planted
Sub-district 106-41 (Sumner Strait) Proportions								
1984	0.658	0.269	0.029		0.044	0.074		
1985	0.480	0.401	0.109		0.010	0.119		
1986	0.834	0.149	0.008		0.009	0.017		
1987	0.816	0.166	0.015		0.003	0.018		
1988	0.868	0.098	0.034		0.000	0.034		
1989	0.624	0.304	0.017		0.056	0.072		
1990	0.548	0.416	0.014		0.022	0.035		
1994	0.500	0.250	0.250		0.000	0.250	0.167	0.083
Sub-district 106-30 (Clarence Strait) Proportions								
1986	0.726	0.272	0.000		0.002	0.002		
1987	0.844	0.140	0.004		0.012	0.016		
1988	0.746	0.254	0.000		0.000	0.000		
1989	0.514	0.486	0.000		0.000	0.000		
District 106 Proportions								
1984	0.658	0.269	0.029		0.044	0.074		
1985	0.480	0.401	0.109		0.010	0.119		
1986	0.805	0.182	0.006		0.007	0.013		
1987	0.823	0.160	0.012		0.006	0.017		
1988	0.867	0.100	0.033		0.000	0.033		
1989	0.622	0.307	0.016		0.055	0.071		
1990	0.548	0.416	0.014		0.022	0.035		
1994	0.500	0.250	0.250		0.000	0.250	0.250	0.000
District 108 Proportions								
1985	0.064	0.000	0.292		0.644	0.936		
1986	0.134	0.044	0.486		0.336	0.822		
1987	0.125	0.000	0.438		0.437	0.875		
1988	0.205	0.049	0.132		0.614	0.746		
1989	0.132	0.084	0.072		0.712	0.784		
1990	0.417	0.172	0.094		0.318	0.411		
1991	0.128	0.128	0.494		0.251	0.745		
1992	0.149	0.076	0.333		0.442	0.774		
1993	0.168	0.109	0.475		0.248	0.719		
1998	0.064	0.041	0.353	0.438	0.104	0.895	0.336	0.016
1999	0.162	0.019	0.481	0.298	0.041	0.820	0.453	0.028
2000	0.110	0.116	0.302	0.321	0.150	0.774	0.240	0.062

[a] Tahltan includes thermally marked fish.

Appendix B. 11. Stock specific catches of sockeye salmon in the Alaskan District 106 and 108 test fisheries, 1984-2005.

Table only includes years when test fisheries were operated.

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

[a] Tahltan includes thermally marked fish.

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

	Chinook Salmon Harvest								
	Gillnet			Troll[b]					
Year	Catch	Permits	Days	Catch	Permits	Days	Sport	Subsist.	Total
2005	22,173	0	41	4,296	0	61	3,002	20	29,491

Appendix B. 13. U.S. subsistence fishery harvest in the Stikine River, 2004-2005.

	Harvest								
	Chinook						Steel	Dolly	Permits
Year	Large	Jacks[a]	Sockeye	Coho	Pink	Chum	Head	Varden	Fished
2004	12	9	243	4	22	11	1		35
2005	20	0	252	53	69	22		4	22

Appendix B. 14. Salmon and steelhead trout catch and effort in the Canadian commercial fishery in the lower Stikine River, 1979-2005.

	Catch							Effort	
	Chinook							Permit	
Year	Large	Jacks [a]	Sockeye	Coho	Pink	Chum	Steelhead[b]	Days	Days
1979[c]	712	63	10,534	10,720	1,994	424	264	756.0	42.0
1980	1,488		18,119	6,629	736	771	362	668.0	41.0
1981	664		21,551	2,667	3,713	1,128	280	522.0	32.0
1982	1,693		15,397	15,904	1,782	722	828	1,063.0	71.0
1983	492	430	15,857	6,170	1,043	274	667	434.0	54.0
1984[d]									
1985	256	91	17,093	2,172	2,321	532	231	145.5	22.5
1986	806	365	12,411	2,278	107	295	192	239.0	13.5
1987	909	242	6,138	5,728	646	432	217	287.0	20.0
1988	1,007	201	12,766	2,112	418	730	258	320.0	26.5
1989	1,537	157	17,179	6,092	825	674	127	325.0	23.0
1990	1,569	680	14,530	4,020	496	499	188	328.0	29.0
1991	641	318	17,563	2,638	394	208	71	282.4	39.0
1992	873	89	21,031	1,850	122	231	129	235.4	55.0
1993	830	164	38,464	2,616	29	395	63	483.8	58.0
1994	1,016	158	38,462	3,377	89	173	75	430.1	74.0
1995	1,067	599	45,622	3,418	48	256	208	534.0	59.0
1996	1,708	221	66,262	1,402	25	229	153	439.2	81.0
1997	3,283	186	56,995	401	269	222	33	569.4	89.0
1998	1,614	328	37,310	726	55	13	209	374.0	46.5
1999	2,127	789	32,556	181	11	8	14	261.3	31.0
2000	1,970	240	20,472	298	181	144	89	227.0	23.3
2001	826	59	19,872	233	78	56	30	173.0	23.0
2002	433	209	10,420	82	19	33	17	169.0	21.0
2003	695	672	51,735	190	850	112	0	275.2	28.8
2004	2,481	2,070	77,530	271	8	134	0	431.0	43.0
Averages									
79-04[e]	1,245	394	27,835	3,287	650	348	188	399	41.8
95-04	1,620	537	41,877	720	154	121	75	345	44.6
2005	19,070	1,181	79,952	276	0	39	0	803.0	72.0

[a] Jacks as reported by fishery and loosely based on "small" fish ~2.5-3.0 kg; the jack catch may not correspond with the estimated jack catch based on samplin, I.e. jack<660 mef or <735 fl.

[b] All steelhead released post 2002

[c] The lower river commercial catch in 1979 includes the upper river commercial catch.

[d] There was no commercial fishery in 1984.

[e] Chinook averages only since 1983 when large fish and jacks were recorded separately.

Appendix B. 15. Sockeye salmon stock proportions and catch by stock in the Canadian commercial fishery in the lower Stikine River, 1979-2005.

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 in 1989-2006.

	Proportions			Planted	Catch			Tahltan	
Year	Tahltan	Tuya	Mainstem	Tahltan	Tahltan	Tuya	Mainstem	Wild	Planted
1979	0.433		0.567		4,561		5,973		
1980	0.309		0.691		5,599		12,520		
1981	0.476		0.524		10,258		11,293		
1982	0.624		0.376		9,608		5,789		
1983	0.422		0.578		6,692		9,165		
1984[a]									
1985	0.623		0.377		10,649		6,444		
1986	0.489		0.511		6,069		6,342		
1987	0.225		0.775		1,380		4,758		
1988	0.161		0.839		2,062		10,704		
1989	0.164		0.836		2,813		14,366		
1990	0.346		0.654		5,029		9,501		
1991	0.634		0.366		11,136		6,427		
1992	0.482		0.518		10,134		10,897		
1993	0.537		0.463		20,662		17,802		
1994	0.616		0.384		23,678		14,784		
1995	0.676	0.020	0.304	0.195	30,848	893	13,881	21,936	8,912
1996	0.537	0.113	0.350	0.066	35,584	7,465	23,213	31,197	4,387
1997	0.356	0.272	0.372	0.072	20,269	15,513	21,213	16,175	4,094
1998	0.335	0.352	0.313	0.020	12,498	13,137	11,675	11,751	747
1999	0.576	0.241	0.183	0.021	18,742	7,862	5,952	18,046	696
2000	0.252	0.397	0.350	0.039	5,165	8,136	7,171	4,364	801
2001	0.175	0.226	0.599	0.032	3,482	4,483	11,907	2,850	632
2002	0.320	0.128	0.552	0.074	3,335	1,335	5,750	2,559	776
2003	0.427	0.161	0.412	0.131	22,067	8,335	21,333	15,304	6,763
2004	0.707	0.016	0.276	0.285	54,841	1,276	21,413	32,717	22,124
Averages									
79-04	0.436		0.487		13,486		11,611		
95-04	0.436	0.193	0.371	0.094	20683	6844	14351	15690	4993
2005	0.761	0.018	0.221	0.352	60,881	1,437	17,634	32,707	28,174

[a] There was no commercial fishery in 1984.

Appendix B. 16. Salmon and steelhead trout catch and effort in the Canadian commercial fishery in the upper Stikine River, 1975-2005.

	Catch							Effort	
	Chinook							Permit	
Year	Large	Jacks [a]	Sockeye	Coho	Pink	Chum	Steelhead	Days	Days
1975	178		270	45	0	0	0		
1976	236		733	13	0	0	0		
1977	62		1,975	0	0	0	0		
1978	100		1,500	0	0	0	0		
1979[b]									
1980	156		700	40	20	0	0		
1981	154		769	0	0	0	0	11.0	5.0
1982	76		195	0	0	0	0	8.0	4.0
1983	75		614	0	0	4	1	10.0	8.0
1984[c]									
1985	62		1,084	0	0	0	0	14.0	6.0
1986	104	41	815	0	0	0	0	19.0	7.0
1987	109	19	498	0	0	19	0	20.0	7.0
1988	175	46	348	0	0	0	0	21.5	6.5
1989	54	17	493	0	0	0	0	14.0	7.0
1990	48	20	472	0	0	0	0	15.0	7.0
1991	117	32	761	0	0	0	0	13.0	6.0
1992	56	19	822	0	0	0	0	28.0	13.0
1993	44	2	1,692	0	0	0	2	48.0	22.0
1994	76	1	2,466	0	1	0	0	68.0	50.0
1995	9	17	2,355	0	0	0	0	54.0	25.0
1996	41	44	1,101	0	0	0	0	75.0	59.0
1997	45	6	2,199	0	0	0	0	42.0	29.0
1998	12	0	907	0	0	0	0	19.0	19.0
1999	24	12	625	0	0	0	0	19.0	18.0
2000	7	2	889	0	0	0	0	19.8	9.3
2001	0	0	487	0	0	0	0	6.0	4.0
2002	2	3	484	0	0	0	0	12.0	9.0
2003	19	12	454	0	0	0	0	10.0	10.0
2004	0	1	626	0	0	0	0	11.0	11.0
Averages									
75-04[d]	50	15	941	4	1	1	0	24	14.9
95-04	16	10	1,013	0	0	0	0	26.8	19.3
2005	28	1	605	0	0	0	0	13.0	13.0

[a] Jacks as reported by fishery and loosely based on "small" fish ~2.5-3.0 kg; the jack catch may not correspond with the estimated jack catch based on samplin, I.e. jack<660 mef or <735 fl.

[b] Catches in 1979 were included in the lower river commercial catches.

[c] There was no commercial fishery in 1984.

[d] Chinook averages only since 1986 when large fish and jacks were recorded separately.

Appendix B. 17. Salmon and steelhead trout catch in the Canadian Aboriginal fishery located at Telegraph Creek, on the Stikine River, 1972-2005.

	Catch						
	Chinook						
Year	Large	Jacks [a]	Sockeye	Coho	Pink	Chum	Steelhead
1972			4,373	0	0	0	0
1973	200		3,670	0	0	0	0
1974	100		3,500	0	0	0	0
1975	1,024		1,982	5	0	0	0
1976	924		2,911	0	0	0	0
1977	100		4,335	0	0	0	0
1978	400		3,500	0	0	0	0
1979	850		3,000	0	0	0	0
1980	587		2,100	100	0	0	0
1981	586		4,697	200	144	0	4
1982	618		4,948	40	60	0	0
1983	851	215	4,649	3	77	26	46
1984	643	59	5,327	1	62	0	2
1985	793	94	7,287	3	35	4	9
1986	1,026	569	4,208	2	0	12	2
1987	1,183	183	2,979	3	0	8	2
1988	1,178	197	2,177	5	0	3	3
1989	1,078	115	2,360	6	0	0	0
1990	633	259	3,022	17	0	0	11
1991	753	310	4,439	10	0	0	0
1992	911	131	4,431	5	0	0	3
1993	929	142	7,041	0	0	0	2
1994	698	191	4,167	4	0	0	9
1995	570	244	5,490	0	0	7	62
1996	722	156	6,918	2	0	3	30
1997	1,155	94	6,365	0	0	0	0
1998	538	95	5,586	0	0	0	0
1999	765	463	4,874	0	0	0	0
2000	1,109	386	6,107	3	0	0	14
2001	665	44	5,241	0	0	0	0
2002	927	366	6,390	0	0	0	0
2003	682	373	6,595	0	0	0	0
2004	1,425	497	6,862	4	0	0	0
Averages							
72-04 [b]	874	236	4,592	13	11	2	6
95-04	856	272	6,043	1	0	1	11
2005	94	800	5,333	0	0	0	0

[a] Jacks as reported by fishery and loosely based on "small" fish ~2.5-3.0 kg; the jack catch may not correspond with the estimated jack catch based on samplin, I.e. jack<660 mef or <735 fl.

[b] Chinook averages only since 1983 when large fish and jacks were recorded separately.

Appendix B. 18. Stock specific sockeye catches in the Canadian upper river commercial and Aboriginal fisheries in the Stikine River, 1972-2005.

	Upper River Commercial					Aboriginal Fishery				
				Tahltan					Tahltan	
Year	Tahltan	Tuya	Mainstem	Wild	Planted	Tahltan	Tuya	Mainstem	Wild	Planted
1972						3,936		437		
1973						3,303		367		
1974						3,150		350		
1975	243		27			1,784		198		
1976	660		73			2,620		291		
1977	1,778		198			3,902		434		
1978	1,350		150			3,150		350		
1979[a]						2,700		300		
1980	630		70			1,890		210		
1981	692		77			4,227		470		
1982	176		20			4,453		495		
1983	553		61			4,184		465		
1984[b]						4,794		533		
1985	976		108			6,558		729		
1986	734		82			3,787		421		
1987	448		50			2,681		298		
1988	313		35			1,959		218		
1989	444		49			2,124		236		
1990	425		47			2,720		302		
1991	685		76			3,995		444		
1992	740		82			3,988		443		
1993	1,523		169			6,337		704		
1994	2,219		247	1,904	315	3,750		417	3,217	533
1995	2,120	60	176	1,508	612	4,941	139	410	3,514	1,427
1996	945	150	6	824	121	5,802	972	144	4,931	871
1997	1,152	834	213	914	238	3,318	2,403	644	2,631	687
1998	363	517	27	336	27	2,352	3,103	131	2,227	125
1999	359	206	60	356	3	3,038	1,423	413	2,903	135
2000	224	581	84	224	0	1,733	3,989	385	1,681	52
2001	213	229	45	148	65	1,795	2,939	507	1,454	341
2002	122	316	46	122	0	1,813	4,174	403	1,759	54
2003	316	100	38	219	97	3,987	1,571	1,037	2,659	1,328
2004	539	42	45	301	238	6,240	608	14	3,346	2,549
Averages										
72-04	748		84			3,546		400		
95-04	635	304	74	495	140	3,502	2,132	409	2,710	757
2005	582	13	10	437	145	5,099	71	164	3,845	1,254

[a] Catches in 1979 were included in the lower river commercial catches.

[b] There was no commercial fishery in 1984.

Appendix B. 19. Salmon and steelhead trout catch in the combined Canadian net fisheries in the Stikine River, 1972-2005.

ESSR catches not included.

	Catch						
	Chinook						
Year	Large	Jacks [a]	Sockeye	Coho	Pink	Chum	Steelhead
1972	0		4,373	0	0	0	0
1973	200		3,670	0	0	0	0
1974	100		3,500	0	0	0	0
1975	1,202		2,252	50	0	0	0
1976	1,160		3,644	13	0	0	0
1977	162		6,310	0	0	0	0
1978	500		5,000	0	0	0	0
1979	1,562	63	13,534	10,720	1,994	424	264
1980	2,231		20,919	6,769	756	771	362
1981	1,404		27,017	2,867	3,857	1,128	284
1982	2,387		20,540	15,944	1,842	722	828
1983	1,418	645	21,120	6,173	1,120	304	714
1984[b]	643	59	5,327	1	62	0	2
1985	1,111	185	25,464	2,175	2,356	536	240
1986	1,936	975	17,434	2,280	107	307	194
1987	2,201	444	9,615	5,731	646	459	219
1988	2,360	444	15,291	2,117	418	733	261
1989	2,669	289	20,032	6,098	825	674	127
1990	2,250	959	18,024	4,037	496	499	199
1991	1,511	660	22,763	2,648	394	208	71
1992	1,840	239	26,284	1,855	122	231	132
1993	1,803	308	47,197	2,616	29	395	67
1994	1,790	350	45,095	3,381	90	173	84
1995	1,646	860	53,467	3,418	48	263	270
1996	2,471	421	74,281	1,404	25	232	183
1997	4,483	286	65,559	401	269	222	33
1998	2,164	423	43,803	726	55	13	209
1999	2,916	1,264	38,055	181	11	8	14
2000	3,086	628	27,468	301	181	144	103
2001	1,491	103	25,600	233	78	56	30
2002	1,362	578	17,294	82	19	33	17
2003	1,396	1,057	58,784	190	850	112	0
2004	3,906	2,568	85,018	275	8	134	0
Averages							
72-04[c]	2,278	677	26,477	2,506	505	266	149
95-04	2,492	819	48,933	721	154	122	86
2005	19,192	1,982	85,890	276	0	39	0

[a] Jacks as reported by fishery and loosely based on "small" fish ~2.5-3.0 kg; the jack catch may not correspond with the estimated jack catch based on samplin, I.e. jack<660 mef or <735 fl.

[b] There was no commercial fishery in 1984.

[c] Chinook averages only since 1986 when large fish and jacks were recorded separately in all fisheries.

Appendix B. 20. Salmon catches in the Stikine River harvested under Canadian ESSR licenses, 1992-2005.

	Tahltan			
Year	Total	Wild	Planted	Tuya
1993	1,752	1,714	38	
1994	6,852	5,682	1,170	
1995	10,740	6,680	4,060	
1996	14,339	12,667	1,672	216
1997	378	185	193	2,015
1998	390	255	135	6,103
1999	429	404	25	2,822
2000	406	324	82	1,283
2001	50	30	20	410
2002	400	285	115	501
2003	400	225	175	7,031
2004	420	225	195	1,675
2005	400	242	158	148
Salmon taken for otolith samples when ESSR not operated.				
1996	407	360	47	
1997	378	185	193	
1998	390	255	135	
1999	429	404	25	
2000	406	324	82	
2001	50	30	20	
2002	400	285	115	
2003	400	225	175	
2004	420	225	195	
2005	400	242	158	

Appendix B. 21. Salmon and steelhead trout catches and effort in Canadian test fisheries in the Stikine River, 1985-2005.

	Catches							Effort
	Chinook							Drift=#
Year	Large	Jacks [a]	Sockeye	Coho	Pink	Chum	Steelhead	Set=hr.
Drift Test Fishery Catches								
1985								
1986	27	12	412	226	8	25	0	405
1987[b]	128		385	162	111	61	0	845
1988	168	14	325	75	9	33	7	720
1989	116	4	364	242	41	46	5	870
1990	167	6	447	134	5	29	6	673
1991	90	1	503	118	37	30	3	509
1992	135	27	393	75	13	23	7	312
1993	94	11	440	37	6	18	7	304
1994	43	4	179	71	6	20	7	175
1995	18	13	297	35	4	12	4	285
1996	42	5	262	55	4	55	10	245
1997	30	7	245	11	9	15	2	210
1998	25	11	190	207	20	40	24	820
1999	53	43	410	312	11	17	25	1,006
2000	59	4	374	60	9	45	23	694
2001	128	3	967	257	74	47	27	883
2002	63	50	744	306	14	31	20	898
2003	64	62	997	291	92	54	30	660
2004	29	41	420	352	15	80	40	778
Averages								
85-04	78	18	440	159	26	36	13	594
95-04	51	24	491	189	25	40	21	648
2005	14	8	339	444	9	43	27	780
Set Test Fishery Catches								
1985			1,340					
1986								
1987[b]	61		1,283	620	587	193	0	1,456
1988	101	15	922	130	23	65	14	1,380
1989	101	20	1,243	502	249	103	17	1,392
1990	64	12	1,493	271	42	48	18	1,212
1991	77	15	1,872	127	197	48	1	1,668
1992	62	21	1,971	193	56	43	19	1,249
1993	85	11	1,384	136	6	63	6	1,224
1994	74	34	414	0	0	0	0	456
1995	61	35	850	166	5	41	14	888
1996	64	40	338	0	0	0	1	312
1997								
1998								
1999	49	16	803	64	6	10	11	1,577
2000	87	0	1,015	181	25	120	27	3,715
2001	56	7	2,223	1,078	124	61	61	2,688
2002	48	56	3,540	1,323	13	48	50	2,845
2003	14	91	2,173	525	200	85	56	1,116
2004	22	39	918	135	41	103	48	524
Averages								
85-04	64	27	1,399	341	98	64	21	1,481
95-04	50	36	1,483	434	52	59	34	1,708
2005	19	13	1,312	271	62	50	45	396
Additional Test Fishery Catches								
1992	417	134	594	0	0	0	0	85
1993	389	65	1,925	2	1	3	2	266
1994	178	40	840	0	0	0	0	131
1995	169	136	1,423	26	1	9	1	222
1996	192	31	712	0	0	0	0	138
1997								
1998								
1999	751	38	4,683	16	18	2	7	531
2000	787	14	989	195	0	9	26	1,427
2001	1,652	49	91	426	0	1	6	1,399
2002	1,545	217	128	1,116	0	1	21	2,048
2003	1,225	617	186	883	5	29	50	1,915

2004								
Averages								
85-04	664	122	1,052	242	2	5	10	742
95-04	722	127	1,006	296	3	6	12	868
2005								
Total Test Fishery Catches								
1985	0	0	1,340	0	0	0	0	
1986	27	12	412	226	8	25	0	
1987	189	30	1,668	782	698	254	0	
1988	269	29	1,247	205	32	98	21	
1989	217	24	1,607	744	290	149	22	
1990	231	18	1,940	405	47	77	24	
1991	167	16	2,375	245	234	78	4	
1992	614	182	2,958	268	69	66	26	
1993	568	87	3,749	175	13	84	15	
1994	295	78	1,433	71	6	20	7	
1995	248	184	2,570	227	10	62	19	
1996	298	76	1,312	55	4	55	11	
1997	30	7	245	11	9	15	2	
1998	25	11	190	207	20	40	24	
1999	853	97	5,896	392	35	29	43	
2000[c]	933	18	2,378	436	34	174	76	
2001[c]	1,836	59	3,281	1,761	198	109	94	
2002[c]	1,656	323	4,412	2,745	27	80	91	
2003	1,303	770	3,356	1,699	297	168	136	
2004	51	80	1,338	487	56	183	88	
Averages								
85-04	491	105	2,185	557	104	88	35	
95-04	723	163	2,498	802	69	92	58	
2005	33	21	1,651	715	71	93	72	

[a] Jacks as reported by fishery and loosely based on "small" fish ~2.5-3.0 kg; the jack catch may not correspond with the estimated jack catch based on samplin, I.e. jack<660 mef or <735 fl.

[b] 1987 jack chinook catch was for both set and drift nets.

[c] Catch of large fish includes 226, 401, and 378 released fish in 2000-2002, respectively

Appendix B. 22. Sockeye salmon stock proportions and catch by stock in the test fishery in the lower Stikine River, 1985-2005.

Stock composition based on: SPA 1985; average of SPA and GPA 1986-1988; egg diameter 1989-2005.

	Catch					Proportions				
	Tahltan				Marked	Tahltan				
Year	U.S.	Canada	Tuya	Main	Tahltan	U.S.	Canada	Ave[a]	Tuya	Main
1985	560	439		841		0.418	0.328	0.372		0.628
1986	164	127		267		0.398	0.308	0.352		0.648
1987	513	397		1,213		0.308	0.238	0.273		0.727
1988	408	295		895		0.327	0.237	0.282		0.718
1989		414		1,192			0.258	0.258		0.742
1990		822		1,058			0.454	0.454		0.546
1991		1,443		931			0.608	0.608		0.392
1992		1,912		1,046			0.646	0.646		0.354
1993		2,184		1,564			0.583	0.583		0.417
1994		1,228		205			0.857	0.857		0.143
1995		2,064	20	486	729		0.803	0.803	0.008	0.189
1996		875	116	321	108		0.667	0.667	0.088	0.245
1997		97	54	94	20		0.396	0.396	0.220	0.384
1998		70	51	69	4		0.368	0.368	0.268	0.363
1999		3,031	1,564	1,301	113		0.514	0.514	0.265	0.221
2000		605	982	791	94		0.254	0.254	0.413	0.333
2001		684	924	1,673	124		0.208	0.208	0.282	0.510
2002		1,726	694	1,992	402		0.391	0.391	0.157	0.451
2003		1,505	428	1,423	374		0.448	0.448	0.128	0.424
2004		686	44	608	277		0.510	0.510	0.033	0.457
Averages										
85-04								0.462	0.186	0.445
95-04								0.456	0.186	0.358
2005		895	8	748	327		0.549	0.549	0.005	0.446

[a] Average proportions were from averages of weekly estimates.

Appendix B. 23. Estimated proportion of inriver run comprised of Tahltan, Tuya, and mainstem sockeye stocks, 1979-2005.

Stock compositions based on: scale circuli counts 1979-1983; SPA in 1985; average of SPA and GPA 1986-1988; and egg diameter analysis in 1989-2006. 1994-2000 and 2003-2004 data from commercial catch. Estimates for 2001-2003 are from the test fishery and from 2004-2005 from the commercial fishery.

	Tahltan		Average[a]		
Year	U.S.	Canada	Tahltan	Tuya	Mainstem
1979	0.433		0.433		0.567
1980	0.305		0.305		0.695
1981	0.475		0.475		0.525
1982	0.618		0.618		0.382
1983	0.489	0.423	0.456		0.544
1984	0.635	0.394	0.493		0.507
1985	0.621	0.363	0.466		0.534
1986	0.398	0.500	0.449		0.551
1987	0.338	0.257	0.304		0.696
1988	0.209	0.122	0.172		0.828
1989		0.188	0.188		0.812
1990		0.417	0.417		0.583
1991		0.561	0.561		0.439
1992		0.496	0.496		0.504
1993		0.477	0.477		0.523
1994		0.606	0.606		0.394
1995		0.578	0.578	0.016	0.406
1996		0.519	0.519	0.104	0.377
1997		0.297	0.297	0.229	0.474
1998		0.309	0.309	0.348	0.344
1999		0.545	0.545	0.245	0.209
2000		0.260	0.260	0.391	0.349
2001		0.202	0.202	0.268	0.530
2002		0.360	0.360	0.141	0.498
2003		0.421	0.421	0.158	0.421
2004		0.674	0.664	0.026	0.311
Averages					
79-04			0.426		0.500
95-04			0.415	0.193	0.392
2005		0.667	0.662	0.020	0.318

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

Appendix B. 24. Counts of adult sockeye salmon migrating through Tahltan Lake weir, 1959-2005.

	Weir	Date of Arrival			Weir	Total	Brood-	Sample	Spawners		
Year	Instal	First	50%	90%	Pulled	Count	stock	/ESSR	Total	Wild	Plant
1959	30-Jun	2-Aug	12-Aug	16-Aug		4,311					
1960	15-Jul	2-Aug	24-Aug	27-Aug		6,387					
1961	20-Jul	9-Aug	11-Aug	15-Aug		16,619					
1962	1-Aug	2-Aug	5-Aug	8-Aug		14,508					
1963[a]	3-Aug					1,780					
1964	23-Jul	26-Jul	14-Aug	25-Aug		18,353					
1965[b]	19-Jul	18-Jul	2-Sep	7-Sep		1,471					
1966	12-Jul	3-Aug	13-Aug	21-Aug		21,580					
1967	11-Jul	14-Jul	21-Jul	28-Jul		38,801					
1968	11-Jul	21-Jul	25-Jul	8-Aug		19,726					
1969	7-Jul	11-Jul	18-Jul	31-Jul		11,805					
1970	5-Jul	25-Jul	1-Aug	11-Aug		8,419					
1971	12-Jul	19-Jul	28-Jul	12-Aug		18,523					
1972	13-Jul	13-Jul	19-Jul	31-Aug	21-Aug	52,545					
1973	10-Jul	24-Jul	30-Jul	7-Aug	1-Sep	2,877					
1974	3-Jul	28-Jul	3-Aug	17-Aug	13-Sep	8,101					
1975	10-Jul	25-Jul	8-Aug	17-Aug	28-Aug	8,159					
1976	16-Jul	29-Jul	1-Aug	6-Aug	24-Aug	24,111					
1977	6-Jul	11-Jul	16-Jul	10-Aug	25-Aug	42,960					
1978	10-Jul	10-Jul	20-Jul	29-Jul	26-Aug	22,788					
1979	9-Jul	23-Jul	1-Aug	11-Aug	31-Aug	10,211					
1980	4-Jul	15-Jul	22-Jul	12-Aug	3-Sep	11,018					
1981	30-Jun	16-Jul	26-Jul	3-Aug	8-Sep	50,790					
1982	2-Jul	10-Jul	19-Jul	29-Jul	4-Sep	28,257					
1983	27-Jun	5-Jul	22-Jul	5-Aug	7-Sep	21,256					
1984	20-Jun	19-Jul	24-Jul	3-Aug	29-Aug	32,777					
1985	28-Jun	18-Jul	31-Jul	6-Aug	5-Sep	67,326					
1986	10-Jul	26-Jul	4-Aug	11-Aug	4-Sep	20,280					
1987	14-Jul	21-Jul	4-Aug	13-Aug	27-Aug	6,958					
1988	16-Jul	16-Jul	6-Aug	14-Aug	29-Aug	2,536					
1989	7-Jul	9-Jul	1-Aug	14-Aug	4-Sep	8,316	2,210		6,106		
1990	6-Jul	15-Jul	26-Jul	3-Aug	28-Aug	14,927	3,302		11,625		
1991	30-Jun	17-Jul	25-Jul	7-Aug	5-Sep	50,135	3,552		46,583		
1992	9-Jul	18-Jul	25-Jul	3-Aug	2-Sep	59,907	3,694		56,213		
1993	7-Jul	10-Jul	28-Jul	10-Aug	11-Sep	53,362	4,506	1,752	47,104	46,074	1,030
1994	7-Jul	14-Jul	30-Jul	9-Aug	7-Sep	46,363	3,378	6,852	36,133	29,961	6,172
1995	8-Jul	9-Jul	24-Jul	12-Aug	16-Sep	42,317	4,902	10,740	26,675	16,591	10,084
1996	6-Jul	14-Jul	22-Jul	04-Aug	10-Sep	52,500	4,402	14,339	33,759	29,823	3,936
1997	9-Jul	15-Jul	25-Jul	26-Aug	26-Sep	12,483	2,294	378	9,811	7,829	1,982
1998	9-Jul	11-Jul	25-Jul	26-Aug	17-Sep	12,658	3,099	390	9,169	8,553	616
1999	10-Jul	19-Jul	31-Jul	13-Aug	15-Sep	10,748	2,870	429	7,449	6,952	497
2000	9-Jul	21-Jul	25-Jul	03-Aug	4-Sep	6,076	1,717	406	3,953	3,152	801
2001	08-Jul	19-Jul	31-Jul	09-Aug	14-Sep	14,811	2,386	50	12,375	7,475	4,900
2002	07-Jul	12-Jul	25-Jul	08-Aug	14-Sep	17,740	3,051	400	14,289	10,490	3,799
2003	07-Jul	11-Jul	29-Jul	08-Aug	18-Sep	53,933	3,946	400	49,587	27,893	21,694
2004	07-Jul	12-Jul	25-Jul	10-Aug	15-Sep	63,372	4,243	420	58,709	28,715	29,994
Averages											
59-04	09-Jul	18-Jul	30-Jul	11-Aug	05-Sep	24,237					
95-04	08-Jul	14-Jul	26-Jul	11-Aug	14-Sep	28,664	3,291	2,795	22,578	14,747	7,830
2005	07-Jul	11-Jul	04-Aug	25-Aug	15-Sep	43,446	3,424	400	39,622	23,202	16,420

[a] Daily counts unavailable.

[b] A slide occurred blocking the entrance for a while.

Appendix B. 25. Aerial survey counts of Mainstem sockeye stocks in the Stikine River drainage, 1984-2005.

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[b]	Escape 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[a]	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
Averages									
84-04	166	407	87	34	25	47	181	86	968
95-04	201	410	108			38	121	94	972
2005	66	124	111			23	158	76	558

[a] Survey conditions were exceptionally poor; therefore, the counts probably did reflect relative abundance.
[b] Verrett Slough inundated with turbid Iskut water since 2002.

Appendix B. 26. Estimates of sockeye salmon smolt migrating through Tahltan Lake smolt weir, 1984-2005.

Year	Weir Installed	Date of Arrival			Total Count	Total Estimate	Date and Expand	Smolt	
		First	50%	90%				Natural	Hatchery
1984	10-May	11-May	23-May	06-Jun		218,702			
1985	25-Apr	23-May	31-May	28-May		613,531			
1986	08-May	10-May	31-May	07-Jun		244,330			
1987[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]	05-May	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
Averages									
84-04	05-May	11-May	23-May	04-Jun		1,129,947		915,028	476,456
95-04	06-May	09-May	24-May	07-Jun		1,226,832		736,292	490,540
2005	06-May	07-May	17-May	25-May		1,843,804		943,929	899,875

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

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

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

[d] Estimate of 1,516,150 on June 14 expanded by average % of outmigration by date (97.5%) from historical data.

Appendix B. 27. Weir counts of Chinook salmon at Little Tahltan River, 1985-2005.

Year	Weir Installed	Date of Arrival First	Date of Arrival 50%	Date of Arrival 90%	Total Count	Broodstock and Other	Natural Spawners	Total Natural Spawners
Large Chinook								
1985	03-Jul	04-Jul	30-Jul	06-Aug	3,114		3,114	
1986	28-Jun	29-Jun	21-Jul	05-Aug	2,891		2,891	
1987	28-Jun	04-Jul	24-Jul	02-Aug	4,783		4,783	
1988	26-Jun	27-Jun	18-Jul	03-Aug	7,292		7,292	
1989	25-Jun	26-Jun	23-Jul	02-Aug	4,715		4,715	
1990	22-Jun	29-Jun	23-Jul	04-Aug	4,392		4,392	
1991	23-Jun	25-Jun	20-Jul	03-Aug	4,506		4,506	
1992	24-Jun	04-Jul	21-Jul	30-Jul	6,627	-12	6,615	
1993	20-Jun	21-Jun	16-Jul	28-Jul	11,449	-12	11,437	
1994	18-Jun	28-Jun	22-Jul	02-Aug	6,387	-14	6,373	
1995	17-Jun	20-Jun	17-Jul	04-Aug	3,072	0	3,072	
1996	26-Jun	08-Jul	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	
Averages								
85-04	21-Jun	26-Jun	07-Aug	01-Aug	6,298		6,294	
95-04	18-Jun	23-Jun	23-Aug	31-Jul	6,981	-5	6,976	
2005	19-Jun	21-Jun	22-Jul	4-Aug	7,387	0	7,387	
Jack Chinook (fish <660 mid-eye fork length or <735 snout fork length)								
1985	03-Jul	04-Jul	31-Jul	10-Aug	316			3,430
1986	28-Jun	03-Jul	25-Jul	06-Aug	572			3,463
1987	28-Jun	03-Jul	26-Jul	06-Aug	365			5,148
1988	26-Jun	27-Jun	17-Jul	02-Aug	327			7,619
1989	25-Jun	26-Jun	23-Jul	02-Aug	199			4,914
1990	22-Jun	05-Jul	22-Jul	30-Jul	417			4,809
1991	23-Jun	03-Jul	24-Jul	07-Aug	313			4,819
1992	24-Jun	12-Jul	22-Jul	30-Jul	131			6,746
1993	20-Jun	30-Jun	14-Jul	01-Aug	60			11,497
1994	18-Jun	02-Jul	22-Jul	05-Aug	121			6,494
1995	17-Jun	22-Jun	28-Jul	10-Aug	135			3,207
1996	26-Jun	02-Jul	13-Jul	14-Jul	22			4,843
1997	14-Jun	26-Jun	21-Jul	1-Aug	54			5,601
1998	13-Jun	26-Jun	20-Jul	7-Aug	37			4,910
1999	18-Jun	1-Jul	23-Jul	6-Aug	202			4,935
2000	19-Jun	23-Jun	20-Jul	5-Aug	108			6,739
2001	20-Jun	23-Jun	27-Jul	3-Aug	269			9,999
2002	20-Jun	26-Jun	21-Jul	7-Aug	618			8,094
2003	20-Jun	30-Jun	21-Jul	5-Aug	334			6,826
2004	18-Jun	21-Jun	19-Jul	31-Jul	250			16,631
Averages								
85-04	21-Jun	29-Jun	21-Jul	03-Aug	243			6,536
95-04	18-Jun	26-Jun	21-Jul	02-Aug	203			7,179
2005	19-Jun	29-Jun	23-Jul	4-Aug	231			7,618

Appendix B. 28. Index counts of Stikine Chinook escapements, 1979-2005.

Counts do not include jacks (fish < 660mm mef length).

	Inriver		Marine	Total	% to L.	Little Tahltan		Tahltan	Beatty	Andrew Creek	
Year	Run[a]	Escape[a]	Catch[b]	Run[c]	Tahltan	Weir	Aerial	Aerial	Aerial	Foot	Exp[d]
1979							1,166	2,118		382	
1980							2,137	960	122	363	
1981							3,334	1,852	558	654	
1982							2,830	1,690	567	947	
1983							594	453	83	444	
1984							1,294		126	389	
1985						3,114	1,598	1,490	147	319	
1986						2,891	1,201	1,400	183	707	
1987						4,783	2,706	1,390	312	788	
1988						7,292	3,796	4,384	593	564	
1989						4,715	2,527		362	530	
1990						4,392	1,755	2,134	271	664	
1991						4,506	1,768	2,445	193	400	
1992						6,627	3,607	1,891	362	778	
1993						11,437	4,010	2,249	757	1,060	
1994						6,373	2,422		184	572	
1995						3,072	1,117	696	152	338	
1996	31,718	28,949			0.167	4,821	1,920	772	218	332	664
1997	31,509	26,996			0.205	5,547	1,907	260	218	300	478
1998	28,133	25,968			0.188	4,873	1,385	587	125	487	974
1999	23,716	19,947			0.237	4,733	1,379			605	1,210
2000	30,301	27,531			0.241	6,631	2,720			690	1,380
2001	66,646	62,543			0.156	9,730	4,258			1,447	2,108
2002	53,983	50,175	3,587	59,322	0.149	7,476	1,903			875	1,752
2003	43,022	39,965	3,895	48,107	0.162	6,492	1,903			595	1,190
2004	52,538	48,900	9,599	62,137	0.335	16,381	6,014			1,534	
Averages											
79-04						6,294	2,374	1,575	291	645	79-04
95-04						6,976	2,511	579	178	720	95-04
2005	60,615	41,979	29,491	90,106	0.173	7,253				2,030	2005

[a] generated from a mark-recapture study (ADF&G fisheries data series)
[b] As reported in the mark-recapture reports
[c] From jointly accepted US and Canadian catch estimates
[d] Terminal run does not included chinook catches taken beyond the Stikine River or Districts 106 and 108.

Appendix B. 29. Index counts of Stikine coho salmon escapements, 1984-2005.

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		no surveys conducted due to inclement survey conditions								
2004[a]		78	762	19	959		173	1,009		3,000
Average										
	84-04	217	760	1,053	468	54	546	615	28	3,459
	95-04	206	760	1,288	598		617	824		4,042
2005		300	1,195	444	353		218	689		3,199

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

Appendix B. 30. Stikine River sockeye salmon run size, 1979-2005.

Catches include test fishery catches.

Year	Inriver Run			Inriver	[b]	Marine	Total
	Canada	U.S.	Average[a]	Catch	Escapement	Catch	Run
1979		40,353	40,353	13,534	26,819	8,299	48,652
1980		62,743	62,743	20,919	41,824	23,206	85,949
1981		138,879	138,879	27,017	111,862	27,538	166,417
1982		68,761	68,761	20,540	48,221	42,324	111,085
1983	77,260	66,838	71,683	21,120	50,563	5,770	77,453
1984	95,454	59,168	76,211	5,327	70,884	7,721	83,932
1985	237,261	138,498	184,747	26,804	157,943	29,747	214,494
1986			69,036	17,846	51,190	6,420	75,456
1987			39,264	11,283	27,981	4,085	43,350
1988			41,915	16,538	25,377	3,181	45,096
1989			75,054	21,639	53,415	15,492	90,546
1990			57,386	19,964	37,422	9,856	67,242
1991			120,152	25,138	95,014	34,323	154,476
1992			154,542	29,242	125,300	77,394	231,936
1993			176,100	52,698	123,402	104,630	280,730
1994			127,527	53,380	74,147	80,509	208,036
1995			142,308	66,777	75,531	76,420	218,728
1996			184,400	90,148	94,252	188,385	372,785
1997			125,657	68,197	57,460	101,258	226,915
1998			90,459	50,486	39,973	30,989	121,448
1999			65,879	47,202	18,677	58,735	124,614
2000			53,145	31,535	21,610	25,359	78,504
2001			103,755	29,341	74,414	23,500	127,255
2002			68,635	22,607	46,028	8,076	76,711
2003			189,415	69,571	119,844	46,552	235,967
2004			168,176	88,451	79,725	122,592	290,768
Averages							
79-04			103,699	36,435	67,265	44,706	148,406
95-04			119,941	56,154	63,787	69,307	189,248
2005			168,176	88,089	80,087	92,362	260,538
Tahltan sockeye run size							
1979			17,472	7,261	10,211	5,076	22,548
1980			19,137	8,119	11,018	11,239	30,376
1981			65,968	15,178	50,790	16,189	82,157
1982			42,493	14,236	28,257	20,696	63,189
1983			32,684	11,428	21,256	5,067	37,752
1984			37,571	4,794	32,777	3,060	40,632
1985			86,008	18,682	67,326	25,197	111,205
1986			31,015	10,735	20,280	2,757	33,771
1987			11,923	4,965	6,958	2,259	14,182
1988			7,222	4,686	2,536	2,129	9,351
1989			14,110	5,794	8,316	1,561	15,671
1990			23,923	8,996	14,927	2,307	26,230
1991			67,394	17,259	50,135	23,612	91,006
1992			76,681	16,774	59,907	28,218	104,899
1993			84,068	32,458	51,610	40,036	124,104
1994			77,239	37,728	39,511	65,101	142,340
1995			82,290	50,713	31,577	51,665	133,955
1996			95,706	57,545	38,161	147,435	243,141
1997			37,319	25,214	12,105	43,408	80,727
1998			27,941	15,673	12,268	7,086	35,027
1999			35,918	25,599	10,319	23,431	59,349
2000			13,803	8,133	5,670	5,340	19,143
2001			20,985	6,224	14,761	6,339	27,324
2002			24,736	7,396	17,340	2,055	26,791
2003			81,808	28,275	53,533	16,298	98,106
2004			125,677	62,725	62,952	91,535	217,213
79-04			47,734	19,484	28,250	24,965	72,699
95-04			54,618	28,750	25,869	39,459	94,078
2005			110,903	67,857	43,046	63,714	174,617
79-04			47,734	19,484	28,250	24,965	72,699

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Catches include test fishery catches.

Year	Inriver Run: Canada	Inriver Run: U.S.	Inriver Run: Average[a]	Inriver Catch	Escapement[b]	Marine Catch	Total Run
Tuya sockeye run size							
1995			2,216	1,112	1,104	586	2,802
1996			19,158	8,919	10,239	19,442	38,600
1997			28,738	20,819	7,919	37,520	66,258
1998			31,442	22,911	8,531	15,941	47,383
1999			16,165	13,877	2,288	15,217	31,382
2000			20,779	14,971	5,808	13,255	34,034
2001			27,783	8,985	18,798	12,968	40,751
2002			9,707	7,020	2,687	4,058	13,765
2003			30,020	17,465	12,555	8,760	38,780
2004			4,359	3,645	714	4,257	8,616
Averages							
95-04			19,037	11,972	7,064	13,200	32,237
2005			3,337	1,677	1,660	5	3,342
Mainstem sockeye run size							
1979			22,880	6,273	16,608	3,223	26,103
1980			43,606	12,800	30,806	11,967	55,573
1981			72,911	11,839	61,072	11,349	84,260
1982			26,267	6,304	19,964	21,628	47,895
1983			38,999	9,692	29,307	703	39,701
1984			38,640	533	38,107	4,660	43,300
1985			98,739	8,122	90,617	4,550	103,289
1986			38,022	7,111	30,910	3,663	41,685
1987			27,342	6,318	21,023	1,826	29,168
1988			34,693	11,852	22,841	1,052	35,745
1989			60,944	15,845	45,099	13,931	74,875
1990			33,464	10,968	22,495	7,549	41,013
1991			52,758	7,879	44,879	10,712	63,470
1992			77,861	12,468	65,393	49,176	127,037
1993			92,033	20,240	71,792	64,594	156,627
1994			50,288	15,652	34,636	15,408	65,696
1995			57,802	14,953	42,850	24,169	81,971
1996			69,536	23,684	45,852	21,508	91,044
1997			59,600	22,164	37,436	20,330	79,930
1998			31,077	11,902	19,175	7,962	39,039
1999			13,797	7,726	6,071	20,087	33,884
2000			18,563	8,431	10,132	6,764	25,327
2001			54,987	14,132	40,855	4,193	59,180
2002			34,191	8,191	26,001	1,963	36,154
2003			77,587	23,831	53,756	21,494	99,081
2004			38,140	22,080	16,059	26,799	64,939
Averages							
79-04			48,643	12,346	36,298	14,664	63,307
95-04			45,961	15,704	30,257	15,516	61,477
2005			53,935	18,554	35,381	28,643	82,579

[a] The averages for 1983-1985 are averages of weekly run timing estimates as well as stock composition estimates and are not simple averages of total estimates for the season.

[b] Escapement includes fish later captured for broodstock and biological samples

Appendix C. 1. Weekly salmon catch and effort in the Alaskan District 111 and Subdistrict 111-32 (Taku Inlet), commercial drift gillnet fishery, 2005.

		Catch						Effort		
	Start	Chinook							Days	Boat
Week	Date	Large	Jacks	Sockeye	Coho	Pink	Chum	Boats	Open	Days
District 111 catches										
19	1-May	1198	45	0	0	0	0	47	2.0	94
20	8-May	1717	127	0	0	0	0	64	3.0	192
21	15-May	4167	232	0	0	0	0	73	3.0	219
22	22-May	5036	328	1	0	0	0	80	4.0	320
23	29-May	4105	208	70	0	0	5	86	3.0	258
24	5-Jun	2,814	214	308	3	0	11	70	3.0	210
25	12-Jun	1,356	110	964	0	0	26	47	2.0	94
26	19-Jun	562	18	2,598	41	467	481	49	3.0	147
27	26-Jun	567	14	3,872	68	20,043	1,874	61	3.0	183
28	3-Jul	200	5	6,340	138	46,457	6,572	50	3.0	150
29	10-Jul	35	2	5,428	101	40,166	8,631	51	3.0	153
30	17-Jul	164	2	8,182	882	29,577	22,095	54	3.0	162
31	24-Jul	19	0	8,074	858	17,778	27,748	76	3.0	228
32	31-Jul	20	1	22,769	1,576	19,586	18,125	82	3.0	246
33	7-Aug	11	0	15,516	1,797	6,110	4,189	84	3.0	252
34	14-Aug	26	5	9,218	645	1,305	1,337	48	3.0	144
35	21-Aug	0	0	2,419	1,733	24	446	25	3.0	75
36	28-Aug	0	0	892	3,010	0	473	24	3.0	72
37	4-Sep	1	0	449	3,682	0	699	29	3.0	87
38	11-Sep	1	0	139	2,850	0	349	24	3.0	72
39	18-Sep	0	0	13	1,411	0	109	9	3.0	27
40	25-Sep	0	0	2	1,318	0	38	8	3.0	24
41	2-Oct	0	0	0	612	0	2	6	3.0	18
Total		21,999	1,311	87,254	20,725	181,513	93,210		68.0	3,427
Alaskan hatchery contribution for chinook and coho salmon. [a]										
19	1-May	62	0		0					
20	8-May	0	0		0					
21	15-May	29	0		0					
22	22-May	73	0		0					
23	29-May	187	0		0					
24	5-Jun	226	0		0					
25	12-Jun	47	0		0					
26	19-Jun	0	0		0					
27	26-Jun	180	0		0					
28	3-Jul	9	0		0					
29	10-Jul	0	0		0					
30	17-Jul	0	0		0					
31	24-Jul	0	0		0					
32	31-Jul	3	0		0					
33	7-Aug	0	0		0					
34	14-Aug	1	0		0					
35	21-Aug	0	0		0					
36	28-Aug	0	0		0					
37	4-Sep	0	0		240					
38	11-Sep	0	0		46					
39	18-Sep	0	0		124					
Total		815	0	0	463	0	0			

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		Catch						Effort		
	Start	Chinook							Days	Boat
Week	Date	Large	Jacks	Sockeye	Coho	Pink	Chum	Boats	Open	Days
Catches not including Alaskan hatchery contribution:										
19	1-May	1,136	45		0					
20	8-May	1,717	127		0					
21	15-May	4,138	232		0					
22	22-May	4,963	328		0					
23	29-May	3,918	208		0					
24	5-Jun	2,588	214		3					
25	12-Jun	1,309	110		0					
26	19-Jun	562	18		41					
27	26-Jun	387	14		68					
28	3-Jul	191	5		138					
29	10-Jul	35	2		101					
30	17-Jul	164	2		882					
31	24-Jul	19	0		858					
32	31-Jul	17	1		1,576					
33	7-Aug	11	0		1,797					
34	14-Aug	25	5		645					
35	21-Aug	0	0		1,733					
36	28-Aug	0	0		3,010					
37	4-Sep	1	0		3,442					
38	11-Sep	1	0		2,804					
39	18-Sep	0	0		1,287					
Total		21,184	1,311	0	20,262	0	0			
Subdistrict 111-32 Catches (Taku Inlet)										
19	1-May	1,198	45	0	0	0	0	47	2.0	94
20	8-May	1,717	127	0	0	0	0	64	3.0	192
21	15-May	4,167	232	0	0	0	0	73	3.0	219
22	22-May	5,036	328	1	0	0	0	80	4.0	320
23	29-May	4,105	208	70	0	0	5	86	3.0	258
24	5-Jun	2,814	214	308	3	0	11	70	3.0	210
25	12-Jun	1,356	110	964	0	0	26	47	2.0	94
26	19-Jun	562	18	2,598	41	467	481	49	3.0	147
27	26-Jun	560	14	3,792	67	19,654	1,811	61	3.0	183
28	3-Jul	193	5	6,002	130	43,222	4,263	49	3.0	147
29	10-Jul	22	2	3,538	64	28,175	3,755	47	2.0	94
30	17-Jul	158	0	4,477	459	19,504	13,840	53	2.0	106
31	24-Jul	14	0	5,896	430	13,005	12,101	62	2.0	124
32	31-Jul	13	0	15,892	1,170	12,928	13,307	68	3.0	204
33	7-Aug	4	0	5,650	1,083	525	2,403	43	3.0	129
34	14-Aug	1	2	2,805	401	293	738	28	3.0	84
35	21-Aug	0	0	1,713	1,523	18	354	20	3.0	60
36	28-Aug	0	0	582	3,003	0	470	23	3.0	69
37	4-Sep	1	0	405	3,217	0	621	26	3.0	78
38	11-Sep	1	0	139	2,850	0	349	23	3.0	69
39	18-Sep	0	0	13	1,239	0	109	8	3.0	24
Total		21,922	1,305	54,847	17,610	137,791	54,684		65.0	2,947
Subdistrict 111-34 Catches (Port Snettisham)										
32	31-Jul	2	1	3,354	142	4,418	985	16	3.0	48
33	7-Aug	4	0	7,256	461	5,258	1,267	44	3.0	132
34	14-Aug	15	0	4,540	141	737	415	24	3.0	72
35-37	21-Aug	0	0	645	511	0	105	5	3.0	15
Total		21	1	15,795	1,255	10,413	2,772		12.0	267

[a] Chum Salmon are not included because of the difficulty of making an accurate estimate, the majority of the summer chum catch was of hatchery origin.

Appendix C. 2. Estimate of the proportion of natural and planted sockeye salmon stock groups harvested in the Alaskan District 111 commercial drift gillnet fishery by week, 2005.

Does not include Port Snettisham harvests.

		King	Little		Tatsamenie		Total			Wild	U.S.
Week	Kuthai	Salmon	Trapper	Mainstem	Wild	Planted	Taku	Crescent	Speel	Snett.	Hatch.
23-24	0.183	0.116	0.228	0.320	0.000	0.000	0.846	0.014	0.135	0.148	0.006
25	0.183	0.116	0.228	0.320	0.000	0.000	0.846	0.014	0.135	0.148	0.006
26	0.183	0.116	0.228	0.320	0.000	0.000	0.846	0.014	0.135	0.148	0.006
27	0.118	0.087	0.122	0.479	0.000	0.000	0.805	0.017	0.159	0.176	0.018
28	0.050	0.043	0.169	0.492	0.000	0.002	0.757	0.030	0.164	0.195	0.049
29	0.000	0.032	0.132	0.456	0.005	0.008	0.633	0.056	0.152	0.208	0.159
30	0.000	0.033	0.000	0.535	0.026	0.004	0.599	0.044	0.091	0.136	0.265
31	0.000	0.026	0.000	0.467	0.063	0.008	0.563	0.065	0.059	0.124	0.313
32	0.000	0.000	0.083	0.437	0.036	0.012	0.568	0.078	0.093	0.171	0.261
33	0.000	0.000	0.035	0.445	0.037	0.005	0.522	0.024	0.085	0.109	0.370
34	0.000	0.000	0.096	0.452	0.180	0.026	0.753	0.026	0.003	0.029	0.218
35	0.000	0.000	0.096	0.452	0.180	0.026	0.753	0.026	0.003	0.029	0.218
36	0.000	0.000	0.096	0.452	0.180	0.026	0.753	0.026	0.003	0.029	0.218
37	0.000	0.000	0.096	0.452	0.180	0.026	0.753	0.026	0.003	0.029	0.218
38	0.000	0.000	0.096	0.452	0.180	0.026	0.753	0.026	0.003	0.029	0.218
39	0.000	0.000	0.096	0.452	0.180	0.026	0.753	0.026	0.003	0.029	0.218
40	0.000	0.000	0.096	0.452	0.180	0.026	0.753	0.026	0.003	0.029	0.218
Total	0.021	0.024	0.082	0.456	0.045	0.009	0.636	0.048	0.095	0.143	0.221

Appendix C. 3. Weekly stock-specific catch of wild and planted Taku River and Port Snettisham sockeye salmon harvested in the Alaskan District 111 commercial drift gillnet fishery, 2005.

Does not inlcude Port Snettisham harvests.

		King	Little		Tatsamenie		Total			Wild	U.S.
Week	Kuthai	Salmon	Trapper	Mainstem	Wild	Planted	Taku	Crescent	Speel	Snett.	Hatch
23-24	72	45	89	125	0	0	332	5	53	58	2
25	176	112	220	308	0	0	816	13	130	143	6
26	474	301	592	831	0	0	2,198	35	350	385	15
27	456	335	471	1,855	0	1	3,118	66	618	683	71
28	318	271	1,072	3,122	0	15	4,798	191	1,042	1,234	308
29	0	172	717	2,475	28	44	3,437	306	824	1,130	861
30	0	271	0	4,379	217	36	4,903	363	748	1,111	2,168
31	0	209	0	3,767	510	61	4,546	524	475	999	2,529
32	0	0	1,620	8,481	702	224	11,028	1,514	1,804	3,318	5,069
33	0	0	293	3,674	302	41	4,309	197	699	896	3,055
34	0	0	449	2,113	841	120	3,523	123	14	137	1,018
35	0	0	204	961	383	55	1,603	56	6	62	463
36	0	0	56	263	105	15	438	15	2	17	127
37	0	0	39	183	73	10	305	11	1	12	88
38	0	0	13	63	25	4	105	4	0	4	30
39	0	0	1	6	2	0	10	0	0	0	3
40	0	0	0	1	0	0	2	0	0	0	0
Total	1,495	1,715	5,837	32,606	3,188	627	45,469	3,423	6,766	10,190	15,813

Appendix C. 4. Weekly salmon and steelhead trout catch and effort in the Canadian commercial fishery in the Taku River, 2005.

		Catch							Effort		
	Start	Chinook						Steel-	Ave.	Days	Permit
Week	Date	Large[a]	Small	Sockeye	Coho	Pink	Chum	head	Permits	Fished	Days
19	1-May	515	24	0	0				8.00	3.00	24.00
20	8-May	281	17	0	0				7.33	3.00	22.00
21	15-May	530	70	0	0				7.00	4.00	28.00
22	22-May	1247	123	0	0				9.00	5.00	45.00
23	29-May	1463	92	1	0				10.00	5.00	50.00
24	5-Jun	1277	141	37	0				9.50	4.00	38.00
25	12-Jun	758	108	222	0				9.00	3.00	27.00
26	19-Jun	356	55	1,012	0	0	0	0	10.00	3.00	30.00
27	26-Jun	528	109	1,886	0	0	0	0	11.67	3.00	35.00
28	3-Jul	302	54	1,019	37	0	0	0	8.75	4.00	35.00
29	10-Jul	85	11	1,641	46	0	0	0	14.00	2.00	28.00
30	17-Jul	39	11	1,809	113	0	0	0	13.00	3.00	39.00
31	24-Jul	9	5	3,193	289	0	0	0	13.67	3.00	41.00
32	31-Jul	8	1	4,355	425	0	0	0	12.33	3.00	37.00
33	7-Aug	1	0	2,668	502	0	0	0	10.67	3.00	32.00
34	14-Aug	0	0	2,100	1,010	0	0	0	4.60	5.00	23.00
35	21-Aug	0	0	1,279	1,019	0	0	0	4.00	3.00	12.00
36	28-Aug	0	0	457	1,023	0	0	0	3.50	2.00	7.00
37	4-Sep	0	0	18	176				1.00	2.00	2.00
38	11-Sep	0	0	0	0				0.00	0.00	0.00
39	18-Sep	0	0	0	0				0.00	0.00	0.00
40	25-Sep	0	0	0	0				0.00	0.00	0.00
41	2-Oct	0	0	0	284				1.20	5.00	6.00
Total		7,399	821	21,697	4,924	0	0	0		68	561

[c] Large Chinook are fish with mid-eye-to-fork-of-tail (MEF) length > 659 mm (mostly 3-5 ocean age fish).

[b] Prior to 2005, chinook catch was broken down into jacks and adults; therefore only total catch of chinook should be used for comparison purposes.

Appendix C. 5. Weekly stock proportions of sockeye salmon harvested in the Canadian commercial fishery in the Taku River, 2005.

	Start		King	Little		Tatsamenie	
Week	Date	Kuthai	Salmon	Trapper	Mainstem	Wild	Planted
22-23	29-May	0.528	0.375	0.005	0.092	0.000	0.000
25	12-Jun	0.420	0.002	0.036	0.541	0.000	0.000
26	19-Jun	0.551	0.092	0.007	0.350	0.000	0.000
27	26-Jun	0.426	0.211	0.037	0.325	0.000	0.000
28	3-Jul	0.312	0.035	0.107	0.547	-0.012	0.012
29	10-Jul	0.199	0.114	0.186	0.470	0.031	0.000
30	17-Jul	0.000	0.053	0.291	0.342	0.304	0.011
31	24-Jul	0.000	0.002	0.301	0.512	0.185	0.000
32	31-Jul	0.000	0.000	0.118	0.818	0.042	0.022
33	7-Aug	0.000	0.000	0.186	0.730	0.063	0.021
34	14-Aug	0.000	0.000	0.596	0.175	0.208	0.021
35	21-Aug	0.000	0.000	0.129	0.231	0.620	0.020
36	28-Aug	0.000	0.000	0.039	0.218	0.734	0.008
37	4-Sep	0.000	0.000	0.039	0.218	0.734	0.008
Total		0.098	0.038	0.204	0.505	0.143	0.012

Appendix C. 6. Weekly stock-specific catch of sockeye salmon in the Canadian commercial fishery in the Taku River, 2005.

Week	Start Date	Kuthai	King Salmon	Little Trapper	Mainstem	Tatsamenie Wild	Tatsamenie Planted
24	5-Jun	20	14	0	3	0	0
25	12-Jun	93	1	8	120	0	0
26	19-Jun	558	93	7	354	0	0
27	26-Jun	804	398	71	613	0	0
28	3-Jul	318	36	109	557	-12	12
29	10-Jul	326	188	305	772	50	0
30	17-Jul	0	95	526	618	549	20
31	24-Jul	0	5	962	1,636	590	0
32	31-Jul	0	0	514	3,563	184	95
33	7-Aug	0	0	497	1,947	169	55
34	14-Aug	0	0	1,251	367	438	45
35	21-Aug	0	0	165	296	792	26
36	28-Aug	0	0	18	100	336	4
37	4-Sep	0	0	1	4	13	0
Total		2,119	829	4,433	10,950	3,108	257

Appendix C. 7. Weekly salmon and steelhead trout catch and effort in the Canadian test fishery in the Taku River, 2005.

		Catch [a]							Effort		
	Start	Chinook[b]						Steel-	Ave.	Days	Permit
Week	Date	Large	Small	Sockeye	Coho	Pink	Chum	head	Permits	Fished	Days
36	28-Aug			69	364	0	0	0	1	4	4
37	4-Sep			103	600	0	0	0	1	7	7
38	11-Sep			64	700	0	0	0	1	7	7
39	18-Sep			8	600	0	0	0	1	6	6
40	25-Sep			0	500	0	0	0	1	5	5
41	2-Oct			0	409	0	0	0	1	6	6
Total		0	0	244	3,173	0	0	0	6	35	35

[a] There was no test fishing during weeks 18-35 inclusive.
[b] Large Chinook are fish with mid-eye-to-fork-of-tail (MEF) length > 659 mm (mostly 3-5 ocean age fish).

Appendix C. 8. Mark-recapture estimate of above border run of Chinook, sockeye, and coho salmon in the Taku River, 2005.

Recovery Week	Start Date		Above Border Run	Canadian Harvests				Above Border Escape.
				Commercial	Test	Aboriginal [a]	Recreation	
Inseason Chinook Estimates								
19	1-May			515				
20	8-May			281				
21	15-May			530				
22	22-May		24,380	1,247				21,807
23	29-May		32,110	1,463				30,647
24	5-Jun		32,824	1,277				31,547
25	12-Jun		34,238	758				33,480
Inseason Estimate			42,487	7,374	0	160 [a]		34,953
Final Estimate			46,566	7,399	0	212	149	38,806
Sockeye								
23	29-May		173	1	0			172
24	5-Jun		518	37	0			481
25	12-Jun		7,932	222	0			7,710
26	19-Jun		9,420	1,012	0			8,408
27	26-Jun		8,159	1,886	0			6,273
28	3-Jul		11,998	1,019	0			10,979
29	10-Jul		32,395	1,641	0			30,754
30	17-Jul		18,195	1,809	0			16,386
31	24-Jul		10,625	3,193	0			7,432
32	31-Jul		12,233	4,355	0			7,878
33	7-Aug		12,629	2,668	0			9,961
34	14-Aug		6,892	2,100	0			4,792
35	21-Aug		5,413	1,279	0			4,134
36	28-Aug		2,258	457	69			1,732
37	4-Sep		1,610	18	103			1,489
38	11-Sep		1,357	0	64			1,293
39	18-Sep		280	0	8			272
40	25-Sep		69	0	0			69
M-R Estimate			142,155					
95% C.I.	121,566	162,744						
Total Estimate			142,155	21,697	244	161 [a]		120,053
Coho								
28-41	26-Jun		99,811	4,924	3,173	162		91,552
M-R Estimate			99,811					
95% C.I.	81,877	117,745						
Total Estimate			99,811	4,924	3,173	162		91,552

[a] Aboriginal catch by week is not available

Appendix C. 9. Daily counts of adult sockeye salmon passing through Tatsamenie weir, 2005.

Date	Count	Cumulative Count	Cumulative Percent
11-Aug	---- Weir Fish Tight ----		
12-Aug	0	0	0.0
13-Aug	0	0	0.0
14-Aug	2	2	0.1
15-Aug	13	15	0.4
16-Aug	7	22	0.7
17-Aug	3	25	0.7
18-Aug	15	40	1.2
19-Aug	64	104	3.1
20-Aug	12	116	3.4
21-Aug	73	189	5.6
22-Aug	97	286	8.5
23-Aug	12	298	8.8
24-Aug	34	332	9.8
25-Aug	103	435	12.9
26-Aug	89	524	15.5
27-Aug	145	669	19.8
28-Aug	57	726	21.5
29-Aug	67	793	23.5
30-Aug	78	871	25.8
31-Aug	175	1,046	31.0
1-Sep	3	1,049	31.1
2-Sep	224	1,273	37.8
3-Sep	134	1,407	41.7
4-Sep	121	1,528	45.3
5-Sep	161	1,689	50.1
6-Sep	42	1,731	51.3
7-Sep	134	1,865	55.3
8-Sep	166	2,031	60.2
9-Sep	83	2,114	62.7
10-Sep	82	2,196	65.1
11-Sep	75	2,271	67.3
12-Sep	90	2,361	70.0
13-Sep	30	2,391	70.9
14-Sep	126	2,517	74.6
15-Sep	46	2,563	76.0
16-Sep	81	2,644	78.4
17-Sep	42	2,686	79.7
18-Sep	42	2,728	80.9
19-Sep	34	2,762	81.9
20-Sep	2	2,764	82.0
21-Sep	41	2,805	83.2
22-Sep	35	2,840	84.2
23-Sep	148	2,988	88.6
24-Sep	139	3,127	92.7
25-Sep	7	3,134	92.9
26-Sep	14	3,148	93.4
27-Sep	17	3,165	93.9
28-Sep	23	3,188	94.5
29-Sep	42	3,230	95.8
30-Sep	1	3,231	95.8
1-Oct	29	3,260	96.7
2-Oct	89	3,349	99.3
3-Oct	12	3,361	99.7
4-Oct	0	3,361	99.7
5-Oct	11	3,372	100.0
Counts	3,372		
Outlet spawners	<15		
Broodstock [a]	-927		
Spawners	2,445		

[a]Broodstock included 1,220 females and 962 males which were spawned successfully, 37 females and 118 males that did not survive holding and 198 females and 120 males which were held and released unspawned; it is not known if any of these released fish spawned successfully

Appendix C. 10. Daily counts of adult sockeye salmon passing through Little Trapper Lake weir, 2005.

		Cumulative	
Date	Count	Count	Percent
22-Jul	----Weir Fish Tight ----		
23-Jul	0	0	0.00
24-Jul	0	0	0.00
25-Jul	0	0	0.00
26-Jul	0	0	0.00
27-Jul	0	0	0.00
28-Jul	27	27	0.17
29-Jul	201	228	1.42
30-Jul	306	534	3.34
31-Jul	380	914	5.71
1-Aug	1,274	2,188	13.67
2-Aug	1,067	3,255	20.33
3-Aug	918	4,173	26.07
4-Aug	1,132	5,305	33.14
5-Aug	1,009	6,314	39.44
6-Aug	1,250	7,564	47.25
7-Aug	1,223	8,787	54.89
8-Aug	745	9,532	59.54
9-Aug	594	10,126	63.25
10-Aug	448	10,574	66.05
11-Aug	691	11,265	70.37
12-Aug	675	11,940	74.58
13-Aug	253	12,193	76.16
14-Aug	305	12,498	78.07
15-Aug	338	12,836	80.18
16-Aug	313	13,149	82.14
17-Aug	137	13,286	82.99
18-Aug	269	13,555	84.67
19-Aug	157	13,712	85.65
20-Aug	201	13,913	86.91
21-Aug	160	14,073	87.91
22-Aug	147	14,220	88.83
23-Aug	84	14,304	89.35
24-Aug	35	14,339	89.57
25-Aug	37	14,376	89.80
26-Aug	292	14,668	91.62
27-Aug	356	15,024	93.85
28-Aug	180	15,204	94.97
29-Aug	110	15,314	95.66
30-Aug	124	15,438	96.43
31-Aug	99	15,537	97.05
1-Sep	117	15,654	97.78
2-Sep	70	15,724	98.22
3-Sep	64	15,788	98.62
4-Sep	83	15,871	99.14
5-Sep	27	15,898	99.31
6-Sep	29	15,927	99.49
7-Sep	20	15,947	99.61
8-Sep	15	15,962	99.71
9-Sep	24	15,986	99.86
10-Sep	15	16,001	99.95
11-Sep	8	16,009	100.00
11-Sep	---- Weir Flooded ----		
Spawners	16,099		

[a] Broodstock removals included 336 females and 295 males which were spawned successfully, 2 females and 4 males which did not survive holding, and 60 females and 11 males which were released unspawned after being held; it is not known if any of these released fish spawned successfully

Appendix C. 11. Daily counts of adult salmon passing through the King Salmon Lake weir, 2005.

Date	Count	Cumulative Count	Cumulative Percent
5-Jul	---- Weir Fish Tight ----		
6-Jul	0	0	0.00
7-Jul	0	0	0.00
8-Jul	0	0	0.00
9-Jul	0	0	0.00
10-Jul	0	0	0.00
11-Jul	0	0	0.00
12-Jul	0	0	0.00
13-Jul	0	0	0.00
14-Jul	0	0	0.00
15-Jul	0	0	0.00
16-Jul	0	0	0.00
17-Jul	0	0	0.00
18-Jul	0	0	0.00
19-Jul	16	16	0.02
20-Jul	0	16	0.02
21-Jul	28	44	0.04
22-Jul	0	44	0.04
23-Jul	0	44	0.04
24-Jul	0	44	0.04
25-Jul	0	44	0.04
26-Jul	0	44	0.04
27-Jul	0	44	0.04
28-Jul	0	44	0.04
29-Jul	0	44	0.04
30-Jul	0	44	0.04
31-Jul	0	44	0.04
1-Aug	5	49	0.05
2-Aug	3	52	0.05
3-Aug	48	100	0.10
4-Aug	57	157	0.15
5-Aug	46	203	0.19
6-Aug	49	252	0.24
7-Aug	35	287	0.27
8-Aug	59	346	0.33
9-Aug	48	394	0.38
10-Aug	126	520	0.50
11-Aug	30	550	0.53
12-Aug	84	634	0.61
13-Aug	0	634	0.61
14-Aug	0	634	0.61
15-Aug	56	690	0.66
16-Aug	47	737	0.70
17-Aug	0	737	0.70
18-Aug	90	827	0.79
19-Aug	0	827	0.79
20-Aug	27	854	0.82
21-Aug	64	918	0.88
22-Aug	0	918	0.88
23-Aug	36	954	0.91
24-Aug	13	967	0.92
25-Aug	0	967	0.92
26-Aug	44	1,011	0.97
27-Aug	0	1,011	0.97
28-Aug	35	1,046	1.00
29-Aug	0	1,046	1.00
30-Aug	0	1,046	1.00
31-Aug	0	1,046	1.00
1-Sep	---- Weir Removed ----		
Total	1,046		

Appendix C. 12. Daily counts of adult sockeye salmon passing through the Kuthai Lake weir, 2005.

Date	Count	Cumulative Count	Cumulative Percent
6-Jul	----Weir Fish Tight ----		
7-Jul	0	0	0.00
8-Jul	0	0	0.00
9-Jul	0	0	0.00
10-Jul	0	0	0.00
11-Jul	0	0	0.00
12-Jul	0	0	0.00
13-Jul	25	25	0.42
14-Jul	19	44	0.73
15-Jul	21	65	1.08
16-Jul	108	173	2.88
17-Jul	111	284	4.73
18-Jul	20	304	5.06
19-Jul	44	348	5.80
20-Jul	140	488	8.13
21-Jul	0	488	8.13
22-Jul	548	1,036	17.26
23-Jul	337	1,373	22.87
24-Jul	84	1,457	24.27
25-Jul	0	1,457	24.27
26-Jul	84	1,541	25.67
27-Jul	90	1,631	27.17
28-Jul	220	1,851	30.83
29-Jul	81	1,932	32.18
30-Jul	150	2,082	34.68
31-Jul	61	2,143	35.69
1-Aug	8	2,151	35.83
2-Aug	244	2,395	39.89
3-Aug	149	2,544	42.37
4-Aug	18	2,562	42.67
5-Aug	63	2,625	43.72
6-Aug	129	2,754	45.87
7-Aug	73	2,827	47.09
8-Aug	214	3,041	50.65
9-Aug	320	3,361	55.98
10-Aug	187	3,548	59.09
11-Aug	264	3,812	63.49
12-Aug	84	3,896	64.89
13-Aug	64	3,960	65.96
14-Aug	25	3,985	66.37
15-Aug	198	4,183	69.67
16-Aug	45	4,228	70.42
17-Aug	13	4,241	70.64
18-Aug	55	4,296	71.55
19-Aug	55	4,351	72.47
20-Aug	98	4,449	74.10
21-Aug	5	4,454	74.18
22-Aug	15	4,469	74.43
23-Aug	68	4,537	75.57
24-Aug	15	4,552	75.82
25-Aug	18	4,570	76.12
26-Aug	7	4,577	76.23
27-Aug	12	4,589	76.43
28-Aug	307	4,896	81.55
29-Aug	150	5,046	84.04
30-Aug	327	5,373	89.49
31-Aug	242	5,615	93.52
1-Sep	147	5,762	95.97
2-Sep	242	6,004	100.00
3-Sep	---- Weir Removed ----		
Total count	6,004		
Harvest above weir	0		
Escapement	6,004		

Appendix C. 13. Daily counts of large (>659mm MEF length) Chinook salmon carcasses at the Nakina River weir, 2005.

	Count				Cumulative	
Date	Female	Male	Unknown	Combined	Count	Percent
2-Aug	--- Weir Fish Tight ----					
3-Aug	5	3	0	8	8	0.00
4-Aug	4	14	0	18	26	0.01
5-Aug	9	24	0	33	59	0.03
6-Aug	14	33	0	47	106	0.05
7-Aug	11	32	0	43	149	0.07
8-Aug	19	58	0	77	226	0.10
9-Aug	27	68	0	95	321	0.14
10-Aug	26	82	0	108	429	0.19
11-Aug	45	88	0	133	562	0.25
12-Aug	62	131	0	193	755	0.33
13-Aug	92	186	2	280	1,035	0.46
14-Aug	110	206	4	320	1,355	0.60
15-Aug	75	132	1	208	1,563	0.69
16-Aug	88	147	0	235	1,798	0.80
17-Aug	78	103	16	197	1,995	0.88
18-Aug	42	78	7	127	2,122	0.94
19-Aug	32	43	2	77	2,199	0.97
20-Aug	25	17	0	42	2,241	0.99
21-Aug	2	4	2	8	2,249	0.99
22-Aug	2	3	0	5	2,254	1.00
23-Aug	3	4	0	7	2,261	1.00
24-Aug	---- Weir Removed ----					
Total	771	1,456	34	2,261		

Appendix D. 1. Salmon catches and effort in the Alaskan District 111 and Subdistrict 111-32 (Taku Inlet) commercial drift gillnet fishery, 1960-2005.

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

	Catch							Effort	
Year	Chinook	Sockeye	Coho	Pink	S. Chum [a]	F. Chum [a]	Steelhead	Boat Days	Days Open
District 111 Catches									
1960	8,810	42,819	22,374	33,155	8,754	33,098			60.00
1961	7,434	45,981	15,486	41,455	8,578	15,855			62.00
1962	5,931	36,745	15,661	17,280	7,453	13,182			52.00
1963	2,652	24,119	10,855	21,392	12,335	7,779			54.00
1964	2,509	34,140	29,315	26,593	4,970	7,883			56.00
1965	4,170	27,569	32,667	2,768	3,842	7,691			63.00
1966	4,829	33,925	26,065	23,833	5,015	30,118			64.00
1967	5,417	17,735	40,391	12,372	2,183	20,651			53.00
1968	4,904	19,501	39,103	67,365	5,747	16,143			60.00
1969	6,986	41,169	10,802	73,927	4,851	10,198	369	1,518	41.50
1970	3,357	50,922	44,960	197,017	19,593	90,797	1,055	2,688	53.00
1971	6,958	66,181	41,830	31,484	31,813	59,332	631	3,053	55.00
1972	10,955	80,404	49,780	144,339	67,126	80,831	574	3,103	51.00
1973	9,799	85,317	35,453	58,186	33,296	75,949	554	3,286	41.00
1974	2,908	38,670	38,667	57,731	11,263	75,423	465	2,315	29.50
1975	2,182	32,513	1,185	9,567	2,091	587	89	1,084	15.50
1976	1,757	61,749	41,729	14,962	6,027	75,776	499	1,914	25.00
1977	1,068	70,097	54,917	88,578	8,995	52,107	359	2,258	27.00
1978	1,926	55,398	31,944	51,385	9,076	27,178	397	2,174	26.00
1979	3,701	122,148	16,194	152,836	5,936	55,261	243	2,269	28.83
1980	2,251	123,451	41,677	296,572	33,627	159,020	363	4,123	30.92
1981	1,721	49,942	26,711	254,856	22,546	53,892	262	2,687	30.00
1982	3,057	83,625	29,072	109,297	14,867	22,741	476	2,433	35.50
1983	888	31,821	21,455	66,239	6,160	9,104	183	1,274	33.00
1984	1,773	77,233	33,836	145,971	45,811	40,930	366	2,757	52.50
1985	2,636	88,077	55,597	311,248	58,972	47,748	499	3,264	48.00
1986	2,584	73,061	30,512	16,568	29,909	28,883	529	2,129	32.83
1987	2,076	75,212	35,219	363,439	57,280	64,380	272	2,514	34.75
1988	1,779	38,923	44,881	157,831	80,307	59,271	226	2,135	32.00
1989	1,811	74,019	51,812	180,597	18,022	18,955	215	2,333	41.00
1990	3,480	126,884	67,530	153,036	112,336	33,463	310	3,188	38.33
1991	3,217	109,877	126,436	74,183	147,404	13,771	69	4,145	57.00
1992	2,341	135,411	172,662	314,445	97,725	14,802	166	4,550	50.00
1993	6,748	171,556	65,536	17,081	156,033	10,447	52	3,827	43.00
1994	5,047	105,861	188,501	401,525	198,002	16,169	459	5,078	66.00
1995	4,660	103,377	83,626	41,269	339,178	10,920	128	4,034	49.00
1996	2,659	199,014	33,633	12,660	347,612	6,455	240	3,229	46.00
1997	2,804	94,745	3,515	51,424	173,804	3,060		2,107	33.00
1998	794	69,677	28,713	168,283	291,416	4,695		3,070	48.00
1999	1,841	79,425	17,273	59,316	429,213	4,639		2,841	59.00
2000	1,137	168,272	7,546	54,716	665,582	3,013		2,919	40.00
2001	1,696	290,450	22,529	122,829	235,276	1,693	0	4,731	54.00
2002	1,840	178,488	39,823	77,562	230,092	929	0	4,095	62.00
2003	1,465	205,433	23,707	112,395	169,214	1,206	0	3,977	73.50
2004	2,291	241,254	45,289	150,272	125,965	5,422	0	3,342	59.00
Averages									
60-04	3,574	88,493	42,144	107,552	96,562	30,921	314	2,957	45.90
94-04	2,119	163,014	30,565	85,073	300,735	4,203	61	3,435	52.35
2005	21,999	87,254	20,725	181,513	89,757	3,453		3,427	68.00

–Continued–

Appendix D.1. Page 2 of 2.

	Catch							Effort	
Year	Chinook	Sockeye	Coho	Pink	S. Chum [a]	F. Chum [a]	Steelhead	Boat Days	Days Open
Subdistrict 111-32 Catches (Taku Inlet)									
1960	8,763	26,641	20,282	26,777	4,566	28,720		1,680	60.00
1961	7,269	30,805	14,618	34,615	6,863	14,876		2,901	62.00
1962	5,719	25,969	13,699	10,006	5,418	11,812		1,568	52.00
1963	2,547	16,079	9,406	18,102	8,085	7,071		1,519	51.00
1964	2,482	28,873	28,603	22,177	3,919	7,822		1,491	56.00
1965	4,146	23,828	32,382	2,641	3,604	7,691		1,332	60.00
1966	4,817	28,301	24,153	22,490	4,350	27,327		1,535	58.00
1967	5,351	14,537	39,983	11,619	1,569	20,463		1,663	50.00
1968	4,862	16,952	37,570	55,527	4,646	15,597		2,420	60.00
1969	6,874	38,260	10,131	66,991	4,233	9,926	366	1,413	42.00
1970	3,073	41,476	37,587	143,886	14,208	76,795	996	2,425	53.00
1971	6,753	62,459	38,571	30,765	31,110	54,696	627	2,849	55.00
1972	9,633	62,877	38,568	78,673	45,955	60,097	544	2,797	51.00
1973	9,525	80,063	29,770	55,234	30,817	61,025	513	3,135	41.00
1974	2,280	26,256	27,670	32,684	6,469	51,063	378	1,741	30.00
1975	1,998	28,201	429	8,084	1,639	31	77	986	15.00
1976	1,693	51,674	31,641	11,868	3,766	42,674	450	1,582	23.00
1977	754	47,512	48,403	67,072	5,436	43,595	318	1,879	27.00
1978	1,642	43,795	21,620	41,624	7,142	18,101	314	1,738	24.00
1979	3,016	103,043	12,741	114,324	4,317	46,142	225	2,011	29.00
1980	1,986	108,577	35,814	241,085	25,779	131,126	337	3,634	31.00
1981	1,325	39,963	20,936	98,524	10,407	40,212	233	1,740	22.00
1982	2,841	75,012	24,761	77,942	11,558	18,363	447	2,130	36.00
1983	689	25,957	17,665	40,996	3,171	7,813	172	1,065	31.00
1984	1,414	59,229	25,951	83,028	28,214	27,967	315	2,120	39.00
1985	2,152	70,160	45,106	176,710	35,897	40,530	436	2,116	37.00
1986	1,877	60,106	26,474	9,772	14,646	24,790	485	1,413	30.00
1987	1,534	54,436	23,342	200,203	31,992	28,891	197	1,517	30.00
1988	949	23,752	33,159	41,625	25,969	27,010	174	1,213	29.00
1989	1,606	68,104	44,034	141,385	15,254	15,491	183	1,909	36.00
1990	2,432	110,006	60,078	101,168	88,350	29,099	286	2,879	38.00
1991	2,614	96,006	118,902	44,347	97,577	12,279	63	3,324	52.00
1992	1,672	103,238	152,598	180,340	57,153	11,649	135	3,407	43.00
1993	4,413	144,982	58,062	8,801	101,356	7,760	46	3,372	43.00
1994	3,051	88,625	156,314	198,507	129,350	12,280	422	3,960	60.00
1995	3,497	81,266	70,826	18,469	192,557	8,786	119	3,061	45.00
1996	2,412	188,412	31,828	12,123	294,890	5,245	236	2,685	41.00
1997	2,724	84,115	2,993	38,794	143,354	1,936		1,761	30.00
1998	634	47,413	24,606	85,269	192,057	2,800		2,007	39.00
1999	1,762	68,914	14,086	43,958	327,706	2,643		2,563	58.00
2000	1,032	127,274	6,299	25,729	453,147	1,311		2,325	38.00
2001	1,290	179,683	12,647	49,174	141,715	1,012		3,635	55.00
2002	1,546	113,110	30,501	40,283	108,171	671		2,792	54.00
2003	1,386	130,303	20,577	77,459	106,373	894		2,685	64.50
2004	1,734	71,578	34,763	31,501	54,454	3,546		1,627	50.00
Averages									
60-04	3,150	67,063	35,781	64,941	64,205	23,770	325	2,213	42.90
95-04	1,802	109,207	24,913	42,276	201,442	2,884	178	2,514	47.45
2005	21,922	54,847	17,610	137,791	49,595	5,084		2,947	65.00

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

Appendix D. 2. Stock proportions and catches of sockeye salmon in the Alaska District 111 commercial drift gillnet fishery, 1983-2005**.**

Data based on analysis of scale patterns, otolith marks, and incidence of brain parasites. Does not include catches inside Port Snettisham

		King	Little Trapper			Tatsamenie		Total			Wild	U.S.
Week	Kuthai	Salmon	Wild	Planted	Mainstem	Wild	Planted	Taku	Crescent	Speel	Snett.	Hatch.
Proportions												
1983								0.755			0.245	
1984								0.758			0.242	
1985								0.838			0.162	
1986	0.061		0.266		0.303	0.204		0.834	0.090	0.076	0.166	
1987	0.078		0.234		0.376	0.031		0.720	0.157	0.123	0.280	
1988	0.118		0.158		0.305	0.082		0.663	0.266	0.071	0.337	
1989a	0.077		[a]		[a]	0.156		0.849	0.051	0.100	0.152	
1990	0.036		0.197		0.336	0.286		0.855	0.112	0.033	0.145	
1991	0.039		0.297		0.373	0.232		0.941	0.059	0.000	0.059	
1992	0.048		0.220		0.445	0.191		0.904	0.036	0.060	0.096	
1993	0.062		0.328		0.308	0.123		0.822	0.069	0.109	0.178	
1994	0.110		0.356		0.361	0.091		0.917	0.036	0.022	0.058	0.025
1995	0.046		0.214	0.010	0.428	0.153	0.029	0.880	0.018	0.075	0.093	0.026
1996	0.069		0.117	0.010	0.499	0.232	0.014	0.941	0.013	0.032	0.045	0.014
1997	0.067		0.170	0.011	0.282	0.286	0.011	0.826	0.027	0.026	0.053	0.120
1998	0.087		0.158	0.008	0.209	0.245	0.004	0.710	0.026	0.007	0.033	0.257
1999	0.176		0.259	0.003	0.235	0.119	0.005	0.797	0.049	0.023	0.072	0.131
2000	0.139		0.273	0.002	0.211	0.151	0.008	0.783	0.004	0.054	0.058	0.160
2001	0.076		0.130	0.000	0.268	0.207	0.031	0.713	0.014	0.032	0.046	0.241
2002	0.098		0.254	0.000	0.173	0.126	0.004	0.654	0.014	0.032	0.047	0.299
2003	0.087	0.016	0.225	0.000	0.398	0.033	0.004	0.755	0.009	0.047	0.064	0.181
2004	0.064	0.043	0.041	0.000	0.233	0.042	0.004	0.427	0.011	0.040	0.052	0.522
Averages												
86-04	0.081		0.217	0.004	0.319	0.157	0.011	0.786	0.056	0.048	0.105	0.180
95-04	0.091		0.184	0.004	0.294	0.159	0.011	0.749	0.019	0.037	0.056	0.195
2005	0.021	0.024	0.082	0.000	0.456	0.045	0.009	0.636	0.048	0.095	0.143	0.221
Catches												
1983								24,025			7,796	
1984								58,543			18,690	
1985								73,809			14,268	
1986	4,489		19,441		22,104	14,900		60,934	6,610	5,516	12,127	
1987	5,893		17,594		28,286	2,352		54,124	11,814	9,274	21,088	
1988	4,598		6,153		11,865	3,194		25,811	10,365	2,748	13,112	
1989[a]	5,696		[a]		[a]	11,536		62,805	3,789	7,425	11,214	
1990	4,539		24,952		42,676	36,332		108,499	14,242	4,143	18,385	
1991	4,295		32,685		40,957	25,475		103,412	6,465	0	6,465	
1992	6,543		29,818		60,224	25,853		122,438	4,912	8,060	12,972	
1993	10,673		56,350		52,876	21,139		141,038	11,877	18,641	30,518	
1994	11,638		37,644		38,179	9,585		97,046	3,859	2,319	6,178	2,637
1995	4,788		22,109	1,017	44,278	15,767	3,049	91,008	1,901	7,741	9,642	2,727
1996	13,742		23,307	1,920	99,231	46,148	2,859	187,207	2,544	6,416	8,960	2,848
1997	6,345		16,105	1,031	26,694	27,107	1,006	78,288	2,558	2,510	5,068	11,389
1998	6,055		11,018	570	14,560	17,040	250	49,493	1,784	500	2,284	17,900
1999	14,016		20,596	247	18,680	9,421	367	63,327	3,879	1,814	5,693	10,405
2000	23,357		45,977	279	35,451	25,347	1,301	131,712	621	9,088	9,709	26,851
2001	22,042		37,862	0	77,938	60,109	9,057	207,008	4,097	9,331	13,428	70,014
2002	17,474		45,308	0	30,819	22,449	660	116,710	2,559	5,779	8,338	53,440
2003	15,462	2,829	39,989	0	70,801	5,876	767	135,724	1,622	8,361	9,983	32,196
2004	11,413	7,579	7,307	0	41,342	7,501	676	75,818	2,028	7,124	9,152	92,756
Average [b]												
86-04	10,409		27,456	506	42,053	20,866	1,999	102,755	5,208	6,076	11,283	29,378
95-04	13,469	5,204	26,958	506	45,979	23,677	1,999	113,630	2,359	5,866	8,226	32,053
2005	1,495	1,715	5,837	0	32,606	3,188	627	45,468	3,423	6,766	10,189	15,813

[a] The Trapper and Mainstem groups were combined in the 1989 analysis and were 45,573 fish.

[b] Averages for individual stocks do not include 1989.

Appendix D. 3. Proportion of wild Taku River sockeye salmon in the Alaskan District 111 commercial drift gillnet catch by week, 1983-2005.

Data based on scale patterns and incidence of brain parasites and includes only wild fish.

	Week										
Year	25	26	27	28	29	30	31	32	33	34	Total
1983		0.996	0.842	0.819	0.663	0.527	0.836	0.534	0.719	0.759	0.755
1984	0.970	0.956	0.843	0.670	0.588	0.712	0.728	0.809	0.726		0.758
1985	0.999	0.986	0.928	0.974	0.868	0.706	0.737	0.826	0.801		0.838
1986	0.938	0.953	0.873	0.880	0.852	0.777	0.851	0.757	0.893	0.739	0.834
1987		0.982	0.901	0.884	0.948	0.414	0.619	0.689	0.841	0.731	0.720
1988		0.964	0.886	0.889	0.510	0.643	0.677	0.528	0.478	0.346	0.663
1989	0.943	0.989	0.979	0.852	0.835	0.641	0.681	0.919	0.676		0.848
1990	0.874	0.935	0.904	0.773	0.782	0.863	0.943	0.939	0.878	0.862	0.855
1991	0.988	0.979	0.953	0.979	0.951	0.933	0.936	0.890	0.885	0.875	0.941
1992		0.978	0.985	0.956	0.916	0.943	0.893	0.858	0.766	0.766	0.904
1993		0.961	0.901	0.837	0.856	0.781	0.790	0.829	0.738	0.706	0.822
1994		1.000	0.981	0.973	0.967	0.870	0.835	0.938	0.804	0.901	0.917
1995	0.942	0.889	0.903	0.858	0.872	0.868	0.761	0.759	0.705	0.740	0.841
1996	1.000	0.998	0.909	0.974	0.950	0.991	0.914	0.945	0.879	0.804	0.953
1997	0.992	0.970	0.910	0.926	0.951	0.939	0.939	0.925	0.872	0.906	0.938
1998		0.964	0.974	0.978	0.971	0.949	0.948	0.942	0.997	0.857	0.955
1999		0.966	0.988	0.953	0.934	0.917	0.878	0.833	0.732	0.665	0.917
2000		0.973	0.962	0.958	0.929	0.898	0.872	0.907	0.908	0.858	0.931
2001	0.995	0.998	0.948	0.888	0.908	0.930	0.961	0.945	0.858	0.858	0.936
2002	0.986	0.989	0.993	0.970	0.872	0.946	0.829	0.880	0.851	0.851	0.933
2003	1.000	0.987	0.961	0.994	0.970	0.929	0.883	0.795	0.236	0.236	0.931
2004		0.968	0.950	0.930	0.939	0.884	0.731	0.799	0.909	0.891	0.891
Average											
83-04	0.969	0.972	0.931	0.905	0.865	0.821	0.829	0.829	0.780	0.755	0.867
95-04	0.986	0.970	0.950	0.943	0.930	0.925	0.872	0.873	0.795	0.767	0.923
2005	0.851	0.851	0.851	0.820	0.795	0.750	0.814	0.818	0.765	0.826	

Appendix D. 4. Salmon catch in the U.S. subsistence and personal use fisheries in the Taku River, 1967-2005.

The subsistence fishery was open 1967 to 1976 and 1985 and the personal use fishery was open 1989-2005. The harvests are miminum estimates because not all permits are filled out and returned.

	Catch					
Year	Chinook	Sockeye	Coho	Pink	Chum	Permits
1967	0	103	221	9	25	
1968	3	41	196	19	10	
1969	0	122	8	11	0	
1970	0	304	0	20	8	
1971	0	512	0	42	0	
1972	0	554	0	103	7	
1973	0	1,227	0	64	14	
1974	0	1,431	0	118	5	
1975	0	170	0	3	0	
1976	0	351	4	22	0	
1985	0	920	35	16	1	54
1989	25	562	57	591	16	75
1990	26	793	103	111	46	95
1991	25	800	86	97	2	88
1992	21	1,217	88	100	0	125
1993	9	1,201	25	93	3	128
1994	21	1,111	93	76	3	116
1995	18	990	97	40	6	106
1996	33	1,189	67	110	5	130
1997	16	1,053	27	86	1	123
1998	15	1,153	86	225	2	130
1999	22	1,254	44	105	3	147
2000	22	1,134	31	68	7	128
2001	8	1,462	22	195	11	163
2002	14	1,289	68	59	20	136
2003	13	1,126	57	237	2	123
2004	25	1,150	120	109	3	131
Averages						
67-04	12	860	57	101	7	
95-04	19	1,180	62	123	6	132
2005	32	1,150	134	155	15	132

Appendix D. 5. Salmon and steelhead trout catch and effort in the Canadian commercial fishery in the Taku River, 1979-2005.

	Catch							Effort	
	Chinook							Boat	Days
Year	Large	Jack	Sockeye	Coho	Pink	Chum	Steelhead	Days	Open
1979	97		13,578	6,006	13,661	15,474	254	599	50
1980	225		22,602	6,405	26,821	18,516	457	476	39
1981	159		10,922	3,607	10,771	5,591	108	243	31
1982	54		3,144	51	202	3	1	38	13
1983	156	400	17,056	8,390	1,874	1,760	213	390	64
1984	294	221	27,242	5,357	6,964	2,492	367	288	30
1985	326	24	14,244	1,770	3,373	136	32	178	16
1986	275	77	14,739	1,783	58	110	48	148	17
1987	127	106	13,554	5,599	6,250	2,270	223	280	26
1988	555	186	12,014	3,123	1,030	733	86	185	15
1989	895	139	18,545	2,876	695	42	24	271	25
1990	1,258	128	21,100	3,207	378	12	22	295	28
1991	1,177	432	25,067	3,415	296	2	5	284	25
1992	1,445	147	29,472	4,077	0	7	15	291	27
1993	1,619	171	33,217	3,033	16	15	11	363	34
1994	2,065	235	28,762	14,531	168	18	232	497	74
1995	1,577	298	32,640	13,629	2	1	205	428	51
1996	3,331	144	41,665	5,028	0	0	98	415	65
1997	2,731	84	24,003	2,594	0	1	160	394	47
1998	1,107	227	19,038	5,090	0	2	176	299	42
1999	908	257	20,681	4,416	0	0	81	300	34
2000	1,576	87	28,009	4,395	0	0	192	351	39
2001	1,458	118	47,660	2,568	0	0	3	382	42
2002	1,561	291	31,053	3,082	0	0	2	286	33
2003	1,894	547	32,730	3,168	0	0	27	275	44
2004	2,082	335	20,148	5,966	0	0	0	294	40
Averages									
79-04	1,114	212	23,188	4,737	2,791	1,815	117	317	37
95-04	1,823	239	29,763	4,994	0	0	94	342	44
2005	7,399	821	21,697	4,924	0	0	0	561	68

Appendix D. 6. Sockeye salmon stock proportions and catch by stock in the Canadian commercial fishery on the Taku River, 1986-2005.

		King	Little Trapper			Tatsamenie		Total	
Year	Kuthai	Salmon	Wild	Planted	Mainstem	Wild	Planted	Wild	Planted
Proportion									
1986	0.111		0.397		0.350	0.143		1.000	
1987	0.062		0.201		0.649	0.088		1.000	
1988	0.143		0.417		0.343	0.098		1.000	
1989[a]	0.053		[a]		[a]	0.203		1.000	
1990	0.112		0.388		0.338	0.163		1.000	
1991	0.064		0.308		0.452	0.176		1.000	
1992	0.092		0.240		0.569	0.099		1.000	
1993	0.126		0.392		0.432	0.049		1.000	
1994	0.158		0.482		0.302	0.058		1.000	
1995	0.047		0.427	0.010	0.373	0.112	0.031	0.959	0.041
1996	0.105		0.221	0.008	0.442	0.215	0.010	0.982	0.018
1997	0.120		0.282	0.019	0.277	0.294	0.008	0.973	0.027
1998	0.225		0.207	0.028	0.254	0.283	0.003	0.969	0.031
1999	0.389		0.305	0.008	0.145	0.147	0.006	0.986	0.014
2000	0.172		0.205	0.000	0.326	0.282	0.016	0.984	0.016
2001	0.184		0.168	0.000	0.364	0.246	0.039	0.961	0.039
2002	0.316		0.428	0.000	0.192	0.062	0.002	0.998	0.002
2003	0.231	0.023	0.378	0.000	0.271	0.089	0.008	0.992	0.008
2004	0.168	0.071	0.132	0.000	0.586	0.031	0.013	0.987	0.013
Average[b]									
86-04	0.157		0.310		0.370	0.146		0.988	
95-04	0.196	0.047	0.275	0.007	0.323	0.176	0.014	0.979	0.021
2005	0.098	0.038	0.204	0.000	0.505	0.143	0.012	0.784	0.216
Catch									
1986	1,629		5,855		5,152	2,103		14,739	
1987	834		2,728		8,793	1,199		13,554	
1988	1,715		5,005		4,122	1,172		12,014	
1989[a]	990		[a]		[a]	3,763		18,545	
1990	2,355		8,183		7,131	3,431		21,100	
1991	1,601		7,721		11,327	4,418		25,067	
1992	2,699		7,085		16,764	2,924		29,472	
1993	4,192		13,036		14,347	1,641		33,217	
1994	4,544		13,858		8,684	1,676		28,762	
1995	1,528		13,934	331	12,185	3,659	1,003	31,306	1,334
1996	4,357		9,195	331	18,422	8,959	401	40,933	732
1997	2,891		6,758	456	6,637	7,060	201	23,346	657
1998	4,279		3,944	533	4,829	5,397	56	18,449	589
1999	8,044		6,314	171	2,992	3,034	126	20,384	297
2000	4,809		5,745	0	9,122	7,897	436	27,573	436
2001	8,748		8,005	0	17,330	11,709	1,868	45,792	1,868
2002	9,826		13,305	0	5,948	1,925	49	31,004	49
2003	7,568	755	12,383	0	8,855	2,902	267	32,463	267
2004	3,381	1,430	2,653	0	11,799	620	266	19,882	266
Average[b]			19						
86-04	4,167		8,095		9,691	3,985		26,059	
95-04	5,543	1,093	8,224	182	9,812	5,316	467	29,113	650
2005	2,119	829	4,433	0	10,951	3,108	257	17,007	4,690

[a] The Trapper and Mainstem groups were combined in the 1989 analysis with 13,792 fish or .744 proportion.

[b] Averages do not include 1989.

Appendix D. 7. Salmon catches in the Canadian Aboriginal fishery on the Taku River, 1980-2005.

	Chinook						
Year	Large	Jack	Sockeye	Coho	Pink	Chum	Steelhead
1980	85		150	0	0	15	0
1981							
1982							
1983	9		0	0	0	0	0
1984	0		50	15	0	0	0
1985	4		167	22	0	0	0
1986	10		200	50	0	0	0
1987	0		96	113	0	0	0
1988	27		245	98	0	0	0
1989	6		53	146	0	0	0
1990	0		89	6	0	0	0
1991	0		150	20	0	0	0
1992	121		352	187	0	0	16
1993	25		140	8	0	0	0
1994	119		239	162	4	0	1
1995	70		71	109	0	7	4
1996	63		360	24	0	0	0
1997	103		349	96	0	0	0
1998	60		239	0	0	0	0
1999	50		382	471	0	0	0
2000	50		140	342	0	0	0
2001	125		210	500	0	25	5
2002	37		155	688	0	0	9
2003	277	237	267	416	4	0	0
2004	530	116	120	450	0	0	0
Averages							
80-04	77		184	171	0	2	2
95-04	137		229	310	0	3	2
2005	212	NA	161	162	0	0	1

Appendix D. 8. Salmon and steelhead trout catch in the Canadian test fishery in the Taku River, 1987-2005.

	Catch						
	Chinook						
Year	Large	Jack	Sockeye	Coho	Pink	Chum	Steelhead
1987			237	807			
1988	72		708	422	52	222	14
1989	31		207	1,011	0	13	26
1990	48		285	472	0	0	20
1991	0		163	2,004	3	295	41
1992	0		38	1,277	0	76	88
1993[a]	0		166	1,593	0	50	13
1994	There was no Canadian test fishery in 1994.						
1995	There was no Canadian test fishery in 1995.						
1996	There was no Canadian test fishery in 1996.						
1997	The 1 sockeye and 39 coho salmon caught in 1997 were released live.						
1998	There was no Canadian test fishery in 1998.						
1999[b]	577	2	88	688	0	0	48
2000[c]	1,312	87	319	710	0	0	19
2001	1,175	229	247	31	0	0	0
2002	1,311	355	518	32	0	0	9
2003	1,403	397	27	59	0	0	7
2004	1,489	294	91	3,268	0	0	0
Averages							
87-04	618		238	952	5	55	24
93-04	1,211	227	215	798	0	0	14
2005	0	0	244	3,173	0	0	0

[a] Incomplete harvest data.
[b] In addition to these fish, 180 adult female chinook, one adult male chinook and four steelhead were captured and released live.
[c] In addition to these fish, 180 female chinook, 2,976 coho, 82 sockeye, 159 chum and 116 steelhead were captured and released live.

Appendix D. 9. Taku River sockeye salmon run size, 1984-2005.

	Above Border M-R				Expanded					
	Run	Start	Expansion		Run	Canada		U.S.	Total	Exploit
Year	Estimate	Date	Method	Factor	Estimate	Catch	Escape.	Catch	Run	Rate
1984	133,414	17-Jun	CPUE[a]	0.056	141,254	27,292	113,962	58,543	199,796	0.430
1985	118,160	16-Jun	CPUE[a]	0.047	123,974	14,411	109,563	74,729	198,703	0.449
1986	104,162	22-Jun	CPUE[a]	0.095	115,045	14,939	100,106	60,934	175,980	0.431
1987	87,554	21-Jun	CPUE[a]	0.088	96,023	13,887	82,136	55,154	151,178	0.457
1988	86,629	19-Jun	CPUE[b]	0.065	92,641	12,967	79,674	25,811	118,452	0.327
1989	99,467	18-Jun	CPUE[b]	0.128	114,068	18,805	95,263	63,367	177,435	0.463
1990	117,385	10-Jun	CPUE[b]	0.002	117,573	21,474	96,099	109,292	226,865	0.576
1991	153,773	9-Jun	CPUE[a]	0.007	154,873	25,380	129,493	104,931	260,103	0.502
1992	162,003	21-Jun	CPUE[a]	0.032	167,376	29,862	137,514	123,655	291,031	0.527
1993	138,523	13-Jun	CPUE[a]	0.026	142,148	33,523	108,625	142,239	284,387	0.618
1994	129,119	12-Jun	CPUE[a]	0.019	131,580	29,001	102,579	98,157	229,737	0.553
1995	145,264	11-Jun	CPUE[b]	0.008	146,450	32,711	113,739	91,998	238,448	0.523
1996	132,322	9-Jun	CPUE[b]	0.017	134,651	42,025	92,626	188,396	323,047	0.713
1997	93,816	3-May	CPUE[b]	0.017	95,438	24,352	71,086	79,341	174,779	0.593
1998	89,992	2-May	None		89,992	19,277	70,715	50,646	140,638	0.497
1999	113,706	14-May	None		113,706	21,151	92,555	64,581	178,287	0.481
2000	115,693	14-May	None		115,693	28,468	87,225	132,846	248,539	0.649
2001	192,245	27-May	None		192,245	47,958	144,287	208,470	400,715	0.640
2002	135,233	19-May	None		135,233	31,726	103,507	117,999	253,232	0.591
2003	193,390	19-May	None		193,390	33,024	160,366	136,850	330,240	0.514
2004	127,047	29-Apr	None		127,047	20,359	106,688	76,968	204,015	0.477
Averages										
84-04	127,090						130,495	25,838	104,658	98,329
95-04	133,871						134,385	30,105	104,279	114,810
2005	142,155	29-Apr	None		142,155	22,102	120,053	46,618	188,773	0.364

[a] Expansion based on average FW CPUE for years (88-90&95-96)
[b] Expansion based on current year FW CPUE

Appendix D. 10. Sockeye salmon escapement estimates of Taku River and Port Snettisham sockeye stocks, 1979-2005.

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

	Little Trapper		Tatsamenie		Hackett	Kuthai	Nahlin	Crescent Lake		Speel Lake	
Year	Count	Escape.	Escape.	Spawn	Weir	L. Weir	R. Weir	Escape.	Spawn	Escape.	Spawn
1980						1,658					
1981						2,299					
1982											
1983 [b]	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 [b]	14,889	14,889	13,093	13,093	2,309			7,249	7,249	7,073	7,006
1986	13,820	13,820	11,446	11,446	1,004			3,414	3,414	5,857	5,457
1987 [b]	12,007	12,007	2,794	2,794	910			7,839	7,839	9,319	9,319
1988 [cd]	10,637	10,637	2,063	2,063	516		138	1,199	1,199	969	710
1989 [d]	9,606	9,606	3,039	3,039				1,109	775	12,229	10,114
1990 [d]	9,443	7,777	5,736	4,929			2,515	1,262	757	18,064	16,867
1991 [a]	22,942	21,001	8,381	7,585				9,208	8,666	299	299
1992 [ac]	14,372	12,732	6,576	5,681		1,457	297	22,674	21,849	9,439	8,136
1993 [d]	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 [ae]	11,524	11,524	8,000	6,607		3,310	3,711			16,208	14,260
1996 [f]	5,483	5,483	10,381	8,026		4,243	2,538			20,000	18,610
1997 [g]	5,924	5,924	8,363	5,981		5,746	1,857			4,999	[i]
1998 [h]	8,717	8,717	5,997	4,735		1,934	345			13,358	[i]
1999	11,805	11,805	2,104	1,888		10,042				10,277	[i]
2000	11,551	11,551	7,575	6,094		4,096				6,764	[i]
2001	16,860	16,860	22,575	21,094		1,663	935			8,060	[i]
2002 [j]	7,973	11,484	5,495	4,379		7,697				5,016	[i]
2003	31,227	31,227	4,515	2,965		7,769				7,014	[i]
2004	9,613	9,613	1,951	1,615		1,578	0	na	na	7,813	[i]
Averages											
83-04	12,716	12,569	6,974	6,091	1,185	4,713	1,433	8,008	7,788	9,150	9,252
95-04	12,068	12,419	7,696	6,338		4,808	1,564			9,951	16,435
2005	16,009	16,009	3,372	2,445		6,004	0	na	na	7,538	[i]

[a] Mark-recapture estimates for Crescent 91, 92 Speel 95

[b] Weir count plus spawning ground survey. Trapper 83, 85, 87

[c] Weir counts are incomplete. Kuthai 92, Nahlin 88, 92

[d] Counts may be low due to uncounted fish passage past weir. Crescent 88-90, Speel 90, Kuthai 93

[e] In 1995 the weir was moved upstream to Tatsamenie Lake, the count of 8,000 is an expansion (based on past experiance) of the 5,780 fish counted there.

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

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

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

[i] Minimum estimates of run size

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

Appendix D. 11. Taku River Chinook salmon run size, 1989-2005.

Year	Above Border M-R Run Estimate	Start Date	Confidence Intervals Lower	Upper	Canadian Catch [a]	Spawning Escape.	U.S. Catch [b]	Total Run
Large Fish Only								
1979	21,993		4,255	38,979	376	21,617	2,070	24,063
1980	39,781		7,723	70,755	542	39,239	3,208	42,989
1981	49,983		9,755	89,363	424	49,559	2,314	52,297
1982	24,190		4,694	43,003	342	23,848	2,194	26,384
1983	10,535		1,928	17,661	741	9,794	1,195	11,730
1984	21,480		4,090	37,466	702	20,778	1,609	23,088
1985	36,492		7,069	64,762	576	35,916	2,665	39,157
1986	38,693		7,501	68,720	582	38,111	1,604	40,298
1987	29,417		5,695	52,176	482	28,935	1,554	30,971
1988	45,479		8,764	80,284	955	44,524	1,005	46,484
1989	41,464		29,263	51,395	1,135	40,329	2,771	44,236
1990	53,561		33,863	70,421	1,419	52,142	3,045	56,606
1991	53,200		10,165	93,124	1,555	51,645	5,296	58,496
1992	57,525		110-01	100,778	1,636	55,889	4,203	61,728
1993	67,841		13,015	119,236	1,716	66,125	8,096	75,937
1994	50,555		9,520	87,216	2,187	48,368	4,639	55,193
Averages								
79-04	45,272				1,583	43,689	3,195	48,466
95-04	53,488				2,579	50,909	3,559	57,047
2005	46,365	1-May	37,691	55,442	7,559	38,806	22,036	68,401
All Chinook Salmon								
1979	50,634		10,705	89,769	397	50,237	4,314	54,948
1980	56,285		18,615	92,735	610	55,675	3,899	60,184
1981	65,615		20,921	109,391	459	65,156	2,746	68,361
1982	30,133		9,154	50,404	354	29,779	3,187	33,320
1983	15,231		4,541	24,191	865	14,366	1,550	16,781
1984	31,414		10,309	50,889	815	30,599	2,033	33,447
1985	49,493		15,928	81,750	654	48,839	3,379	52,872
1986	46,806		13,900	78,388	662	46,144	2,029	48,835
1987	37,183		11,470	61,830	533	36,650	2,022	39,205
1988	63,243		19,507	104,699	1,140	62,103	1,256	64,499
1989	52,269		39,402	62,394	1,371	50,898	3,115	55,384
1990	60,972		40,772	77,704	1,734	59,238	3,645	64,617
1991	75,261		23,526	123,178	1,909	73,352	5,986	81,247
1992	76,585		23,419	125,725	2,013	74,572	4,503	81,088
1993	79,457		22,267	132,417	2,115	77,342	8,803	88,260
1994	56,372		14,238	93,068	2,719	53,653	5,019	61,391
Averages								
79-04	57,401				1,936	55,465	3,743	61,144
94-04	64,548				3,199	61,349	3,982	68,530
2005	55,651	27-Apr	43,794	61,942	8,380	47,271	22,036	77,687

[a] In years when sample size data is available (1999-present in the commercial and test fisheries, and 2003-2004 in the Aboriginal fishery) it was used to determine the number of large fish in the Canadian harvest. In years when sample data is not available, the average % large in the commercial fishery from 1999-2004 (75%) was applied to all catches except the recreational catch, which is assumed to be 100% large and comprise 300 fish annually.

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

Appendix D. 12. Aerial survey index escapement counts of large (3-ocean and older) Taku River Chinook salmon, 1975-2005.

Year	Kowatua	Tatsatua	Dudidontu	Tseta	Nakina	Nahlin	Index
1975			15		1,800	274	2,089
1976	341	620	40		3,000	725	4,726
1977	580	573	18		3,850	650	5,671
1978	490	550		21	1,620	624	3,284
1979	430	750	9		2,110	857	4,156
1980	450	905	158		4,500	1,531	7,544
1981	560	839	74	258	5,110	2,945	9,528
1982	289	387	130	228	2,533	1,246	4,585
1983	171	236	117	179	968	391	1,883
1984 [ab]	279	616		176	1,887	951	3,733
1985	699	848	475	303	2,647	2,236	6,905
1986	548	886	413	193	3,868	1,612	7,327
1987	570	678	287	180	2,906	1,122	5,563
1988	1,010	1,272	243	66	4,500	1,535	8,560
1989	601	1,228	204	494	5,141	1,812	8,986
1990	614	1,068	820	172	7,917	1,658	12,077
1991	570	1,164	804	224	5,610	1,781	9,929
1992	782	1,624	768	313	5,750	1,821	10,745
1993	1,584	1,491	1,020	491	6,490	2,128	12,713
1994	410	1,106	573	614	4,792	2,418	9,299
1995	550	678	731	786	3,943	2,069	7,971
1996	1,620	2,011	1,810	1,201	7,720	5,415	18,576
1997	1,360	1,148	943	648	6,095	3,655	13,201
1998	473	675	807	360	2,720	1,294	5,969
1999	561	431	527	221	1,900	532	3,951
2000	702	953	482	160	2,907	728	5,772
2001	1,050	1,024	479	202	1,552	935	5,040
2002	945	1,145	834	192	4,066	1,099	8,089
2003	850	1,000	644	436	2,126	861	5,481
2004	828	1,396	1,036	906	4,091	1,787	9,138
Averages							
75-04	687	941	516	361	3,804	1,556	7,866
95-04	894	1,046	829	511	3,712	1,838	8,319
2005	833	1,146	318	215	1,213	471	3,981

[a] Partial survey. Tseta 84

[b] Extrapolated results. Nahlin 84

Appendix D. 13. Taku River (above border) coho salmon run size, 1987-2005.

Year	Above Border M-R Run Estimate	End Date	Expansion Method	Expansion Factor	Expand. Estimate	Canada Catch	Escape.	U.S. Catch	Total Run	Total Exploit. Rate
1987	43,750	20-Sep	Test[a]	1.42	61,976	6,519	55,457			
1988	43,093	18-Sep		1.00	43,093	3,643	39,450			
1989	60,841	1-Oct		1.00	60,841	4,033	56,808			
1990	75,881			1.00	75,881	3,685	72,196			
1991	132,923			1.00	132,923	5,439	127,484			
1992	50,557	5-Sep	Gill[b]	1.79	90,394	5,541	84,853	96,283	186,677	0.545
1993	62,076	11-Sep	Gill[b]	1.84	114,091	4,634	109,457	97,758	211,849	0.483
1994	98,643	24-Sep	Gill[b]	1.13	111,036	14,693	96,343	228,607	339,643	0.716
1995	61,738	30-Sep	Gill[b]	1.12	69,448	13,738	55,710	111,571	181,019	0.692
1996	44,172	28-Sep	Gill[b]	1.12	49,687	5,052	44,635	44,529	94,216	0.526
1997	35,035	27-Sep	Gill[b]	1.00	35,035	2,690	32,345	15,825	50,860	0.364
1998	49,290	26-Sep	Gill[b]	1.35	66,472	5,090	61,382	53,368	119,840	0.488
1999	59,052	3-Oct	Troll[c]	1.12	66,343	5,575	60,768	50,789	117,132	0.481
2000	70,147	2-Oct	Troll[c]	1.00	70,147	5,447	64,700	35,390	105,537	0.387
2001	107,493	5-Oct	Troll[c]	1.00	107,493	3,099	104,394	53,390	160,883	0.351
2002	223,162	7-Oct	Troll[c]	1.00	223,162	3,802	219,360	80,114	303,276	0.277
2003	171,562	8-Oct	Troll[c]	1.00	171,562	3,643	167,919	78,334	249,896	0.328
2004	142,970	8-Oct	Troll[c]	1.00	143,970	9,432	134,538	112,807	256,777	0.476
Averages										
87-04	85,132	9/27		1.16	94,086	5,875	88,211	81,443	182,893	
95-04	96,462	10/2		1.07	100,332	5,757	94,575	63,612	163,944	0.437
2005	99,811	8-Oct	Troll[c]	1.00	99,811	8,259	91,552	59,257	159,068	0.424

[a] Expansion based on test fish CPUE
[b] Expansion based on District 111 gillnet CPUE
[c] Expansion based on Troll CPUE

Appendix D. 14. Escapement counts of Taku River coho salmon, 1984-2000.

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

Year	Yehring Creek Weir	Yehring Creek Aerial	Sock. Creek Aerial	Johnson Creek Ar/Foot	Fish Creek Aerial	Flannigan Slough Aerial	Tats. River Weir	Hacket River Weir	Dudidontu River Aerial	Upper Nahlin Aerial	Upper Nahlin Weir
1984		2,900	275	235	700	1,480					
1985		560	740	150	1,000	2,320	201[b]	1,031			
1986	2116[a]	1,200	174[c]	70	53[c]	1095[c]	344[b]	2,723	108	318	
1987	1627[a]	565[c]	980[c]	150	250	2100[c]	173[b]	1,715	276	165	
1988	1,423	658 c	585[c]	500	1215[c]	1308[c]	663[a]	1,260	367	694	1,322
1989	1570[d]	600	400	400	235	1,670	712[a]		115	322	
1990	2522[d]	220	193[c]		425[c]	414[c]	669[a]		25	256	
1991		475[c]	399[c]	120	1378[c]	1348[c]	1,101		458	176[e]	
1992		1267[cf]	594[f]	654	478	1,288	730				970[ab]
1993		250	130	90	380	70	88[b]				326[g]
1994		500	60	450	200	50	168				2112[g]
1995		70	230	170	132	421	62[b]				
1996		35	28	50	250	278	21[b]				
1997		500	10	550	600						
1998		280		300	450						
1999		1,050			400						
2000		450		500	1,800						
Averages											
84-00	1,423	663	234	293	529	947	666	1,682	225	351	1,322
95-00		398	89	314	605	350					

[a] Weir count combined with spawning ground count. Tatsamenie 88-90, Yehring 86-87, Nahlin 92.
[b] Incomplete weir count. Tatsamenie 85-87, 93, 95, 96; and Nahlin 92
[c] Count is an average of surveys by different observers. Flannigan 86, 87, 88, 90, 91;sockeye 86, 87, 88, 90, 91;Fish 86, 88, 90, 91; Yehring 87, 88, 91, 92
[d] Includes mark-recapture estimate. Yehring 89, 90
[e] Poor survey conditions. Nahlin 91.
[f] Foot survey. Yehring 92, Sockeye 92
[g] Surveys conducted before peak abundance on spawning grounds Flannigan 93, 94

Appendix D. 15. Canyon Island fish wheel salmon counts and periods of operation on the Taku River, 1983-2005.

		Catch							
	Period of						Pink		
Year	Operation	Chinook	Sockeye	Coho	Pink	Chum	even year	odd year	Steelhead
1984	6/15-9/18	138	2,334	889	20,751	316	20,751		
1985	6/16-9/21	184	3,601	1,207	27,670	1,376		27,670	
1986	6/14-8/25	571	5,808	758	7,256	80	7,256		
1987	6/15-9/20	285	4,307	2,240	42,786	1,533		42,786	34
1988	5/11-9/19	1,436	3,292	2,168	3,982	1,089	3,982		34
1989	5/05-10/01	1,811	5,650	2,243	31,189	645		31,189	38
1990	5/03-9/23	1,972	6,091	1,860	13,358	748	13,358		43
1991	6/08-10/15	680	5,102	4,922	23,553	1,063		23,553	138
1992	6/20-9/24	212	6,279	2,103	9,252	189	9,252		22
1993	6/12-9/29	562	8,975	2,552	1,625	345		1,625	16
1994	6/10-9/21	906	6,485	4,792	27,100	367	27,100		107
1995	5/4-9/27	1,535	6,228	2,535	1,712	218		1,712	61
1996	5/3-9/20	1,904	5,919	1,895	21,583	388	21,583		68
1997	5/3-10/1	1,321	5,708	1,665	4,962	485		4,962	103
1998	5/2-9/15	894	4,230	1,777	23,347	179	23,347		119
1999	5/3-10/3 [b]	440	4,636	1,848	23,503	164		23,503	119
2000	4/23-10/3 [c]	1,211	5,865	1,877	6,529	423	6,529		160
2001	4/23-10/5 [d]	1,262	6,201	2,380	9,134	250		9,134	125
2002	4/24-10/7 [e]	1,578	5,812	3,766	5,672	205	5,672		87
2003	4/20-10/08 [f]	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
Averages									
84-04		1,071	5,464	2,364	15,663	512	13,390	18,163	79
94-04		1,373	5,682	2,391	12,040	299	13,119	10,961	100
2005	4/25-10/05	517	3,953	1,476	15,839	258		15,839	79

[a] gillnetting was used to supplement catches from September 16-23
[b] gillnetting was used to supplement catches from April 24 - June 23 and September 3 - October 3.
[c] gillnetting was used to supplement catches from May 8 - June 2 and September 9 - October 3.
[d] gillnetting was used to supplement catches from April 28 - June 17 and September 8 - October 5.
[e] gillnetting was used to supplement catches from April 24 - June 8 and September 11 - October 7.
[f] gillnetting was used to supplement catches from April 20-June 12 and September 09-October 8.

Appendix E. 1. Weekly salmon catch and effort in the lower Alsek River fisheries, 2005.

		Catch						Effort		
	Start	Chinook							Days	Boat
Week	Date	Large	Jack	Sockeye	Coho	Pink	Chum	Boats	Open	Days
Test Fishery										
22	22-May	39	0	8	0	0	0	1	1.00	1.0
23	29-May	180	0	34	0	0	0	1	6.67	6.7
24	5-Jun	125	0	48	0	0	0	1	4.67	4.7
25	12-Jun	53	0	57	0	0	0	1	3.67	3.7
26	19-Jun	24	0	59	0	0	0	1	4.67	4.7
27	26-Jun	2	0	16	0	0	0	1	4.67	4.7
Total		423	0	222	0	0	0			
Commercial Fishery[a]										
24	5-Jun	156	27	451	0	0	0	13	1.0	13.0
25	12-Jun	63	18	1,661	0	0	0	15	2.0	30.0
26	19-Jun	9	1	648	0	0	0	14	1.0	14.0
27	26-Jun	8	1	1,023	0	0	0	12	1.0	12.0
28	3-Jul	1	0	737	0	0	0	11	1.0	11.0
29	10-Jul	1	0	1,872	0	0	0	10	2.0	20.0
30	17-Jul	0	0	515	0	0	0	8	1.0	8.0
31	24-Jul	0	0	400	0	0	0	6	2.0	12.0
32-42	31-Jul	1	0	265	1,196	0	0	12	30.0	51.0
Total		239	47	7,572	1,196	0	0		41.0	171

[a]There was no effort during weeks 34-37 or week 42.

Appendix E. 2. Weekly salmon catch and effort in the Canadian Aboriginal and sport fisheries in the Alsek River, 2005.

Total catches do not include released fish.

		Chinook			Sockeye			Coho		
Week	Date	AFF[a]	Sport[b]	Total	AFF[a]	Sport[b]	Total	AFF[a]	Sport[b]	Total
24	5-Jun		0	0		0	0		0	0
25	12-Jun		0	0		0	0		0	0
26	19-Jun		1	1		1	1		0	0
27	26-Jun		4	4		0	0		0	0
28	3-Jul		9	9		0	0		0	0
29	10-Jul	No	22	22	No	0	0	No	0	0
30	17-Jul	Weekly	14	14	Weekly	1	1	Weekly	0	0
31	24-Jul	Data	5	5	Data	0	0	Data	0	0
32	31-Jul		0	0		0	0		0	0
33	7-Aug		1	1		0	0		0	0
34	14-Aug		0	0		4	4		0	0
35	21-Aug		0	0		1	1		0	0
36	28-Aug		0	0		4	4		0	0
37	4-Sep		0	0		2	2		0	0
38	11-Sep		0	0		0	0		0	0
39	18-Sep		0	0		0	0		0	0
40	25-Sep		0	0		0	0		2	2
41	2-Oct		0	0		0	0		19	19
42	9-Oct		0	0		0	0		27	27
43	16-Oct		0	0		0	0		3	3
44	23-Oct		0	0		0	0		0	0
45	30-Oct		0	0		0	0		0	0
46	6-Nov		0	0		0	0		0	0
Total		58	56	114	581	13	594	20	51	71
Village Creek food fish			Data Not Available							
Harvest at Klukshu River weir				14			112			20
Food fish above Klukshu Weir				22			94			0

[a] Aboriginal catches are an estimate using run timing.

[b] Includes estimates of sport catch retained in Takhanne and Blanchard rivers; estimates based on salmon catch card information.

Appendix E. 3. Daily counts of salmon passing through Klukshu River weir, 2005.

	Chinook [a]			Sockeye			Coho		
		Cumulative			Cumulative			Cumulative	
Date	Daily	Daily	Prop.	Daily	Daily	Prop.	Daily	Daily	Prop.
5-Jun	0	0	0.000	0	0	0.000	0	0	0.000
6-Jun	0	0	0.000	0	0	0.000	0	0	0.000
7-Jun	0	0	0.000	0	0	0.000	0	0	0.000
8-Jun	0	0	0.000	0	0	0.000	0	0	0.000
9-Jun	0	0	0.000	0	0	0.000	0	0	0.000
10-Jun	0	0	0.000	0	0	0.000	0	0	0.000
11-Jun	0	0	0.000	0	0	0.000	0	0	0.000
12-Jun	0	0	0.000	0	0	0.000	0	0	0.000
13-Jun	0	0	0.000	0	0	0.000	0	0	0.000
14-Jun	0	0	0.000	0	0	0.000	0	0	0.000
15-Jun	0	0	0.000	0	0	0.000	0	0	0.000
16-Jun	0	0	0.000	0	0	0.000	0	0	0.000
17-Jun	0	0	0.000	0	0	0.000	0	0	0.000
18-Jun	0	0	0.000	0	0	0.000	0	0	0.000
19-Jun	0	0	0.000	0	0	0.000	0	0	0.000
20-Jun	0	0	0.000	0	0	0.000	0	0	0.000
21-Jun	0	0	0.000	0	0	0.000	0	0	0.000
22-Jun	0	0	0.000	0	0	0.000	0	0	0.000
23-Jun	0	0	0.000	0	0	0.000	0	0	0.000
24-Jun	3	3	0.003	0	0	0.000	0	0	0.000
25-Jun	3	6	0.006	0	0	0.000	0	0	0.000
26-Jun	2	8	0.007	0	0	0.000	0	0	0.000
27-Jun	4	12	0.011	0	0	0.000	0	0	0.000
28-Jun	1	13	0.012	0	0	0.000	0	0	0.000
29-Jun	0	13	0.012	0	0	0.000	0	0	0.000
30-Jun	2	15	0.014	0	0	0.000	0	0	0.000
1-Jul	5	20	0.019	0	0	0.000	0	0	0.000
2-Jul	3	23	0.021	1	1	0.000	0	0	0.000
3-Jul	2	25	0.023	0	1	0.000	0	0	0.000
4-Jul	2	27	0.025	0	1	0.000	0	0	0.000
5-Jul	2	29	0.027	0	1	0.000	0	0	0.000
6-Jul	7	36	0.034	0	1	0.000	0	0	0.000
7-Jul	31	67	0.063	0	1	0.000	0	0	0.000
8-Jul	139	206	0.193	7	8	0.002	0	0	0.000
9-Jul	26	232	0.217	1	9	0.003	0	0	0.000
10-Jul	11	243	0.227	0	9	0.003	0	0	0.000
11-Jul	23	266	0.249	0	9	0.003	0	0	0.000
12-Jul	16	282	0.264	0	9	0.003	0	0	0.000
13-Jul	20	302	0.282	2	11	0.003	0	0	0.000
14-Jul	46	348	0.325	2	13	0.004	0	0	0.000
15-Jul	24	372	0.348	0	13	0.004	0	0	0.000
16-Jul	34	406	0.379	0	13	0.004	0	0	0.000
17-Jul	85	491	0.459	2	15	0.004	0	0	0.000
18-Jul	27	518	0.484	1	16	0.005	0	0	0.000
19-Jul	65	583	0.545	13	29	0.009	0	0	0.000
20-Jul	122	705	0.659	11	40	0.012	0	0	0.000
21-Jul	48	753	0.704	5	45	0.013	0	0	0.000
22-Jul	46	799	0.747	9	54	0.016	0	0	0.000
23-Jul	36	835	0.780	23	77	0.023	0	0	0.000
24-Jul	31	866	0.809	4	81	0.024	0	0	0.000
25-Jul	11	877	0.820	0	81	0.024	0	0	0.000
26-Jul	9	886	0.828	15	96	0.028	0	0	0.000
27-Jul	19	905	0.846	8	104	0.031	0	0	0.000
28-Jul	24	929	0.868	71	175	0.052	0	0	0.000
29-Jul	9	938	0.877	7	182	0.054	0	0	0.000
30-Jul	17	955	0.893	8	190	0.056	0	0	0.000
31-Jul	1	956	0.893	7	197	0.058	0	0	0.000
1-Aug	11	967	0.904	4	201	0.060	0	0	0.000
2-Aug	13	980	0.916	2	203	0.060	0	0	0.000
3-Aug	10	990	0.925	5	208	0.062	0	0	0.000
4-Aug	30	1,020	0.953	7	215	0.064	0	0	0.000
5-Aug	1	1,021	0.954	14	229	0.068	0	0	0.000
6-Aug	7	1,028	0.961	19	248	0.074	0	0	0.000
7-Aug	3	1,031	0.964	10	258	0.076	0	0	0.000
8-Aug	5	1,036	0.968	81	339	0.101	0	0	0.000
9-Aug	7	1,043	0.975	31	370	0.110	0	0	0.000

10-Aug	3	1,046	0.978	44	414	0.123	0	0	0.000
11-Aug	2	1,048	0.979	35	449	0.133	0	0	0.000
12-Aug	8	1,056	0.987	76	525	0.156	0	0	0.000
13-Aug	5	1,061	0.992	282	807	0.239	0	0	0.000
14-Aug	3	1,064	0.994	145	952	0.282	0	0	0.000
15-Aug	0	1,064	0.994	42	994	0.295	0	0	0.000
16-Aug	1	1,065	0.995	217	1,211	0.359	0	0	0.000
17-Aug	0	1,065	0.995	57	1,268	0.376	0	0	0.000
18-Aug	1	1,066	0.996	20	1,288	0.382	0	0	0.000
19-Aug	0	1,066	0.996	4	1,292	0.383	0	0	0.000
20-Aug	0	1,066	0.996	1	1,293	0.383	0	0	0.000
21-Aug	0	1,066	0.996	7	1,300	0.385	0	0	0.000
22-Aug	0	1,066	0.996	13	1,313	0.389	0	0	0.000
23-Aug	1	1,067	0.997	6	1,319	0.391	0	0	0.000
24-Aug	2	1,069	0.999	87	1,406	0.417	0	0	0.000
25-Aug	0	1,069	0.999	6	1,412	0.419	0	0	0.000
26-Aug	0	1,069	0.999	7	1,419	0.421	0	0	0.000
27-Aug	0	1,069	0.999	4	1,423	0.422	0	0	0.000
28-Aug	0	1,069	0.999	3	1,426	0.423	0	0	0.000
29-Aug	0	1,069	0.999	2	1,428	0.423	0	0	0.000
30-Aug	0	1,069	0.999	0	1,428	0.423	0	0	0.000
31-Aug	0	1,069	0.999	4	1,432	0.425	0	0	0.000
1-Sep	1	1,070	1.000	2	1,434	0.425	0	0	0.000
2-Sep	0	1,070	1.000	2	1,436	0.426	0	0	0.000
3-Sep	0	1,070	1.000	1	1,437	0.426	0	0	0.000
4-Sep	0	1,070	1.000	4	1,441	0.427	0	0	0.000
5-Sep	0	1,070	1.000	0	1,441	0.427	0	0	0.000
6-Sep	0	1,070	1.000	21	1,462	0.433	0	0	0.000
7-Sep	0	1,070	1.000	22	1,484	0.440	0	0	0.000
8-Sep	0	1,070	1.000	330	1,814	0.538	0	0	0.000
9-Sep	0	1,070	1.000	11	1,825	0.541	0	0	0.000
10-Sep	0	1,070	1.000	211	2,036	0.604	0	0	0.000
11-Sep	0	1,070	1.000	35	2,071	0.614	0	0	0.000
12-Sep	0	1,070	1.000	16	2,087	0.619	0	0	0.000
13-Sep	0	1,070	1.000	10	2,097	0.622	0	0	0.000
14-Sep	0	1,070	1.000	2	2,099	0.622	0	0	0.000
15-Sep	0	1,070	1.000	2	2,101	0.623	0	0	0.000
16-Sep	0	1,070	1.000	0	2,101	0.623	0	0	0.000
17-Sep	0	1,070	1.000	0	2,101	0.623	0	0	0.000
18-Sep	0	1,070	1.000	27	2,128	0.631	0	0	0.000
19-Sep	0	1,070	1.000	14	2,142	0.635	0	0	0.000
20-Sep	0	1,070	1.000	8	2,150	0.637	0	0	0.000
21-Sep	0	1,070	1.000	18	2,168	0.643	0	0	0.000
22-Sep	0	1,070	1.000	0	2,168	0.643	0	0	0.000
23-Sep	0	1,070	1.000	34	2,202	0.653	0	0	0.000
24-Sep	0	1,070	1.000	46	2,248	0.666	0	0	0.000
25-Sep	0	1,070	1.000	34	2,282	0.677	1	1	0.001
26-Sep	0	1,070	1.000	42	2,324	0.689	2	3	0.004
27-Sep	0	1,070	1.000	4	2,328	0.690	0	3	0.004
28-Sep	0	1,070	1.000	16	2,344	0.695	0	3	0.004
29-Sep	0	1,070	1.000	44	2,388	0.708	3	6	0.009
30-Sep	0	1,070	1.000	80	2,468	0.732	7	13	0.019
1-Oct	0	1,070	1.000	23	2,491	0.739	10	23	0.034
2-Oct	0	1,070	1.000	25	2,516	0.746	4	27	0.040
3-Oct	0	1,070	1.000	137	2,653	0.787	12	39	0.057
4-Oct	0	1,070	1.000	195	2,848	0.844	30	69	0.101
5-Oct	0	1,070	1.000	49	2,897	0.859	47	116	0.170
6-Oct	0	1,070	1.000	139	3,036	0.900	92	208	0.305
7-Oct	0	1,070	1.000	84	3,120	0.925	35	243	0.356
8-Oct	0	1,070	1.000	30	3,150	0.934	41	284	0.416
9-Oct	0	1,070	1.000	25	3,175	0.941	56	340	0.498
10-Oct	0	1,070	1.000	40	3,215	0.953	35	375	0.549
11-Oct	0	1,070	1.000	23	3,238	0.960	82	457	0.669
12-Oct	0	1,070	1.000	15	3,253	0.964	44	501	0.734
13-Oct	0	1,070	1.000	30	3,283	0.973	33	534	0.782
14-Oct	0	1,070	1.000	20	3,303	0.979	54	588	0.861
15-Oct	0	1,070	1.000	16	3,319	0.984	19	607	0.889
16-Oct	0	1,070	1.000	12	3,331	0.988	24	631	0.924
17-Oct	0	1,070	1.000	8	3,339	0.990	18	649	0.950
18-Oct	0	1,070	1.000	15	3,354	0.994	19	668	0.978

19-Oct	0	1,070	1.000	19	3,373	1.000	15	683	1.000
Total Count		1,070			3,373			683	
Catch at weir		14			112			20	
Catch above weir		22			94			0	
Total Escapement		1,034			3,167			663	

[a] Jack chinook included in the counts.

Appendix E. 4. Salmon catch and effort in the U.S. Commercial fishery in the Alsek River, 1960-2005.

	Catch					Effort	
						Boat	Days
Year	Chinook	Sockeye	Coho	Pink	Chum	Days	Open
1960							
1961	2,120	23,339	7,679	84	86	1,436	80.0
1962							
1963	131	6,055	7,164	42	34	692	68.0
1964	591	14,127	9,760	144	367	592	68.0
1965	719	28,487	9,638	10	72	1,016	72.0
1966	934	29,091	2,688	22	240	500	64.0
1967	225	11,108	10,090	107	30	600	68.0
1968	215	26,918	10,586	82	240	664	68.0
1969	685	29,259	2,493	38	61	807	61.0
1970	1,128	22,654	2,188	6	26	670	52.3
1971	1,222	25,314	4,730	3	120	794	60.5
1972	1,827	18,717	7,296	37	280	640	65.0
1973	1,757	26,523	4,395	26	283	894	52.0
1974	1,162	16,747	7,046	13	107	699	46.0
1975	1,379	13,842	2,230	16	261	738	58.0
1976	512	19,741	4,883	0	368	550	58.5
1977	1,402	40,780	11,817	689	483	882	57.0
1978	2,441	50,580	13,913	59	233	929	57.0
1979	2,525	41,449	6,158	142	263	1,110	51.0
1980	1,382	25,522	7,863	21	1,005	773	42.0
1981	779	23,641	10,232	65	816	588	40.0
1982	532	27,443	6,534	6	358	552	33.0
1983	94	18,293	5,253	20	432	487	38.0
1984	60	14,326	7,868	24	1,610	429	33.0
1985	213	5,792	5,490	3	427	277	33.0
1986	481	24,791	1,344	13	462	517	34.0
1987	347	11,393	2,517	0	1,924	388	40.5
1988	223	6,286	4,986	7	908	324	34.0
1989	228	13,513	5,972	2	1,031	378	38.0
1990	78	17,013	1,437	0	495	374	38.0
1991	103	17,542	5,956	0	105	530	49.0
1992	301	19,298	3,116	1	120	372	46.0
1993	300	20,043	1,215	0	49	372	40.0
1994	805	19,639	4,182	0	32	403	61.0
1995	670	33,112	14,184	13	347	879	53.5
1996	772	15,182	5,514	0	165	419	51.0
1997	568	25,879	11,427	0	34	611	59.0
1998	550	15,007	4,925	1	145	358	41.0
1999	482	11,441	5,660	0	112	319	44.0
2000	677	9,522	5,103	5	130	307	37.0
2001	541	13,995	2,909	8	17	234	50.0
2002	700	16,918	9,525	0	1	270	73.0
2003	937	39,698	47	0	0	271	60.0
2004	656	18,030	2,475	0	2	280	76.5
Averages							
60-04	778	21,117	6,058	40	332	580	52.3
95-04	655	19,878	6,177	3	95	395	55
2005	239	7,572	1,196	0	0	171	41.0

Appendix E. 5. Salmon catch in the U.S. subsistence and personal use fisheries in the Alsek River, 1976-2005.

Catches are those reported on returned permits.

	Catch		
Year	Chinook	Sockeye	Coho
1976	13	51	5
1977	18	113	0
1978			
1979	80	35	70
1980	57	41	62
1981	32	50	74
1982	87	75	50
1983	31	25	50
1984			
1985	16	95	0
1986	22	241	45
1987	27	173	31
1988	13	148	9
1989	20	131	34
1990	85	144	12
1991	38	104	0
1992	15	37	44
1993	38	96	28
1994	60	47	20
1995	51	167	53
1996	60	67	28
1997	38	273	26
1998	63	158	42
1999	44	152	21
2000	73	146	31
2001	19	72	45
2002	60	232	35
2003	24	176	27
2004	38	122	0
Averages			
76-04	42	117	31
95-04	47	157	31
2005	31	63	62

Appendix E. 6. Salmon catches in the Canadian Aboriginal and sport fisheries in the Alsek River, 1976 to 2005.

	Chinook			Sockeye			Coho		
Year	AFF	Sport	Total	AFF	Sport	Total	AFF	Sport	Total
1976	150	200	350	4,000	600	4,600	0	100	100
1977	350	300	650	10,000	500	10,500	0	200	200
1978	350	300	650	8,000	500	8,500	0	200	200
1979	1,300	650	1,950	7,000	750	7,750	0	100	100
1980	150	200	350	800	600	1,400	0	200	200
1981	150	315	465	2,000	808	2,808	0	109	109
1982	400	224	624	5,000	755	5,755	0	109	109
1983	300	312	612	2,550	732	3,282	0	16	16
1984	100	475	575	2,600	289	2,889	0	20	20
1985	175	250	425	1,361	100	1,461	50	100	150
1986	102	165	267	1,914	307	2,221	0	9	9
1987	125	367	492	1,158	383	1,541	0	49	49
1988	43	249	292	1,604	322	1,926	0	192	192
1989	234	272	506	1,851	319	2,170	0	227	227
1990	202	555	757	2,314	392	2,706	0	75	75
1991	509	388	897	2,111	303	2,414	0	227	227
1992	148	103	251	2,592	582	3,174	0	213	213
1993	152	171	323	2,361	329	2,690	0	37	37
1994	289	197	486	1,745	261	2,006	8	69	77
1995	580	1,044	1,624	1,745	682	2,427	83	527	610
1996	448	650	1,098	1,204	157	1,361	56	9	65
1997	232	298	530	484	36	520	5	0	5
1998	171	175	346	567	18	585	72	40	112
1999	238	174	412	554	0	554	0	28	28
2000	65	77	142	745	0	745	51	1	52
2001	120	157	277	1,173	4	1,177	5	94	99
2002	120	197	317	2,194	61	2,255	6	283	289
2003	90	138	228	2,734	61	2,795	0	192	192
2004	139	46	185	1,875	247	2,122	0	127	127
Averages									
76-04	256	298	555	2,560	348	2,908	12	122	134
95-04	220	296	516	1,328	127	1,454	28	130	158
2005	58	56	114	581	13	594	20	51	71

Appendix E. 7. Annual Klukshu River weir counts of Chinook, sockeye, and coho salmon, 1976 to 2005.

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

	Chinook [a]		Sockeye				Coho [b]	
Year	Count	Escape. [c]	Early [d]	Late	Total	Escape.	Count	Escape. [c]
1976	1,278	1,153	181	11,510	11,691	7,941	1,572	
1977	3,144	2,894	8,931	17,860	26,791	15,441	2,758	
1978	2,976	2,676	2,508	24,359	26,867	19,017	30	
1979	4,404	2,454	977	11,334	12,311	7,051	175	
1980	2,637	2,487	1,008	10,742	11,750	10,850	704	
1981	2,113	1,963	997	19,351	20,348	18,448	1,170	
1982	2,369	1,969	7,758	25,941	33,699	28,899	189	
1983	2,537	2,237	6,047	14,445	20,492	18,017	303	
1984	1,672	1,572	2,769	9,958	12,727	10,227	1,402	
1985	1,458	1,283	539	18,081	18,620	17,259	350	
1986	2,709	2,607	416	24,434	24,850	22,936	71	
1987	2,616	2,491	3,269	7,235	10,504	9,346	202	
1988	2,037	1,994	585	8,756	9,341	7,737	2,774	
1989	2,456	2,289	3,400	20,142	23,542	21,636	2,219	
1990	1,915	1,742	1,316	24,679	25,995	24,607	315	
1991	2,489	2,248	1,924	17,053	18,977	17,645	8,540	8,478
1992	1,367	1,242	11,339	8,428	19,767	18,269	1,145	1,145
1993	3,302	3,220	5,369	11,371	16,740	14,921	788	788
1994	3,727	3,628	3,247	11,791	15,038	13,892	1,232	1,232
1995	5,678	5,394	2,289	18,407	20,696	19,817	3,614	3,564
1996	3,599	3,382	1,502	6,818	8,320	7,891	3,465	3,465
1997	2,989	2,829	6,565	4,931	11,496	11,303	307	302
1998	1,364	1,347	597	12,994	13,591	13,580	1,921	1,961
1999	2,193	2,168	371	5,010	5,381	5,101	2,481	2,531
2000	1,365	1,321	237	5,314	5,551	5,422	4,832	4,791
2001	1,825	1,738	908	9,382	10,290	9,329	748	746
2002	2,240	2,134	11,904	13,807	25,711	23,587	9,921	9,921
2003	1,737	1,661	3,084	31,278	34,362	32,120	3,689	3,689
2004	2,525	2,445	3,464	11,884	15,348	13,721	750	750
Averages								
76-04	2,508	2,295	3,224	14,389	17,614	15,380	1,989	
95-04	2,552	2,442	3,092	11,983	15,075	14,187	3,173	3,172
2005	1,070	963	994	2,379	3,373	3,167	683	663

[a] Counts include jack chinook salmon.

[b] Weir was removed prior to the end of the coho run.

[c] The chinook and sockeye escapements into Klukshu Lake are calculated from the weir count minus fish harvested above the weir site minus brood stock taken. The remainder of the food fishery harvest occurred below the weir, at Village Creek, and Blanchard and Takhanne Rivers.

[d] Includes sockeye counts up to and including August 15.

Appendix E. 8. Alsek River sockeye salmon escapement 2000 to 2004.

Estimates are based on a mark-recapture study which was discontinued in 2005.

Year	Inriver Run Estimate	Confidence Interval Lower	Confidence Interval Upper	Canadian Catch	Spawning Escape.	U.S. Catch	Total Run	Percent Klukshu
2000	37,887	23,410	52,365	745	37,142	9,668	47,555	14.7%
2001	31,164	23,143	39,185	1,177	29,987	14,067	45,231	33.0%
2002	95,427	55,893	134,961	2,255	93,172	17,150	112,577	26.9%
2003	103,507	74,350	132,664	2,795	100,712	39,874	143,381	33.2%
2004	83,703	39,566	127,841	2,122	81,581	18,152	101,855	18.3%
Averages								
00-04	70,338			1,819	68,519	19,782	90,120	25.2%

Appendix E. 9. Alsek River sockeye counts from U.S. and Canadian aerial surveys and from the electronic counter at Village Creek, 1985-2005.

Year	U.S. Aerial Surveys [a] Basin Creek	Cabin Creek	Muddy Creek	Tanis River	Canada Aerial Surveys [b] 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	[c]
1989	320			680	1,689	1,700	9,569	
1990	275	300		3,500			5,313	[c]
1991				800			86	[c]
1992	1,000	10		50			7,447	[c]
1993	4,800			900			2,104	[c]
1994	250			600	366		3,921	[c]
1995	2,700			350			4,042	
1996	325			650			1,583	
1997	600			350			2,267	
1998				130			826	
1999	30			800			NA	[d]
2000	25			180			1,860	
2001				700			1,897	[c]
2002	No surveys flown						2,765	
2003	No surveys flown						2,778	[c]
2004	No surveys flown						1,968	[c]
Averages								
85-03	991	177	300	996	756	969	2,901	
94-03	655			470	366		2,391	
2005	No surveys flown						1,408	

[a] Surveys not made every year at each tributary.
[b] Includes several streams from Lo-Fog to Goat Creek.
[c] Incomplete count due to machine malfunction.
[d] No counts due to malfunction of the counter.

Appendix E. 10. Aerial survey index counts of Alsek River Chinook salmon escapements, 1984 to 2005.

Year	Blanchard River	Takhanne River	Goat Creek
1984	304	158	28
1985	232	184	
1986	556	358	142
1987	624	395	85
1988	437	169	54
1989	[a]	158	34
1990	[a]	325	32
1991	121	86	63
1992	86	77	16
1993	326	351	50
1994	349	342	67
1995	338	260	
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
Averages			
84-04	280	211	48
95-04	229	182	36
2005	112	47	7

[a] Not surveyed due to poor visibility. 89,90 Blanchard
[b] Late survey date which missed the peak of spawning goat 95

Appendix E. 11. Alsek River run of large (=>660 mef) Chinook salmon, 1997-2004.

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

	Inriver Run			U.S. Catch		Total			
	Past	Confidence Interval		Dry Bay		Inriver	Canadian Catch		
Year	Dry Bay	Lower	Upper	Comm.	Subsist.	Run	AFF	Sport	Escape.
1997	15,250	9,081	21,418	568	38	15,856	232	298	14,720
1998	4,967	3,027	9,765	550	63	5,580	171	175	4,621
1999	11,969	8,243	22,035	482	44	12,495	238	174	11,557
2000	8,432	6,805	14,308	677	73	9,182	65	77	8,290
2001	11,246	9,146	14,303	541	19	11,806	120	157	10,969
2002	8,807	8,345	10,790	700	60	9,567	120	197	8,490
2003	5,105	4,302	6,310	937	24	6,066	90	138	4,877
2004	7,565			239	31	7,835	0	56	7,509
Averages									
97-04	9,168			587	44	9,798	130	159	8,879

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

	Weir Count		Percent
	All	Large	Klukshu
1997	2,989	2,864	19.5%
1998	1,364	1,184	25.6%
1999	2,193	1,663	14.4%
2000	1,365	1,218	14.7%
2001	1,825	1,538	14.0%
2002	2,240	2,067	24.3%
2003	1,737	1,313	26.9%
2004	1,070	2,376	31.6%
Averages			
97-04	1,848	1,778	21.4%

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

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

[a] Few systems surveyed

Appendix F. 1. Tahltan Lake egg collection, fry plants, and survivals, 1989-2005.

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		
Broodyear	Target	Collected	Tahltan	Planted	Fertilized	Fertilized Egg-Fry	Green Egg-Fry	Thermal Mark Pattern
1989	3.000	2.955	2.955	1.042	0.704	0.501	0.353	1:1.4
1990	5.000	4.511	4.511	3.585	0.824	0.964	0.795	1:1.3
1991	5.000	4.246	1.514	1.415	0.949	0.985	0.935	1:1.4
1992	5.400	4.901	2.154	1.947	0.919	0.983	0.904	1:1.5+2.3
1993	6.000	6.140	0.969	0.904	0.946	0.986	0.933	1:1.6+2.5N
1994	6.000	4.183	1.418	1.143	0.929	0.868	0.806	1:1.6
1995	6.000	6.891	3.008	2.296	0.906	0.843	0.763	1:1.7
1996	6.000	6.402	3.169	2.313	0.923	0.791	0.730	1:1.6
1997	6.000	3.221	2.700	1.900	0.812	0.867	0.704	2:1.6
1998	6.000	4.022	1.998	1.671	0.911	0.918	0.836	1:1.7
1999	6.000	3.505	2.773	2.228	0.901	0.890	0.803	2:1.6
2000	6.000	2.388	2.388	1.873	0.920	0.853	0.784	1:1.7
2001	6.000	3.306	3.306	2.533	0.829	0.924	0.766	2:1.6
2002	6.000	4.050	2.780	2.623	0.926	1.019	0.944	1:1.7
2003	6.000	5.391	2.661	2.226	0.899	0.931	0.837	1:1.6 & 1:1.5+2.4
2004	6.000	5.701	1.966	1.266	0.800	0.920	0.644	1:1.6+2.6
Averages								
89-04	5.650	4.488	2.517	1.935	0.881	0.890	0.784	
95-04	6.000	4.488	2.675	2.093	0.883	0.895	0.781	
2005	6.000	4.552	1.809	1.280	0.800	0.890	0.710	1:1.4+2.2

Appendix F. 2. Tuya Lake fry plants and survivals, 1991-2005.

	Egg Take			Survival		Thermal
	Designated	Fry	Percent	Fertilized	Green	Mark
Brood Year	Tuya	Planted	Fertilized	Egg to Fry	Egg to Fry	Pattern
1991	2.732	1.632	0.944	0.633	0.597	1:1.6
1992	2.747	1.990	0.929	0.780	0.724	1:1.7
1993	5.171	4.691	0.911	0.996	0.907	1:1.4+2.5N
1994	2.765	2.267	0.870	0.943	0.820	1:1.4
1995	3.883	2.474	0.795	0.802	0.637	1:1.4+2.4
1996	3.233	2.614	0.932	0.868	0.809	1:1.4
1997	0.052	0.433	0.911	0.912	0.831	2:1.4
1998	2.024	1.603	0.917	0.864	0.792	1:1.4
1999	1.053	0.867	0.960	0.860	0.823	2:1.4
2000 [a]	0.000	0.000				
2001 [a]	0.000	0.000				
2002	1.271	1.124	0.904	0.978	0.884	1:1.7+2.3
2003	2.730	2.445	0.927	0.966	0.896	1:1.4
2004	3.734	3.201	0.920	0.950	0.857	1:1.6+2.4
Averages						
91-04	2.243	1.810	0.910	0.879	0.798	
95-04	1.798	1.476	0.908	0.900	0.813	
2005	2.744	2.138	0.9	0.86	0.779	1:1.4+2.4

[a] All eggs collected in 2000 and 2001 were for backplant into Tahltan Lake.

Appendix F. 3. Tatsamenie Lake egg collection, fry plants, and survivals, 1990-2005.

Brood	Egg Take			Fry	Percent	Egg to Fry Surv.			Last Date
Year	Target	Collect [a]	Ship	Planted	Fert.	Fert.	Green	Thermal Mark Pattern	Release
1990	2.500	0.985	0.985	0.673	0.775	0.882	0.683	1:1.3	22-Jun
1991	1.500	1.360	1.360	1.232	0.927	0.977	0.906	2:1.4	26-Jun
1992	1.750	1.486	1.486	0.909	0.858	0.713	0.612	1:1.5	14-Jul
1993	2.500	1.144	1.144	0.521	0.619	0.735	0.455	2:1.5	14-Jul
1994	2.500	1.229	1.229	0.898	0.801	0.912	0.731	1:1.5	21-Jul
1995	2.500	2.407	2.407	1.724	0.843	0.850	0.716	1:1.5	25-Jun
1996	5.000	4.934	4.934	3.945	0.849	0.942	0.800	1:1.5&1:1.5,2.3	27-Jun
1997	5.000	4.651	4.651	3.597	0.910	0.850	0.773	2:1&2:1.5,2.3	9-Jul
1998	2.500	2.414	2.414	1.769	0.897	0.817	0.733	1:1.4+2.5&1:1.4+2.3	30-Jun
1999	2.500	0.461	0.461	0.350	0.922	0.824	0.759	2:1.5	4-Jul
2000	3.000	2.816	2.572	2.320	0.943	0.956	0.902	1.1.5+2.3&1.1.5	26-Jun
2001	4.800	4.364	3.499	2.233	0.900	0.709	0.638	2:1.5&2:1.5,2.3	25-Jun
2002	3.000	2.498	2.302	1.353	0.823	0.714	0.588	1:1.4&1:1.4+2.3	27-May
2003	5.000	2.642	2.452	2.141	0.919	0.950	0.873	1.1.5+2.3&1.1.5	27-May
2004	5.000	0.750	0.750	0.628	0.933	0.898	0.837	1:1.4+2.5n&1:1.4+2.3,3.3	20-May
Averages									
90-04	3.270	2.276	2.177	1.619	0.861	0.848	0.733		24-Jun
95-04	3.830	2.794	2.645	2.006	0.894	0.849	0.760		18-Jun
2005	5.000	1.811	1.811	1.471	0.936	0.868	0.813	1:1.4+2.3&1:1.4+2.5	8-Jun

Multiple Release Treatments

Brood	Treatment 1		Released		Treatment 2		Released	
Year	Mark	Treatment	Number	Date	Mark	Treatment	Number	Date
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 ear.	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
Averages								
96-04			1.336				0.724	
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

[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.