

**PACIFIC SALMON COMMISSION JOINT  
TRANSBOUNDARY TECHNICAL COMMITTEE**

**ESTIMATES OF TRANSBOUNDARY RIVER SALMON  
PRODUCTION, HARVEST AND ESCAPEMENT  
AND A REVIEW OF JOINT  
ENHANCEMENT ACTIVITIES IN 2001**

**REPORT TCTR (13)-1**

**July 2013**

## ACRONYMS

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

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## EXECUTIVE SUMMARY

Final postseason estimates of harvest and escapements of Pacific salmon returning to the transboundary Stikine, Taku, and Alsek Rivers for 2001 are presented and compared with historical patterns. Average, unless stated differently, refers to the 1991-2000 averages. Relevant information pertaining to the management of appropriate U.S. and Canadian fisheries is presented and the use of inseason management models is discussed. Final results from transboundary river sockeye salmon, *Oncorhynchus nerka*, enhancement projects are also reviewed.

### Stikine

The 2001 Stikine sockeye run is estimated at 127,300 fish, of which approximately 53,000 fish were harvested in various fisheries including test fisheries, 50 fish were taken at the Tahltan Lake weir for otolith samples, and 2,400 Tahltan fish were used for broodstock. An estimated 75,000 Stikine fish escaped to spawn including 19,200 fish which migrated to the Tuya block and were not harvested. The catch and the run were below averages. The Tahltan escapement was below goal but the highest since 1996. The estimated U.S. commercial catch of Stikine sockeye salmon in Districts 106 and 108 was 23,500 fish and the Canadian inriver commercial, aboriginal, and ESSR fishery catches were 19,900, 5,200, and 400 fish, respectively. The inriver test fishery harvested 3,300 sockeye salmon and there was no marine test fishery in 2001. The postseason estimate of 127,300 sockeye salmon was above the preseason forecast of 113,000 fish. The Stikine Management Model over forecast the entire run throughout the season but correctly forecast little or no allowable catch on the Tahltan stock during all but two weeks. Weekly inseason model forecasts ranged from 155,000 to 219,000 sockeye salmon; the final inseason model prediction was 164,000 fish with a total allowable catch (TAC) of 80,000 fish. Based on the inseason model estimates, both Parties harvested below their 50% target of the TAC (40,000 Stikine sockeye salmon). However, using the final postseason estimate of run size and TAC, the U.S. harvested below its TAC and Canada harvested 19% above its TAC. The broodstock collection and otolith sampling removed 2,400 and 50 sockeye salmon, respectively; from the escapement to Tahltan Lake leaving a spawning escapement of 12,400 fish, falling below the spawning escapement goal of 20,000 fish. The estimated spawning escapement of 40,900 mainstem Stikine sockeye salmon was within the objective of 20,000 to 40,000 fish for this stock group.

The Chinook catch in Canadian commercial and aboriginal fisheries in the Stikine River was 1,700 large fish and 100 non large; below the respective averages. An additional 1,800 large and 60 non large Chinook salmon were taken in the Canadian inriver test fishery. The U.S. marine catch of Chinook salmon (all stocks) in the District 106 and 108 mixed stock gillnet fisheries was 1,100 fish and was below average. The Chinook spawning escapement of 10,000 large adults through the Little Tahltan River weir in 2001 was above the recently revised joint U.S./Canada escapement goal range 2,700 to 5,300 fish, was above average. The total postseason Stikine Chinook escapement estimate from a mark recapture study was 62,500 fish; above the goal of 14,000 to 28,000 fish.

As with Chinook salmon, the U.S. marine harvest of Stikine coho salmon is unknown since there is no stock identification program for this species. Mixed stock coho catch in Districts 106 was 188,500 and was average and the District 108 catch was 10,700 fish and was below average. Alaskan hatchery fish comprised approximately 35% (70,000 fish) of the coho harvest from the two districts. The Canadian inriver coho catch of 233 fish was below average. DFO used test fishery coho and sockeye CPUE to estimate coho salmon—test fishery coho CPUE indicated the inriver coho run was approximately 36% of the inriver sockeye run or roughly 44,000 fish, within the interim escapement goal range of 30,000 to 50,000 fish. The mark-recapture estimate indicated twice this escapement or 88,000 fish (range 61,000 to 126,000 fish). Aerial surveys of coho spawning index sites were above average, which also indicated an above average inriver run.

## **Taku**

The final postseason estimate of the 2001 Taku sockeye run is 400,700 fish, including an estimated catch of 256,000 fish and an above-border spawning escapement of 144,000 sockeye salmon. The run size was above average, the total catch was a record, and the escapement was roughly twice escapement goal range of 71,000 to 80,000 fish. An estimated 208,000 Taku sockeye salmon were harvested in the District 111 commercial fishery, above average, and an estimated 1,500 sockeye salmon were harvested in the U.S. inriver personal use fishery. Canadian inriver commercial catch was 48,000 and aboriginal fishery catch was 210 sockeye salmon. The Canadian commercial catch was above average. Since the escapement goal is expressed as a range, the resulting total allowable catch is also expressed as a range. In 2001, Canada harvested an estimated 22% to 15%, and the U.S. took 80% to 64% of the total allowable catch.

The catch of large Chinook salmon in the Canadian commercial fishery in the Taku River was 1,500 fish, which was below average; in addition, 118 non large Chinook salmon were caught. The Canadian aboriginal fishery in the Taku River harvested 125 large Chinook salmon. The Chinook catch in the District 111 mixed stock gillnet fishery was 1,700 fish, and was below average. Approximately 28% of the catch was estimated to be of Alaska hatchery origin. The aerial survey escapement index of 5,000 Chinook salmon counted in Taku River index areas was below average but within the recently revised index escapement goal range of 5,800 to 10,500 fish. The above-border mark-recapture estimate of 44,700 Chinook salmon is within the escapement goal range of 30,000 to 55,000 fish.

The estimated above border run of Taku coho salmon in 2001 is 107,000 fish, which was above the average. The Canadian inriver commercial catch included 3,000 coho salmon, which was below average. After upriver Canadian catches are subtracted from the inriver run, the above-border-spawning escapement is estimated at 104,000 coho salmon, which exceeds the minimum escapement goal of 38,000 fish. The U.S. harvest of 23,000 coho salmon in the District 111 mixed stock fishery was below average. Alaskan hatcheries contributed an estimated 7% of the District 111 harvest, or 1,600 fish.

The harvest of 123,000 pink salmon in District 111 was average. Pink salmon were not retained in the Canadian commercial inriver fishery in 2001. The escapement of pink salmon to the Taku River was likely below average as evidenced by the fish wheel catch and release of 9,100 pink salmon, which was below average.

The catch of chum salmon in the District 111 fishery was 237,000 fish; composed of 235,000 summer run fish (prior to mid-August) and 1,700 fall run fish. The catch of summer chum salmon, primarily Alaskan hatchery stocks, was below average. The catch of fall chum salmon, composed of wild Taku River and Port Snettisham stocks, was below average. As with pink salmon, there was non-retention of chum salmon in the Canadian inriver fishery and the reported catch was 0 fish in 2001. Although spawning escapement is not known the Canyon Island fish wheel catch of 250 chum salmon was below average.

## **Alsek**

The Alsek sockeye harvest of 14,000 fish in the U.S. commercial fishery was below average. The Canadian inriver catch of 1,200 fish was below average. The low catches were the result restrictions and closures in the commercial, sport, and aboriginal fisheries due to conservation concerns. The Klukshu River weir count of 10,300 sockeye salmon was below average, but within the goal-range of 7,500 to 15,000 fish. The count of 900 early-run sockeye salmon (count through August 15) was below average, whereas the count of 9,400 late run fish was average.

The U.S. Dry Bay catch of 500 Chinook salmon was average. The combined Canadian sport and aboriginal fishery catch of 300 Chinook salmon was below average. The 1,800 Chinook salmon counted through the Klukshu River weir was below average. Of the total count, 1,700 Chinook salmon were estimated to have spawned, thus achieving the escapement goal range of 1,100 to 2,300. Aerial survey index counts of other spawning systems were above average for the Blanchard and Takhanne Rivers and below average for Goat Creek.

Current stock assessment programs prevent an accurate comparison of Alsek coho runs with historical runs. The U.S. Dry Bay catch of 2,900 coho salmon was below average, while the combined Canadian inriver aboriginal and sport fishery catch of 99 fish was below average. The operation of the Klukshu weir does not provide a complete enumeration of coho salmon into this system since it is removed before the run is over; however, it does provide an annual index. The count of 750 coho salmon was below average.

## **Enhancement**

Eggs and milt were collected from the year 2001 sockeye escapements at Tahltan and Tatsamenie Lakes. For the fifth year in a row the 6.0 million egg-take goal was not achieved at Tahltan Lake due to low escapement. A total of 3.3 million eggs were collected at Tahltan Lake. At Tatsamenie Lake, 3.5 million eggs were collected for the hatchery and 0.8 million eggs were collected for the in-lake incubation project.

Outplants of 2000 brood-year sockeye fry in May and June 2001 included 1.9 million fry into Tahltan Lake, no fry into Tuya Lake, and 2.2 million fry into Tatsamenie Lake. Green-egg to planted-fry survivals were 77%, and 90% for these outplants, respectively. Survival to emergence was generally at, or above, expected levels with one pair of incubators lost to Infectious Hematopoietic Necrosis (IHN). Losses from IHN have occurred in the past at Snettisham Hatchery and are expected in sockeye salmon culture.

Outmigrant smolt sampling was conducted at Tahltan and Tatsamenie Lakes in 2001. Total emigration from Tahltan Lake was an estimated at 1,496,000 smolts with approximately 44% (654,000 outmigrants) from past fry plants. Sampling at Tuya Lake was conducted to estimate age and size composition of the outmigrants but the magnitude of the emigration was not estimated. Sample size at this location was limited due to logistics and timing. The Tatsamenie Lake smolt mark-recapture program estimated that 72,000 (95% CI: 54,000 – 89,000), smolts emigrated from the lake with planted fish contributing approximately 12% of the total (9,000 smolts).

The egg incubation and thermal-marking program was continued at Snettisham Hatchery in 2001. 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 otoliths were processed inseason by the ADF&G otolith lab to estimate the weekly contribution of fish from U.S./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. Final contribution estimates of planted fish to Alaskan catches were 13,000 Stikine sockeye salmon to District 106 and 108 (8% of catch) and 9,000 Taku sockeye salmon to District 111 (4% of catch). Final estimates of contributions to Canadian fisheries included 10,000 sockeye salmon (38% of catch) to Stikine fisheries and 2,000 sockeye salmon to the Taku fisheries (4% of catch).

## INTRODUCTION

This report presents final estimates of the 2001 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) 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 forecasts for run strengths and initial TAC estimates for the various species and rivers. The results of this meeting are summarized in: **Pacific Salmon Commission Transboundary Technical Committee. 2001. *Salmon Management and Enhancement Plans for the Stikine, Taku and Alsek Rivers, 2001. Report TCTR 01-1.***

Run reconstruction analyses are conducted on the sockeye runs to the three rivers for the purpose of evaluating the stocks and the fisheries managed for these stocks. No estimates of marine catch are made for Alaskan fisheries outside of District 106 and 108 for Stikine stocks, District 111 for Taku stocks and Subdistrict 182-30 & 31 for Alsek 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. In addition, a Canadian terminal area fishery is operated in the lower Tuya River and/or at Tahltan Lake when escapements are estimated to be surplus to spawning requirements (ESSR) (Figure 1). A small sport fishery also exists in the Canadian sections of the Stikine 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 2001. 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 9 portion of Frederick Sound was expanded to target hatchery Chinook salmon; four previous areas were combined into one large area that also included previously unopened waters. This area was the same in 2001.

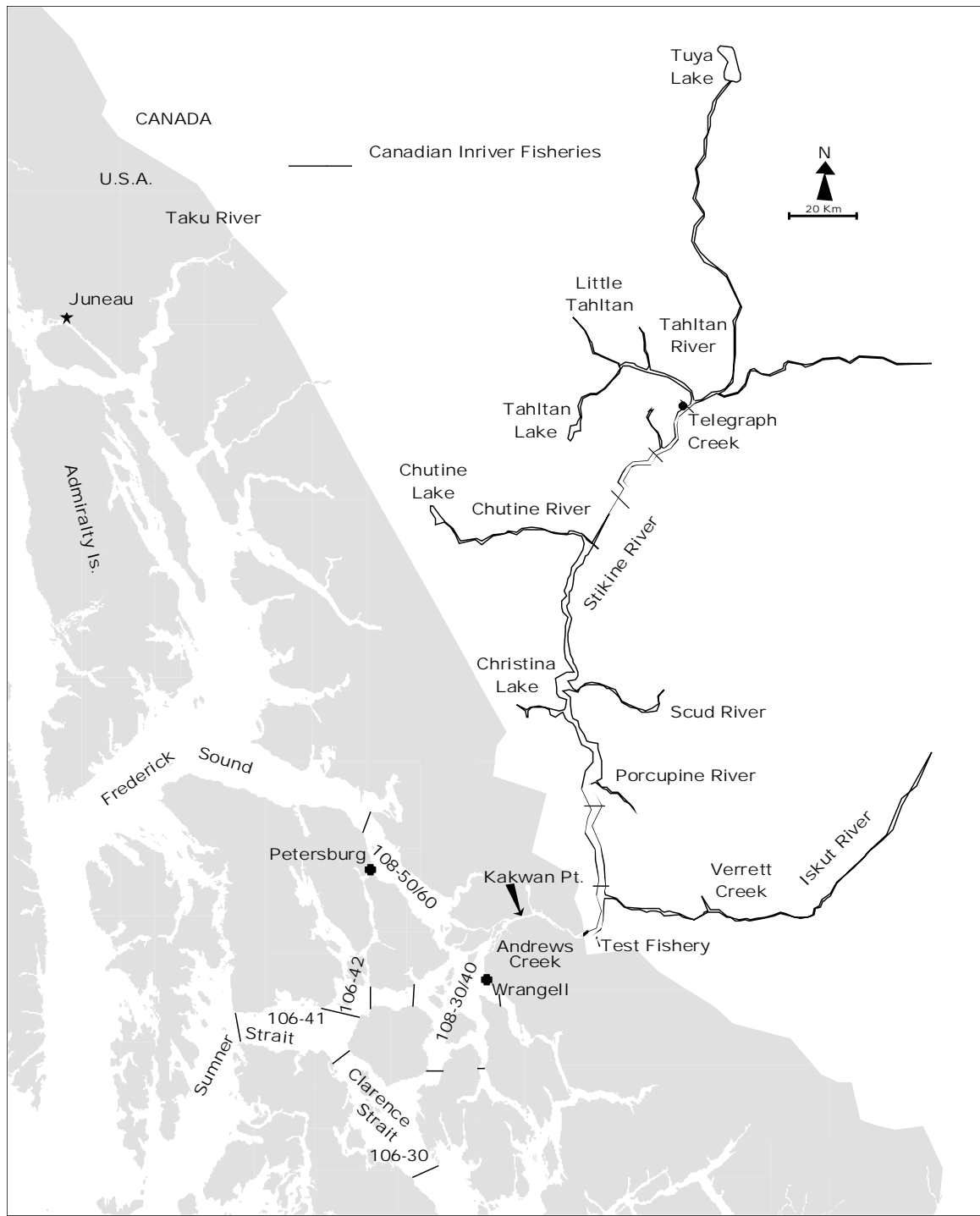


Figure 1. The Stikine River and principal U.S. and Canadian fishing areas.

## 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 salmon which are expected to be in place for the 1999 to 2008 period:

1. General:

The Parties shall improve procedures for coordinated or cooperative management of the fisheries on transboundary river stocks. To this end, the Parties affirm their intent to develop and implement abundance-based management regimes for transboundary Chinook, sockeye and coho salmon no later than May 1, 2004.

2. Sockeye Salmon:

(i) Assessment of the annual run of Stikine River sockeye salmon shall be made as follows:

a. a preseason forecast of the Stikine sockeye run will be made by the Committee prior to April 1 of each year. This forecast may be modified by the Committee prior to the opening of the fishing season;

b. inseason estimates of the Stikine sockeye run and the Total Allowable Catch (TAC) shall be made under the guidelines of an agreed Stikine Management Plan and using a forecast model developed by the Committee. Both U.S. and Canadian fishing patterns shall be based on current weekly estimates of the TAC. At the beginning of the season and up to an agreed date, the weekly estimates of the TAC shall be determined from the pre-season forecast of the run strength. After that date, the TAC shall be determined from the inseason forecast model;

c. modifications to the Stikine Management Plan and forecast model may be made prior to June 1 of each year by agreement of both Parties. Failure to reach agreement in modifications shall result in use of the model and parameters used in the previous year; and

d. estimates of the TAC may be adjusted inseason only by concurrence of both Parties' respective managers. Reasons for such adjustments must be provided to the Committee.

(ii) The Parties desire to maximize the harvest of planted Tahltan/Tuya sockeye salmon in their existing fisheries while considering the conservation needs of wild salmon runs. The Parties agree to manage the runs of Stikine sockeye salmon to ensure that each country obtains 50% of the TAC in their existing fisheries. Canada will endeavor to harvest all fish surplus to escapement and broodstock needs returning to the Tuya and Tahltan Lake systems.

(iii) The Parties agree to continue the existing joint enhancement programs designed to produce annually 100,000 returning sockeye salmon.

(2) Coho salmon:

(i) Consistent with paragraph 1 above, the Parties agree to develop and implement an abundance-based approach to managing coho salmon on the Stikine River. Assessment programs need to be further developed before a MSY escapement goal can be established.

(ii) In the interim, the United States' management intent is to ensure that sufficient coho salmon enter the Canadian section of the Stikine River to meet the agreed spawning objective, plus an annual Canadian catch of 4,000 coho salmon in a directed coho fishery.

(3) Chinook salmon:

(i) 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 Stikine River are achieved.

(ii) The Parties agree that new fisheries on Stikine Chinook salmon will not be developed without the consent of both Parties. Consistent with paragraph 2, management of new directed fisheries will be abundance-based through an approach to be developed by the Committee. The Parties agree to implement assessment programs in support of the development of an abundance-based management regime.

(iii) The Parties shall review an appropriate MSY escapement goal for Stikine Chinook salmon by May 1999 and establish a new goal as soon as practicable thereafter.

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 run forecast model, referred to as the Stikine Management Model (SMM). The model was upgraded to provide inseason forecasts of the total Stikine sockeye 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 2001 was based on CPUE data from 1985 to 2000 from District 106 and the Canadian commercial fishery in the lower river and from 1986 to 2000 from the lower Stikine 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 2000, the intercept was forced to be zero in order to correct for a tendency to overestimate the run size in the earlier weeks during years of low abundance. In 2001 the inriver test fishery was used as the primary inseason index of inriver run strength. Calculations were also made for the lower Stikine commercial CPUE, which excluded catch and effort data from the Flood Glacier area, i.e. the new area introduced in 1997 and fished through the 2000 season. 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 pre-1994 era.

In 2001, the preseason forecasts were used during statistical weeks 25 (June 17 – 23) through 27 (July 1– 7). After week 27, inseason forecasts of total run size and TAC, produced by the SMM and based on catch-per-unit-effort (CPUE) data, were used to assist in determining weekly fishing plans (Table 1). 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 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; and, the catch and assumed stock composition in District 108 and Subdistrict 106-30. Final 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, which was expected to be below average in 2001.

Table 1. Weekly forecasts of run size and total allowable catch for Stikine River sockeye salmon as estimated inseason by the Stikine Management Model, 2001.

| Stat.<br>Week   | Start<br>Date | Forecast<br>Run Size | TAC     |        |        | Cumulative Catches <sup>a</sup> |        |  |
|---|---------------|----------------------|---------|--------|--------|---------------------------------|--------|--|
|   |               |                      | Total   | U.S.   | Canada | U.S.                            | Canada |  |
| Model runs generated by Canada                          |               |                      |         |        |        |                                 |        |  |
| 26  | 24-Jun        | 113,000              | 27,200  | 13,600 | 13,600 | 6,886                           | 237    |  |
| 27  | 01-July       | 113,000              | 27,200  | 13,600 | 13,600 | 12,691                          | 3,369  |  |
| 28  | 08-Jul        | 200,532              | 111,799 | 55,900 | 55,900 | 22,142                          | 8,491  |  |
| 29  | 15-Jul        | 218,648              | 132,036 | 66,018 | 66,018 | 30,014                          | 13,521 |  |
| 30  | 22-Jul        | 197,148              | 107,433 | 53,716 | 53,716 | 31,614                          | 13,996 |  |
| 31  | 29-Jul        | 195,592              | 107,102 | 53,511 | 53,511 | 26,400                          | 22,787 |  |
| 32  | 05-Aug        | 188,995              | 105,119 | 52,560 | 52,560 | 26,400                          | 23,683 |  |
| 33  | 12-Aug        | 170,796              | 84,725  | 42,362 | 42,362 | 26,300                          | 23,683 |  |
| 34  | 19-Aug        | 164,161              | 78,394  | 39,197 | 39,197 | 39,197                          | 23,683 |  |
| Model runs generated by the U.S.                        |               |                      |         |        |        |                                 |        |  |
| 25  | 17-Jun        | 113,000              | 26,642  | 13,321 | 13,321 | 2,146                           |        |  |
| 26  | 24-Jun        | 113,000              | 26,642  | 13,321 | 13,321 | 6,886                           | 237    |  |
| 27  | 01-Jul        | 113,000              | 26,642  | 13,321 | 13,321 | 13,363                          | 3,639  |  |
| 28  | 08-Jul        | 192,828              | 119,089 | 59,545 | 59,545 | 22,441                          | 7,822  |  |
| 29  | 15-Jul        | 211,202              | 138,666 | 69,333 | 69,333 | 28,830                          | 13,521 |  |
| 30  | 22-Jul        | 211,202              | 119,071 | 59,536 | 59,536 | 26,207                          | 20,282 |  |
| 31  | 29-Jul        | 171,950              | 85,361  | 42,681 | 42,681 | 26,402                          | 20,282 |  |
| 32  | 05-Aug        | 155,603              | 70,241  | 35,121 | 35,121 | 27,067                          | 24,162 |  |
| 33  | 12-Aug        | 170,796              | 86,459  | 43,230 | 43,230 | 27,179                          | 24,162 |  |
| 34  | 19-Aug        | 164,161              | 80,098  | 40,049 | 40,049 |                                 |        |  |
| Final Postseason end-of-season estimate (from Table 2). |               |                      | 127,255 |        |        |                                 |        |  |

<sup>a</sup> 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 was added to the historical proportion of Tahltan fish in the SMM since this stock was not present in the historical database. No adjustments were made in District 108 which was not open during the sockeye fishery.

The preseason forecast for the Stikine sockeye run was 113,000 fish (Table 1), which indicated a run size below average (Appendix B.28). The forecast included approximately 23,600 natural Tahltan sockeye salmon (21%), 4,400 planted Tahltan fish (4%), 35,000 planted Tuya sockeye salmon (31%), and 50,000 mainstem fish (44%). Canadian inseason predictions of total run ranged from 164,161 to 218,648 sockeye salmon; U.S. forecasts ranged from 155,603 to 211,202 sockeye salmon (Table 1). All forecasts indicated an above average total Stikine run but a below average Tahltan run. As in 2000, the preseason forecast

was more accurate than inseason forecasts. U.S. and Canadian weekly predictions differed due to different catch data input used for the updates.

Inseason management was influenced significantly by forecasts derived from the SMM which was updated and refined by the TTC prior to the season. The model is based on the historical relationship between cumulative CPUE and run size and provides three sets of independently generated forecasts for the Tahltan, Tuya, and mainstem runs: one set based on US District 106 CPUE, another based on Canadian inriver commercial CPUE and the last based on Canadian test fishery CPUE. Each CPUE and run size data set is significantly correlated. Unfortunately, the inseason forecasts exhibited a very wide range in 2001; the forecasts generated from the inriver commercial CPUE were consistently higher than those derived from District 106 or inriver test fishery CPUE data. The forecasts derived from the inriver test fishery data were consistently the lowest. The inriver test fishery CPUE was the forecast used inseason because it has the most consistent historical database of the three data sets.

The final postseason estimates of run size and TAC are well below the predictions that were used inseason for management. For week 28 the model predicted a TAC for the Tahltan stock of approximately 10,000 for each country; in all other weeks the model correctly predicted that there was little or no TAC for the Tahltan stock. Part of the difference between the final inseason run size estimate and the final postseason estimate is due to the different methods used. The postseason estimate is based on the inriver commercial fishery CPUE. Comparison of the two estimates will be made when the TTC reviews SMM performance and evaluates additional management tools prior to the 2001 fisheries.

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

The 2001 gillnet harvest in District 106 included 1,057 Chinook; 164,013 sockeye; 188,465 coho; 825,330 pink, and 282,910 chum salmon (Appendix A.1 and B.1). The harvests of Chinook, pink, and chum salmon were above average, while the 2001 harvest of sockeye and coho salmon were both average. The final postseason estimate of the contribution of Stikine sockeye salmon to the District 106 total harvest was 23,423 fish or 14.3% of the harvest (Appendices A.2 and B.2). An estimated 446 Chinook salmon in the District 106 harvest (42.2%) were of Alaska hatchery origin. An estimated 35.8% of the coho harvest was of Alaskan hatchery origin. The pink salmon harvest in District 106 was above average. The District 106 drift gillnet fishery was open for 50 days from June 17 through October 13 (Appendices A.1 and B.1). This was above average fishing time. Sections 6-A, 6-B, and 6-C were open simultaneously each week throughout the season. Fishing effort in number of vessels fishing in District 106 was below the average for the most of the season (Appendix B.1). The greatest effort in both vessels fishing and boat days occurred week 29 during the week beginning July 15 when 121 vessels fished for 3 days. Boat-days in District 106 were average (Appendix B.1).

The Sumner Strait fishery (Subdistricts 106-41 & 42) harvested an estimated 17,004 Stikine sockeye salmon (Appendices A.3, A.4, B.3, and B.4), 17.1% of the total sockeye harvest in that subdistrict. The Clarence Strait fishery (Subdistrict 106-30) harvested 6,419 Stikine sockeye salmon (Appendices A.5, A.6, B.5, and B.6), 10% of the total sockeye harvest in that subdistrict.

In District 108, 7 Chinook, 610 sockeye, 10,731 coho, 11,012 pink, and 5,397 chum salmon were harvested for the season (Appendices A.7 and B.7). The District 108 fishery harvested 77 Stikine sockeye salmon (Appendices A.8 and B.8), 12.6% of the District 108 sockeye harvest. The District 108 fishery started on July 29 and ran through October 13. The 36 days the district was open was below average (Appendices A.7 and B.7). District 108 was not opened until week 31 due to an expected very weak run of Tahltan sockeye salmon. Because the fishery was delayed, comparisons of 2001 harvest to previous 10-year averages are meaningless. An estimated 23.9% of the coho harvest was of Alaskan hatchery origin. The fishing effort in number of vessels fishing in District 108 was below average most openings

except during week 35 at the end of August. The season effort of 377 boat-days in District 108 was below average (Appendix B.7). Once again the conservative fishing time in District 108 was in place to restrict access to those areas closest to the Stikine River (allowing almost all Tahltan sockeye salmon additional time and protection to pass through this area).

The District 108 test fishery did not take place in 2001 (Appendix A.9). Annual harvests and stock compositions from 1960 to 2000 for District 6 and 8 test fishery are provided in Appendices B.9-B.11.

Harvests in Districts 106 and 108 consist of species of mixed stock origin; the contribution of Stikine stocks is estimated only for sockeye salmon. The proportions of Stikine sockeye salmon in the District 106 and 108 harvests were estimated inseason using both the historical proportions of each stock and the inseason proportions of thermally marked fish from fry plants to Tahltan and Tuya Lakes.

The District 106 gillnet season began 12:00 noon on Sunday, June 17 (statistical week 25) for a 48 hour period. This 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. District 108 was closed for this opening, in order to attain the desired sockeye escapement to Tahltan Lake. Due to the high potential for an extremely weak Tahltan sockeye run and the desired escapement of 24,000 fish to the lake, no openings were expected in District 108 and no fishery extensions were expected in District 106 for the first 4-5 weeks of the fishing season. The estimated sockeye CPUE in District 106 for statistical week 25 was above average for this week. However, the fishery was open in week 25 in only 4 years during the 1991-2000 period. Based on aerial survey, an estimated 42 boats were fishing in Sumner Strait (106-41) and 6 boats were fishing in Clarence Strait (106-30) during this opening. The otolith readings for District 106 for week 25 indicated that the marked stock composition of the harvest in Sumner Strait had a low proportion of planted Tahltan fish (1%) and a much higher proportion of Tuya fish (20%) from the 287 fish sampled. The preseason Stikine Management Model (SMM) forecast a total Stikine TAC of 26,642 fish and a Tahltan TAC of 3,554 fish. This would allow the U.S. fisheries to harvest a total of 13,321 Stikine fish, including 1,777 Tahltan fish. The pre-season forecast was used for weeks 25-27; the inriver test fishery CPUE data was used for the remainder of the sockeye season.

During statistical week 26 (June 24-June 30) there were 50 boats fishing in Sumner Strait and 34 boats fishing in Clarence Strait (Appendices A.3 and A.5). District 108 remained closed and no fishery extension was given in District 106. The estimated sockeye CPUE in District 106 was well above average for this week. The high CPUE under normal, historical circumstances would have warranted a 24-hour extension of fishing time in District 106. However, the decision not to extend the fishing period was based on the forecast for a weak Tahltan sockeye run.

During statistical week 27 (July 1-July 7) there were 57 boats fishing in Sumner Strait (106-41) and 37 boats were fishing in Clarence Strait (106-30; Appendices A.3 and A.5). The estimated sockeye harvest and CPUE was lower this week than in week 25 and 26, and near average. Once again District 108 remained closed and no extension was given in District 106 for this opening. This week the SMM switched from the preseason forecast to a forecast based on the Canadian inriver test fishery CPUE for the week 28 projections. The SMM for week 27 indicated that the District 106-41 catch was comprised of 3.1% marked Tahltan fish and 34.9% marked Tuya fish. During this opening Canadian commercial harvest information from otolith samples showed 6.2% marked Tahltan and 34.9% marked Tuya fish. The estimated U.S. Tahltan harvest by the end of this week was 6,166 sockeye salmon, while the estimated TAC projected for week 28 jumped to 17,951 fish due to the switch from preseason forecast to inseason test fish CPUE forecasts.

During statistical week 28 (July 8-July 14) there were 90 boats in District 106 (66 in 106-41 and 25 in 106-30; Appendices A.3 and A.5). Survey on the fishing grounds showed that both the harvest and the

CPUE for the two-day opening in District 106 were well above average for both subdistricts. Again, under normal circumstances this data would have led to extended fishing time. Historically the Tahltan sockeye run peaks in District 106 in week 27; however, the 2001 statistical weeks were almost a week earlier than in a normal calendar year, which would have made this year's run timing more similar to statistical week 29 (with the majority of the run through the District 106 fishery). The week 28 SMM forecast for week 29 showed the Stikine inriver run increasing to 219,479 sockeye salmon and the Tahltan run increasing to 46,890 fish. This increased the total Stikine sockeye TAC to 138,666 (U.S. TAC: 69,333) with a Tahltan total TAC of 22,444 (U.S. TAC: 11,222). The estimated U.S. harvest of Tahltan sockeye salmon was estimated at 12,933 fish. Despite the high CPUE and due to the SMM indication that no additional Tahltan sockeye salmon could be harvested in U.S. fisheries, there was no extension given and District 108 remained closed.

During statistical week 29 (July 15-July 21) there were 121 boats fishing in District 106. This opening started at two days, with an enlarged closure around Salmon Bay. Due to above average CPUE in subdistricts and a drop in proportion of Tahltan sockeye salmon in the Canadian test fishery to 13% of the catch in week 29, a 24 hr extension was given to the fishery on the grounds, extending the fishery until noon Wednesday. District 108 again remained closed. Statistical week 29 had the highest sockeye CPUE of the 2001 season.

During statistical week 30 (July 22-July 28) there were 119 boats fishing in District 106. Due to the estimated low number of Tahltan sockeye salmon in the fishery during week 29 (8.5%) and the low historical average proportion Tahltan in the week 30 catch in District 106 (106-41 = 0.8%, 106-31 = 0.0%) the decision was made to open District 106 for three days. The sockeye CPUE for week 30 was above average. By the end of the fishing period, the total Stikine run forecast had dropped to 171,950 sockeye salmon with a Tahltan run of 19,078 fish, leaving no TAC. The week 30 SMM indicated a U.S. Tahltan harvest of 11,452 fish and a Canadian harvest of 2,853 Tahltan fish with no reported catches from the upper river commercial fishery since week 27 or the upper river Aboriginal fishery since week 28.

During statistical week 31 (July 29-August 4) there were 111 boats fishing in District 106 and 9 boats fishing in District 108. District 8 was opened for the first time this season with lines restricting access to areas closest to the Stikine River. These fishery restrictions were in place to allow Tahltan sockeye salmon to pass through District 108. Both Districts 106 and 108 were open for three days and the sockeye CPUE was below average. The SMM indicated a Stikine run of 155,603 sockeye salmon and a Tahltan run of 18,313 fish, again leaving no TAC for this stock. At this time the cumulative Tahltan harvest for the U.S. was estimated to be 11,463 fish and the Canadian harvest was estimated to be 2,706 fish in the lower river commercial catch and with no updates to the upper river commercial fishery since week 27 or the upper river Aboriginal fishery since week 28. There were no thermally marked Tahltan fish recovered in either district after week 29, and although the ratio of marked Tahltan fish to wild Tahltan fish was uncertain at this time, this did indicate that most or all the Tahltan fish had migrated through Districts 106 and 108 by late July. No mid-week openings or extensions were given since the harvests were below average and there was concern about over-harvesting island sockeye stocks which migrate through the fisheries during that time. This was the final week of directed sockeye salmon fishing in Districts 106 and 108. The final runs of the SMM for weeks 32-34 indicated runs of 164,161 Stikine sockeye salmon with 15,094 Tahltan sockeye salmon. The harvest for Tahltan sockeye salmon in the U.S. fisheries from the SMM was 11,769 and 4,096 for all of the combined Canadian fisheries. The sockeye escapement to Tahltan Lake reached just under 15,000, which suggests that the preseason forecast was close to the final estimate and the SMM over projected the run size during weeks 28 and 29 but was fairly accurate after that time. These numbers compare to final postseason harvest estimates of 3,687 Tahltan and 20,335 total Stikine fish in U.S. fisheries and 4,793 Tahltan and 25,600 total Stikine fish in Canadian fisheries.

During statistical week 32 (August 5–August 11) both District 106 and 108 were managed for pink salmon abundance. Typically this switch occurs during statistical week 33; however, this year’s statistical weeks were shifted almost a week earlier than most years. This opening was four days in Districts 106 and 108. All of District 108 was open with the exception of the Petersburg Creek closure in Fredrick Sound. Section 6D was closed from this week through statistical week 35. Pink salmon harvests in both districts are not always a true reflection of abundance because of low prices for pink salmon, along with good catches of other more valuable species, may affect the fishing patterns and methods. During the 2001 season, the fishing effort was nearly one-half of average in most weeks. High catches of chum salmon in other districts reduced the number of boats fishing in Districts 106 and 108. Despite the lowered effort, the pink salmon harvest for weeks 32–34 far exceeded averages, along with much higher CPUE. Due to the high numbers of pink salmon in both districts four-day fishing periods were allowed during statistical weeks 32 - 35 (August 5 – September 1).

Coho management in both the District 106 and 108 gillnet fisheries typically commences during late August or early September. During statistical week 36 (September 2 – September 8) the management emphasis changed from pink to coho salmon. The weekly catch of wild coho harvests prior to week 36 was usually above the average. Due to the projections of extremely good coho escapements throughout the region, along with above average wild CPUE, three-day openings were allowed in both districts from weeks 36 through week 40 (September 2–October 6). The season ended with a final two day opening during week 41 (October 7–13). In District 106, prior to the change to coho salmon management, the sockeye and pink salmon fisheries harvested 93,999 coho salmon, or approximately 50% of the total District 106 coho harvest.

### **Canadian Fisheries**

Postseason final catches from the combined Canadian commercial and aboriginal gillnet fisheries in the Stikine River in 2001 included: 1,491 large Chinook, 103 non large Chinook, 25,600 sockeye, 233 coho, 78 pink, and 56 chum salmon (Appendices A.10, A.13, B.12, B.15). In addition to these catches, 410 sockeye salmon were taken in an ESSR harvest in the Tuya River (Table 2). Catches of all species except pink salmon were below average (Appendices B.12 and B.15). The final estimate of the total sockeye contribution from the Canada/U.S. fry planting program to the combined Canadian aboriginal and commercial fisheries is 9,694 fish, 37.8% of the catch.

Three test fisheries (Chinook, sockeye and coho salmon) were conducted in the lower Stikine River in 2001, just upstream from the Canada/U.S. border. Combined test fishery catches included: 1,782 large Chinook, 103 non large Chinook, 3,281 sockeye, 1,761 coho, 198 pink, and 109 chum salmon, (Appendices A.15 and B.19). The objectives of the Chinook, sockeye, and coho test fisheries were to obtain data for respective mark-recapture programs and to collect information about run timing. Additional objectives of the sockeye test fishery were similar to those in previous years: to provide inseason catch, stock ID and effort data for input into the SMM to forecast the inriver run size; and, to determine migratory timing and stock composition of the sockeye run for use in the postseason estimations of the inriver sockeye and coho run sizes.

### **Lower Stikine Commercial Fishery**

Canadian commercial fishers in the lower Stikine harvested 826 large Chinook , 59 non large Chinook , 19,872 sockeye, 233 coho, 78 pink, and 56 chum salmon (Appendix A.10). The sockeye catch was below average (Appendix B.12). Catches of all species except pink salmon were below average (Appendices B.12). Based on final estimates, the stock composition of the lower river sockeye catch was as follows: 632 planted Tahltan fish, 3.2% of the sockeye catch; 2,850 wild Tahltan fish, 14.3% of the catch; 11,907 mainstem fish, 59.9% of the catch; and 3,482 planted Tuya fish, 26.6% of the catch (Appendix B.13).

Weekly guideline harvests, based on 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 sockeye season. Particular attention was directed at the inriver run and escapement forecasts of the various stock groupings. Management through statistical week 31 was focused primarily on the Tahltan sockeye stock after which it switched to mainstem sockeye stocks through the end of August, and then to coho salmon. The Tahltan sockeye stock was of particular concern given the preseason expectation of a below average run.

The fishery commenced at noon on Sunday, June 24 (statistical week 26) for a scheduled opening of one day. Fishing time was kept to 24 hours due to a below average CPUE of Tahltan fish and the expectation of a below average run of Tahltan sockeye salmon.

Table 2.—Run reconstruction for Stikine sockeye salmon, 2001.

|                    | Tahltan Mainstem | Total  | Tuya   | Tahltan |          | Total Stikine | All Planted | All Wild |        |
|--------------------|------------------|--------|--------|---------|----------|---------------|-------------|----------|--------|
|                    |                  |        |        | Wild    | Hatchery |               |             |          |        |
| Escapement a       | 14,811           | 40,855 | 55,666 | 19,208  | 8,946    | 5,865         | 74,874      | 25,072   | 49,802 |
| ESSR Catch b       |                  |        |        | 410     |          |               | 410         | 410      | 0      |
| Biological Samples | 50               | 50     |        |         | 30       | 20            | 50          | 20       | 30     |
| Broodstock         | 2,386            | 2,386  |        |         | 1,441    | 945           | 2,386       | 945      | 1,441  |
| Natural Spawning   | 12,375           | 40,855 | 53,230 |         | 7,475    | 4,900         | 53,230      | 4,900    | 48,330 |
| Excess c           |                  | 0      |        | 18,798  |          |               | 18,798      | 18,798   |        |
| Canadian Harvest   |                  |        |        |         |          |               |             |          |        |
| Indian Food        | 1,795            | 507    | 2,302  | 2,939   | 1,454    | 341           | 5,241       | 3,280    | 1,961  |
| Upper Commercial   | 213              | 45     | 258    | 229     | 148      | 65            | 487         | 294      | 193    |
| Lower Commercial   | 3,482            | 11,907 | 15,389 | 4,483   | 2,850    | 632           | 19,872      | 5,115    | 14,757 |
| Total              | 5,490            | 12,459 | 17,949 | 7,651   | 4,452    | 1,038         | 25,600      | 8,689    | 16,911 |
| % Harvest          | 46.4%            | 74.8%  | 63.0%  | 37.1%   |          |               |             |          |        |
| Test Fishery Catch | 684              | 1,673  | 2,357  | 924     | 560      | 124           | 3,281       | 1,048    | 2,233  |
| Inriver Run        | 20,985           | 54,987 | 75,972 | 27,783  | 13,958   | 7,027         | 103,755     | 34,810   | 68,945 |
| U.S. Harvest a     |                  |        |        |         |          |               |             |          |        |
| 106-41&42          | 3,164            | 2,777  | 5,941  | 11,063  | 1,723    | 1,441         | 17,004      | 12,504   | 4,500  |
| 106-30             | 3,175            | 1,342  | 4,517  | 1,902   | 3,024    | 151           | 6,419       | 2,053    | 4,366  |
| 108                | 0                | 74     | 74     | 3       | 0        | 0             | 77          | 3        | 74     |
| Total              | 6,339            | 4,193  | 10,532 | 12,968  | 4,747    | 1,592         | 23,500      | 14,560   | 8,940  |
| % Harvest          | 53.6%            | 25.2%  | 37.0%  | 62.9%   |          |               |             |          |        |
| Test Fishery Catch | 0                | 0      | 0      | 0       | 0        | 0             | 0           | 0        | 0      |
| Total Run          | 27,324           | 59,180 | 86,504 | 40,751  | 18,705   | 8,619         | 127,255     | 49,370   | 77,885 |
| Escapement Goal    | 24,000           | 30,000 | 54,000 | 0       |          |               |             |          |        |
| Terminal Excess d  |                  |        |        | 36,814  |          |               |             |          |        |
| Total TAC          | 2,640            | 27,507 | 30,147 | 3,937   |          |               |             |          |        |
| Total Harvest e    | 12,513           | 18,325 | 30,838 | 21,953  |          |               | 52,791      | 24,708   | 28,083 |
| Canada TAC         | 1,320            | 13,754 | 15,074 | 1,969   |          |               |             |          |        |
| Actual Catch f     | 5,490            | 12,459 | 17,949 | 7,651   |          |               | 25,600      | 8,689    | 16,911 |
| % of total TAC     | 415.9%           | 90.6%  | 119.1% |         |          |               |             |          |        |
| U.S. TAC           | 1,320            | 13,754 | 15,074 | 1,969   |          |               |             |          |        |
| Actual Catch fg    | 6,339            | 4,193  | 10,532 | 12,968  |          |               | 23,500      | 14,560   | 8,940  |
| % of total TAC     | 480.2%           | 30.5%  | 69.9%  |         |          |               |             |          |        |

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

e Includes traditional, ESSR, and test fishery catches.

f Does not include ESSR or test fishery catches.

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

Sockeye catches increased in week 27 (July 1-July 7) and the commercial Tahltan sockeye CPUE was above average. Again, concern over a potentially weak Tahltan sockeye run kept fishing time to 1 day. The SMM forecast for week 28, based on the inriver test fishery CPUE indicated a TAC of 23,116 Tahltan Lake sockeye salmon, which was to be split 50/50 between Canada and the U.S. The estimated cumulative Tahltan sockeye catch through week 27 was 1,200 fish, which was slightly below guideline catches for this week.

In statistical week 28 (July 8-July 14), the fishery was opened on two days in anticipation of a slightly stronger than expected run of Tahltan sockeye salmon. Results from preliminary otolith analyses from samples collected over the previous weeks continued to indicate a high contribution of Tuya sockeye salmon to the lower Stikine catches. It was also evident that the mainstem run was very abundant. This meant the high CPUE observed to date were wholly attributed to sockeye production from the Tuya Lake fry plants and the run of mainstem sockeye salmon. The Tahltan sockeye CPUE in week 28, however, was below average and therefore the fishery was held to two days.

Based on the Tahltan sockeye projections for week 29, which indicated that a slight surplus of Tahltan fish was available, the fishery was again opened on two days. The Tahltan stock, however, was not present in the numbers that the model predicted. The CPUE on Tahltan sockeye salmon was well below average and the fishery was therefore held to two days. A record mainstem sockeye CPUE and an above average Tuya sockeye CPUE was registered in week 29.

In week 30 (July 23-July 29), management focus shifted from the Tahltan stock, 78% of which had cleared the fishery based on the 1991-00 run timing records, to the mainstem sockeye run. The fishery was opened for three days in order to harvest what appeared to be a near record run of mainstem sockeye salmon. The CPUE on mainstem fish was over 50% above average. The fishery was held at three days, however, due to the presence of some Tahltan fish (approximately 8%).

In week 31 (July 30 to Aug 06) the fishery was posted for two days and extended an additional three days to harvest the strong run of mainstem sockeye salmon. The CPUE of mainstem fish was 40% above average for the week. The majority of Tahltan fish had cleared the fishery.

For the remainder of the fishery (weeks 32 to 36) weekly openings were relatively liberal with four to five day openings posted in order to harvest the strong mainstem run. The fishing effort, however, was light with some fishers electing not to fish during some of the open days.

Based on sockeye CPUE in the lower river, the overall sockeye run timing appeared to be about normal. The run peaked in week 27, similar to the average peak in timing over the previous ten years. The Tahltan and Tuya stocks peaked in week 27. Mainstem sockeye salmon peaked in week 29, one week ahead of normal timing for this stock conglomerate.

As in recent years, Excess Salmon to Spawning Requirements (ESSR) fishing activities again focused on the lower Tuya River to harvest fish originating from the fry-planting program. Unfortunately marketing problems prevented a full scale Tuya ESSR fishery this year. Only 410 sockeye salmon were harvested in this area (Table 2, Appendix B.18). These fish were distributed to the Tahltan First Nations elders.

Out of 18 licenses available for the lower river, 11 licenses were issued in 2001 with a maximum of 10 licenses being active in any one week. The total effort in terms of boat-days was 173, which was below average (Appendix B.12). Gear was restricted to one drift or set gill net and the commercial fishing zone was reduced from the 1997-2000 zone defined by the Canada/US border upstream to the mouth of Flood Creek to an area bounded by the Canada/US border to the mouth of the Porcupine River (the pre 1997 fishing zone). These actions were taken to protect the expected weak run of Tahltan sockeye salmon.



## **Upper Stikine Commercial Fishery**

A small commercial fishery has existed near Telegraph Creek on the upper Stikine River since 1975. The catch recorded in 2001 was 487 sockeye salmon, which was below average (Appendices A.12 and B.14). The fishing effort was below average with an average of only two fishers fishing one to two days per week. A total of 4 days was fished and the total effort amounted to 6 boat-days. For comparison, the ten year average fishing time was 25 days with an average effort of 39 boat-days.

## **Aboriginal Fishery**

The Stikine aboriginal fishery, which is located near Telegraph Creek, harvested 665 large Chinook, 44 non large Chinook, and 5,241 sockeye salmon (Appendix A 13). The catch of sockeye salmon was average. The harvest of large Chinook salmon was below average, while the non large Chinook catch was below average (Appendix B 15). As in past years, fishing times were not restricted in this fishery.

## **Escapement**

### **Sockeye**

A total of 14,811 sockeye salmon was counted through the Tahltan Lake weir in 2001; below average (Appendices A.17 and B.22). An estimated 4,900 fish (33.1%) originated from the fry planting program, which was similar to what was observed in the 1998 smolt out-migration. The number of planted fish in 2001 was based on the proportion of thermal marked Tahltan sockeye salmon as estimated from otoliths collected during the egg-take. In total, 2,386 sockeye salmon were collected for broodstock for the fry-planting project (Table 2). This leaves a spawning escapement of 12,375 sockeye salmon, below the Tahltan Lake escapement goal of 24,000 fish.

The spawning escapements for the mainstem and the Tuya stock groups are estimated indirectly by computing the ratio of Tahltan to mainstem and Tuya components in the total inriver sockeye run. Stock identification data are collected in the lower river commercial and test fisheries. The ratios of Tahltan:mainstem and Tahltan:Tuya are applied to the estimated inriver Tahltan run size to develop an estimate of the total inriver sockeye run. The escapements are estimated by subtracting the inriver catches from the inriver run estimate. The 2001 escapement estimates are 40,855 mainstem and 19,208 Tuya sockeye salmon (Table 2). The mainstem sockeye stocks spawn in tributaries and the mainstem of the Stikine River. The mainstem spawning escapement is within the escapement goal range of 20,000 to 40,000 fish. Aerial survey results indicated an above average escapement of mainstem fish with a record count of 3,518 sockeye salmon; above average (Appendix B.23). The Tuya fish are blocked from entering potential spawning grounds of the Tuya River by natural barriers and are targeted in the ESSR fishery, which caught 410 fish in 2001 (Table 2; Appendix B.18). The fate of the remaining 18,798 Tuya fish is uncertain. For the second consecutive year Tuya River sockeye salmon were observed spawning at Shakes Creek located approximately 50 km downstream of the Tuya River. It is not known if any of the Tuya sockeye salmon reproduce.

For the second consecutive year sockeye mark-recapture program was executed to explore the feasibility of developing an alternate abundance-based management regime for Stikine sockeye salmon. The final estimate of the total escapement using a modified Peterson estimate was 24,495 sockeye salmon ( $m=1,987$ ,  $r=107$ ,  $c=23,153$ ), ranging from 118,430 to 130,560 fish. This estimate is slightly higher than the postseason estimate of 70,021 sockeye salmon estimated postseason using the commercial fishery cpue. The postseason estimate generated using the test fishery cpue indicates an additional 9,000 Tuya and 24,000 mainstem spawners, for a total escapement very similar to the mark-recapture estimate.

Analyses will be conducted this winter to try and determine the most accurate method to use to estimate the mainstem and Tuya inriver runs.

### **Chinook**

Chinook escapement enumerated at the Little Tahltan weir was 9,738 large fish (8 fish used for broodstock) and 269 non large Chinook salmon between June 20 and August 14 (Appendix A.19). The escapement for large Chinook salmon was 80% above the upper limit of the escapement goal. The Stikine River Chinook escapement goal was revised in 1999 to 17,500 fish, with a range of 14,000 to 28,000 Chinook salmon. The Little Tahltan escapement goal is approximately 19% of the total Stikine River escapement or approximately 3,300 fish, with a range of 2,300 to 5,300 fish through the Little Tahltan weir. The Little Tahltan escapement of 9,730 represents approximately 15.6 % of the total escapement. Aerial surveys of the Tahltan River and Beatty Creek have been discontinued. Aerial survey counts for the remainder of the Stikine Chinook escapements were above average.

A mark-recapture study was conducted again in 2001. The final escapement estimate for large Stikine Chinook salmon is 62,543 fish (Appendix B. 26).

### **Coho**

DFO used test fishery coho and sockeye CPUE to estimate coho salmon—test fishery cumulative weekly CPUE of coho salmon was a record high and constituted 36% of the cumulative weekly sockeye CPUE, thus indicating the coho run to be approximately 36% of the estimated sockeye run of 121,063 fish or 43,582 coho salmon. Based on these analyses, the total inriver escapement of Stikine River coho salmon was 41,588 fish. This escapement is within the interim escapement goal range of 30,000 to 50,000 and is approximately 67% above average escapement of 29,000 fish. Results from the coho aerial surveys also indicated an above average Stikine River coho run. A record total of 7,405 coho salmon was observed in 2001; above average (Appendix B.27).

For the second consecutive year a coho mark-recapture program was conducted to explore the feasibility of developing an alternate abundance-based management regime for Stikine River coho salmon. The final estimate of the total escapement using a modified Peterson estimate ( $m=1,378$ ,  $r=28$ ,  $c=1,994$ ) is approximately 88,100 coho salmon, ranging from 61,000 to 126,000 fish. Again, as occurred in the 2000 study, the low catch in both the test and commercial fisheries in tandem with the low number of tagged fish recovered, resulted in the very wide range of coho escapements as indicated above. Increased fishing effort (commercial and test fishing grounds) are recommended for future studies.

### **Sockeye Run Reconstruction**

The final postseason estimate of the Stikine sockeye run size is 127,255 fish, of which 27,324 are of Tahltan Lake origin (wild & planted), 40,751 are of Tuya origin (fry from Tahltan broodstock planted into Tuya Lake), and 59,180 are mainstem stocks (Table 2). These estimates are based otolith recovery and analysis and scale pattern analysis in the U.S. Districts 106 and 108 catches; otolith analysis, egg-diameter stock-composition estimates for inriver catches from the Canadian commercial, aboriginal, ESSR, and test fishery catches; and escapement data. Analysis of the CPUE data from the commercial and test fisheries indicate a range in escapement estimates. The 2001 total run is 63.1% of average run of 201,817 sockeye salmon and 5.5% above the preseason forecast of 113,000 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.

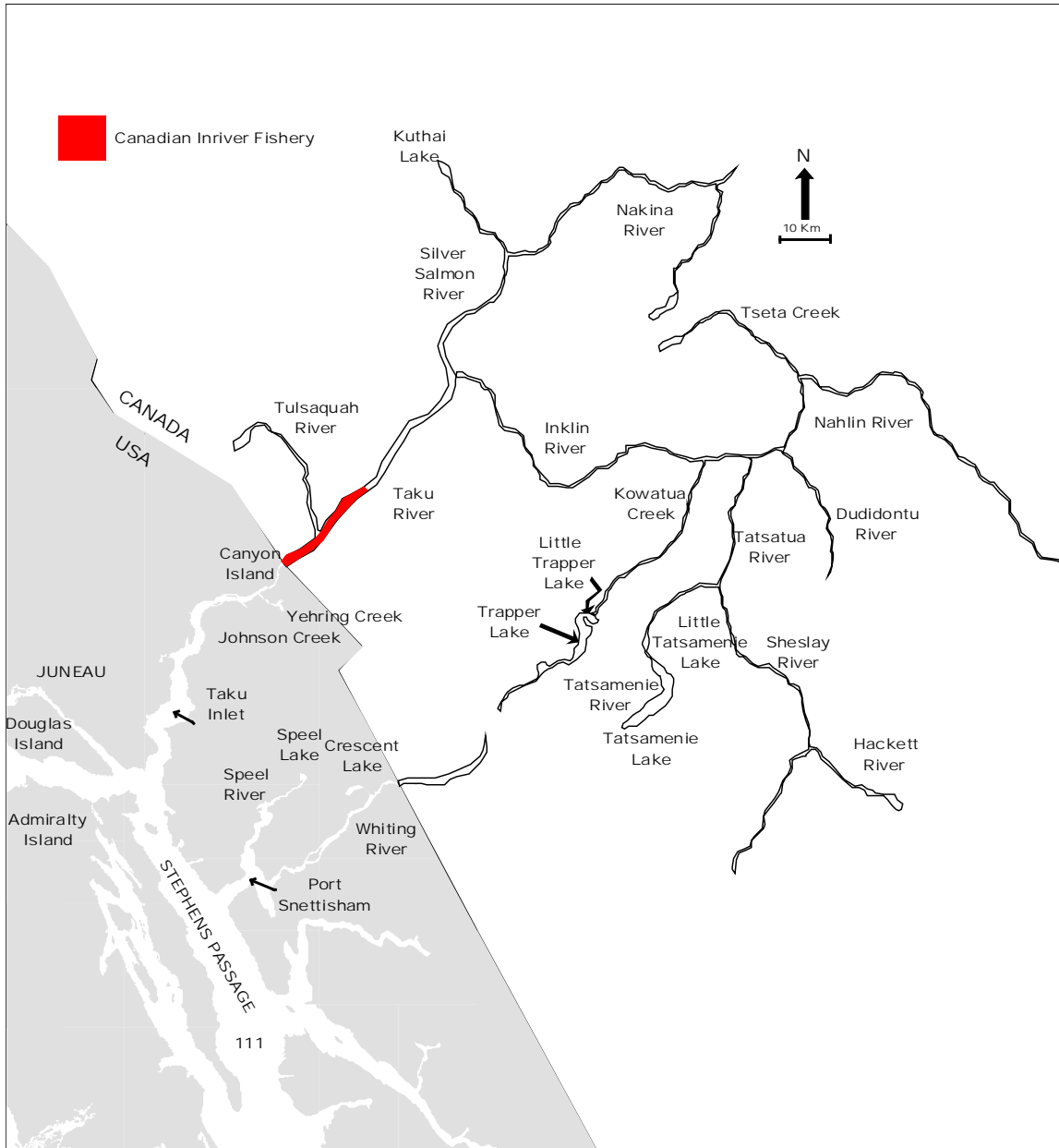


Figure 2. The Taku River and principal U.S. and Canadian fishing areas.

## 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 fry plants;

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

(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 catch will apply in Canada during the directed sockeye fishery (through statistical 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 is allowed.

(3) Chinook salmon:

(i) 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.

(ii) The Parties agree that new fisheries on Taku River Chinook salmon will not be developed without the consent of both Parties. Management of new directed fisheries will be abundance-based through an approach to be developed by the Committee no later than May 01, 2004. The Parties agree to implement assessment programs in support of the development of an abundance-based management regime.

(iii) The Parties shall review an appropriate MSY escapement goal for Taku Chinook salmon by May 1999 and thereafter establish a new goal as soon as practicable.

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

The traditional District 111 commercial drift gillnet salmon fishery was open for a total of 55 days from June 17, 2001, through October 9, 2001 (Appendix C.1). The harvest totaled 1,696 Chinook, 290,450 sockeye, 22,529 coho, 122,829 pink, and 236,969 chum salmon. Harvests of Chinook, coho, and chum salmon were below average (Appendix D1). The harvest of pink salmon was average. The sockeye harvest was above average.

Hatchery stocks contributed substantially to the numbers of both sockeye and chum salmon harvested, and minor numbers to the harvest of other species. The 2001 season was the second year of substantial 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 fishery inside Port Snettisham.

The Chinook harvest of 1,696 fish was below average (Appendix D.1). Alaskan hatchery fish contributed 472 fish as estimated by coded wire tag (CWT) analysis, for approximately 27.8% of the harvest (Appendix C.1). The Taku River stock assessment program at Canyon Island above-border Chinook final estimate escapement was 45,934. The escapement goal range is from 30,000 to 55,000 Chinook salmon.

The sockeye harvest was an all-time record 290,450 fish (Appendices C.1 and D.1). Sockeye harvests were above average in all weeks of the summer fishery, as was weekly sockeye cpue. Weekly sockeye harvests were records for six of the nine statistical weeks (SW) in the summer fishery, SW25, SW27, SW30, SW31, SW32, and SW33. Weekly sockeye cpue was a record for SW25, SW31, and SW34. Domestic hatchery sockeye stocks started to contribute to the traditional fishery in SW27 and added significant numbers to the harvests in SW30, SW31, and SW32. Fishermen targeting on those 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 sockeye harvest, 32% occurred in Stephens Passage; above average.

The catch of thermally marked sockeye salmon from fry plants was estimated inseason from analysis of otoliths. Sockeye salmon from a joint U.S./Canada fry-planting program at Tatsamenie Lake contributed an estimated 9,057 fish to the fishery (Appendix C.3). Contributions of domestic U.S. hatchery sockeye salmon to the District 111 gillnet fishery totaled 70,014 fish or 24.1% of the harvest. These were predominately Snettisham Hatchery fish but also included a small number of thermally marked fish from a fry-planting program at Chilkat Lake in upper Lynn Canal. Historical stock composition estimates were

applied to the remainder of the harvest to estimate contributions of Taku River and Port Snettisham stocks to the weekly harvests.

The final estimate of stock composition of the harvest of sockeye salmon in District 111 is 207,008 (71%) Taku River fish and 13,428 wild Snettisham fish (4.6%) (Appendix D.2). The estimated stock composition of the harvest of sockeye salmon in the traditional district was 197,951 (68%) wild Taku River, 9,057 (3%) planted Tatsamenie, 13,428 (5%) wild Port Snettisham, and 70,014 Snettisham hatchery fish (Appendices C.2 and C.3).

The final estimate of the Taku sockeye escapement from the mark-recapture program was 144,288 fish, which is above the upper escapement goal range (Appendices C.8 and D.9). Sockeye escapements to headwater lakes of the Taku River were very good, except for Kuthai Lake which had a poor escapement (Appendices C.9 - C.11, and D.10). Good sockeye escapements were apparent inside Port Snettisham (Appendix D.10).

The harvest total of 236,969 chum salmon was below average (Appendices C.1 and D.1). The summer chum harvest, 235,276 fish, comprised 99.0% of the season's harvest. The summer chum run was considered to last through mid-August (SW33) and was comprised mostly of domestic hatchery fish, with small numbers of wild stock fish contributing to the catches. 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. As in recent years, a gear restriction of a minimum six-inch mesh size net was employed during the month of July in the fishery openings in Section 11-B south of Circle Point. This allowed harvest of hatchery chum salmon returning to the Limestone Inlet remote release site while limiting harvest rates on wild sockeye stocks. Approximately 60% of the District 111 chum harvest was made in Taku Inlet, 40% in Stephens Passage, and less than 1% inside Port Snettisham. The harvest of 1,693 fall chum salmon, SW34 and later, was 19.2% of average. Most of these chums are assumed to be wild fish of Taku and Whiting Rivers origin. The escapement to the Taku River was unquantified; however, the 250 fall chums passing through the fish wheels at Canyon Island was used as an index of escapement, and was a decrease from year 2000 (Appendix D.14). There is a long-term declining trend for fish wheel catches of chum, and the Taku chum stock may be in a depressed state.

The District 111 pink salmon harvest of 122,829 fish was average (Appendices C.1 and D.1). The escapement number to the Taku River was unquantified; however, the number of pinks passing through the fish wheels at Canyon Island was used as an index of escapement. Fish wheel catches of pinks were below average, and pink salmon escapement to the Taku River was characterized as below average.

Coho 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 coho harvest of 22,529 fish was below average (Appendices C.1 and D.1). Weekly coho harvests were below average except for an above average harvest in Stephens Passage in SW32. Coho catch-per-unit effort was also below average for most weeks of the fishery, but improved to above average near the end of the fishery in SW37, SW39, and SW40. Alaskan hatchery coho salmon contributed 1,588 fish or 7.0% of the District 111 harvest. For most of the season, weekly estimates of Taku coho abundance indicated a below average run size; however, the final estimate of coho escapement above Canyon Island was 104,394 fish, surpassing the escapement goal of 35,000 (Appendices C.8 and D.12). Aerial surveys made on other streams in the district indicated the presence of coho salmon but the escapement totals were unquantified (Appendix D.13).

Fishing time was average (Appendices C.1 and D.1). The number of boats participating in the fishery was above average, and the 162 boats fishing in statistical week 32 (SW32) was a new record for the fishery.

Fishing effort as measured by the total number of boats delivering fish each week times the number of days open to fishing, was 4,731 boat-days for the season and was above average. Fishing effort for the summer fishery from SW25 through SW33 was a record 4,446 boat-days; above average.

Management actions to conduct the Taku drift gillnet fishery were limited to imposing restrictions in time, area and gear. In the first week of the season (SW25) which began June 17, three days of fishing time were allowed in both Taku Inlet (Subdistrict 111-32) and Stephens Passage (Subdistrict 111-31) (Appendices C.1 and D.1). The sockeye harvest in the first week was a record, as was sockeye cpue. The participation in the fishery, 96 boats, was also a record respective to the week. There was no extension of fishing time because of the high number of fishing boats. The initial inseason estimate of run size was delayed, and fishing time for SW26 was set for three days. Fishery participation in SW26 continued high, similar to that in SW25. The initial inseason projection of run size was very high. The conundrum for management was whether the inseason prediction of a strong run was real and to increase fishing time accordingly or to keep fishing time curbed because of the high number of boats fishing. At the end of SW26, the inseason projection of the total run size was 645,194 fish (Table 3). Fishing time was set at three days for SW27. In SW27, the inseason projection of run size remained high. The projected U.S. harvest was less than the projected U.S. TAC, and fishing time was extended for an additional 24 hours north of Circle Point in order to allow additional opportunity to harvest wild Taku sockeye salmon. Fishery participation continued high with 106 boats fishing, a record respective to SW27. Fishing time was set at three days for SW28. In SW28, the in-season projection of the run size remained high; however, there was no extension of fishing time because of management concerns with wild Snettisham sockeye stocks caught at Point Arden. In order to avoid extended fishing on wild Snettisham sockeye salmon at Point Arden and yet to increase fishing time for wild Taku sockeye stocks necessitated developing a fishery boundary line other than the Circle Point to Point Arden line. Fishery participation continued high with 121 boats fishing, a record respective to SW28. Fishing time was set at three days for SW29. In SW29, the inseason projection of run size remained high, and the projected U.S. harvest was less than the projected U.S. TAC. The fishery was extended for an additional 24 hours east of a line from Point Bishop to Pete’s Rock in order to allow additional opportunity to harvest the large run of wild Taku sockeye salmon. Fishery participation continued high for the week. For the remainder of the summer fishery, SW30 – SW33, the Taku inseason run size projection was large, and the projected U.S. harvest was less than the projected U.S. TAC. Daily sockeye catches in the fish wheels at the Canyon Island were consistently above average during this time period and several daily fish wheel catches established new records. Fishing time was extended to 4 and 5 days per week. For SW30 – SW32, record numbers of boats participated in the fishery, respective to the week.

Table 3. U.S. inseason forecasts of total run size, inriver run size, TAC, and the U.S. harvest of Taku River sockeye salmon for 2001.

| Stat Week  | Inriver Run | Total Run | Total TAC | U.S. TAC | Projected U.S. Harvest |
|------------|-------------|-----------|-----------|----------|------------------------|
| 25         | 454,116     | 727,222   | 652,222   | 534,822  | 273,106                |
| 26         | 338,690     | 645,194   | 570,194   | 467,559  | 306,504                |
| 27         | 238,411     | 467,369   | 392,369   | 321,742  | 228,958                |
| 28         | 167,186     | 360,831   | 285,831   | 234,382  | 193,646                |
| 29         | 184,166     | 394,056   | 319,056   | 261,626  | 209,890                |
| 30         | 210,903     | 397,998   | 322,998   | 264,859  | 194,614                |
| 31         | 240,649     | 421,040   | 346,040   | 283,753  | 186,688                |
| 32         | 212,065     | 409,154   | 334,154   | 274,006  | 202,676                |
| 33         | 211,342     | 416,247   | 341,247   | 279,823  | 198,305                |
| Postseason | 192,245     | 395,459   | 320,459   | 262,776  | 203,214                |

Inseason U.S. TAC calculated as 82% of the total TAC and was not adjusted for change in harvest share when the escapement exceeds 100,000 sockeye salmon. The model was altered in week 30 to account for the 50/50 harvest sharing of planted Tatsamenie fish.

During the summer fishing season, fishing time and gear in Stephens Passage south of Circle Point differed from that in Taku Inlet in order to effectively harvest the run of hatchery summer chums. A mesh size restriction of a minimum six-inch web opening was imposed during the month of July in Section 11-

B south of Circle Point. This allowed harvest of hatchery chum salmon from the Limestone Inlet remote releases while limiting harvest rates on wild sockeye stocks. Lower Stephens Passage (Subdistrict 111-20) was open to fishing beginning August 5 when a harvestable surplus of pink salmon became available. Port Snettisham (Subdistricts 111-33/-34/-35) was closed to fishing through early August to limit catch rates on wild Crescent and Speel sockeye runs. By early August, assessment programs indicated good escapements to both Crescent and Speel Lakes, and beginning August 12, portions of Port Snettisham were opened to fishing each week, primarily to harvest the hatchery sockeye returning to Snettisham Hatchery.

The fall fishing season in District 111 lasted eight weeks, from August 19 in SW34 until October 9 in SW41. In the first week of the fall season, fishing time was set at three days to allow continued opportunity to harvest the strong run of wild sockeye salmon in Taku Inlet and hatchery sockeye salmon in Stephens Passage and Port Snettisham. For SW35 through SW37, two day fishery openings were allowed each week. This course of action was taken both to limit harvest on a perceived weak Taku coho run and to conserve fall Taku chum stocks. When the coho mark-recapture program indicated the escapement goal would likely be met, fishing time was increased to three days in SW38. The fishery was intended to close upon completion of two days of fishing in SW39; however, the coho catch rate increased sharply to well above average and the coho inseason abundance estimate increased markedly to 78,000 fish in the river. The fishery was continued for three more days in SW40, and for two more days in SW41 primarily for stock assessment purposes.

Several other fisheries in the Juneau area harvested transboundary Taku salmon stocks in 2001. Personal use permits were used to harvest an estimated 1,462 Taku sockeye salmon (Appendix D.4). The spring Juneau-area sport fishery harvested an estimated 2,232 large Chinook (28 inches or longer) and 23 non large Chinook salmon. Of the large fish, 1,437 (64%) were wild mature fish. A number of stocks are known to contribute to the sport fishery, including those from the Taku, Chilkat, and King Salmon rivers, and local hatchery stocks. The major contributor is large, wild mature fish from the Taku River through mid-May and Alaska hatchery fish thereafter. The July Hawk Inlet shoreline purse seine fishery operating north of Point Marsden in Chatham Strait had one opening this year. The fishery targets early runs of northbound pink salmon stocks, and may include Taku pink stocks. Of the harvest of 10,567 sockeye salmon in the Hawk Inlet fishery, 206 fish (2% of the harvest) were of Taku River origin, from results of thermal mark analyses of otoliths samples.

### **Canadian Fisheries**

Taku River commercial fishers harvested 1,458 large Chinook, 118 non large Chinook (fish less than 2.3 kg), 47,660 sockeye, and 2,568 coho salmon (Appendix C.4). Catches of all species except sockeye salmon were below average. The sockeye catch was above average (Appendix D.5). Fish originating from fry plants contributed an estimated 1,868 fish to the catch, comprising 3.9% of the total sockeye harvest (Appendix D.6). A total of 42 days was fished and the seasonal fishing effort of 382 boat-days; both were average. As in recent years, both set and drift gill netting techniques were utilized with the majority of the catch taken in drift gillnets. Mesh sizes were restricted to less than 150 mm through July 16 to minimize the incidental catch of Chinook salmon. No fish wheel was operated in the commercial fishery in 2001.

In addition to the commercial catches 125 Chinook, 210 sockeye (77 from Kuthai Lake and 133 from the lower Taku River), 500 coho, and 25 chum salmon were harvested in the aboriginal fishery in 2001 (Appendix D.7). The average catches in the Taku aboriginal fishery have included 66 Chinook, 242 sockeye, 142 coho, and 1 chum.

The final inseason forecast of the inriver coho run ranged from 45,828 to 73,650 fish. Accordingly as per PST provisions, the Canadian allowable catch after week 33 was 3,000 to 7,500 salmon. Of the total



commercial catch, 772 coho salmon were caught after week 33; all of the coho catch in the Aboriginal fishery occurred after week 33. The combined commercial and AF post week 33 catch was 1,374 coho salmon.

According to the final postseason run estimate of 400,715 sockeye salmon, the Canadian sockeye catch (excluding test fishery catches) represented approximately 15.5% of the TAC (Table 5). An estimated 1,868 fish of the total Taku sockeye run originated from fry plants at Tatsamenie Lake. The contribution of planted fish to the sockeye catches was estimated to be 1,868 of which 8 were harvested in Canadian commercial or aboriginal fisheries. This represented approximately 11% of the TAC of planted fish.

A spring test fishery was conducted from April 29 to June 15 as a component of the Chinook mark-recapture program. This test fishery landed 1,175 large Chinook, 229 non large Chinook, and 245 sockeye salmon. An additional 871 large female Chinook salmon were released (Appendix C7 and D.8).

As part of the coho mark-recapture program, a live-release fishery was conducted on coho salmon from September 1 to October 10. Totals of 3,007 coho, 84 sockeye, and 159 chum salmon were caught. All but 31 coho and 2 sockeye salmon were released.

The Canadian preseason forecast was for a run of approximately 250,000 sockeye salmon, which was the average of a sibling-based forecast of 264,300 fish and a forecast of 236,600 fish based on stock-recruitment data. The point estimate was 12% above the previous 1991-2000 average run of approximately 224,000 sockeye salmon (Canadian estimate). The preseason forecast was used to guide weekly management actions for the first week of the season; thereafter, inseason forecasts based on the joint Canada/U.S mark-recapture program at Canyon Island were used (Table 4). For coho salmon, the preseason outlook was for an above average run due to the high number of smolt captured in the 2000 coded-wire tagging program.

Table 4. Canadian inseason forecasts of total run size, total allowable catch (TAC), and spawning escapement of Taku sockeye salmon, 2001.

| Stat. Week | Total Run | TAC     | Projected Escapement | Canadian TAC | Inseason guideline | Actual Catch |
|------------|-----------|---------|----------------------|--------------|--------------------|--------------|
| 25         | 250,000   | 162,500 | 75,000               | 29,250       | 1,399              | 2,118        |
| 26         | 545,948   | 470,948 | 357,268              | 136,224      | 13,846             | 6,348        |
| 27         | 408,792   | 333,792 | 222,103              | 84,503       | 16,087             | 10,276       |
| 28         | 347,777   | 272,777 | 145,630              | 58,226       | 17,453             | 13,387       |
| 29         | 376,648   | 301,648 | 148,816              | 64,060       | 25,718             | 23,028       |
| 30         | 471,141   | 396,141 | 194,475              | 90,200       | 48,102             | 30,429       |
| 31         | 524,018   | 449,018 | 213,306              | 103,484      | 66,944             | 38,776       |
| 32         | 510,858   | 435,858 | 165,252              | 91,505       | 70,918             | 44,162       |
| 33         | 508,865   | 433,865 | 164,140              | 90,924       | 79,632             | 46,967       |
| 34         | 489,243   | 414,243 | 153,296              | 85,223       | 79,513             | 47,502       |

The commercial fishery commenced at noon on Sunday, June 17 (statistical week 25) for a scheduled opening of two days. Since the incidental catch of Chinook salmon was relatively low and the sockeye CPUE was record high, the fishing period was extended by one day.

As in previous years, cumulative guideline harvests were developed each week to guide weekly management decisions so that: a) the catch was consistent with conservation and Treaty goals; and b) management was responsive to changes in forecasts of abundance, i.e. abundance based. The guidelines

were based on current inseason forecasts of the Canadian sockeye TAC (based on mark-recapture estimates) apportioned by historical run timing.

In week 26 (ending June 30) the fishery was opened on three days. After day 2, the total run forecast was 268,896, and there were 4,711 more sockeye salmon allowed for harvest to take as per the treaty guideline. CPUE more than doubled on the third day of the fishery, when a total of 2,443 sockeye salmon were caught. Despite this, the fishery was closed as scheduled because there was concern that the CPUE was inflated by a rapid drop in water levels.

The run forecast used in week 27 (ending July 7) increased to a range of 288,012 (assuming the run was one week early) to 539,442 sockeye salmon, and total season spawning escapement predictions ranged from 190,748 to 357,268 fish. The weekly fishing time was initially posted at three days, however a one-day extension was provided in to attempt to harvest some of the surplus indicated by the weekly guideline harvest. Additional time over and above the four days was not fished because of below average CPUE in the last day of fishing.

The week 28 (ending July 14) fishery opened on three days. It was closed as scheduled due to a drop in fish wheel catches to less than 100 fish per day. CPUE for the week was average.

Week 29 (ending July 21) also opened on three days. CPUE for the week increased to 212 sockeye per boat-day (Appendix C.4), which was 2.5 times average of 85 fish/boat-day. The primary fish buyer stopped accepting fish due to the high volume for a period of time so the majority of fishers did not fish for about 9 hours on day 3. The fishery was extended another 12 hours after Day 3. The final sockeye catch of 9,641 fish was both the highest weekly catch for the season, and on record for the week.

CPUE remained well above average in week 30 (ending July 28), which opened on three days. By the end of day 2, the cumulative catch was only 64% of the weekly guideline of 42,886 (assuming normal run timing). Consequently, the fishery was extended for 2 days. However, effort, which had been building over the course of the week, decreased dramatically on day 5. This was again due to volume-related marketing difficulties.

In 2000, through preseason planning consultations with the US, it was agreed that special efforts would be undertaken by both Parties to increase the spawning escapement of Tatsamenie sockeye salmon over recent years. The Canadian management plan in 2000 specified that for weeks 31 through 33, fishing time would be limited to a maximum of 3 days/week. This management action was to be accompanied by similar restrictions in the U.S. District 111 fishery. Extensions of fishing time above prescribed levels in each country's fisheries would only be considered after consultation and agreement between fishery managers of the two countries. Consequently in 2000, fishing times were limited to three days/week for weeks 31-33.

In 2001, in light of a favourable forecast for Tatsamenie sockeye salmon, it was felt that a pre-arranged limit of 3 days was unnecessary, but special consideration should be given to increasing the escapement of this stock above normal target levels and providing sufficient broodstock for the fry planting program.

Considerations for restricting the fishery in week 31 (ending August 4) proved to be unnecessary as CPUE continued to be well above average. The fishery was opened on 3 days and extended by 2. However, as per the previous two openings, effort was curtailed by marketing problems near the end of the week; fishing stopped almost completely at midnight on Day 4 and did not resume.

Weeks 32 and 33 (weeks ending August 11 and 18, respectively) were opened on 4 days due to the need to make up guideline harvest shortfall, and the high CPUE. After day 3 in Week 32, the fishery was

extended to 5 days as CPUE and fish wheel catches continued to be high. Again, the latter part of the week saw low effort, but this time due to the Tulsequah flood which started on Day 4. In week 33, despite favourable fishing conditions, CPUE dropped off considerably to about average levels. By mid-week the fish wheel catch had dropped to below average. Consequently, there was no extension beyond four days.

Despite the overall shortfall in the catch compared to the guideline harvest (46,896 vs 76,690), fishing time was kept to three days in week 3 (ending August ) due to declining sockeye abundance as evidenced by below average commercial sockeye CPUE, declining fish wheel catches of sockeye salmon at Canyon Island and concerns over below average early season coho abundance. The weekly catch was 535 sockeye and 590 coho salmon.

Week 34 essentially marked the end of the commercial fishing season as the primary buyer ceased accepting fish. Despite being opened for 3 days in week 35, 5 days in week 36 and continuously from September 17 (week 38) through October 12, there were only three boat days of fishing. These occurred in week 39 (ending September 29) and accounted for a catch of 182 coho salmon.

The cumulative commercial sockeye CPUE over the season totaled 1,169 sockeye/fisher/day, 46% of average of 803 and just short of the record of 1,174 sockeye/fisher/day set in 1996. Based on the CPUE, run timing appeared to be earlier than usual in 2001, with two distinctive peaks in weeks 26, and 29. Normally, sockeye CPUE peaks in week 32.

The cumulative coho CPUE through week 34, 83 coho/fisher/day, was 22% below average of 106 coho/fisher/day. Based on this, the strength of the early part of the run appeared to be below average.

## **Escapement**

### **Sockeye**

Spawning escapement of sockeye salmon in the Canadian portion of the Taku River drainage is estimated from the joint Canada/U.S. mark-recapture program. Counting weirs operated by DFO at Little Trapper and Tatsamenie lakes provide information on the distribution and abundance of discrete spawning stocks within the watershed. An additional sockeye enumeration program was conducted at Kuthai Lake by the TRTFN in 2001.

A mark-recapture program has been operated annually from 1984 to 2001 to estimate the above-border run size (i.e., border escapement); spawning escapement is then estimated by subtracting the inriver catch. The final 2001 estimate of border escapement is 192,245 sockeye salmon and the spawning escapement is estimated at 144,287 fish (Table 5). This spawning escapement is 43.7% higher than average of 100,385 fish (Appendix D.9), and is 80.4% above the upper end of the interim escapement goal range of 71,000 to 80,000 sockeye salmon.

Table 5. Taku sockeye salmon run reconstruction, 2001. Estimates do not include spawning escapements below the U.S./Canada border.

|                    | Taku    |         |         | Snettisham Stocks |        |          |
|--------------------|---------|---------|---------|-------------------|--------|----------|
|                    | Total   | Wild    | Planted | Total             | Wild   | Hatchery |
| Escapement         | 144,128 | 138,772 | 5,356   | Not Available     |        |          |
| Canadian Harvest   |         |         |         |                   |        |          |
| Commercial         | 47,660  | 45,792  | 1,868   |                   |        |          |
| Food Fishery       | 210     | 202     | 8       |                   |        |          |
| Total              | 47,870  | 45,994  | 1,876   |                   |        |          |
| Test Fishery Catch | 247     | 237     | 10      |                   |        |          |
| Above Border Run   | 192,245 | 185,003 | 7,242   |                   |        |          |
| U.S. Harvest a     |         |         |         |                   |        |          |
| District 111       | 207,008 | 197,951 | 9,057   | 83,442            | 13,428 | 70,014   |
| Personal Use       | 1,462   | 1,398   | 64      |                   |        |          |
| Total              | 208,470 | 199,349 | 9,121   |                   |        |          |
| Test Fishery Catch | 0       |         |         |                   |        |          |
| Total Run          | 400,715 | 384,352 | 16,363  |                   |        |          |
| Taku Harvest Plan  |         | Wild    | Planted | Total             |        |          |
| Escapement Goal    | 75,000  | 0       | 75,000  |                   |        |          |
| TAC                | 309,352 | 16,363  | 325,715 |                   |        |          |
| <u>Canada</u>      |         |         |         |                   |        |          |
| Base Allowable     | 55,683  | 8,181   | 63,865  |                   |        |          |
| Surplus Allowable  | 8,826   |         | 8,826   |                   |        |          |
| Total              | 64,509  | 8,181   | 72,690  |                   |        |          |
| Total %            | 20.9%   | 50.0%   | 22.3%   |                   |        |          |
| Actual             | 45,994  | 1,876   | 47,870  |                   |        |          |
| Actual %           | 14.9%   | 11.5%   | 14.7%   |                   |        |          |
| <u>U.S.</u>        |         |         |         |                   |        |          |
| Total              | 253,669 | 8,181   | 261,850 |                   |        |          |
| Total %            | 82.0%   | 50.0%   | 80.4%   |                   |        |          |
| Actual             | 199,349 | 9,121   | 208,470 |                   |        |          |
| Actual %           | 64.4%   | 55.7%   | 64.0%   |                   |        |          |

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

The escapement through the Little Trapper Lake weir was 16,860 sockeye salmon, which is above average (Appendix C.10 and D.10). An estimated 8,049 females spawned in 2001, comprising 47.7% of the total run (n=741).

The Tatsamenie Lake weir count in 2001 was 22,575 sockeye salmon (Appendices C.9 and D.10). This is above average. The estimated sex composition was 43.2% female i.e. 9,744 fish (n=738). A total of 1,552 females and 1,444 males were held for broodstock; gametes were collected from 1,045 females and 900 males. The broodstock holding mortality included 221 females and 160 males. Totals of 273 females and

213 males were released unspawned, either because they were not ripening or the egg take target had been exceeded.

The sockeye count through the Kuthai Lake weir was 1,663 fish, which is below average (Appendices C.11 and D.10).

### **Chinook**

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 28 through July 17 (statistical weeks 17 - 29). Tag recovery in the test and commercial fisheries occurred April 29 through August 1 (statistical weeks 18 - 31), and on the spawning grounds in August and September. The recovery effort consisted of commercial, test, and aboriginal fisheries. The final above-border run estimate was 49,598 large (three-ocean and larger) Chinook salmon. The final spawning escapement estimate was 46,644 large. The spawning escapement of large Chinook salmon was below average, but within the escapement goal range of 30,000 to 55,000 fish.

Aerial surveys of large Chinook salmon (three-ocean and larger) to the six escapement index areas annually surveyed by ADF&G were as follows: Nakina, 1,552 fish; Kowatua, 1,050 fish; Tatsamenie, 1,024 fish; Dudidontu, 479 fish; Tseta, 202 fish; and Nahlin, 935 fish (Appendix D.11). The total of 5,040 large Chinook salmon observed was below average and was the second lowest count obtained during this period.

A carcass weir was again operated by the TRTFN on the Nakina River to obtain tag and age-length-sex data on Chinook salmon. A total of 1,965 Chinook salmon were sampled.

As in recent years, the Nahlin River weir was not installed due to concerns that it would impede Chinook migration.

### **Coho**

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 5 (statistical week 40). Tag recovery occurred through October 10 (statistical week 41). The recovery effort consisted of commercial, test, and aboriginal fisheries. The final above-border escapement was estimated to be 107,493 fish and the spawning escapement was estimated at 104,394 fish (Appendix C.8). The spawning escapement was above average and more than three times the upper limit of the interim escapement goal range (27,500 to 35,000 fish).

### **Pink**

A total of 9,134 pink salmon was counted at the Canyon Island fish wheels in 2001. (Appendix D.15). There was no program in place to estimate the escapement of pink salmon to the Taku River in 2001. The pink salmon count at the fish wheels was below average.

### **Chum**

There was no program in place to estimate the system-wide escapement of chum salmon. A total of 250 chum salmon was captured in the Canyon Island fish wheels, which was below average (Appendix D.14).

The Taku River fall chum run has been depressed since 1988. It is unlikely that the spawning escapement goal of 50,000 to 80,000 chum salmon was achieved in 2001.

### 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 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).

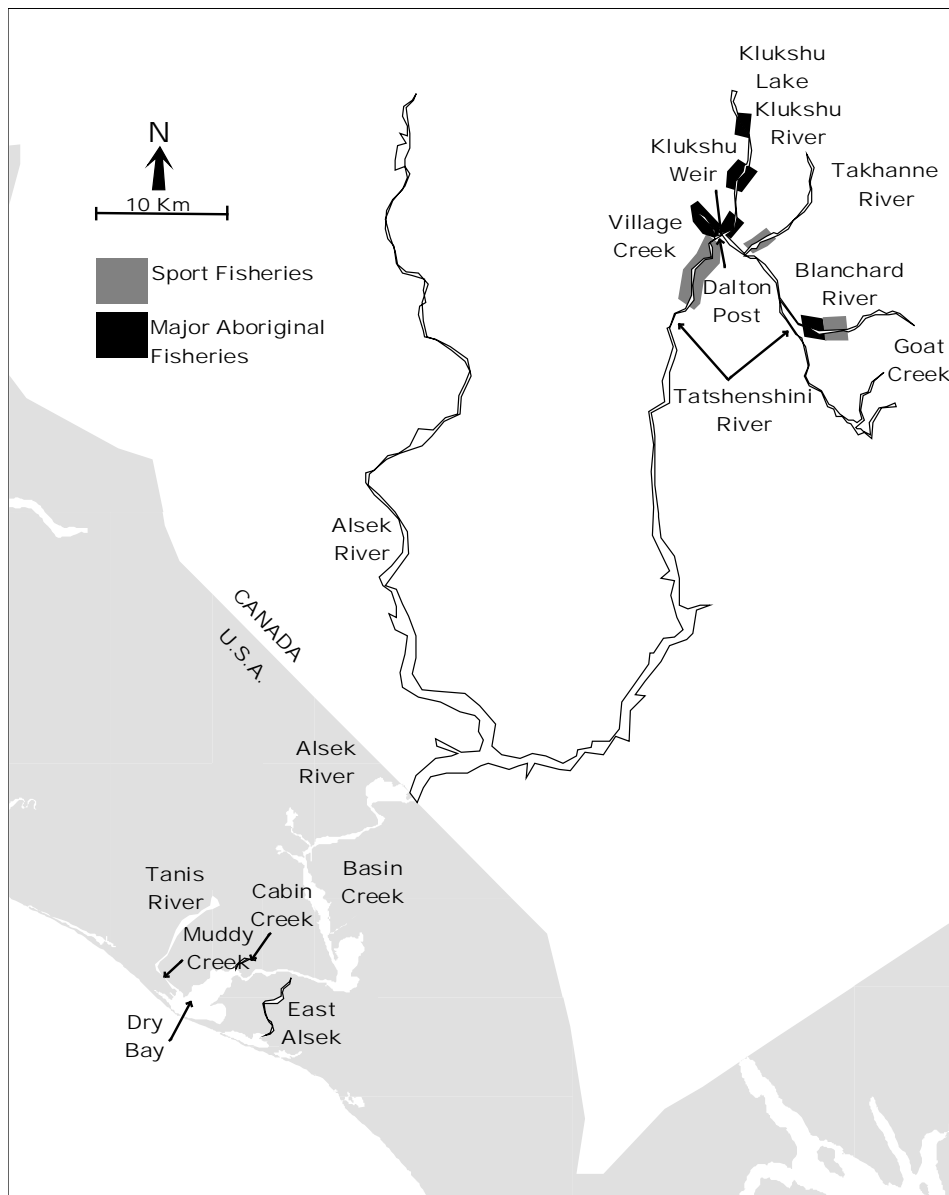


Figure 3. The Alsek River and principal U.S. and Canadian fishing areas.

## **Harvest Regulations & Management Objectives**

Although catch sharing of Alsek 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 Chinook, sockeye and coho salmon. Interim escapement goal ranges for Alsek 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. However, stock assessment projects to determine system-wide escapements are currently being developed. 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. 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 for 2001.

The initiative to establish a specific Klukshu Chinook 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 (McPherson et al 1998).

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

Programs are currently under development to estimate the inriver run size of Alsek Chinook and sockeye salmon. Mark-recapture estimates of total inriver abundance have been generated since 1998 for Alsek Chinook salmon and since 2000 for sockeye salmon.

## **Preseason Forecasts**

The overall sockeye run to the Klukshu River in 2001 was expected to be below average in strength. Principal contributing brood years to the 2001 run were expected to be 1996 (Klukshu escapement of 7,891 sockeye salmon) and 1997 (Klukshu escapement of 11,303 sockeye salmon); average Klukshu escapement was 12,784 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 2001 overall Alsek sockeye run was expected to be approximately 27,000 fish. This estimate was based on: a predicted run of 8,600 Klukshu sockeye salmon derived from the average of the historical Klukshu stock-recruitment data and a return/female spawner of 2:1; and an assumed Klukshu contribution to the total run of 32%. A run size of this magnitude is below the average run size estimate of approximately 46,000 fish (based on the Klukshu weir count expanded by 1/0.35 to account for other inriver escapement and an assumed U.S. harvest rate of 0.20).

The Klukshu early-run sockeye escapements in 1996 and 1997 were 1,502 and 6,565, respectively. The 1997 escapement was approximately twice the average but the predominant brood year (1996) was well below the optimum level of 2,500 sockeye spawners as estimated from stock-recruitment analyses by F&OC of the early run. Therefore the early run was expected to be below average.

The Klukshu Chinook escapements in 1996 and 1997, 3,382 and 2,829 Chinook salmon, respectively, were above average. However, the escapements were above the optimum escapement range of 1,100 to 2,300 Chinook salmon as determined from current stock-recruitment analysis. As a result, the preliminary outlook was for a below average run. The 2001 overall Alek Chinook run was expected to be approximately 11,000 fish salmon. This estimate was based on: a predicted run of 2,000 Klukshu Chinook salmon derived from the average of the historical Klukshu stock-recruitment data and a return/female spawner of 1.04:1; and an assumed Klukshu contribution to the total run of 18%.

The coho escapements observed at the Klukshu River in 1997 (300 coho salmon but incomplete count) and 1998 (2,000 coho salmon) suggests the run in 2001 would be below average based on a weak brood year in 1997. The average escapement was 2,826 coho salmon.

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

The Dry Bay commercial set gillnet fishery harvested 541 Chinook, 13,995 sockeye, 2,909 coho, 8 pink salmon, and 17 chum salmon (Appendix E.1). The fishery was open for 51 days, which was average (Appendix E.4). The majority of fishing time (32 days) occurred late in the season (mid-August through October) after the sockeye run had largely passed through the fishery. The total number of days fished during the bulk of the sockeye run was 18. The total effort expended in the fishery was 234 boat-days, which was below average. The preliminary estimate of subsistence harvests included 19 Chinook, 72 sockeye, and 45 coho salmon (Appendix E.5).

The Alek sockeye harvest of 13,995 fish was below average (Appendix E.4). There was no reported harvest from the Alek surf area in 2001. Adjustments to the weekly fishing periods during the sockeye season relied heavily on fishery performance data; the decision of whether or not to extend any given period was initially based on catch and CPUE data gathered inseason during that particular period. From week 30 through 34 management was also based on Klukshu weir sockeye counts. The Alek management model was again not used this year as a management tool because of unreliable run estimates produced in past years.

The Alek River was opened to commercial fishing during statistical week 23, the first Monday in June (June 4). The initial opening in week 23 was limited to 24 hours in order to evaluate Chinook and sockeye run strengths. Fishery performance (CPUE) indicated that the sockeye harvest was well below historical levels and fishing time was not extended. CPUE continued to be below average during the following week of the season (statistical week 24) and fishing time remained at 24 hours. Fishing time was increased to 48 hours during statistical week 25 because CPUE was more than double the average for the week. CPUE dropped again during week 26 and the fishery was not extended beyond 24 hours. For the next four weeks (statistical weeks 27 through 30) fishing time was extended to 48 hours because CPUE remained well above average. Fishing time was not extended beyond 48 hours, regardless of CPUE, specifically to protect Klukshu River sockeye salmon. Fishing time was extended to 48, and then to 72 hours during week 31. CPUE remained very high during this week, and the majority of the Klukshu sockeye stock had cleared the fishery by this time. Fishing time was again restricted to one day during statistical weeks 32 and 33 due to below average CPUE values.

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 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 escapement goal concern for incidentally caught Chinook salmon has diminished so the management of the early June periods was based on sockeye CPUE. Gillnet mesh size was restricted to a maximum of six inches through July 1. The Chinook harvest of 541 fish was average (Appendix E.4). Approximately 82% of the Chinook catch (443 fish) was taken during the first three weeks of the season.

The coho harvest of 2,909 fish was below average (Appendix E.4). Escapement of coho salmon at the Klukshu weir was below average. Fishing periods remained at 3 days per week from week 34 through the end of the season. Effort for coho salmon remained well below historical levels, and the river was open, but not fished, during the last six weeks of the season.

### **Canadian Fisheries**

The aboriginal fishery harvested an estimated 120 Chinook and 1,158 sockeye salmon (Appendices E.2 and E.6). The catches of Chinook, coho, and sockeye salmon were below average.

Catches in the Tatshenshini recreational fishery were well below average for Chinook and sockeye salmon with an estimated 157 Chinook, 4 sockeye salmon, and above average for coho salmon with 94 of this species harvested (Appendices E.2 and E.6). The low Chinook catches were attributed to unusually high water conditions throughout the summer fishing season and the low sockeye catches were attributed to the reduced effort observed during the peak of the sockeye migration. The catch data was derived from a creel census program conducted in the Dalton Post area by the Klukshu weir personnel.

Management of salmon in the Yukon is a shared responsibility between Fisheries and Oceans Canada (F&OC) 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 Champagne-Aishihik First Nation (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 2001 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 sockeye 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 sockeye run would be reviewed the first week of September. Adjustments to inseason fishing regimes in the sport 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 drainage occurs at the Champagne/Aishihik First Nation 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 sport 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 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, respectively. However, the aggregate limit for all salmon combined was 2 salmon per daily, 4 in possession. Sport fishing in the Dalton Post area was initially to be 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 sport 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 Yukon Salmon Committee in 1999, was required by all salmon sport fishers in 2001. 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 sport 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.

Over the past three years, major changes in the Tatshenshini River channel have redefined the location of the mouth of the Klukshu River and have resulted in the weir being in closer proximity to the mouth, i.e. the mouth of the Klukshu River has moved approximately 200 m upstream. This has decreased the distance between where salmon hold prior to entering the Klukshu River and where they encounter the weir. Concerns have been expressed that salmon no longer have adequate room to resume a normal upstream migration before reaching the weir.

The YSC discussed this concern with CAFN and F&OC and it was agreed that a sub-committee of representatives from these three groups would be formed to examine the weir issue in detail. The result of the sub-committee deliberations was a recommendation for the weir to be moved further upstream to a site agreeable to the CAFN and F&OC. After several site investigations, a location was chosen and the weir was re-located for the 2001 season.

The FN (recreational fishing is closed in this area) has much more actively fished the new holding/staging area at the mouth of the Klukshu River since the Tatshenshini River channel changes occurred. When fishing activity is intense, very few fish migrate upstream and many seek refuge further downstream in the turbid waters of the Tatshenshini River. In 2001, an area closure from the Klukshu River bridge crossing up to the new weir location was imposed in the FN fishery by CAFN to allow for better staging opportunities in the vicinity of the Klukshu/Tatshenshini confluence.

### **Escapement**

Total drainage abundance programs are currently being developed to accurately assess whether the system-wide escapement goals for Alsek Chinook and sockeye stocks are being met. At this time, there are no programs in place to estimate the drainage-wide coho 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 comparative escapement index for

Alsek drainage salmon stocks is the Klukshu River weir count. Escapements for 2001 are given in Table 6.

Table 6. Catch and Klukshu index escapement data for Alsek sockeye, Chinook, and coho salmon for 2001.

|                     | Sockeye | Chinook | Coho  |
|---------------------|---------|---------|-------|
| Escapement Index a  |         |         |       |
| Klukshu Weir Count  | 10,290  | 1,825   | 748   |
| Klukshu Escapement  | 9,329   | 1,738   | 746   |
| Harvest b           |         |         |       |
| U.S. Commercial     | 13,995  | 541     | 2,909 |
| U.S. Subsistence    | 72      | 19      | 45    |
| Canadian Sport      | 4       | 157     | 94    |
| Canadian Aboriginal | 1,158   | 120     | 5     |
| Total               | 15,229  | 837     | 3,053 |

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.

### Sockeye

The 2001 Klukshu River sockeye salmon weir count was 10,290 and the escapement was 9,495 fish (Table 6), and was below average of early-run fish (count through August 15) and average of late-run sockeye salmon (Appendix E.7). The sockeye count at Village Creek was 2,487 in 2001 which was below average. (Appendix E.8).

The sockeye mark-recapture program initiated in 2000 to explore the feasibility of developing an abundance-based management regime for Alsek sockeye salmon was continued in 2001. The final estimate of the total inriver run using a Darroch estimate is approximately 45,231 sockeye salmon ( $m=1,228$ ,  $r=69$ ,  $c=1,930$ ), with a 90% CI range of 23,143 to 39,185 fish. The Klukshu weir count therefore represented approximately 23% of the total Alsek inriver run in 2001, substantially below previously published contributions ranging from 37% to 60%. The estimated contribution of Nesketaheen sockeye salmon to the total Alsek run was approximately 7%. In 2001, a radiotagging study was initiated to determine the run timing and distribution of sockeye salmon in the Alsek River drainage. In total, 309 radio tags were applied to migrating sockeye salmon captured above the U.S. commercial fishery. Of these, 244 radio tags were tracked and assigned a destination. Fifty-three tags were found in the Klukshu River system, 30 were located in Village Creek/Nesketaheen Lake, 24 were assigned to the Blanchard River system, 76 were known to have spawned in the mainstem Tatshenshini River, and 60 were found in the mainstem Alsek River. Five radio tags were known to have dropped out of the study area and one tag was recovered in the Tatshenshini River sport fishery.

Comparative counts for other Alsek index tributaries appear in Appendix E.9. Basin Creek was not surveyed in 2001 while the count of 700 sockeye salmon in the Tanis River was above average.

### Chinook

The most reliable comparative Chinook escapement index for the Alsek drainage is the Klukshu River weir count. The 2001 Chinook weir count was 1,825 and the escapement count was 1,738 (Table 6), and

were both below average (Appendix E.7). The 2001 escapement was within the revised interim escapement goal of 1,100 to 2,300 Klukshu Chinook salmon.

Aerial Chinook surveys were again flown in 2001. The count of 543 Chinook salmon in the Blanchard River and the count of 287 Chinook salmon in the Takhanne River were above averages (Appendix E.9) and Goat Creek counts were below average.

A Chinook salmon mark-recapture study was conducted again in 2001 (Appendix E.11). The total inriver run estimate was 11,806 with an estimated escapement of 10,969.

### **Coho**

The final Klukshu weir count was 748 and the escapement was 746 and both were below average (Table 6; Appendices E.3 and E.7). The weir was removed prior to the completion of the coho run and typically does not include fish that migrate after mid-October. (Appendix E.10)

### **Sockeye Run Reconstruction**

Estimates of the Klukshu contribution to the sockeye run to the Alsek drainage vary from 29% based on final mark-recapture results, 37%, as estimated from an ADF&G mark-recapture study in 1983, to 60%, based on Canadian fishery managers' professional judgment. The Klukshu weir count divided by the estimated proportion of Klukshu fish that constitute the total Alsek run, minus the recreational and aboriginal fishery catches yields an escapement estimate for the Alsek River. The estimated escapement added to the U.S. commercial and subsistence catches yields an estimate of the entire Alsek run. The mark-recapture estimate of 31,164 (does not include U.S. catches) fish for the entire Alsek drainage was within the escapement goal range. Using the 37% to 60% contribution range, the estimated sockeye escapement in the Alsek River was on the order of 17,150 (Canada) to 27,811 (U.S.) fish and the estimated Alsek sockeye run was on the order of 31,145 (Canada) to 41,806 (U.S.) fish. The sockeye escapement estimate falls below the low range of the sockeye escapement goal range of from 33,000 (U.S.) to 58,000 (Canada) for the Alsek River.

## **ENHANCEMENT ACTIVITIES**

### **Egg Collection**

In 2001, sockeye eggs were collected at Tahltan Lake on the Stikine River for the fourteenth year, and in the Tatsamenie Lake system on the Taku River, for the twelfth year.

#### **Tahltan Lake**

The egg collection was contracted to Arc Environmental Ltd. for the fifth consecutive year. Lower than average escapement in 2001 made capture of broodstock relatively difficult in comparison with previous years that had higher escapement levels. An estimated 3.3 million eggs were collected from 1,150 females and 1,150 males were taken for broodstock (Appendix F. 1). The estimated egg collection is based on an average historical fecundity of 2,875 eggs per female. An additional 86 fish were collected but deemed unspawnable. The broodstock was collected by beach seine at the major spawning site as has been done in previous years. The eggs were collected on thirteen distinct egg-take days. Two loads of eggs were delayed in shipment to the hatchery; one load was delayed by three days due to closed airways after the Sept. 11<sup>th</sup> tragedy, the other delay was due to weather.

## **Tatsamenie Lake**

Tatsamenie Lake broodstock was again captured at an adult enumeration weir that was located at the outlet of Tatsamenie Lake. This was the eighth year that all of the Tatsamenie broodstock was captured at this location. Egg collection was again contracted to B. Mercer and Associates Ltd. A total of 1,552 females and 1,444 males were held prior to the first egg take on September 16. On Oct. 26, 273 females and 213 males were released after the egg take goal was reached. The released fish appeared to be in good condition and it is assumed the majority successfully spawned. An estimated 4.4 million eggs were collected (based on hatchery estimates of egg counts). Of the total fertilized eggs collected, 3.5 million were delivered to Snettisham hatchery in eight shipments, and 850,000 were placed in a passive flow incubator at Tatsamenie Lake.

### **Incubation, Thermal Marking, and Fry Plants (2000 Brood Year)**

The egg incubation and thermal-marking program at Snettisham Hatchery went smoothly in year 2000/2001. 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 2000 brood eggs took place at Snettisham Hatchery and the resultant fry were transported to the appropriate systems from May 25 to June 16, 2001. The IHN virus was detected in one pair of incubators during the incubation period for the Tahltan fry.

## **Tahltan Lake**

A total of 1.9 million fry from the 2000 Tahltan sockeye egg take was planted back into Tahltan Lake in 2001 (Appendix F.1 and F. 2). Survival from green-egg to outplanted fry was 76.6%. Fry outplanting took place from May 25 through June 6 (Appendix F.1).

## **Tuya Lake**

No fry were planted in Tuya Lake this year.

## **Tatsamenie Lake**

A total of 2.2 million fry from the 2000 egg-take was planted into Tatsamenie Lake in 2001 (Table 7). Survival from green-egg to outplanted-fry was 64% (Appendix F.3). Outplanting took place from June 4 to June 16.

## **Outplant Evaluation Surveys**

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

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

### **Thermal Mark Laboratories**

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

During the 2001 season the ADFG thermal mark lab received 15,753 sockeye otoliths collected by ADFG and DFO staff as part of the U.S./Canada fry-planting evaluation program. These collections came from commercial and test fisheries in U.S. waters and in Canadian fisheries on the Taku and Stikine Rivers over a 14-week period. In addition, several escapement samples were examined. Combined, the laboratory processed 13,256 of the otoliths received (84%) and provided estimates on hatchery contributions for almost 100 distinct sampling collections. Of these totals, 3,007 otoliths were identified and classified as belonging to one of 29 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 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. Final contribution estimates planted sockeye stocks to Alaskan catches were as follows: 14,506 planted Stikine fish to District 106 and 108 and 9,121 planted Taku fish to District 111 (includes inriver personal use fishery). Final contribution estimates of planted sockeye stocks to Canadian fisheries included 8,689 planted Stikine fish to Stikine River fisheries and 1,876 planted Taku fish to the Taku River fisheries.

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

Sub-samples of juvenile and adult otolith samples collected during the 2001 season are being analyzed at the DFO thermal mark lab in Whitehorse. There was a substantive increase in the collection and analyses of beach seine and trawl samples collected at Tatsamenie Lake in the summer and fall of 2001 and additional samples were collected from the stomachs of predators. These samples were collected as part of the joint U.S./Canada assessment of the poor survival of fry planted into Tatsamenie Lake.

## **APPENDICES**

### **Standards**

Large Chinook salmon are MEF length  $\geq 660$

Unless otherwise stated Chinook salmon are large

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

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

Appendix A. 1. Weekly salmon catch in the Alaskan District 106 commercial drift gillnet fisheries, 2001.

| Week  | Start Date | Catch   |         |         |         |         | Effort  |      |             |
|-------|------------|---------|---------|---------|---------|---------|---------|------|-------------|
|       |            | Chinook | Sockeye | Coho    | Pink    | Chum    | Permits | Days | Permit Days |
| 25    | 17-Jun     | 336     | 8,767   | 374     | 407     | 6,378   | 48      | 2    | 96          |
| 26    | 24-Jun     | 178     | 16,452  | 2,233   | 8,558   | 15,356  | 83      | 2    | 166         |
| 27    | 1-Jul      | 118     | 12,282  | 4,227   | 31,598  | 20,256  | 91      | 2    | 182         |
| 28    | 8-Jul      | 49      | 16,337  | 5,454   | 28,992  | 24,275  | 90      | 2    | 180         |
| 29    | 15-Jul     | 186     | 40,047  | 18,515  | 138,712 | 55,931  | 121     | 3    | 363         |
| 30    | 22-Jul     | 120     | 39,686  | 11,203  | 113,272 | 34,044  | 119     | 3    | 357         |
| 31    | 29-Jul     | 33      | 22,803  | 9,514   | 142,733 | 24,215  | 111     | 3    | 333         |
| 32    | 5-Aug      | 10      | 4,450   | 6,390   | 116,531 | 10,018  | 69      | 4    | 276         |
| 33    | 12-Aug     | 2       | 1,969   | 5,588   | 143,647 | 9,211   | 68      | 4    | 272         |
| 34    | 19-Aug     | 0       | 746     | 11,955  | 59,923  | 14,499  | 83      | 4    | 332         |
| 35    | 26-Aug     | 0       | 208     | 18,546  | 29,785  | 14,243  | 80      | 4    | 320         |
| 36    | 2-Sep      | 5       | 153     | 16,555  | 6,228   | 16,244  | 85      | 3    | 255         |
| 37    | 9-Sep      | 3       | 89      | 28,478  | 4,637   | 24,371  | 91      | 3    | 273         |
| 38    | 16-Sep     | 3       | 18      | 19,427  | 304     | 7,469   | 83      | 3    | 249         |
| 39    | 23-Sep     | 4       | 2       | 15,186  | 3       | 4,030   | 39      | 3    | 117         |
| 40    | 30-Sep     | 9       | 4       | 12,058  | 0       | 2,065   | 23      | 3    | 69          |
| 41    | 7-Oct      | 1       | 0       | 2,762   | 0       | 305     | 7       | 2    | 14          |
| Total |            | 1,057   | 164,013 | 188,465 | 825,330 | 282,910 |         | 50.0 | 3,854       |

Alaska Hatchery Contributions of Large Chinook and Coho salmon

|       | Start Date | Large Chinook |      | Coho     |         |
|-------|------------|---------------|------|----------|---------|
|       |            | Hatchery      | Wild | Hatchery | Wild    |
| 25    | 17-Jun     | 169           | 167  | 85       | 289     |
| 26    | 24-Jun     | 0             | 178  | 1,491    | 742     |
| 27    | 1-Jul      | 0             | 118  | 3,938    | 289     |
| 28    | 8-Jul      | 103           | -54  | 3,566    | 1,888   |
| 29    | 15-Jul     | 167           | 19   | 9,779    | 8,736   |
| 30    | 22-Jul     | 0             | 120  | 1,902    | 9,301   |
| 31    | 29-Jul     | 0             | 33   | 1,402    | 8,112   |
| 32    | 5-Aug      | 0             | 10   | 718      | 5,672   |
| 33    | 12-Aug     | 0             | 2    | 571      | 5,017   |
| 34    | 19-Aug     | 0             | 0    | 1,311    | 10,644  |
| 35    | 26-Aug     | 0             | 0    | 1,573    | 16,973  |
| 36    | 2-Sep      | 0             | 5    | 3,224    | 13,331  |
| 37    | 9-Sep      | 0             | 3    | 9,314    | 19,164  |
| 38    | 16-Sep     | 0             | 3    | 9,326    | 10,101  |
| 39    | 23-Sep     | 7             | -3   | 7,184    | 8,002   |
| 40    | 30-Sep     | 0             | 9    | 10,087   | 1,971   |
| 41    | 7-Oct      | 0             | 1    | 1,908    | 854     |
| Total |            | 446           | 611  | 67,378   | 121,087 |



Appendix A. 2. Weekly stock proportions of sockeye salmon harvested in the Alaskan District 106 commercial drift gillnet fisheries, 2001.

Data based on scale pattern analysis, and thermal marks

| Week        | Alaska | Canada | Stikine |        |          |        | Planted | CPUE of Stikine Fish |         |       |          |
|-------------|--------|--------|---------|--------|----------|--------|---------|----------------------|---------|-------|----------|
|             |        |        | Tahltan | Tuya   | Mainstem | Total  |         | Tahltan              | Tahltan | Tuya  | Mainstem |
| Proportions |        |        |         |        |          |        |         |                      |         |       |          |
| 25          | 0.405  | 0.334  | 0.015   | 0.221  | 0.025    | 0.261  | 0.083   | 0.047                | 0.278   | 0.153 | 0.204    |
| 26          | 0.369  | 0.270  | 0.153   | 0.193  | 0.015    | 0.361  | 0.083   | 0.513                | 0.264   | 0.096 | 0.305    |
| 27          | 0.479  | 0.254  | 0.076   | 0.181  | 0.011    | 0.267  | 0.089   | 0.172                | 0.168   | 0.047 | 0.154    |
| 28          | 0.740  | 0.122  | 0.006   | 0.119  | 0.012    | 0.138  | 0.089   | 0.019                | 0.149   | 0.075 | 0.107    |
| 29          | 0.630  | 0.224  | 0.041   | 0.061  | 0.044    | 0.147  | 0.058   | 0.152                | 0.094   | 0.323 | 0.138    |
| 30          | 0.457  | 0.465  | 0.025   | 0.031  | 0.022    | 0.078  | 0.043   | 0.095                | 0.048   | 0.160 | 0.074    |
| 31          | 0.479  | 0.498  | 0.000   | 0.000  | 0.023    | 0.023  | 0.007   | 0.000                | 0.000   | 0.103 | 0.013    |
| 32          | 0.584  | 0.386  | 0.000   | 0.000  | 0.031    | 0.031  | 0.000   | 0.000                | 0.000   | 0.033 | 0.004    |
| 33          | 0.536  | 0.460  | 0.000   | 0.000  | 0.004    | 0.004  | 0.000   | 0.000                | 0.000   | 0.002 | 0.000    |
| 34          | 0.440  | 0.533  | 0.000   | 0.000  | 0.027    | 0.027  | 0.000   | 0.000                | 0.000   | 0.004 | 0.001    |
| 35          | 0.451  | 0.525  | 0.000   | 0.000  | 0.024    | 0.024  | 0.000   | 0.000                | 0.000   | 0.001 | 0.000    |
| 36          | 0.435  | 0.537  | 0.000   | 0.000  | 0.028    | 0.028  | 0.000   | 0.000                | 0.000   | 0.001 | 0.000    |
| 37          | 0.459  | 0.519  | 0.000   | 0.000  | 0.022    | 0.022  | 0.000   | 0.000                | 0.000   | 0.000 | 0.000    |
| 38          | 0.431  | 0.540  | 0.000   | 0.000  | 0.029    | 0.029  | 0.000   | 0.000                | 0.000   | 0.000 | 0.000    |
| 39          | 0.406  | 0.560  | 0.000   | 0.000  | 0.034    | 0.034  | 0.000   | 0.000                | 0.000   | 0.000 | 0.000    |
| 40          | 0.406  | 0.560  | 0.000   | 0.000  | 0.034    | 0.034  | 0.000   | 0.000                | 0.000   | 0.000 | 0.000    |
| Total       | 0.525  | 0.332  | 0.039   | 0.079  | 0.025    | 0.143  | 0.010   |                      |         |       |          |
| Catches     |        |        |         |        |          |        |         |                      |         |       |          |
| 25          | 3,553  | 2,924  | 134     | 1,935  | 221      | 2,290  | 115     | 1.4                  | 20.2    | 2.3   | 23.9     |
| 26          | 6,065  | 4,449  | 2,525   | 3,173  | 240      | 5,938  | 395     | 15.2                 | 19.1    | 1.4   | 35.8     |
| 27          | 5,884  | 3,121  | 930     | 2,217  | 130      | 3,277  | 661     | 5.1                  | 12.2    | 0.7   | 18.0     |
| 28          | 12,094 | 1,990  | 104     | 1,946  | 203      | 2,253  | 332     | 0.6                  | 10.8    | 1.1   | 12.5     |
| 29          | 25,221 | 8,957  | 1,640   | 2,462  | 1,767    | 5,869  | 89      | 4.5                  | 6.8     | 4.9   | 16.2     |
| 30          | 18,143 | 18,443 | 1,006   | 1,232  | 862      | 3,100  | 0       | 2.8                  | 3.5     | 2.4   | 8.7      |
| 31          | 10,926 | 11,358 | 0       | 0      | 519      | 519    | 0       | 0.0                  | 0.0     | 1.6   | 1.6      |
| 32          | 2,597  | 1,716  | 0       | 0      | 137      | 137    | 0       | 0.0                  | 0.0     | 0.5   | 0.5      |
| 33          | 1,056  | 905    | 0       | 0      | 8        | 8      | 0       | 0.0                  | 0.0     | 0.0   | 0.0      |
| 34          | 328    | 398    | 0       | 0      | 20       | 20     | 0       | 0.0                  | 0.0     | 0.1   | 0.1      |
| 35          | 94     | 109    | 0       | 0      | 5        | 5      | 0       | 0.0                  | 0.0     | 0.0   | 0.0      |
| 36          | 67     | 82     | 0       | 0      | 4        | 4      | 0       | 0.0                  | 0.0     | 0.0   | 0.0      |
| 37          | 41     | 46     | 0       | 0      | 2        | 2      | 0       | 0.0                  | 0.0     | 0.0   | 0.0      |
| 38          | 8      | 10     | 0       | 0      | 1        | 1      | 0       | 0.0                  | 0.0     | 0.0   | 0.0      |
| 39          | 1      | 1      | 0       | 0      | 0        | 0      | 0       | 0.0                  | 0.0     | 0.0   | 0.0      |
| 40          | 2      | 2      | 0       | 0      | 0        | 0      | 0       | 0.0                  | 0.0     | 0.0   | 0.0      |
| Total       | 86,078 | 54,512 | 6,339   | 12,965 | 4,119    | 23,423 | 1,592   | 29.6                 | 72.5    | 15.1  | 117.2    |

Appendix A. 3. Weekly salmon catch and effort in the Alaskan Subdistrict 106-41&42 (Sumner Strait) commercial drift gillnet fishery, 2001.

| Week  | Start Date | Catch   |         |         |         |         | Effort  |      |             |
|-------|------------|---------|---------|---------|---------|---------|---------|------|-------------|
|       |            | Chinook | Sockeye | Coho    | Pink    | Chum    | Permits | Days | Permit Days |
| 25    | 17-Jun     | 277     | 7,730   | 352     | 390     | 5,338   | 42      | 2    | 84          |
| 26    | 24-Jun     | 74      | 11,438  | 1,561   | 5,486   | 8,787   | 50      | 2    | 100         |
| 27    | 1-Jul      | 46      | 8,875   | 3,082   | 15,164  | 12,363  | 57      | 2    | 114         |
| 28    | 8-Jul      | 27      | 12,744  | 3,710   | 18,130  | 17,137  | 66      | 2    | 132         |
| 29    | 15-Jul     | 38      | 25,617  | 11,191  | 66,610  | 29,568  | 68      | 3    | 204         |
| 30    | 22-Jul     | 25      | 18,503  | 4,553   | 39,504  | 14,749  | 65      | 3    | 195         |
| 31    | 29-Jul     | 3       | 10,394  | 4,213   | 58,417  | 14,105  | 61      | 3    | 183         |
| 32    | 5-Aug      | 2       | 2,255   | 3,236   | 30,242  | 5,065   | 35      | 4    | 140         |
| 33    | 12-Aug     | 1       | 734     | 2,744   | 41,200  | 4,902   | 27      | 4    | 108         |
| 34    | 19-Aug     | 0       | 579     | 10,429  | 41,929  | 12,208  | 57      | 4    | 228         |
| 35    | 26-Aug     | 0       | 147     | 16,190  | 21,438  | 12,044  | 64      | 4    | 256         |
| 36    | 2-Sep      | 4       | 124     | 12,978  | 4,319   | 10,192  | 60      | 3    | 180         |
| 37    | 9-Sep      | 2       | 58      | 17,778  | 2,352   | 11,638  | 50      | 3    | 150         |
| 38    | 16-Sep     | 3       | 15      | 14,472  | 201     | 4,772   | 54      | 3    | 162         |
| 39    | 23-Sep     | 4       | 2       | 12,698  | 3       | 3,058   | 30      | 3    | 90          |
| 40    | 30-Sep     | 9       | 4       | 12,007  | 0       | 2,034   | 22      | 3    | 66          |
| 41    | 7-Oct      | 1       | 0       | 2,762   | 0       | 305     | 7       | 2    | 14          |
| 42    | 14-Oct     |         |         |         |         |         |         |      |             |
| Total |            | 516     | 99,219  | 133,956 | 345,385 | 168,265 |         | 50.0 | 2,406       |

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, 2001.

Data based on scale pattern analysis, and thermal marks

| Week        | Alaska | Canada | Stikine |               |       | Planted | CPUE of Stikine Fish |         |               |       |       |
|-------------|--------|--------|---------|---------------|-------|---------|----------------------|---------|---------------|-------|-------|
|             |        |        | Tahltan | Tuya Mainstem | Total |         | Tahltan              | Tahltan | Tuya Mainstem | Total |       |
| Proportions |        |        |         |               |       |         |                      |         |               |       |       |
| 25          | 0.459  | 0.312  | 0.008   | 0.220         | 0.000 | 0.228   | 0.014                | 0.028   | 0.215         | 0.002 | 0.155 |
| 26          | 0.360  | 0.241  | 0.121   | 0.256         | 0.021 | 0.398   | 0.031                | 0.543   | 0.311         | 0.149 | 0.335 |
| 27          | 0.403  | 0.286  | 0.063   | 0.236         | 0.012 | 0.311   | 0.063                | 0.191   | 0.195         | 0.059 | 0.178 |
| 28          | 0.705  | 0.123  | 0.008   | 0.148         | 0.016 | 0.172   | 0.026                | 0.031   | 0.151         | 0.095 | 0.122 |
| 29          | 0.523  | 0.292  | 0.023   | 0.093         | 0.069 | 0.185   | 0.003                | 0.113   | 0.124         | 0.536 | 0.171 |
| 30          | 0.511  | 0.453  | 0.025   | 0.004         | 0.007 | 0.036   | 0.000                | 0.094   | 0.004         | 0.039 | 0.025 |
| 31          | 0.384  | 0.592  | 0.000   | 0.000         | 0.024 | 0.024   | 0.000                | 0.000   | 0.000         | 0.086 | 0.010 |
| 32          | 0.486  | 0.495  | 0.000   | 0.000         | 0.019 | 0.019   | 0.000                | 0.000   | 0.000         | 0.019 | 0.002 |
| 33          | 0.499  | 0.490  | 0.000   | 0.000         | 0.011 | 0.011   | 0.000                | 0.000   | 0.000         | 0.005 | 0.001 |
| 34          | 0.406  | 0.560  | 0.000   | 0.000         | 0.034 | 0.034   | 0.000                | 0.000   | 0.000         | 0.005 | 0.001 |
| 35          | 0.406  | 0.560  | 0.000   | 0.000         | 0.034 | 0.034   | 0.000                | 0.000   | 0.000         | 0.001 | 0.000 |
| 36          | 0.406  | 0.560  | 0.000   | 0.000         | 0.034 | 0.034   | 0.000                | 0.000   | 0.000         | 0.001 | 0.000 |
| 37          | 0.406  | 0.560  | 0.000   | 0.000         | 0.034 | 0.034   | 0.000                | 0.000   | 0.000         | 0.001 | 0.000 |
| 38          | 0.406  | 0.560  | 0.000   | 0.000         | 0.034 | 0.034   | 0.000                | 0.000   | 0.000         | 0.000 | 0.000 |
| 39          | 0.406  | 0.560  | 0.000   | 0.000         | 0.034 | 0.034   | 0.000                | 0.000   | 0.000         | 0.000 | 0.000 |
| 40          | 0.406  | 0.560  | 0.000   | 0.000         | 0.034 | 0.034   | 0.000                | 0.000   | 0.000         | 0.000 | 0.000 |
| Total       | 0.493  | 0.336  | 0.032   | 0.112         | 0.028 | 0.171   | 0.015                | 0.188   | 0.694         | 0.119 | 1.000 |
| Catches     |        |        |         |               |       |         |                      |         |               |       |       |
| 25          | 3,550  | 2,415  | 59      | 1,703         | 3     | 1,765   | 108                  | 0.7     | 20.3          | 0.0   | 21.0  |
| 26          | 4,123  | 2,757  | 1,387   | 2,931         | 240   | 4,558   | 357                  | 13.9    | 29.3          | 2.4   | 45.6  |
| 27          | 3,573  | 2,541  | 557     | 2,096         | 108   | 2,761   | 555                  | 4.9     | 18.4          | 0.9   | 24.2  |
| 28          | 8,984  | 1,572  | 104     | 1,881         | 203   | 2,188   | 332                  | 0.8     | 14.3          | 1.5   | 16.6  |
| 29          | 13,397 | 7,489  | 588     | 2,380         | 1,763 | 4,731   | 89                   | 2.9     | 11.7          | 8.6   | 23.2  |
| 30          | 9,450  | 8,388  | 469     | 72            | 124   | 665     | 0                    | 2.4     | 0.4           | 0.6   | 3.4   |
| 31          | 3,991  | 6,150  | 0       | 0             | 253   | 253     | 0                    | 0.0     | 0.0           | 1.4   | 1.4   |
| 32          | 1,095  | 1,117  | 0       | 0             | 43    | 43      | 0                    | 0.0     | 0.0           | 0.3   | 0.3   |
| 33          | 366    | 360    | 0       | 0             | 8     | 8       | 0                    | 0.0     | 0.0           | 0.1   | 0.1   |
| 34          | 235    | 324    | 0       | 0             | 20    | 20      | 0                    | 0.0     | 0.0           | 0.1   | 0.1   |
| 35          | 60     | 82     | 0       | 0             | 5     | 5       | 0                    | 0.0     | 0.0           | 0.0   | 0.0   |
| 36          | 50     | 69     | 0       | 0             | 4     | 4       | 0                    | 0.0     | 0.0           | 0.0   | 0.0   |
| 37          | 24     | 32     | 0       | 0             | 2     | 2       | 0                    | 0.0     | 0.0           | 0.0   | 0.0   |
| 38          | 6      | 8      | 0       | 0             | 1     | 1       | 0                    | 0.0     | 0.0           | 0.0   | 0.0   |
| 39          | 1      | 1      | 0       | 0             | 0     | 0       | 0                    | 0.0     | 0.0           | 0.0   | 0.0   |
| 40          | 2      | 2      | 0       | 0             | 0     | 0       | 0                    | 0.0     | 0.0           | 0.0   | 0.0   |
| Total       | 48,906 | 33,309 | 3,164   | 11,063        | 2,777 | 17,004  | 1,441                | 25.5    | 94.3          | 16.1  | 135.9 |

Appendix A. 5. Weekly salmon catch and effort in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 2001.

| Week         | Start<br>Date | Catch      |               |               |                |                | Effort  |           |                |
|--------------|---------------|------------|---------------|---------------|----------------|----------------|---------|-----------|----------------|
|              |               | Chinook    | Sockeye       | Coho          | Pink           | Chum           | Permits | Days      | Permit<br>Days |
| 25           | 17-Jun        | 59         | 1,037         | 22            | 17             | 1,040          | 6       | 2         | 12             |
| 26           | 24-Jun        | 104        | 5,014         | 672           | 3,072          | 6,569          | 34      | 2         | 68             |
| 27           | 1-Jul         | 72         | 3,407         | 1,145         | 16,434         | 7,893          | 37      | 2         | 74             |
| 28           | 8-Jul         | 22         | 3,593         | 1,744         | 10,862         | 7,138          | 25      | 2         | 50             |
| 29           | 15-Jul        | 148        | 14,430        | 7,324         | 72,102         | 26,363         | 53      | 3         | 159            |
| 30           | 22-Jul        | 95         | 21,183        | 6,650         | 73,768         | 19,295         | 62      | 3         | 186            |
| 31           | 29-Jul        | 30         | 12,409        | 5,301         | 84,316         | 10,110         | 59      | 3         | 177            |
| 32           | 5-Aug         | 8          | 2,195         | 3,154         | 86,289         | 4,953          | 37      | 4         | 148            |
| 33           | 12-Aug        | 1          | 1,235         | 2,844         | 102,447        | 4,309          | 44      | 4         | 176            |
| 34           | 19-Aug        | 0          | 167           | 1,526         | 17,994         | 2,291          | 29      | 4         | 116            |
| 35           | 26-Aug        | 0          | 61            | 2,356         | 8,347          | 2,199          | 17      | 4         | 68             |
| 36           | 2-Sep         | 1          | 29            | 3,577         | 1,909          | 6,052          | 27      | 3         | 81             |
| 37           | 9-Sep         | 1          | 31            | 10,700        | 2,285          | 12,733         | 46      | 3         | 138            |
| 38           | 16-Sep        | 0          | 3             | 4,955         | 103            | 2,697          | 30      | 3         | 90             |
| 39           | 23-Sep        | 0          | 0             | 2,488         | 0              | 972            | 9       | 3         | 27             |
| 40           | 30-Sep        | 0          | 0             | 51            | 0              | 31             | 1       | 3         | 3              |
| <b>Total</b> |               | <b>541</b> | <b>64,794</b> | <b>54,509</b> | <b>479,945</b> | <b>114,645</b> |         | <b>50</b> | <b>1,573</b>   |

Appendix A. 6. Weekly stock proportions and catches of sockeye salmon harvested in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 2001.

Data based on scale pattern analysis and thermal marks

| Week        | Stikine |        |         |               |       | Planted | CPUE of Stikine Fish |         |               |       |       |
|-------------|---------|--------|---------|---------------|-------|---------|----------------------|---------|---------------|-------|-------|
|             | Alaska  | Canada | Tahltan | Tuya Mainstem | Total |         | Tahltan              | Tahltan | Tuya Mainstem | Total |       |
| Proportions |         |        |         |               |       |         |                      |         |               |       |       |
| 25          | 0.003   | 0.491  | 0.072   | 0.224         | 0.210 | 0.506   | 0.007                | 0.167   | 0.000         | 0.739 | 0.462 |
| 26          | 0.387   | 0.337  | 0.227   | 0.048         | 0.000 | 0.275   | 0.007                | 0.446   | 0.000         | 0.000 | 0.214 |
| 27          | 0.678   | 0.170  | 0.109   | 0.036         | 0.006 | 0.151   | 0.031                | 0.134   | 0.000         | 0.012 | 0.074 |
| 28          | 0.866   | 0.116  | 0.000   | 0.018         | 0.000 | 0.018   | 0.000                | 0.000   | 0.000         | 0.000 | 0.014 |
| 29          | 0.819   | 0.102  | 0.073   | 0.006         | 0.000 | 0.079   | 0.000                | 0.176   | 0.000         | 0.001 | 0.076 |
| 30          | 0.410   | 0.475  | 0.025   | 0.055         | 0.035 | 0.115   | 0.000                | 0.077   | 0.000         | 0.161 | 0.138 |
| 31          | 0.559   | 0.420  | 0.000   | 0.000         | 0.021 | 0.021   | 0.000                | 0.000   | 0.000         | 0.061 | 0.016 |
| 32          | 0.684   | 0.273  | 0.000   | 0.000         | 0.043 | 0.043   | 0.000                | 0.000   | 0.000         | 0.026 | 0.007 |
| 33          | 0.558   | 0.442  | 0.000   | 0.000         | 0.000 | 0.000   | 0.000                | 0.000   | 0.000         | 0.000 | 0.000 |
| 34          | 0.558   | 0.442  | 0.000   | 0.000         | 0.000 | 0.000   | 0.000                | 0.000   | 0.000         | 0.000 | 0.000 |
| 35          | 0.558   | 0.442  | 0.000   | 0.000         | 0.000 | 0.000   | 0.000                | 0.000   | 0.000         | 0.000 | 0.000 |
| 36          | 0.558   | 0.442  | 0.000   | 0.000         | 0.000 | 0.000   | 0.000                | 0.000   | 0.000         | 0.000 | 0.000 |
| 37          | 0.558   | 0.442  | 0.000   | 0.000         | 0.000 | 0.000   | 0.000                | 0.000   | 0.000         | 0.000 | 0.000 |
| 38          | 0.558   | 0.442  | 0.000   | 0.000         | 0.000 | 0.000   | 0.000                | 0.000   | 0.000         | 0.000 | 0.000 |
| 39          | 0.558   | 0.442  | 0.000   | 0.000         | 0.000 | 0.000   | 0.000                | 0.000   | 0.000         | 0.000 | 0.000 |
| 40          | 0.558   | 0.442  | 0.000   | 0.000         | 0.000 | 0.000   | 0.000                | 0.000   | 0.000         | 0.000 | 0.000 |
| 41          | 0.558   | 0.442  | 0.000   | 0.000         | 0.000 | 0.000   | 0.000                | 0.000   | 0.000         | 0.000 | 0.000 |
| Total       | 0.574   | 0.327  | 0.049   | 0.029         | 0.021 | 0.099   | 0.002                | 0.396   | 0.344         | 0.260 | 1.000 |
| Catches     |         |        |         |               |       |         |                      |         |               |       |       |
| 25          | 3       | 509    | 75      | 232           | 218   | 525     | 8                    | 6.3     | 19.3          | 18.2  | 43.8  |
| 26          | 1,942   | 1,692  | 1,138   | 242           | 0     | 1,380   | 37                   | 16.7    | 3.6           | 0.0   | 20.3  |
| 27          | 2,311   | 580    | 373     | 121           | 22    | 516     | 106                  | 5.0     | 1.6           | 0.3   | 7.0   |
| 28          | 3,110   | 418    | 0       | 65            | 0     | 65      | 0                    | 0.0     | 1.3           | 0.0   | 1.3   |
| 29          | 11,824  | 1,468  | 1,052   | 82            | 4     | 1,138   | 0                    | 6.6     | 0.5           | 0.0   | 7.2   |
| 30          | 8,693   | 10,055 | 537     | 1,160         | 738   | 2,435   | 0                    | 2.9     | 6.2           | 4.0   | 13.1  |
| 31          | 6,935   | 5,208  | 0       | 0             | 266   | 266     | 0                    | 0.0     | 0.0           | 1.5   | 1.5   |
| 32          | 1,502   | 599    | 0       | 0             | 94    | 94      | 0                    | 0.0     | 0.0           | 0.6   | 0.6   |
| 33          | 690     | 545    | 0       | 0             | 0     | 0       | 0                    | 0.0     | 0.0           | 0.0   | 0.0   |
| 34          | 93      | 74     | 0       | 0             | 0     | 0       | 0                    | 0.0     | 0.0           | 0.0   | 0.0   |
| 35          | 34      | 27     | 0       | 0             | 0     | 0       | 0                    | 0.0     | 0.0           | 0.0   | 0.0   |
| 36          | 16      | 13     | 0       | 0             | 0     | 0       | 0                    | 0.0     | 0.0           | 0.0   | 0.0   |
| 37          | 17      | 14     | 0       | 0             | 0     | 0       | 0                    | 0.0     | 0.0           | 0.0   | 0.0   |
| 38          | 2       | 1      | 0       | 0             | 0     | 0       | 0                    | 0.0     | 0.0           | 0.0   | 0.0   |
| 39          | 0       | 0      | 0       | 0             | 0     | 0       | 0                    | 0.0     | 0.0           | 0.0   | 0.0   |
| 40          | 0       | 0      | 0       | 0             | 0     | 0       | 0                    | 0.0     | 0.0           | 0.0   | 0.0   |
| 41          | 0       | 0      | 0       | 0             | 0     | 0       | 0                    | 0.0     | 0.0           | 0.0   | 0.0   |
| Total       | 37,172  | 21,203 | 3,175   | 1,902         | 1,342 | 6,419   | 151                  | 37.5    | 32.6          | 24.6  | 94.7  |

Appendix A. 7. Weekly salmon catch and effort in the Alaskan District 108 commercial drift gillnet fishery, 2001.

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

| Week  | Start Date | Catch   |         |        |        |       | Effort  |      | Permit Days |
|-------|------------|---------|---------|--------|--------|-------|---------|------|-------------|
|       |            | Chinook | Sockeye | Coho   | Pink   | Chum  | Permits | Days |             |
| 31    | 29-Jul     | 1       | 324     | 84     | 1,868  | 736   | 9       | 3    | 27.0        |
| 32    | 5-Aug      | 6       | 223     | 340    | 6,242  | 1,373 | 11      | 4    | 44.0        |
| 33    | 12-Aug     | 0       | 12      | 189    | 754    | 63    | 5       | 4    | 20.0        |
| 34    | 19-Aug     | 0       | 15      | 547    | 521    | 113   | 6       | 4    | 24.0        |
| 35    | 26-Aug     | 0       | 20      | 1,272  | 1,446  | 455   | 19      | 4    | 76.0        |
| 36    | 2-Sep      | 0       | 13      | 2,052  | 85     | 1,248 | 20      | 3    | 60.0        |
| 37    | 9-Sep      | 0       | 1       | 1,871  | 96     | 650   | 12      | 3    | 36.0        |
| 38    | 16-Sep     | 0       | 2       | 1,707  | 0      | 431   | 16      | 3    | 48.0        |
| 39    | 23-Sep     | 0       | 0       | 1,845  | 0      | 293   | 11      | 3    | 33.0        |
| 40    | 30-Sep     | 0       | 0       | 824    | 0      | 35    | 3       | 3    | 9.0         |
| Total |            | 7       | 610     | 10,731 | 11,012 | 5,397 | 112     | 36   | 377         |

Alaska Hatchery Contributions of Large Chinook and Coho salmon

| Week  | Start Date | Large Chinook |      | Coho     |       |
|-------|------------|---------------|------|----------|-------|
|       |            | Hatchery      | Wild | Hatchery | Wild  |
| 31    | 29-Jul     | 0             | 1    | 0        | 84    |
| 32    | 5-Aug      | 0             | 6    | 0        | 340   |
| 33    | 12-Aug     | 0             | 0    | 9        | 180   |
| 34    | 19-Aug     | 0             | 0    | 0        | 547   |
| 35    | 26-Aug     | 0             | 0    | 0        | 1,272 |
| 36    | 2-Sep      | 0             | 0    | 166      | 1,886 |
| 37    | 9-Sep      | 0             | 0    | 625      | 1,246 |
| 38    | 16-Sep     | 0             | 0    | 254      | 1,453 |
| 39    | 23-Sep     | 0             | 0    | 819      | 1,026 |
| 40    | 30-Sep     | 0             | 0    | 693      | 131   |
| Total |            | 0             | 7    | 2,565    | 8,166 |

Appendix A. 8. Weekly stock proportions and stock-specific catch of sockeye salmon in the Alaskan District 108 commercial drift gillnet fishery, 2001.

Data based on scale pattern analysis and thermal marks

| Week        | Alaska | Canada | Stikine |               |       | Planted | CPUE of Stikine Fish |               |       |       |       |
|-------------|--------|--------|---------|---------------|-------|---------|----------------------|---------------|-------|-------|-------|
|             |        |        | Tahltan | Tuya Mainstem | Total |         | Tahltan              | Tuya Mainstem | Total |       |       |
| Proportions |        |        |         |               |       |         |                      |               |       |       |       |
| 31          | 0.775  | 0.098  | 0.000   | 0.005         | 0.121 | 0.126   | 0.000                | 0.000         | 0.637 | 0.637 | 0.637 |
| 32          | 0.775  | 0.098  | 0.000   | 0.005         | 0.121 | 0.126   | 0.000                | 0.000         | 0.269 | 0.269 | 0.269 |
| 33          | 0.775  | 0.098  | 0.000   | 0.005         | 0.121 | 0.126   | 0.000                | 0.000         | 0.032 | 0.032 | 0.032 |
| 34          | 0.775  | 0.098  | 0.000   | 0.005         | 0.121 | 0.126   | 0.000                | 0.000         | 0.033 | 0.033 | 0.033 |
| 35          | 0.775  | 0.098  | 0.000   | 0.005         | 0.121 | 0.126   | 0.000                | 0.000         | 0.014 | 0.014 | 0.014 |
| 36          | 0.775  | 0.098  | 0.000   | 0.005         | 0.121 | 0.126   | 0.000                | 0.000         | 0.011 | 0.011 | 0.011 |
| 37          | 0.775  | 0.098  | 0.000   | 0.005         | 0.121 | 0.126   | 0.000                | 0.000         | 0.001 | 0.001 | 0.001 |
| 38          | 0.775  | 0.098  | 0.000   | 0.005         | 0.121 | 0.126   | 0.000                | 0.000         | 0.002 | 0.002 | 0.002 |
| Total       | 0.775  | 0.098  | 0.000   | 0.005         | 0.121 | 0.126   | 0.000                | 0.000         | 0.039 | 0.961 | 1.000 |
| Catch       |        |        |         |               |       |         |                      |               |       |       |       |
| 31          | 251    | 32     | 0       | 2             | 39    | 41      | 0                    | 0.0           | 0.1   | 1.5   | 1.5   |
| 32          | 173    | 22     | 0       | 1             | 27    | 28      | 0                    | 0.0           | 0.0   | 0.6   | 0.6   |
| 33          | 9      | 1      | 0       | 0             | 1     | 2       | 0                    | 0.0           | 0.0   | 0.1   | 0.1   |
| 34          | 12     | 1      | 0       | 0             | 2     | 2       | 0                    | 0.0           | 0.0   | 0.1   | 0.1   |
| 35          | 16     | 2      | 0       | 0             | 2     | 3       | 0                    | 0.0           | 0.0   | 0.0   | 0.0   |
| 36          | 10     | 1      | 0       | 0             | 2     | 2       | 0                    | 0.0           | 0.0   | 0.0   | 0.0   |
| 37          | 1      | 0      | 0       | 0             | 0     | 0       | 0                    | 0.0           | 0.0   | 0.0   | 0.0   |
| 38          | 2      | 0      | 0       | 0             | 0     | 0       | 0                    | 0.0           | 0.0   | 0.0   | 0.0   |
| Total       | 473    | 60     | 0       | 3             | 74    | 77      | 0                    | 0.0           | 0.1   | 2.3   | 2.4   |

Appendix A. 9. Weekly salmon catch and effort and sockeye salmon stock composition in the Alaskan District 108 test fishery, 2001.

No test fishery in 2001

Appendix A. 10. Weekly salmon catch and effort in the Canadian commercial fishery in the lower Stikine River, 2001.

| Week  | Start Date | Catch   |           |         |      |      |      | Effort  |      |             |
|-------|------------|---------|-----------|---------|------|------|------|---------|------|-------------|
|       |            | Chinook |           | Sockeye | Coho | Pink | Chum | Permits | Days | Permit Days |
|       |            | Large   | non large |         |      |      |      |         |      |             |
| 26    | 24-Jun     | 390     | 20        | 237     | 0    | 0    | 0    | 10.00   | 1.0  | 10.0        |
| 27    | 1-Jul      | 187     | 25        | 3,402   | 0    | 0    | 0    | 9.00    | 1.0  | 9.0         |
| 28    | 8-Jul      | 204     | 10        | 4,183   | 0    | 0    | 2    | 9.00    | 2.0  | 18.0        |
| 29    | 15-Jul     | 23      | 2         | 3,035   | 0    | 4    | 4    | 9.00    | 2.0  | 18.0        |
| 30    | 22-Jul     | 14      | 2         | 3,091   | 0    | 9    | 7    | 9.00    | 3.0  | 27.0        |
| 31    | 29-Jul     | 3       | 0         | 5,318   | 24   | 10   | 20   | 8.80    | 5.0  | 44.0        |
| 32    | 5-Aug      | 4       | 0         | 568     | 27   | 24   | 7    | 5.00    | 3.0  | 15.0        |
| 33    | 12-Aug     | 1       | 0         | 29      | 30   | 27   | 9    | 5.00    | 1.0  | 5.0         |
| 34    | 19-Aug     | 0       | 0         | 0       | 18   | 4    | 7    | 5.00    | 2.0  | 10.0        |
| 35    | 26-Aug     | 0       | 0         | 3       | 7    | 0    | 0    | 5.00    | 2.0  | 10.0        |
| 36    | 2-Sep      | 0       | 0         | 6       | 127  | 0    | 0    | 7.00    | 1.0  | 7.0         |
| Total |            | 826     | 59        | 19,872  | 233  | 78   | 56   |         | 23.0 | 173.0       |

Appendix A. 11. Weekly sockeye salmon stock proportions and catch by stock in the Canadian commercial fishery in the lower Stikine River, 2001.

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

| Week       | Proportion |         |       |          | Planted<br>Tahltan | Catch   |       |          | Tahltan |         |
|------------|------------|---------|-------|----------|--------------------|---------|-------|----------|---------|---------|
|            | Small Egg  | Tahltan | Tuya  | Mainstem |                    | Tahltan | Tuya  | Mainstem | Wild    | Planted |
| 26         | 0.916      | 0.599   | 0.316 | 0.084    | 0.068              | 142     | 75    | 20       | 126     | 16      |
| 27         | 0.846      | 0.331   | 0.515 | 0.154    | 0.075              | 1,126   | 1,751 | 525      | 870     | 256     |
| 28         | 0.659      | 0.207   | 0.452 | 0.341    | 0.017              | 867     | 1,891 | 1,425    | 796     | 71      |
| 29         | 0.397      | 0.265   | 0.132 | 0.603    | 0.066              | 805     | 400   | 1,830    | 604     | 201     |
| 30         | 0.178      | 0.076   | 0.101 | 0.822    | 0.028              | 236     | 313   | 2,542    | 148     | 88      |
| 31         | 0.065      | 0.056   | 0.009 | 0.935    | 0.000              | 297     | 47    | 4,974    | 297     | 0       |
| 32         | 0.026      | 0.016   | 0.011 | 0.974    | 0.000              | 9       | 6     | 553      | 9       | 0       |
| 33         | 0.000      | 0.000   | 0.000 | 1.000    | 0.000              | 0       | 0     | 29       | 0       | 0       |
| 34         | 0.000      | 0.000   | 0.000 | 1.000    | 0.000              | 0       | 0     | 0        | 0       | 0       |
| 35         | 0.000      | 0.000   | 0.000 | 1.000    | 0.000              | 0       | 0     | 3        | 0       | 0       |
| 36         | 0.000      | 0.000   | 0.000 | 1.000    | 0.000              | 0       | 0     | 6        | 0       | 0       |
| Total      |            |         |       |          |                    | 3,482   | 4,483 | 11,907   | 2,850   | 632     |
| Proportion |            |         |       |          |                    | 0.175   | 0.226 | 0.599    | 0.143   | 0.032   |

| Week       | Catch/Effort below Porcupine |            | Total<br>CPUE | CPUE      |         |         | Tahltan  |        |
|------------|------------------------------|------------|---------------|-----------|---------|---------|----------|--------|
|            | Sockeye                      | Permit Day |               | Small Egg | Tahltan | Tuya    | Mainstem | Wild   |
| 26         |                              |            | 23.700        | 14.200    | 7.500   | 2.000   | 12.600   | 1.600  |
| 27         |                              |            | 378.000       | 125.111   | 194.556 | 58.333  | 96.667   | 28.444 |
| 28         |                              |            | 232.389       | 48.167    | 105.056 | 79.167  | 44.222   | 3.944  |
| 29         |                              |            | 168.611       | 44.722    | 22.222  | 101.667 | 33.556   | 11.167 |
| 30         |                              |            | 114.481       | 8.741     | 11.593  | 94.148  | 5.481    | 3.259  |
| 31         |                              |            | 120.864       | 6.750     | 1.068   | 113.045 | 6.750    | 0.000  |
| 32         |                              |            | 37.867        | 0.600     | 0.400   | 36.867  | 0.600    | 0.000  |
| 33         |                              |            | 5.800         | 0.000     | 0.000   | 5.800   | 0.000    | 0.000  |
| 34         |                              |            | 0.000         | 0.000     | 0.000   | 0.000   | 0.000    | 0.000  |
| 35         |                              |            | 0.300         | 0.000     | 0.000   | 0.300   | 0.000    | 0.000  |
| 36         |                              |            | 0.857         | 0.000     | 0.000   | 0.857   | 0.000    | 0.000  |
| Total      |                              |            | 1082.869      | 248.291   | 342.394 | 492.184 | 199.876  | 48.415 |
| Proportion |                              |            |               | 0.229     | 0.316   | 0.455   | 0.185    | 0.045  |

Appendix A. 12. Weekly salmon catch and effort in the Canadian commercial fishery in the upper Stikine River, 2001.

| Week  | Start<br>Date | Catch   |           |         |      |      |      | Effort  |      |                |
|-------|---------------|---------|-----------|---------|------|------|------|---------|------|----------------|
|       |               | Chinook |           | Sockeye | Coho | Pink | Chum | Permits | Days | Permit<br>Days |
|       |               | Large   | non large |         |      |      |      |         |      |                |
| 29    | 15-Jul        |         |           | 108     |      |      |      | 1.0     | 2.0  | 2.0            |
| 30    | 22-Jul        |         |           | 379     |      |      |      | 2.0     | 2.0  | 4.0            |
| Total |               | 0       | 0         | 487     | 0    | 0    | 0    | 3.0     | 4.0  | 6.0            |



Appendix A. 13. Weekly salmon catch and effort in the Canadian Aboriginal fishery located at Telegraph Creek, on the Stikine River, 2001.

| Week  | Start Date | Catch   |           |         |      |      |      | Effort  |      |             |
|-------|------------|---------|-----------|---------|------|------|------|---------|------|-------------|
|       |            | Chinook |           | Sockeye | Coho | Pink | Chum | Permits | Days | Permit Days |
|       |            | Large   | non large |         |      |      |      |         |      |             |
| 20    | 13-May     | 11      | 0         | 0       |      |      |      | 2.00    | 5    | 10.0        |
| 21    | 20-May     | 64      | 1         | 0       | 0    | 0    | 0    | 3.29    | 7.0  | 23.0        |
| 22    | 27-May     | 24      | 0         | 0       | 0    | 0    | 0    | 3.00    | 2.0  | 6.0         |
| 23    | 3-Jun      | 2       | 0         | 0       | 0    | 0    | 0    | 1.00    | 1.0  | 1.0         |
| 24    | 10-Jun     | 3       | 0         | 0       | 0    | 0    | 0    | 2.00    | 1.0  | 2.0         |
| 25    | 17-Jun     | 54      | 8         | 3       | 0    | 0    | 0    | 2.43    | 7.0  | 17.0        |
| 26    | 24-Jun     | 101     | 8         | 6       | 0    | 0    | 0    | 2.86    | 7.0  | 20.0        |
| 27    | 1-Jul      | 113     | 10        | 110     | 0    | 0    | 0    | 2.71    | 7.0  | 19.0        |
| 28    | 8-Jul      | 156     | 11        | 2,288   | 0    | 0    | 0    | 11.43   | 7.0  | 80.0        |
| 29    | 15-Jul     | 38      | 1         | 714     | 0    | 0    | 0    | 6.00    | 7.0  | 42.0        |
| 30    | 22-Jul     | 76      | 5         | 1,179   | 0    | 0    | 0    | 5.71    | 7.0  | 40.0        |
| 31    | 29-Jul     | 21      | 0         | 693     | 0    | 0    | 0    | 3.43    | 7.0  | 24.0        |
| 32    | 5-Aug      | 2       | 0         | 180     | 0    | 0    | 0    | 1.43    | 7.0  | 10.0        |
| 33    | 12-Aug     | 0       | 0         | 68      | 0    | 0    | 0    | 1.00    | 4.0  | 4.0         |
| Total |            | 665     | 44        | 5,241   | 0    | 0    | 0    |         | 76   | 298.0       |

Appendix A. 14. Catch by stock and week for sockeye salmon harvested in the Canadian upper river commercial and Aboriginal fisheries in the Stikine River, 2001.

| Week  | Start Date | Upper River Commercial |               |         |         |         | Aboriginal Fishery |         |         |       |         |
|-------|------------|------------------------|---------------|---------|---------|---------|--------------------|---------|---------|-------|---------|
|       |            | Tahltan                | Tuya Mainstem | Tahltan |         | Tahltan | Tuya Mainstem      | Tahltan |         | Wild  | Planted |
|       |            |                        |               | Wild    | Planted |         |                    | Wild    | Planted |       |         |
| 25    | 17-Jun     |                        |               |         |         | 3       | 0                  | 0       | 0       | 0     |         |
| 26    | 24-Jun     |                        |               |         |         | 4       | 2                  | 0       | 4       | 0     |         |
| 27    | 1-Jul      |                        |               |         |         | 67      | 35                 | 8       | 67      | 0     |         |
| 28    | 8-Jul      |                        |               |         |         | 859     | 1,310              | 119     | 740     | 119   |         |
| 29    | 15-Jul     | 20                     | 76            | 12      | 12      | 8       | 134                | 511     | 69      | 87    | 47      |
| 30    | 22-Jul     | 193                    | 153           | 33      | 136     | 57      | 607                | 473     | 99      | 432   | 175     |
| 31    | 29-Jul     |                        |               |         |         |         | 121                | 395     | 177     | 121   | 0       |
| 32    | 5-Aug      |                        |               |         |         |         | 0                  | 155     | 25      | 0     | 0       |
| 33    | 12-Aug     |                        |               |         |         |         | 0                  | 58      | 10      | 0     | 0       |
| Total |            | 213                    | 229           | 45      | 148     | 65      | 1,795              | 2,939   | 507     | 1,451 | 341     |

Appendix A. 15. Weekly salmon catch and effort in the Canadian test fishery in the Stikine River, 2001.

| Week                 | Start Date | Catch      |           |              |              |            | # Drifts/<br>ChumSet Hours |              |
|----------------------|------------|------------|-----------|--------------|--------------|------------|----------------------------|--------------|
|                      |            | Chinook    |           | Sockeye      | Coho         | Pink       |                            |              |
|                      |            | Large      | non large |              |              |            |                            |              |
| <b>Drift gillnet</b> |            |            |           |              |              |            |                            |              |
| 26                   | 24-Jun     | 72         | 2         | 141          | 0            | 0          | 0                          | 77           |
| 27                   | 1-Jul      | 33         | 1         | 269          | 0            | 0          | 0                          | 84           |
| 28                   | 8-Jul      | 20         | 0         | 238          | 0            | 0          | 0                          | 70           |
| 29                   | 15-Jul     | 3          | 0         | 127          | 0            | 1          | 1                          | 77           |
| 30                   | 22-Jul     | 0          | 0         | 113          | 0            | 1          | 1                          | 56           |
| 31                   | 29-Jul     | 0          | 0         | 38           | 0            | 11         | 4                          | 28           |
| 32                   | 5-Aug      | 0          | 0         | 26           | 7            | 29         | 11                         | 42           |
| 33                   | 12-Aug     | 0          | 0         | 9            | 31           | 20         | 14                         | 56           |
| 34                   | 19-Aug     | 0          | 0         | 3            | 35           | 8          | 11                         | 70           |
| 35                   | 26-Aug     | 0          | 0         | 2            | 57           | 3          | 3                          | 70           |
| 36                   | 2-Sep      | 0          | 0         | 0            | 43           | 1          | 2                          | 56           |
| 37                   | 9-Sep      | 0          | 0         | 0            | 18           | 0          | 0                          | 30           |
| 38                   | 16-Sep     | 0          | 0         | 1            | 24           | 0          | 0                          | 30           |
| 39                   | 23-Sep     | 0          | 0         | 0            | 15           | 0          | 0                          | 30           |
| 40                   | 30-Sep     | 0          | 0         | 0            | 11           | 0          | 0                          | 30           |
| 41                   | 7-Oct      | 0          | 0         | 0            | 12           | 0          | 0                          | 54           |
| 42                   | 14-Oct     | 0          | 0         | 0            | 4            | 0          | 0                          | 23           |
| <b>Total</b>         |            | <b>128</b> | <b>3</b>  | <b>967</b>   | <b>257</b>   | <b>74</b>  | <b>47</b>                  | <b>883</b>   |
| <b>Set gillnet</b>   |            |            |           |              |              |            |                            |              |
| 26                   | 24-Jun     | 4          | 35        | 257          | 0            | 0          | 0                          | 240          |
| 27                   | 1-Jul      | 2          | 8         | 528          | 0            | 1          | 5                          | 264          |
| 28                   | 8-Jul      | 0          | 4         | 518          | 0            | 9          | 4                          | 216          |
| 29                   | 15-Jul     | 0          | 5         | 300          | 0            | 0          | 4                          | 216          |
| 30                   | 22-Jul     | 0          | 1         | 259          | 1            | 1          | 2                          | 168          |
| 31                   | 29-Jul     | 0          | 0         | 97           | 4            | 0          | 4                          | 72           |
| 32                   | 5-Aug      | 1          | 0         | 91           | 24           | 10         | 6                          | 120          |
| 33                   | 12-Aug     | 0          | 2         | 98           | 184          | 66         | 17                         | 168          |
| 34                   | 19-Aug     | 0          | 0         | 47           | 137          | 32         | 16                         | 216          |
| 35                   | 26-Aug     | 0          | 0         | 8            | 178          | 3          | 0                          | 216          |
| 36                   | 2-Sep      | 0          | 1         | 5            | 158          | 1          | 2                          | 168          |
| 37                   | 9-Sep      | 0          | 0         | 6            | 244          | 1          | 1                          | 156          |
| 38                   | 16-Sep     | 0          | 0         | 2            | 74           | 0          | 0                          | 132          |
| 39                   | 23-Sep     | 0          | 0         | 4            | 25           | 0          | 0                          | 132          |
| 40                   | 30-Sep     | 0          | 0         | 3            | 38           | 0          | 0                          | 132          |
| 41                   | 7-Oct      | 0          | 0         | 0            | 11           | 0          | 0                          | 72           |
| <b>Total</b>         |            | <b>7</b>   | <b>56</b> | <b>2,223</b> | <b>1,078</b> | <b>124</b> | <b>61</b>                  | <b>2,688</b> |

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| Week                     | Start Date | Catch   |           |         |       |      | # Drifts/<br>Chum Set Hours |       |
|--------------------------|------------|---------|-----------|---------|-------|------|-----------------------------|-------|
|                          |            | Chinook |           | Sockeye | Coho  | Pink |                             |       |
|                          |            | Large   | non large |         |       |      |                             |       |
| additional drifts        |            |         |           |         |       |      |                             |       |
| 20                       | 13-May     | 27      | 0         | 0       | 0     | 0    | 0                           | 119   |
| 21                       | 20-May     | 140     | 0         | 0       | 0     | 0    | 0                           | 131   |
| 22                       | 27-May     | 133     | 4         | 0       | 0     | 0    | 0                           | 152   |
| 23                       | 3-Jun      | 238     | 6         | 0       | 0     | 0    | 0                           | 170   |
| 24                       | 10-Jun     | 373     | 11        | 6       | 0     | 0    | 0                           | 171   |
| 25                       | 17-Jun     | 288     | 4         | 4       | 0     | 0    | 0                           | 156   |
| 26                       | 24-Jun     | 448     | 19        | 81      | 0     | 0    | 0                           | 140   |
| 38                       | 16-Sep     | 0       | 0         | 0       | 112   | 0    | 0                           | 45    |
| 39                       | 23-Sep     | 0       | 0         | 0       | 119   | 0    | 1                           | 90    |
| 40                       | 30-Sep     | 0       | 0         | 0       | 97    | 0    | 0                           | 90    |
| 41                       | 7-Oct      | 0       | 0         | 0       | 91    | 0    | 0                           | 90    |
| 42                       | 14-Oct     | 0       | 0         | 0       | 7     | 0    | 0                           | 45    |
| 43                       | 21-Oct     |         |           |         |       |      |                             |       |
| Total                    |            | 1,647   | 44        | 91      | 426   | 0    | 1                           | 1,399 |
| Total Test Fishery Catch |            |         |           |         |       |      |                             |       |
| 20                       | 13-May     | 27      | 0         | 0       | 0     | 0    | 0                           | 0     |
| 21                       | 20-May     | 140     | 0         | 0       | 0     | 0    | 0                           | 0     |
| 22                       | 27-May     | 133     | 4         | 0       | 0     | 0    | 0                           | 0     |
| 23                       | 3-Jun      | 238     | 6         | 0       | 0     | 0    | 0                           | 0     |
| 24                       | 10-Jun     | 373     | 11        | 6       | 0     | 0    | 0                           | 0     |
| 25                       | 17-Jun     | 288     | 4         | 4       | 0     | 0    | 0                           | 0     |
| 26                       | 24-Jun     | 524     | 56        | 479     | 0     | 0    | 0                           | 77    |
| 27                       | 1-Jul      | 35      | 9         | 797     | 0     | 1    | 5                           | 84    |
| 28                       | 8-Jul      | 20      | 4         | 756     | 0     | 9    | 4                           | 70    |
| 29                       | 15-Jul     | 3       | 5         | 427     | 0     | 1    | 5                           | 77    |
| 30                       | 22-Jul     | 0       | 1         | 372     | 1     | 2    | 3                           | 56    |
| 31                       | 29-Jul     | 0       | 0         | 135     | 4     | 11   | 8                           | 28    |
| 32                       | 5-Aug      | 1       | 0         | 117     | 31    | 39   | 17                          | 42    |
| 33                       | 12-Aug     | 0       | 2         | 107     | 215   | 86   | 31                          | 56    |
| 34                       | 19-Aug     | 0       | 0         | 50      | 172   | 40   | 27                          | 70    |
| 35                       | 26-Aug     | 0       | 0         | 10      | 235   | 6    | 3                           | 70    |
| 36                       | 2-Sep      | 0       | 1         | 5       | 201   | 2    | 4                           | 56    |
| 37                       | 9-Sep      | 0       | 0         | 6       | 262   | 1    | 1                           | 30    |
| 38                       | 16-Sep     | 0       | 0         | 3       | 210   | 0    | 0                           | 30    |
| 39                       | 23-Sep     | 0       | 0         | 4       | 159   | 0    | 1                           | 30    |
| 40                       | 30-Sep     | 0       | 0         | 3       | 146   | 0    | 0                           | 30    |
| 41                       | 7-Oct      | 0       | 0         | 0       | 114   | 0    | 0                           | 54    |
| 42                       | 14-Oct     | 0       | 0         | 0       | 11    | 0    | 0                           | 23    |
| 43                       | 21-Oct     | 0       | 0         | 0       | 0     | 0    | 0                           | 0     |
| Total Test Catch         |            | 1,782   | 103       | 3,281   | 1,761 | 198  | 109                         | 4,970 |

Appendix A. 16. Weekly catch, CPUE, and migratory timing of Tahltan, Tuya, and mainstem sockeye salmon stocks in the Stikine test fishery, 2001.

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

| Week          | Proportions |               |       | Catch   |               |       | CPUE    |               |       | Total  | Migratory Timing |               |       |
|---------------|-------------|---------------|-------|---------|---------------|-------|---------|---------------|-------|--------|------------------|---------------|-------|
|               | Tahltan     | Tuya Mainstem |       | Tahltan | Tuya Mainstem |       | Tahltan | Tuya Mainstem |       |        | Tahltan          | Tuya Mainstem |       |
| Drift gillnet |             |               |       |         |               |       |         |               |       |        |                  |               |       |
| 26            | 0.411       | 0.386         | 0.203 | 58      | 54            | 29    | 0.753   | 0.707         | 0.371 | 1.831  | 0.053            | 0.049         | 0.026 |
| 27            | 0.226       | 0.453         | 0.321 | 61      | 122           | 86    | 0.723   | 1.451         | 1.029 | 3.202  | 0.050            | 0.101         | 0.072 |
| 28            | 0.235       | 0.302         | 0.463 | 56      | 72            | 110   | 0.801   | 1.025         | 1.574 | 3.400  | 0.056            | 0.071         | 0.110 |
| 29            | 0.159       | 0.199         | 0.642 | 20      | 25            | 81    | 0.263   | 0.328         | 1.058 | 1.649  | 0.018            | 0.023         | 0.074 |
| 30            | 0.108       | 0.116         | 0.777 | 12      | 13            | 88    | 0.217   | 0.233         | 1.568 | 2.018  | 0.015            | 0.016         | 0.109 |
| 31            | 0.096       | 0.030         | 0.874 | 4       | 1             | 33    | 0.131   | 0.040         | 1.186 | 1.357  | 0.009            | 0.003         | 0.083 |
| 32            | 0.017       | 0.077         | 0.906 | 0       | 2             | 24    | 0.011   | 0.048         | 0.561 | 0.619  | 0.001            | 0.003         | 0.039 |
| 33            | 0.019       | 0.037         | 0.944 | 0       | 0             | 8     | 0.003   | 0.006         | 0.152 | 0.161  | 0.000            | 0.000         | 0.011 |
| 34            | 0.000       | 0.000         | 1.000 | 0       | 0             | 3     | 0.000   | 0.000         | 0.043 | 0.043  | 0.000            | 0.000         | 0.003 |
| 35            | 0.000       | 0.032         | 0.968 | 0       | 0             | 2     | 0.000   | 0.001         | 0.028 | 0.029  | 0.000            | 0.000         | 0.002 |
| 36            | 0.000       | 0.032         | 0.968 | 0       | 0             | 0     | 0.000   | 0.000         | 0.000 | 0.000  | 0.000            | 0.000         | 0.000 |
| 37            | 0.000       | 0.032         | 0.968 | 0       | 0             | 0     | 0.000   | 0.000         | 0.000 | 0.000  | 0.000            | 0.000         | 0.000 |
| 38            | 0.000       | 0.032         | 0.968 | 0       | 0             | 1     | 0.000   | 0.001         | 0.032 | 0.033  | 0.000            | 0.000         | 0.002 |
| 39            | 0.000       | 0.032         | 0.968 | 0       | 0             | 0     | 0.000   | 0.000         | 0.000 | 0.000  | 0.000            | 0.000         | 0.000 |
| 40            | 0.000       | 0.032         | 0.968 | 0       | 0             | 0     | 0.000   | 0.000         | 0.000 | 0.000  | 0.000            | 0.000         | 0.000 |
| 41            | 0.000       | 0.032         | 0.968 | 0       | 0             | 0     | 0.000   | 0.000         | 0.000 | 0.000  | 0.000            | 0.000         | 0.000 |
| 42            | 0.000       | 0.032         | 0.968 | 0       | 0             | 0     | 0.000   | 0.000         | 0.000 | 0.000  | 0.000            | 0.000         | 0.000 |
| Total         |             |               |       | 211     | 290           | 466   | 2.901   | 3.841         | 7.601 | 14.342 |                  |               |       |
| Proportion    |             |               |       | 0.219   | 0.300         | 0.481 |         |               |       |        | 0.202            | 0.268         | 0.530 |
| Set gillnet   |             |               |       |         |               |       |         |               |       |        |                  |               |       |
| 26            | 0.411       | 0.386         | 0.203 | 106     | 99            | 52    | 0.440   | 0.414         | 0.217 | 1.071  | 0.038            | 0.036         | 0.019 |
| 27            | 0.226       | 0.453         | 0.321 | 119     | 239           | 170   | 0.452   | 0.906         | 0.642 | 2.000  | 0.039            | 0.079         | 0.056 |
| 28            | 0.235       | 0.302         | 0.463 | 122     | 156           | 240   | 0.565   | 0.723         | 1.110 | 2.398  | 0.049            | 0.063         | 0.097 |
| 29            | 0.159       | 0.199         | 0.642 | 48      | 60            | 193   | 0.221   | 0.276         | 0.891 | 1.389  | 0.019            | 0.024         | 0.078 |
| 30            | 0.108       | 0.116         | 0.777 | 28      | 30            | 201   | 0.166   | 0.178         | 1.198 | 1.542  | 0.014            | 0.016         | 0.104 |
| 31            | 0.096       | 0.030         | 0.874 | 9       | 3             | 85    | 0.130   | 0.040         | 1.178 | 1.347  | 0.011            | 0.003         | 0.103 |
| 32            | 0.017       | 0.077         | 0.906 | 2       | 7             | 82    | 0.013   | 0.058         | 0.687 | 0.758  | 0.001            | 0.005         | 0.060 |
| 33            | 0.019       | 0.037         | 0.944 | 2       | 4             | 93    | 0.011   | 0.022         | 0.551 | 0.583  | 0.001            | 0.002         | 0.048 |
| 34            | 0.000       | 0.000         | 1.000 | 0       | 0             | 47    | 0.000   | 0.000         | 0.218 | 0.218  | 0.000            | 0.000         | 0.019 |
| 35            | 0.000       | 0.032         | 0.968 | 0       | 0             | 8     | 0.000   | 0.001         | 0.036 | 0.037  | 0.000            | 0.000         | 0.003 |
| 36            | 0.000       | 0.032         | 0.968 | 0       | 0             | 5     | 0.000   | 0.001         | 0.029 | 0.030  | 0.000            | 0.000         | 0.003 |
| 37            | 0.000       | 0.032         | 0.968 | 0       | 0             | 6     | 0.000   | 0.001         | 0.037 | 0.038  | 0.000            | 0.000         | 0.003 |
| 38            | 0.000       | 0.032         | 0.968 | 0       | 0             | 2     | 0.000   | 0.000         | 0.015 | 0.015  | 0.000            | 0.000         | 0.001 |
| 39            | 0.000       | 0.032         | 0.968 | 0       | 0             | 4     | 0.000   | 0.001         | 0.029 | 0.030  | 0.000            | 0.000         | 0.003 |
| 40            | 0.000       | 0.032         | 0.968 | 0       | 0             | 3     | 0.000   | 0.001         | 0.022 | 0.023  | 0.000            | 0.000         | 0.002 |
| 41            | 0.000       | 0.032         | 0.968 | 0       | 0             | 0     | 0.000   | 0.000         | 0.000 | 0.000  | 0.000            | 0.000         | 0.000 |
| Total         |             |               |       | 435     | 599           | 1,189 | 1.997   | 2.623         | 6.859 | 11.479 |                  |               |       |
| Proportion    |             |               |       | 0.196   | 0.269         | 0.535 |         |               |       |        | 0.174            | 0.229         | 0.598 |

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| Week                       | Proportions |               |       | Catch   |               |       | CPUE    |               |       | Migratory Timing |               |       |       |
|----------------------------|-------------|---------------|-------|---------|---------------|-------|---------|---------------|-------|------------------|---------------|-------|-------|
|                            | Tahltan     | Tuya Mainstem |       | Tahltan | Tuya Mainstem |       | Tahltan | Tuya Mainstem | Total | Tahltan          | Tuya Mainstem |       |       |
| Additional Drifts          |             |               |       |         |               |       |         |               |       |                  |               |       |       |
| 20                         | 0.367       | 0.443         | 0.191 | 0       | 0             | 0     | 0.000   | 0.000         | 0.000 | 0.000            | 0.000         | 0.000 |       |
| 21                         | 0.367       | 0.443         | 0.191 | 0       | 0             | 0     | 0.000   | 0.000         | 0.000 | 0.000            | 0.000         | 0.000 |       |
| 22                         | 0.367       | 0.443         | 0.191 | 0       | 0             | 0     | 0.000   | 0.000         | 0.000 | 0.000            | 0.000         | 0.000 |       |
| 23                         | 0.367       | 0.443         | 0.191 | 0       | 0             | 0     | 0.000   | 0.000         | 0.000 | 0.000            | 0.000         | 0.000 |       |
| 24                         | 0.367       | 0.443         | 0.191 | 2       | 3             | 1     | 0.013   | 0.016         | 0.007 | 0.035            | 0.020         | 0.024 |       |
| 25                         | 0.400       | 0.400         | 0.200 | 2       | 2             | 1     | 0.010   | 0.010         | 0.005 | 0.026            | 0.016         | 0.016 |       |
| 26                         | 0.411       | 0.386         | 0.203 | 33      | 31            | 16    | 0.238   | 0.223         | 0.117 | 0.579            | 0.372         | 0.350 |       |
| 38                         | 0.000       | 0.032         | 0.968 | 0       | 0             | 0     | 0.000   | 0.000         | 0.000 | 0.000            | 0.000         | 0.000 |       |
| 39                         | 0.000       | 0.032         | 0.968 | 0       | 0             | 0     | 0.000   | 0.000         | 0.000 | 0.000            | 0.000         | 0.000 |       |
| 40                         | 0.000       | 0.032         | 0.968 | 0       | 0             | 0     | 0.000   | 0.000         | 0.000 | 0.000            | 0.000         | 0.000 |       |
| 41                         | 0.000       | 0.032         | 0.968 | 0       | 0             | 0     | 0.000   | 0.000         | 0.000 | 0.000            | 0.000         | 0.000 |       |
| 42                         | 0.000       | 0.032         | 0.968 | 0       | 0             | 0     | 0.000   | 0.000         | 0.000 | 0.000            | 0.000         | 0.000 |       |
| Total                      |             |               |       | 37      | 36            | 18    | 0.261   | 0.249         | 0.129 | 0.639            |               |       |       |
| Proportion                 |             |               |       | 0.408   | 0.391         | 0.202 |         |               |       |                  | 0.408         | 0.390 | 0.202 |
| Total Test Fishery Catches |             |               |       |         |               |       |         |               |       |                  |               |       |       |
|                            |             |               |       |         |               |       | Tahltan |               |       |                  |               |       |       |
|                            |             |               |       |         |               |       | Wild    | Planted       | Wild  | Planted          |               |       |       |
| 20                         | 0.367       | 0.443         | 0.191 | 0       | 0             | 0     | 0.300   | 0.100         | 0     | 0                |               |       |       |
| 21                         | 0.367       | 0.443         | 0.191 | 0       | 0             | 0     | 0.300   | 0.100         | 0     | 0                |               |       |       |
| 22                         | 0.367       | 0.443         | 0.191 | 0       | 0             | 0     | 0.300   | 0.100         | 0     | 0                |               |       |       |
| 23                         | 0.367       | 0.443         | 0.191 | 0       | 0             | 0     | 0.300   | 0.100         | 0     | 0                |               |       |       |
| 24                         | 0.367       | 0.443         | 0.191 | 2       | 3             | 1     | 0.300   | 0.100         | 2     | 1                |               |       |       |
| 25                         | 0.400       | 0.400         | 0.200 | 2       | 2             | 1     | 0.300   | 0.100         | 1     | 0                |               |       |       |
| 26                         | 0.411       | 0.386         | 0.203 | 197     | 185           | 97    | 0.336   | 0.075         | 161   | 36               |               |       |       |
| 27                         | 0.226       | 0.453         | 0.321 | 180     | 361           | 256   | 0.220   | 0.006         | 175   | 5                |               |       |       |
| 28                         | 0.235       | 0.302         | 0.463 | 178     | 228           | 350   | 0.169   | 0.066         | 128   | 50               |               |       |       |
| 29                         | 0.159       | 0.199         | 0.642 | 68      | 85            | 274   | 0.094   | 0.066         | 40    | 28               |               |       |       |
| 30                         | 0.108       | 0.116         | 0.777 | 40      | 43            | 289   | 0.070   | 0.038         | 26    | 14               |               |       |       |
| 31                         | 0.096       | 0.030         | 0.874 | 13      | 4             | 118   | 0.007   | 0.089         | 1     | 12               |               |       |       |
| 32                         | 0.017       | 0.077         | 0.906 | 2       | 9             | 106   | 0.017   | 0.000         | 2     | 0                |               |       |       |
| 33                         | 0.019       | 0.037         | 0.944 | 2       | 4             | 101   | 0.019   | 0.000         | 2     | 0                |               |       |       |
| 34                         | 0.000       | 0.000         | 1.000 | 0       | 0             | 50    | 0.000   | 0.000         | 0     | 0                |               |       |       |
| 35                         | 0.000       | 0.032         | 0.968 | 0       | 0             | 10    | 0.000   | 0.000         | 0     | 0                |               |       |       |
| 36                         | 0.000       | 0.032         | 0.968 | 0       | 0             | 5     | 0.000   | 0.000         | 0     | 0                |               |       |       |
| 37                         | 0.000       | 0.032         | 0.968 | 0       | 0             | 6     | 0.000   | 0.000         | 0     | 0                |               |       |       |
| 38                         | 0.000       | 0.032         | 0.968 | 0       | 0             | 3     | 0.000   | 0.000         | 0     | 0                |               |       |       |
| 39                         | 0.000       | 0.032         | 0.968 | 0       | 0             | 4     | 0.000   | 0.000         | 0     | 0                |               |       |       |
| 40                         | 0.000       | 0.032         | 0.968 | 0       | 0             | 3     | 0.000   | 0.000         | 0     | 0                |               |       |       |
| 41                         | 0.000       | 0.032         | 0.968 | 0       | 0             | 0     | 0.000   | 0.000         | 0     | 0                |               |       |       |
| 42                         | 0.000       | 0.032         | 0.968 | 0       | 0             | 0     | 0.000   | 0.000         | 0     | 0                |               |       |       |
| Total                      |             |               |       | 684     | 924           | 1,673 |         |               | 538   | 146              |               |       |       |
| Proportion                 |             |               |       | 0.208   | 0.282         | 0.510 |         |               |       |                  |               |       |       |

Appendix A. 17. Daily counts of adult sockeye salmon passing through Tahltan Lake weir, 2001.

| Date                              | Count | Cumulative |         | Date            | Count       | Cumulative   |         |  |
|-----------------------------------|-------|------------|---------|-----------------|-------------|--------------|---------|--|
|                                   |       | Count      | Percent |                 |             | Count        | Percent |  |
| 8-Jul                             | 0     | 0          | 0.0     | 12-Aug          | 232         | 14,088       | 95.1    |  |
| 9-Jul                             | 0     | 0          | 0.0     | 13-Aug          | 182         | 14,270       | 96.3    |  |
| 10-Jul                            | 0     | 0          | 0.0     | 14-Aug          | 133         | 14,403       | 97.2    |  |
| 11-Jul                            | 0     | 0          | 0.0     | 15-Aug          | 54          | 14,457       | 97.6    |  |
| 12-Jul                            | 0     | 0          | 0.0     | 16-Aug          | 80          | 14,537       | 98.2    |  |
| 13-Jul                            | 0     | 0          | 0.0     | 17-Aug          | 48          | 14,585       | 98.5    |  |
| 14-Jul                            | 0     | 0          | 0.0     | 18-Aug          | 94          | 14,679       | 99.1    |  |
| 15-Jul                            | 0     | 0          | 0.0     | 19-Aug          | 16          | 14,695       | 99.2    |  |
| 16-Jul                            | 0     | 0          | 0.0     | 20-Aug          | 28          | 14,723       | 99.4    |  |
| 17-Jul                            | 0     | 0          | 0.0     | 21-Aug          | 12          | 14,735       | 99.5    |  |
| 18-Jul                            | 0     | 0          | 0.0     | 22-Aug          | 10          | 14,745       | 99.6    |  |
| 19-Jul                            | 336   | 336        | 2.3     | 23-Aug          | 10          | 14,755       | 99.6    |  |
| 20-Jul                            | 708   | 1,044      | 7.0     | 24-Aug          | 7           | 14,762       | 99.7    |  |
| 21-Jul                            | 1,363 | 2,407      | 16.3    | 25-Aug          | 6           | 14,768       | 99.7    |  |
| 22-Jul                            | 1,311 | 3,718      | 25.1    | 26-Aug          | 3           | 14,771       | 99.7    |  |
| 23-Jul                            | 1,164 | 4,882      | 33.0    | 27-Aug          | 5           | 14,776       | 99.8    |  |
| 24-Jul                            | 551   | 5,433      | 36.7    | 28-Aug          | 1           | 14,777       | 99.8    |  |
| 25-Jul                            | 224   | 5,657      | 38.2    | 29-Aug          | 0           | 14,777       | 99.8    |  |
| 26-Jul                            | 140   | 5,797      | 39.1    | 30-Aug          | 0           | 14,777       | 99.8    |  |
| 27-Jul                            | 31    | 5,828      | 39.3    | 31-Aug          | 0           | 14,777       | 99.8    |  |
| 28-Jul                            | 80    | 5,908      | 39.9    | 1-Sep           | 0           | 14,777       | 99.8    |  |
| 29-Jul                            | 370   | 6,278      | 42.4    | 2-Sep           | 0           | 14,777       | 99.8    |  |
| 30-Jul                            | 905   | 7,183      | 48.5    | 3-Sep           | 0           | 14,777       | 99.8    |  |
| 31-Jul                            | 1,116 | 8,299      | 56.0    | 4-Sep           | 0           | 14,777       | 99.8    |  |
| 1-Aug                             | 729   | 9,028      | 61.0    | 5-Sep           | 0           | 14,777       | 99.8    |  |
| 2-Aug                             | 812   | 9,840      | 66.4    | 6-Sep           | 0           | 14,777       | 99.8    |  |
| 3-Aug                             | 738   | 10,578     | 71.4    | 7-Sep           | 0           | 14,777       | 99.8    |  |
| 4-Aug                             | 605   | 11,183     | 75.5    | 8-Sep           | 0           | 14,777       | 99.8    |  |
| 5-Aug                             | 659   | 11,842     | 80.0    | 9-Sep           | 0           | 14,777       | 99.8    |  |
| 6-Aug                             | 590   | 12,432     | 83.9    | 10-Sep          | 0           | 14,777       | 99.8    |  |
| 7-Aug                             | 547   | 12,979     | 87.6    | 11-Sep          | 0           | 14,777       | 99.8    |  |
| 8-Aug                             | 186   | 13,165     | 88.9    | 12-Sep          | 0           | 14,777       | 99.8    |  |
| 9-Aug                             | 331   | 13,496     | 91.1    | 13-Sep          | 0           | 14,777       | 99.8    |  |
| 10-Aug                            | 238   | 13,734     | 92.7    | 14-Sep          | 34          | 14,811       | 100.0   |  |
| 11-Aug                            | 122   | 13,856     | 93.6    | 15-Sep          | 0           | 14,811       | 100.0   |  |
|                                   |       |            |         | <u>Hatchery</u> | <u>Wild</u> | <u>Total</u> |         |  |
| Total Counted                     |       |            |         |                 |             | 14,811       |         |  |
| Fish removed for broodstock       |       |            |         | female          |             | -1,150       |         |  |
|                                   |       |            |         | male            |             | -1,150       |         |  |
|                                   |       |            |         | rejects         |             | -86          |         |  |
| Total fish removed for broodstock |       |            |         |                 | -945        | -1,441       | -2,386  |  |
| Fish removed for otolith samples  |       |            |         |                 | -20         | -30          | -50     |  |
| Total Spawners                    |       |            |         |                 | 4,900       | 7,475        | 12,375  |  |

Appendix A. 18. Daily counts of sockeye salmon smolt migrating through Tahltan Lake smolt weir, 2001.

| Date   | Count   | Cumulative |         | Date     | Count   | Cumulative |         |
|--------|---------|------------|---------|----------|---------|------------|---------|
|        |         | Count      | Percent |          |         | Count      | Percent |
| 6-May  | 0       | 0          | 0.0     | 4-Jun    | 255,548 | 1,146,845  | 76.7    |
| 7-May  | 1       | 1          | 0.0     | 5-Jun    | 3,823   | 1,150,668  | 76.9    |
| 8-May  | 0       | 1          | 0.0     | 6-Jun    | 3,720   | 1,154,388  | 77.2    |
| 9-May  | 0       | 1          | 0.0     | 7-Jun    | 1,307   | 1,155,695  | 77.3    |
| 10-May | 0       | 1          | 0.0     | 8-Jun    | 939     | 1,156,634  | 77.3    |
| 11-May | 0       | 1          | 0.0     | 9-Jun    | 596     | 1,157,230  | 77.4    |
| 12-May | 2       | 3          | 0.0     | 10-Jun   | 444     | 1,157,674  | 77.4    |
| 13-May | 1       | 4          | 0.0     | 11-Jun   | 6,843   | 1,164,517  | 77.9    |
| 14-May | 1       | 5          | 0.0     | 12-Jun   | 14,075  | 1,178,592  | 78.8    |
| 15-May | 1       | 6          | 0.0     | 13-Jun   | 35,508  | 1,214,100  | 81.2    |
| 16-May | 4       | 10         | 0.0     | 14-Jun   | 4,164   | 1,218,264  | 81.5    |
| 17-May | 4       | 14         | 0.0     | 15-Jun   | 627     | 1,218,891  | 81.5    |
| 18-May | 467     | 481        | 0.0     | 16-Jun   | 6,475   | 1,225,366  | 81.9    |
| 19-May | 75,607  | 76,088     | 5.1     | 17-Jun   | 50,917  | 1,276,283  | 85.3    |
| 20-May | 4,268   | 80,356     | 5.4     | 18-Jun   | 188,314 | 1,464,597  | 97.9    |
| 21-May | 258,062 | 338,418    | 22.6    | 19-Jun   | 18,620  | 1,483,217  | 99.2    |
| 22-May | 43,382  | 381,800    | 25.5    | 20-Jun   | 2,114   | 1,485,331  | 99.3    |
| 23-May | 278,044 | 659,844    | 44.1    | 21-Jun   | 5,820   | 1,491,151  | 99.7    |
| 24-May | 99,393  | 759,237    | 50.8    | 22-Jun   | 2,277   | 1,493,428  | 99.9    |
| 25-May | 36,375  | 795,612    | 53.2    | 23-Jun   | 273     | 1,493,701  | 99.9    |
| 26-May | 18,859  | 814,471    | 54.5    | 24-Jun   | 233     | 1,493,934  | 99.9    |
| 27-May | 1,315   | 815,786    | 54.5    | 25-Jun   | 724     | 1,494,658  | 99.9    |
| 28-May | 550     | 816,336    | 54.6    | 26-Jun   | 277     | 1,494,935  | 100.0   |
| 29-May | 48,236  | 864,572    | 57.8    | 27-Jun   | 666     | 1,495,601  | 100.0   |
| 30-May | 8,487   | 873,059    | 58.4    | 28-Jun   | 41      | 1,495,642  | 100.0   |
| 31-May | 1,094   | 874,153    | 58.4    |          |         |            |         |
| 1-Jun  | 5,039   | 879,192    | 58.8    |          |         |            |         |
| 2-Jun  | 9,474   | 888,666    | 59.4    | Wild     |         | 841,268    |         |
| 3-Jun  | 2,631   | 891,297    | 59.6    | Hatchery |         | 654,374    |         |
| Total  |         |            |         |          |         | 1,495,642  |         |

Appendix A. 19. Daily counts of large Chinook salmon passing through Little Tahltan weir, 2001.

| Date          | Large Chinook |            |         | Chinook non large |            |         |
|---------------|---------------|------------|---------|-------------------|------------|---------|
|               | Count         | Cumulative |         | Count             | Cumulative |         |
|               |               | Count      | Percent |                   | Count      | Percent |
| 20-Jun        | 0             | 0          | 0.0     | 0                 | 0          | 0.0     |
| 21-Jun        | 0             | 0          | 0.0     | 0                 | 0          | 0.0     |
| 22-Jun        | 0             | 0          | 0.0     | 0                 | 0          | 0.0     |
| 23-Jun        | 10            | 10         | 0.1     | 1                 | 1          | 0.4     |
| 24-Jun        | 1             | 11         | 0.1     | 0                 | 1          | 0.4     |
| 25-Jun        | 1             | 12         | 0.1     | 0                 | 1          | 0.4     |
| 26-Jun        | 3             | 15         | 0.2     | 0                 | 1          | 0.4     |
| 27-Jun        | 9             | 24         | 0.2     | 0                 | 1          | 0.4     |
| 28-Jun        | 19            | 43         | 0.4     | 2                 | 3          | 1.1     |
| 29-Jun        | 20            | 63         | 0.6     | 1                 | 4          | 1.5     |
| 30-Jun        | 8             | 71         | 0.7     | 1                 | 5          | 1.9     |
| 1-Jul         | 17            | 88         | 0.9     | 0                 | 5          | 1.9     |
| 2-Jul         | 42            | 130        | 1.3     | 0                 | 5          | 1.9     |
| 3-Jul         | 117           | 247        | 2.5     | 0                 | 5          | 1.9     |
| 4-Jul         | 116           | 363        | 3.7     | 0                 | 5          | 1.9     |
| 5-Jul         | 53            | 416        | 4.3     | 0                 | 5          | 1.9     |
| 6-Jul         | 71            | 487        | 5.0     | 1                 | 6          | 2.2     |
| 7-Jul         | 140           | 627        | 6.4     | 3                 | 9          | 3.3     |
| 8-Jul         | 56            | 683        | 7.0     | 0                 | 9          | 3.3     |
| 9-Jul         | 216           | 899        | 9.2     | 2                 | 11         | 4.1     |
| 10-Jul        | 161           | 1,060      | 10.9    | 1                 | 12         | 4.5     |
| 11-Jul        | 161           | 1,221      | 12.5    | 1                 | 13         | 4.8     |
| 12-Jul        | 265           | 1,486      | 15.3    | 4                 | 17         | 6.3     |
| 13-Jul        | 591           | 2,077      | 21.3    | 9                 | 26         | 9.7     |
| 14-Jul        | 691           | 2,768      | 28.4    | 2                 | 28         | 10.4    |
| 15-Jul        | 494           | 3,262      | 33.5    | 6                 | 34         | 12.6    |
| 16-Jul        | 325           | 3,587      | 36.8    | 8                 | 42         | 15.6    |
| 17-Jul        | 1,231         | 4,818      | 49.5    | 37                | 79         | 29.4    |
| 18-Jul        | 811           | 5,629      | 57.8    | 25                | 104        | 38.7    |
| 19-Jul        | 224           | 5,853      | 60.1    | 5                 | 109        | 40.5    |
| 20-Jul        | 282           | 6,135      | 63.0    | 0                 | 109        | 40.5    |
| 21-Jul        | 239           | 6,374      | 65.5    | 4                 | 113        | 42.0    |
| 22-Jul        | 328           | 6,702      | 68.8    | 6                 | 119        | 44.2    |
| 23-Jul        | 208           | 6,910      | 71.0    | 5                 | 124        | 46.1    |
| 24-Jul        | 214           | 7,124      | 73.2    | 0                 | 124        | 46.1    |
| 25-Jul        | 30            | 7,154      | 73.5    | 0                 | 124        | 46.1    |
| 26-Jul        | 36            | 7,190      | 73.8    | 3                 | 127        | 47.2    |
| 27-Jul        | 80            | 7,270      | 74.7    | 11                | 138        | 51.3    |
| 28-Jul        | 344           | 7,614      | 78.2    | 19                | 157        | 58.4    |
| 29-Jul        | 160           | 7,774      | 79.8    | 5                 | 162        | 60.2    |
| 30-Jul        | 300           | 8,074      | 82.9    | 9                 | 171        | 63.6    |
| 31-Jul        | 130           | 8,204      | 84.2    | 10                | 181        | 67.3    |
| 1-Aug         | 504           | 8,708      | 89.4    | 20                | 201        | 74.7    |
| 2-Aug         | 364           | 9,072      | 93.2    | 10                | 211        | 78.4    |
| 3-Aug         | 315           | 9,387      | 96.4    | 38                | 249        | 92.6    |
| 4-Aug         | 140           | 9,527      | 97.8    | 7                 | 256        | 95.2    |
| 5-Aug         | 34            | 9,561      | 98.2    | 0                 | 256        | 95.2    |
| 6-Aug         | 88            | 9,649      | 99.1    | 9                 | 265        | 98.5    |
| 7-Aug         | 0             | 9,649      | 99.1    | 0                 | 265        | 98.5    |
| 8-Aug         | 13            | 9,662      | 99.2    | 0                 | 265        | 98.5    |
| 9-Aug         | 16            | 9,678      | 99.4    | 2                 | 267        | 99.3    |
| 10-Aug        | 18            | 9,696      | 99.6    | 1                 | 268        | 99.6    |
| 11-Aug        | 9             | 9,705      | 99.7    | 1                 | 269        | 100.0   |
| 12-Aug        | 24            | 9,729      | 99.9    | 0                 | 269        | 100.0   |
| 13-Aug        | 9             | 9,738      | 100.0   | 0                 | 269        | 100.0   |
| 14-Aug        | 0             | 9,738      | 100.0   | 0                 | 269        | 100.0   |
| 15-Aug        |               | 9,738      | 100.0   |                   | 269        | 100.0   |
| 16-Aug        |               | 9,738      | 100.0   |                   | 269        | 100.0   |
| 17-Aug        |               | 9,738      | 100.0   |                   | 269        | 100.0   |
| 18-Aug        |               | 9,738      | 100.0   |                   | 269        | 100.0   |
| 19-Aug        |               | 9,738      | 100.0   |                   | 269        | 100.0   |
| 20-Aug        |               | 9,738      | 100.0   |                   | 269        | 100.0   |
| Total Counted |               | 9,738      |         |                   | 269        |         |
| Broodstock    |               | -8         | females |                   |            |         |
| Escapement    |               | 9,730      |         |                   | 269        |         |



Appendix B. 1. Salmon catch and effort in the Alaskan District 106 commercial drift gillnet fisheries, 1960-2001.

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

| Year     | Catch   |         |         |           |         | Effort      |           |
|----------|---------|---------|---------|-----------|---------|-------------|-----------|
|          | Chinook | Sockeye | Coho    | Pink      | Chum    | Permit Days | Days Open |
| 1960     | 46      | 10,354  | 336     | 1,246     | 502     | 369         | 17        |
| 1961     | 416     | 20,614  | 14,934  | 124,236   | 64,479  | 1,737       | 57        |
| 1962     | 1,308   | 47,033  | 42,276  | 256,620   | 59,119  | 4,693       | 52        |
| 1963     | 1,560   | 80,767  | 52,103  | 514,596   | 90,103  | 5,589       | 51        |
| 1964     | 2,082   | 76,541  | 64,654  | 443,086   | 44,218  | 5,383       | 49        |
| 1965     | 1,802   | 87,749  | 75,728  | 625,848   | 27,658  | 4,507       | 51        |
| 1966     | 1,665   | 89,847  | 62,823  | 400,932   | 40,756  | 4,978       | 74        |
| 1967     | 1,318   | 86,385  | 17,670  | 91,609    | 26,370  | 2,511       | 27        |
| 1968     | 1,316   | 64,671  | 67,151  | 169,107   | 61,366  | 4,965       | 52        |
| 1969     | 877     | 70,318  | 10,280  | 197,073   | 10,903  | 2,112       | 31        |
| 1970     | 785     | 42,778  | 35,470  | 94,892    | 32,231  | 1,863       | 41        |
| 1971     | 1,336   | 53,202  | 48,085  | 527,975   | 37,680  | 2,774       | 47        |
| 1972     | 2,573   | 101,338 | 93,427  | 89,467    | 72,382  | 3,321       | 41        |
| 1973     | 1,931   | 71,995  | 38,447  | 303,621   | 87,729  | 3,300       | 26        |
| 1974     | 1,926   | 57,346  | 45,651  | 104,403   | 50,309  | 2,179       | 28        |
| 1975     | 2,587   | 32,051  | 30,962  | 203,015   | 23,968  | 1,649       | 18        |
| 1976     | 384     | 15,481  | 19,126  | 139,439   | 6,868   | 827         | 22        |
| 1977     | 671     | 67,023  | 8,401   | 419,107   | 13,300  | 1,381       | 28        |
| 1978     | 274     | 41,574  | 55,578  | 224,715   | 16,545  | 1,510       | 27        |
| 1979     | 2,720   | 66,373  | 28,083  | 648,212   | 35,507  | 2,703       | 31        |
| 1980     | 580     | 107,422 | 16,666  | 45,662    | 26,291  | 1,324       | 25        |
| 1981     | 1,565   | 182,001 | 22,614  | 437,573   | 34,296  | 2,926       | 26        |
| 1982     | 1,648   | 193,798 | 31,481  | 25,533    | 18,646  | 1,700       | 23        |
| 1983     | 567     | 48,842  | 62,442  | 208,290   | 20,144  | 1,453       | 31        |
| 1984     | 892     | 91,653  | 41,359  | 343,255   | 70,258  | 1,890       | 31        |
| 1985     | 1,687   | 264,987 | 91,188  | 584,953   | 69,673  | 2,673       | 31        |
| 1986     | 1,704   | 145,709 | 194,912 | 308,484   | 82,289  | 3,510       | 31        |
| 1987     | 836     | 136,427 | 34,534  | 243,482   | 42,025  | 1,767       | 20        |
| 1988     | 1,104   | 92,529  | 13,103  | 69,559    | 69,620  | 1,495       | 19        |
| 1989     | 1,544   | 192,734 | 92,385  | 1,101,194 | 67,351  | 3,222       | 34        |
| 1990     | 2,108   | 185,805 | 164,235 | 319,186   | 73,232  | 3,502       | 34        |
| 1991     | 2,055   | 144,104 | 198,160 | 133,566   | 124,630 | 3,620       | 39        |
| 1992     | 1,355   | 203,155 | 298,935 | 94,248    | 140,468 | 4,230       | 40        |
| 1993     | 992     | 205,955 | 231,038 | 537,960   | 134,601 | 4,353       | 38        |
| 1994     | 754     | 211,048 | 267,862 | 179,994   | 176,026 | 4,468       | 43        |
| 1995     | 951     | 207,298 | 170,561 | 448,163   | 300,078 | 3,657       | 34        |
| 1996     | 644     | 311,100 | 223,640 | 188,035   | 283,290 | 5,290       | 46        |
| 1997     | 1,075   | 168,518 | 77,550  | 789,051   | 186,456 | 3,668       | 39        |
| 1998     | 518     | 113,435 | 273,197 | 502,655   | 332,022 | 4,398       | 43        |
| 1999     | 518     | 104,878 | 203,262 | 490,716   | 448,367 | 4,943       | 50        |
| 2000     | 1,220   | 90,076  | 96,207  | 156,619   | 199,836 | 2,409       | 33        |
| Averages |         |         |         |           |         |             |           |
| 60-00    | 1,266   | 111,827 | 88,208  | 311,887   | 90,283  | 3,045       | 36        |
| 91-00    | 1,008   | 175,957 | 204,041 | 352,101   | 232,577 | 4,104       | 41        |
| 2001     | 1,057   | 164,013 | 188,465 | 825,330   | 282,910 | 3,854       | 50        |

Appendix B.1. Page 2 of 2.

Alaska Hatchery Contributions of Large Chinook and Coho salmon

|          | Large Chinook |       | Coho     |         |
|----------|---------------|-------|----------|---------|
|          | Hatchery      | Wild  | Hatchery | Wild    |
| 1989     | 512           | 1,032 | 5,029    | 87,356  |
| 1990     | 1,009         | 1,099 | 50,354   | 113,881 |
| 1991     | 608           | 1,447 | 64,067   | 134,093 |
| 1992     | 658           | 697   | 112,824  | 186,111 |
| 1993     | 305           | 687   | 77,914   | 153,124 |
| 1994     | 402           | 352   | 36,805   | 231,057 |
| 1995     | 353           | 598   | 27,333   | 143,228 |
| 1996     | 324           | 320   | 55,218   | 168,422 |
| 1997     | 369           | 706   | 19,479   | 58,071  |
| 1998     | 290           | 228   | 101,129  | 172,068 |
| 1999     | 189           | 329   | 82,828   | 120,434 |
| 2000     | 790           | 430   | 48,169   | 48,038  |
| Averages |               |       |          |         |
| 91-00    | 429           | 579   | 62,577   | 141,465 |
| 2001     | 446           | 1,609 | 67,378   | 66,188  |

Appendix B. 2. Stock proportions and catches of sockeye salmon in the Alaskan District 106 commercial drift gillnet fisheries, 1982-2001.

| Catches do not include Blind Slough terminal area harvest. Data based on scale pattern analysis. |         |         |         |               |        |         |         |       |
|--|---------|---------|---------|---------------|--------|---------|---------|-------|
| Year   | Alaska  | Canada  | Stikine |               |        | Tahltan |         |       |
|  |         |         | Tahltan | Tuya Mainstem | Total  | Wild    | Planted |       |
| <b>Proportions</b>   |         |         |         |               |        |         |         |       |
| 1982   | 0.486   | 0.319   |         |               | 0.194  |         |         |       |
| 1983   | 0.668   | 0.217   | 0.103   |               | 0.013  |         |         |       |
| 1984   | 0.658   | 0.269   | 0.029   |               | 0.044  |         |         |       |
| 1985   | 0.479   | 0.419   | 0.091   |               | 0.011  |         |         |       |
| 1986   | 0.689   | 0.293   | 0.014   |               | 0.004  |         |         |       |
| 1987   | 0.827   | 0.155   | 0.010   |               | 0.007  |         |         |       |
| 1988   | 0.874   | 0.106   | 0.020   |               | 0.001  |         |         |       |
| 1989   | 0.657   | 0.311   | 0.006   |               | 0.026  |         |         |       |
| 1990   | 0.608   | 0.371   | 0.005   |               | 0.016  |         |         |       |
| 1991   | 0.545   | 0.331   | 0.100   |               | 0.024  |         |         |       |
| 1992   | 0.595   | 0.232   | 0.070   |               | 0.102  |         |         |       |
| 1993   | 0.400   | 0.338   | 0.098   |               | 0.164  |         |         |       |
| 1994   | 0.579   | 0.254   | 0.142   |               | 0.025  |         | 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 |
| <b>Averages</b>  |         |         |         |               |        |         |         |       |
| 82-00  | 0.600   | 0.281   | 0.060   | 0.055         | 0.036  | 0.119   | 0.060   | 0.017 |
| 91-00  | 0.545   | 0.289   | 0.081   | 0.055         | 0.052  | 0.166   | 0.060   | 0.017 |
| 2001   | 0.525   | 0.332   | 0.039   | 0.079         | 0.025  | 0.143   | 0.029   | 0.010 |
| <b>Catches</b>   |         |         |         |               |        |         |         |       |
| 1982   | 94,275  | 61,853  |         |               |        | 37,670  |         |       |
| 1983   | 32,603  | 10,589  | 5,020   |               | 631    | 5,650   |         |       |
| 1984   | 60,278  | 24,624  | 2,673   |               | 4,078  | 6,751   |         |       |
| 1985   | 126,914 | 111,015 | 24,045  |               | 3,013  | 27,058  |         |       |
| 1986   | 100,337 | 42,685  | 2,081   |               | 606    | 2,687   |         |       |
| 1987   | 112,893 | 21,190  | 1,376   |               | 968    | 2,344   |         |       |
| 1988   | 80,868  | 9,784   | 1,813   |               | 64     | 1,877   |         |       |
| 1989   | 126,603 | 59,959  | 1,111   |               | 5,061  | 6,172   |         |       |
| 1990   | 112,983 | 68,921  | 915     |               | 2,986  | 3,901   |         |       |
| 1991   | 78,533  | 47,707  | 14,364  |               | 3,501  | 17,864  |         |       |
| 1992   | 120,977 | 47,207  | 14,187  |               | 20,784 | 34,971  |         |       |
| 1993   | 82,300  | 69,617  | 20,204  |               | 33,833 | 54,037  |         |       |
| 1994   | 122,118 | 53,683  | 29,876  |               | 5,371  | 35,247  | 22,857  | 7,019 |
| 1995   | 65,544  | 116,075 | 16,715  | 125           | 8,839  | 25,679  | 9,182   | 7,533 |
| 1996   | 165,221 | 83,271  | 51,598  | 8,821         | 2,189  | 62,608  | 45,826  | 5,772 |
| 1997   | 97,101  | 45,665  | 9,764   | 13,232        | 2,756  | 25,752  | 6,281   | 3,483 |
| 1998   | 67,890  | 34,811  | 1,678   | 9,020         | 36     | 10,734  | 1,477   | 201   |
| 1999   | 70,363  | 9,696   | 5,988   | 6,427         | 12,404 | 24,819  | 5,700   | 288   |
| 2000   | 57,935  | 20,996  | 1,827   | 7,612         | 1,706  | 11,145  | 1,573   | 254   |
| <b>Averages</b>  |         |         |         |               |        |         |         |       |
| 82-00  | 93,460  | 49,439  | 11,402  | 7,540         | 6,046  | 20,893  | 13,271  | 3,507 |
| 91-00  | 92,798  | 52,873  | 16,620  | 7,540         | 9,142  | 30,286  | 13,271  | 3,507 |
| 2001   | 86,078  | 54,512  | 6,339   | 12,965        | 4,119  | 23,423  | 4,747   | 1,592 |

Appendix B. 3. Salmon catch and effort in the Alaskan Subdistrict 106-41/42 (Sumner Strait) commercial drift gillnet fishery, 1960-2001.

| Year     | Catch   |         |         |         |         | Effort      |           |
|----------|---------|---------|---------|---------|---------|-------------|-----------|
|          | Chinook | Sockeye | Coho    | Pink    | Chum    | Permit Days | Days Open |
| 1960     | 24      | 9,005   | 277     | 1,103   | 362     | 251         | 17        |
| 1961     | 75      | 9,488   | 1,851   | 26,435  | 9,657   | 359         | 48        |
| 1962     | 131     | 19,692  | 6,548   | 45,987  | 9,544   | 811         | 44        |
| 1963     | 310     | 45,305  | 15,727  | 135,503 | 50,380  | 2,311       | 47        |
| 1964     | 316     | 52,943  | 27,338  | 183,402 | 22,913  | 2,344       | 49        |
| 1965     | 679     | 58,736  | 30,570  | 162,271 | 15,763  | 1,658       | 51        |
| 1966     | 690     | 65,721  | 30,792  | 96,287  | 24,235  | 2,080       | 74        |
| 1967     | 668     | 60,148  | 10,573  | 52,284  | 19,626  | 1,463       | 27        |
| 1968     | 1,010   | 50,212  | 46,111  | 82,012  | 39,001  | 2,997       | 52        |
| 1969     | 607     | 46,258  | 6,094   | 92,075  | 6,393   | 1,147       | 31        |
| 1970     | 420     | 26,812  | 15,153  | 29,102  | 18,092  | 905         | 41        |
| 1971     | 671     | 33,991  | 24,727  | 283,739 | 19,329  | 1,619       | 50        |
| 1972     | 1,747   | 74,745  | 60,827  | 40,644  | 46,511  | 2,152       | 41        |
| 1973     | 1,540   | 55,254  | 24,921  | 160,297 | 62,486  | 2,253       | 26        |
| 1974     | 1,342   | 46,760  | 28,889  | 57,296  | 38,045  | 1,579       | 28        |
| 1975     | 467     | 19,319  | 4,650   | 29,340  | 7,762   | 515         | 17        |
| 1976     | 237     | 9,319   | 10,367  | 20,251  | 2,301   | 366         | 19        |
| 1977     | 202     | 47,408  | 1,819   | 51,038  | 4,240   | 447         | 17        |
| 1978     | 274     | 1,422   | 26,762  | 9,546   | 3,142   | 389         | 27        |
| 1979     | 458     | 34,807  | 12,087  | 176,395 | 16,816  | 952         | 25        |
| 1980     | 205     | 48,434  | 10,894  | 17,068  | 15,176  | 596         | 16        |
| 1981     | 598     | 132,293 | 13,161  | 220,194 | 25,682  | 1,732       | 25        |
| 1982     | 648     | 121,563 | 21,193  | 10,392  | 11,891  | 1,083       | 22        |
| 1983     | 268     | 28,153  | 41,208  | 74,347  | 13,001  | 875         | 32        |
| 1984     | 136     | 27,372  | 19,124  | 99,807  | 28,461  | 587         | 32        |
| 1985     | 538     | 172,088 | 50,577  | 319,379 | 45,566  | 1,726       | 38        |
| 1986     | 421     | 85,247  | 104,328 | 105,347 | 48,471  | 1,896       | 32        |
| 1987     | 441     | 79,165  | 17,776  | 117,059 | 25,877  | 978         | 20        |
| 1988     | 452     | 57,337  | 6,349   | 10,894  | 42,210  | 815         | 18        |
| 1989     | 581     | 107,886 | 55,671  | 418,044 | 40,156  | 1,716       | 34        |
| 1990     | 759     | 104,922 | 94,526  | 84,543  | 42,474  | 1,827       | 34        |
| 1991     | 844     | 89,355  | 136,990 | 64,334  | 85,435  | 2,118       | 39        |
| 1992     | 743     | 146,608 | 190,885 | 38,483  | 100,666 | 2,630       | 40        |
| 1993     | 458     | 129,859 | 134,902 | 296,986 | 96,995  | 2,728       | 38        |
| 1994     | 456     | 157,526 | 191,695 | 66,225  | 125,826 | 2,988       | 43        |
| 1995     | 663     | 133,713 | 109,613 | 154,004 | 189,369 | 2,349       | 34        |
| 1996     | 487     | 223,784 | 159,319 | 70,620  | 162,872 | 3,623       | 46        |
| 1997     | 829     | 118,675 | 52,917  | 414,619 | 100,612 | 2,402       | 39        |
| 1998     | 334     | 79,052  | 175,124 | 196,403 | 200,892 | 2,999       | 43        |
| 1999     | 397     | 73,378  | 130,083 | 277,194 | 284,807 | 3,294       | 50        |
| 2000     | 558     | 57,863  | 54,232  | 80,014  | 120,111 | 1,522       | 33        |
| Averages |         |         |         |         |         |             |           |
| 60-00    | 553     | 71,747  | 52,601  | 118,804 | 54,223  | 1,636       | 35        |
| 91-00    | 577     | 120,981 | 133,576 | 165,888 | 146,759 | 2,665       | 41        |
| 2001     | 516     | 99,219  | 133,956 | 345,385 | 168,265 | 2,406       | 50        |

Appendix B. 4. Stock proportions and catches of sockeye salmon in the Alaskan Subdistrict 106-41/42 (Sumner Strait) commercial drift gillnet fishery, 1985-2001.

Data based on scale pattern analysis.

| Year        | Alaska  | Canada | Stikine |               |        | Tahltan |         |       |
|-------------|---------|--------|---------|---------------|--------|---------|---------|-------|
|             |         |        | Tahltan | Tuya Mainstem | Total  | Wild    | Planted |       |
| Proportions |         |        |         |               |        |         |         |       |
| 1985        | 0.480   | 0.401  | 0.109   |               | 0.010  | 0.119   |         |       |
| 1986        | 0.662   | 0.308  | 0.024   |               | 0.006  | 0.030   |         |       |
| 1987        | 0.816   | 0.166  | 0.015   |               | 0.003  | 0.018   |         |       |
| 1988        | 0.868   | 0.112  | 0.019   |               | 0.001  | 0.020   |         |       |
| 1989        | 0.653   | 0.303  | 0.009   |               | 0.036  | 0.044   |         |       |
| 1990        | 0.579   | 0.395  | 0.008   |               | 0.018  | 0.026   |         |       |
| 1991        | 0.460   | 0.377  | 0.129   |               | 0.034  | 0.163   |         |       |
| 1992        | 0.582   | 0.241  | 0.088   |               | 0.089  | 0.177   |         |       |
| 1993        | 0.369   | 0.327  | 0.134   |               | 0.169  | 0.304   |         |       |
| 1994        | 0.531   | 0.271  | 0.166   |               | 0.032  | 0.198   | 0.127   | 0.040 |
| 1995        | 0.287   | 0.565  | 0.099   | 0.001         | 0.048  | 0.149   | 0.049   | 0.051 |
| 1996        | 0.479   | 0.245  | 0.228   | 0.039         | 0.009  | 0.276   | 0.203   | 0.025 |
| 1997        | 0.538   | 0.269  | 0.079   | 0.101         | 0.014  | 0.193   | 0.056   | 0.023 |
| 1998        | 0.550   | 0.337  | 0.017   | 0.096         | 0.000  | 0.113   | 0.014   | 0.003 |
| 1999        | 0.618   | 0.101  | 0.074   | 0.079         | 0.128  | 0.281   | 0.070   | 0.004 |
| 2000        | 0.611   | 0.223  | 0.028   | 0.116         | 0.023  | 0.167   | 0.024   | 0.004 |
| Averages    |         |        |         |               |        |         |         |       |
| 85-00       | 0.568   | 0.290  | 0.077   | 0.072         | 0.039  | 0.142   | 0.077   | 0.021 |
| 91-00       | 0.503   | 0.295  | 0.104   | 0.072         | 0.055  | 0.202   | 0.077   | 0.021 |
| 2001        | 0.493   | 0.336  | 0.032   | 0.112         | 0.028  | 0.171   | 0.017   | 0.015 |
| 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   |
| Averages    |         |        |         |               |        |         |         |       |
| 85-00       | 61,017  | 34,501 | 10,930  | 6,810         | 4,527  | 18,011  | 12,290  | 3,149 |
| 91-00       | 59,165  | 36,317 | 15,002  | 6,810         | 6,411  | 25,499  | 12,290  | 3,149 |
| 2001        | 48,906  | 33,309 | 3,164   | 11,063        | 2,777  | 17,004  | 1,723   | 1,441 |

Appendix B. 5. Salmon catch and effort in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 1960-2001.

| Year     | Catch   |         |         |         |         | Effort      |           |
|----------|---------|---------|---------|---------|---------|-------------|-----------|
|          | Chinook | Sockeye | Coho    | Pink    | Chum    | Permit Days | Days Open |
| 1960     | 22      | 1,349   | 59      | 143     | 140     | 118         | 13        |
| 1961     | 341     | 11,126  | 13,083  | 97,801  | 54,822  | 1,378       | 57        |
| 1962     | 1,177   | 27,341  | 35,728  | 210,633 | 49,575  | 3,882       | 52        |
| 1963     | 1,250   | 35,462  | 36,376  | 379,093 | 39,723  | 3,278       | 51        |
| 1964     | 1,766   | 23,598  | 37,316  | 259,684 | 21,305  | 3,039       | 49        |
| 1965     | 1,123   | 29,013  | 45,158  | 463,577 | 11,895  | 2,849       | 51        |
| 1966     | 975     | 24,126  | 32,031  | 304,645 | 16,521  | 2,898       | 74        |
| 1967     | 650     | 26,237  | 7,097   | 39,325  | 6,744   | 1,048       | 27        |
| 1968     | 306     | 14,459  | 21,040  | 87,095  | 22,365  | 1,968       | 52        |
| 1969     | 270     | 24,060  | 4,186   | 104,998 | 4,510   | 1,026       | 31        |
| 1970     | 365     | 15,966  | 20,317  | 65,790  | 14,139  | 1,025       | 41        |
| 1971     | 665     | 19,211  | 23,358  | 244,236 | 18,351  | 1,517       | 50        |
| 1972     | 826     | 26,593  | 32,600  | 48,823  | 25,871  | 1,276       | 41        |
| 1973     | 391     | 16,741  | 13,526  | 143,324 | 25,243  | 1,303       | 26        |
| 1974     | 584     | 10,586  | 16,762  | 47,107  | 12,264  | 712         | 28        |
| 1975     | 2,120   | 12,732  | 26,312  | 173,675 | 16,206  | 1,159       | 9         |
| 1976     | 147     | 6,162   | 8,759   | 119,188 | 4,567   | 527         | 21        |
| 1977     | 469     | 19,615  | 6,582   | 368,069 | 9,060   | 940         | 21        |
| 1978     |         | 40,152  | 28,816  | 215,169 | 13,403  | 1,148       | 16        |
| 1979     | 2,262   | 31,566  | 15,996  | 471,817 | 18,691  | 1,848       | 25        |
| 1980     | 375     | 58,988  | 5,772   | 28,594  | 11,115  | 749         | 25        |
| 1981     | 967     | 49,708  | 9,453   | 217,379 | 8,614   | 1,321       | 26        |
| 1982     | 1,000   | 72,235  | 10,288  | 15,141  | 6,755   | 647         | 21        |
| 1983     | 299     | 20,689  | 21,234  | 133,943 | 7,143   | 589         | 37        |
| 1984     | 756     | 64,281  | 22,235  | 243,448 | 41,797  | 1,236       | 24        |
| 1985     | 1,149   | 92,899  | 40,611  | 265,574 | 24,107  | 1,372       | 36        |
| 1986     | 1,283   | 60,462  | 90,584  | 203,137 | 33,818  | 1,664       | 31        |
| 1987     | 395     | 57,262  | 16,758  | 126,423 | 16,148  | 799         | 20        |
| 1988     | 652     | 35,192  | 6,754   | 58,665  | 27,410  | 682         | 19        |
| 1989     | 963     | 84,848  | 36,714  | 683,150 | 27,195  | 1,583       | 34        |
| 1990     | 1,349   | 80,883  | 69,709  | 234,643 | 30,758  | 1,676       | 34        |
| 1991     | 1,211   | 54,749  | 61,170  | 69,232  | 39,195  | 1,505       | 39        |
| 1992     | 612     | 56,547  | 108,050 | 55,765  | 39,802  | 1,603       | 40        |
| 1993     | 534     | 76,096  | 96,136  | 240,974 | 37,606  | 1,646       | 38        |
| 1994     | 298     | 53,522  | 76,167  | 113,769 | 50,200  | 1,606       | 43        |
| 1995     | 288     | 73,585  | 60,948  | 294,159 | 110,709 | 1,422       | 34        |
| 1996     | 157     | 87,316  | 64,321  | 117,415 | 120,418 | 1,580       | 39        |
| 1997     | 246     | 49,843  | 24,633  | 374,432 | 85,844  | 1,329       | 38        |
| 1998     | 184     | 34,383  | 98,073  | 306,252 | 131,130 | 1,522       | 43        |
| 1999     | 121     | 31,500  | 73,179  | 213,522 | 163,560 | 1,766       | 49        |
| 2000     | 662     | 32,213  | 41,975  | 76,605  | 79,725  | 934         | 33        |
| Averages |         |         |         |         |         |             |           |
| 60-00    | 730     | 40,080  | 35,606  | 193,083 | 36,060  | 1,468       | 35        |
| 91-00    | 431     | 54,975  | 70,465  | 186,213 | 85,819  | 1,491       | 40        |
| 2001     | 541     | 64,794  | 54,509  | 479,945 | 114,645 | 1,573       | 50        |

Appendix B. 6. Stock proportions and catches of sockeye salmon in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 1985-2001.

Data based on scale pattern analysis.

| Year        | Alaska | Canada | Stikine |               |        | Tahltan |         |       |
|-------------|--------|--------|---------|---------------|--------|---------|---------|-------|
|             |        |        | Tahltan | 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 |
| Average     |        |        |         |               |        |         |         |       |
| 85-00       | 0.664  | 0.273  | 0.023   | 0.020         | 0.033  | 0.063   | 0.018   | 0.006 |
| 91-00       | 0.639  | 0.275  | 0.028   | 0.020         | 0.047  | 0.086   | 0.018   | 0.006 |
| 2001        | 0.574  | 0.327  | 0.049   | 0.029         | 0.021  | 0.099   | 0.047   | 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     |
| Average     |        |        |         |               |        |         |         |       |
| 85-00       | 38,270 | 18,142 | 1,417   |               | 1,980  | 3,670   | 981     | 358   |
| 91-00       | 33,633 | 16,556 | 1,618   | 729           | 2,731  | 4,787   | 981     | 358   |
| 2001        | 37,172 | 21,203 | 3,175   | 1,902         | 1,342  | 6,419   | 3,024   | 151   |

Appendix B. 7. Salmon catch and effort in the Alaskan District 108 commercial drift gillnet fishery, 1960-2001.

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.

| Year     | Catch   |         |        |         |         | Effort      |           |
|----------|---------|---------|--------|---------|---------|-------------|-----------|
|          | Chinook | Sockeye | Coho   | Pink    | Chum    | Permit Days | Days Open |
| 1962     | 618     | 4,430   | 3,921  | 2,889   | 2,035   |             | 27        |
| 1963     | 1,430   | 9,979   | 11,612 | 10,198  | 11,024  |             | 53        |
| 1964     | 2,911   | 20,299  | 29,388 | 114,555 | 10,771  |             | 62        |
| 1965     | 3,106   | 21,419  | 8,301  | 4,729   | 2,480   |             | 48        |
| 1966     | 4,516   | 36,710  | 16,493 | 61,908  | 17,730  |             | 62        |
| 1967     | 6,372   | 29,226  | 6,747  | 4,713   | 5,955   |             | 40        |
| 1968     | 4,604   | 14,594  | 36,407 | 91,028  | 14,537  |             | 61        |
| 1969     | 5,021   | 19,209  | 5,790  | 11,877  | 2,311   | 967         | 46        |
| 1970     | 3,207   | 15,120  | 18,403 | 20,523  | 12,305  | 1,222       | 51        |
| 1971     | 3,717   | 18,143  | 14,876 | 21,806  | 4,665   | 1,070       | 57        |
| 1972     | 9,332   | 51,734  | 38,520 | 17,153  | 17,363  | 2,095       | 64        |
| 1973     | 9,254   | 21,387  | 5,837  | 6,585   | 6,680   | 1,519       | 39        |
| 1974     | 8,199   | 2,428   | 16,021 | 4,188   | 2,107   | 1,178       | 29        |
| 1975     | 1,534   | 0       | 0      | 0       | 1       | 258         | 8         |
| 1976     | 1,123   | 18      | 6,056  | 722     | 124     | 372         | 19        |
| 1977     | 1,443   | 48,374  | 14,405 | 16,253  | 4,233   | 742         | 23        |
| 1978     | 531     | 56      | 32,650 | 1,157   | 1,001   | 565         | 12        |
| 1979     | 91      | 2,158   | 234    | 13,478  | 1,064   | 94          | 5         |
| 1980     | 631     | 14,053  | 2,946  | 7,224   | 6,910   | 327         | 22        |
| 1981     | 283     | 8,833   | 1,403  | 1,466   | 3,594   | 177         | 9         |
| 1982     | 1,033   | 6,911   | 19,971 | 16,988  | 741     | 494         | 21        |
| 1983     | 47      | 178     | 15,369 | 4,171   | 675     | 263         | 17        |
| 1984     | 14      | 1,290   | 5,141  | 4,960   | 1,892   | 56          | 9         |
| 1985     | 20      | 1,060   | 1,926  | 5,325   | 1,892   | 70          | 14        |
| 1986     | 102     | 4,185   | 7,439  | 4,901   | 5,928   | 246         | 25        |
| 1987     | 149     | 1,629   | 1,015  | 3,343   | 949     | 81          | 13        |
| 1988     | 206     | 1,246   | 12     | 144     | 3,109   | 66          | 8         |
| 1989     | 310     | 10,083  | 4,261  | 27,640  | 3,375   | 216         | 28        |
| 1990     | 557     | 11,574  | 8,218  | 13,822  | 9,382   | 359         | 34        |
| 1991     | 1,504   | 22,275  | 15,864 | 10,935  | 11,402  | 643         | 49        |
| 1992     | 967     | 52,717  | 22,127 | 66,742  | 15,458  | 1,246       | 51        |
| 1993     | 1,628   | 76,874  | 14,307 | 39,661  | 22,504  | 1,569       | 48        |
| 1994     | 1,996   | 97,224  | 44,891 | 35,405  | 27,658  | 2,199       | 57        |
| 1995     | 1,702   | 76,756  | 17,834 | 37,788  | 54,296  | 1,729       | 50        |
| 1996     | 1,717   | 154,150 | 19,059 | 37,651  | 135,623 | 2,396       | 57        |
| 1997     | 2,566   | 93,039  | 2,140  | 65,745  | 38,913  | 1,699       | 44        |
| 1998     | 460     | 22,031  | 19,206 | 39,246  | 41,057  | 947         | 45        |
| 1999     | 1,049   | 36,548  | 28,437 | 48,550  | 117,196 | 1,675       | 54        |
| 2000     | 1,671   | 15,833  | 5,651  | 9,497   | 40,337  | 606         | 35        |
| Averages |         |         |        |         |         |             |           |
| 60-00    | 2,195   | 26,251  | 13,407 | 22,691  | 16,905  | 848         | 36        |
| 91-00    | 1,526   | 64,745  | 18,952 | 39,122  | 50,444  | 1,471       | 49        |
| 2001     | 7       | 610     | 10,731 | 11,012  | 5,397   | 377         | 36        |



Appendix B.7. Page 2 of 2.

Alaska Hatchery Contributions of Large Chinook and Coho salmon

|                              | Large Chinook |       | Coho     |        |
|------------------------------|---------------|-------|----------|--------|
|                              | Hatchery      | Wild  | Hatchery | Wild   |
| Alaska Hatchery Contribution |               |       |          |        |
| 1989                         | 83            | 227   | 55       | 4,206  |
| 1990                         | 249           | 308   | 2,536    | 5,682  |
| 1991                         | 490           | 1,014 | 3,442    | 12,422 |
| 1992                         | 439           | 528   | 7,067    | 15,060 |
| 1993                         | 762           | 866   | 890      | 13,417 |
| 1994                         | 594           | 1,402 | 2,043    | 42,848 |
| 1995                         | 757           | 945   | 1,087    | 16,747 |
| 1996                         | 839           | 878   | 1,269    | 17,790 |
| 1997                         | 731           | 1,835 | 161      | 1,979  |
| 1998                         | 302           | 158   | 3,042    | 16,164 |
| 1999                         | 361           | 688   | 6,361    | 22,076 |
| 2000                         | 934           | 737   | 2,801    | 2,850  |
| Averages                     |               |       |          |        |
| 91-00                        | 621           | 905   | 2,816    |        |
| 2001                         | 0             | 7     | 2,565    | 8,166  |

Appendix B. 8. Stock proportions and catches of sockeye salmon in the Alaskan District 108 commercial drift gillnet fishery, 1985-2001.

| Data based on SPA. |        |        |         |               |        |         |         |        |
|--------------------|--------|--------|---------|---------------|--------|---------|---------|--------|
| Year               | Alaska | Canada | Stikine |               |        | Tahltan |         |        |
|                    |        |        | Tahltan | Tuya Mainstem | Total  | Wild    | Planted |        |
| 1985               | 0.064  | 0.000  | 0.292   |               | 0.644  | 0.936   |         |        |
| 1986               | 0.206  | 0.017  | 0.094   |               | 0.683  | 0.777   |         |        |
| 1987 <sup>b</sup>  | 0.125  | 0.000  | 0.438   |               | 0.437  | 0.875   |         |        |
| 1988               | 0.213  | 0.039  | 0.178   |               | 0.571  | 0.749   |         |        |
| 1989               | 0.117  | 0.054  | 0.034   |               | 0.795  | 0.829   |         |        |
| 1990               | 0.395  | 0.128  | 0.111   |               | 0.366  | 0.477   |         |        |
| 1991               | 0.173  | 0.118  | 0.395   |               | 0.314  | 0.709   |         |        |
| 1992               | 0.163  | 0.051  | 0.258   |               | 0.528  | 0.786   |         |        |
| 1993               | 0.231  | 0.114  | 0.256   |               | 0.399  | 0.655   |         |        |
| 1994               | 0.326  | 0.208  | 0.362   |               | 0.103  | 0.466   | 0.246   | 0.116  |
| 1995               | 0.135  | 0.204  | 0.455   | 0.006         | 0.200  | 0.661   | 0.198   | 0.257  |
| 1996               | 0.102  | 0.082  | 0.622   | 0.069         | 0.125  | 0.816   | 0.552   | 0.070  |
| 1997               | 0.058  | 0.131  | 0.362   | 0.261         | 0.189  | 0.812   | 0.260   | 0.102  |
| 1998               | 0.115  | 0.108  | 0.189   | 0.244         | 0.343  | 0.777   | 0.182   | 0.008  |
| 1999               | 0.144  | 0.036  | 0.414   | 0.201         | 0.205  | 0.820   | 0.390   | 0.024  |
| 2000               | 0.204  | 0.128  | 0.132   | 0.261         | 0.275  | 0.669   | 0.100   | 0.032  |
| Averages           |        |        |         |               |        |         |         |        |
| 85-00              | 0.173  | 0.088  | 0.287   |               | 0.386  | 0.738   |         |        |
| 91-00              | 0.165  | 0.118  | 0.345   | 0.174         | 0.268  | 0.717   | 0.275   | 0.087  |
| 2001               | 0.775  | 0.098  | 0.000   | 0.005         | 0.121  | 0.126   | 0.000   | 0.000  |
| 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    |
| Averages           |        |        |         |               |        |         |         |        |
| 85-00              | 6,976  | 5,161  | 16,650  |               | 10,273 | 30,189  |         |        |
| 91-00              | 10,447 | 8,043  | 26,315  | 8,709         | 14,715 | 46,255  | 24,028  | 7,551  |
| 2001               | 473    | 60     | 0       | 3             | 74     | 77      | 0       | 0      |

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

Appendix B. 9. Salmon catch in the Alaskan District 106 and 108 test fisheries, 1984-2001.

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

Appendix B. 10. Stock proportions of sockeye salmon in the Alaskan District 106 and 108 test fisheries, 1984-2001.

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

Data based on scale pattern analysis.

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

Appendix B. 11. Stock specific catches of sockeye salmon in the Alaskan District 106 and 108 test fisheries, 1984-2001.

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

Data based on scale pattern analysis.

| Year   | Alaska | Canada | Stikine              |               |       | Tahltan |         |     |
|--|--------|--------|----------------------|---------------|-------|---------|---------|-----|
|  |        |        | Tahltan <sup>a</sup> | 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 |

Appendix B. 12. Salmon catch and effort in the Canadian commercial fishery in the lower Stikine River, 1979-2001.

| Year               | Catch   |           |         |        |       |       | Effort  |      |
|--------------------|---------|-----------|---------|--------|-------|-------|---------|------|
|                    | Chinook |           | Sockeye | Coho   | Pink  | Chum  | Permit  |      |
|                    | Large   | non large |         |        |       |       | Days    | Days |
| 1979 <sup>a</sup>  | 712     | 63        | 10,534  | 10,720 | 1,994 | 424   | 756.0   | 42.0 |
| 1980               | 1,488   |           | 18,119  | 6,629  | 736   | 771   | 668.0   | 41.0 |
| 1981               | 664     |           | 21,551  | 2,667  | 3,713 | 1,128 | 522.0   | 32.0 |
| 1982               | 1,693   |           | 15,397  | 15,904 | 1,782 | 722   | 1,063.0 | 71.0 |
| 1983               | 492     | 430       | 15,857  | 6,170  | 1,043 | 274   | 434.0   | 54.0 |
| 1984 <sup>b</sup>  |         |           |         |        |       |       |         |      |
| 1985               | 256     | 91        | 17,093  | 2,172  | 2,321 | 532   | 145.5   | 22.5 |
| 1986               | 806     | 365       | 12,411  | 2,278  | 107   | 295   | 239.0   | 13.5 |
| 1987               | 909     | 242       | 6,138   | 5,728  | 646   | 432   | 287.0   | 20.0 |
| 1988               | 1,007   | 201       | 12,766  | 2,112  | 418   | 730   | 320.0   | 26.5 |
| 1989               | 1,537   | 157       | 17,179  | 6,092  | 825   | 674   | 325.0   | 23.0 |
| 1990               | 1,569   | 680       | 14,530  | 4,020  | 496   | 499   | 328.0   | 29.0 |
| 1991               | 641     | 318       | 17,563  | 2,638  | 394   | 208   | 282.4   | 39.0 |
| 1992               | 873     | 89        | 21,031  | 1,850  | 122   | 231   | 235.4   | 55.0 |
| 1993               | 830     | 164       | 38,464  | 2,616  | 29    | 395   | 483.8   | 58.0 |
| 1994               | 1,016   | 158       | 38,462  | 3,377  | 89    | 173   | 430.1   | 74.0 |
| 1995               | 1,067   | 599       | 45,622  | 3,418  | 48    | 256   | 534.0   | 59.0 |
| 1996               | 1,708   | 221       | 66,262  | 1,402  | 25    | 229   | 439.2   | 81.0 |
| 1997               | 3,283   | 186       | 56,995  | 401    | 269   | 222   | 569.4   | 89.0 |
| 1998               | 1,614   | 328       | 37,310  | 726    | 55    | 13    | 374.0   | 46.5 |
| 1999               | 2,127   | 789       | 32,556  | 181    | 11    | 8     | 261.3   | 31.0 |
| 2000               | 1,970   | 240       | 20,472  | 298    | 181   | 144   | 227.0   | 23.3 |
| Averages           |         |           |         |        |       |       |         |      |
| 79-00 <sup>c</sup> | 1,277   | 296       | 25,539  | 3,876  | 729   | 398   | 425     | 44   |
| 91-00              | 1,513   | 309       | 37,474  | 1,691  | 122   | 188   | 384     | 56   |
| 2001               | 826     | 59        | 19,872  | 233    | 78    | 56    | 173.0   | 23.0 |

<sup>a</sup> The lower river commercial catch in 1979 includes the upper river commercial catch.

<sup>b</sup> There was no commercial fishery in 1984.

<sup>c</sup> Chinook averages only since 1983 when large fish and jacks were recorded separately.

Appendix B. 13. Sockeye salmon stock proportions and catch by stock in the Canadian commercial fishery in the lower Stikine River, 1979-2001.

| Year              | Proportions |       |          | Planted<br>Tahltan | Catch   |        |          | Tahltan |         | Stock Id Method | Fishery<br>Timing |
|-------------------|-------------|-------|----------|--------------------|---------|--------|----------|---------|---------|-----------------|-------------------|
|                   | Tahltan     | Tuya  | Mainstem |                    | Tahltan | Tuya   | Mainstem | Wild    | Planted |                 |                   |
| 1979              | 0.433       |       | 0.567    |                    | 4,561   |        | 5,973    |         |         | circuli counts  |                   |
| 1980              | 0.309       |       | 0.691    |                    | 5,599   |        | 12,520   |         |         | circuli counts  |                   |
| 1981              | 0.476       |       | 0.524    |                    | 10,258  |        | 11,293   |         |         | circuli counts  |                   |
| 1982              | 0.624       |       | 0.376    |                    | 9,608   |        | 5,789    |         |         | circuli counts  |                   |
| 1983              | 0.422       |       | 0.578    |                    | 6,692   |        | 9,165    |         |         | circuli counts  |                   |
| 1984 <sup>a</sup> |             |       |          |                    |         |        |          |         |         | SPA             |                   |
| 1985              | 0.623       |       | 0.377    |                    | 10,649  |        | 6,444    |         |         | SPA             |                   |
| 1986              | 0.489       |       | 0.511    |                    | 6,069   |        | 6,342    |         |         | SPA&GPA         |                   |
| 1987              | 0.225       |       | 0.775    |                    | 1,380   |        | 4,758    |         |         | SPA&GPA         |                   |
| 1988              | 0.161       |       | 0.839    |                    | 2,062   |        | 10,704   |         |         | SPA&GPA         |                   |
| 1989              | 0.164       |       | 0.836    |                    | 2,813   |        | 14,366   |         |         | Eggs &TMR       |                   |
| 1990              | 0.346       |       | 0.654    |                    | 5,029   |        | 9,501    |         |         | Eggs &TMR       |                   |
| 1991              | 0.634       |       | 0.366    |                    | 11,136  |        | 6,427    |         |         | Eggs &TMR       |                   |
| 1992              | 0.482       |       | 0.518    |                    | 10,134  |        | 10,897   |         |         | Eggs &TMR       |                   |
| 1993              | 0.537       |       | 0.463    |                    | 20,662  |        | 17,802   |         |         | Eggs &TMR       |                   |
| 1994              | 0.616       |       | 0.384    |                    | 23,678  |        | 14,784   |         |         | Eggs &TMR       | commercial        |
| 1995              | 0.676       | 0.020 | 0.304    | 0.195              | 30,848  | 893    | 13,881   | 21,936  | 8,912   | Eggs &TMR       | commercial        |
| 1996              | 0.537       | 0.113 | 0.350    | 0.066              | 35,584  | 7,465  | 23,213   | 31,197  | 4,387   | Eggs &TMR       | commercial        |
| 1997              | 0.356       | 0.272 | 0.372    | 0.072              | 20,269  | 15,513 | 21,213   | 16,175  | 4,094   | Eggs &TMR       | commercial        |
| 1998              | 0.335       | 0.352 | 0.313    | 0.020              | 12,498  | 13,137 | 11,675   | 11,751  | 747     | Eggs &TMR       | commercial        |
| 1999              | 0.576       | 0.241 | 0.183    | 0.021              | 18,742  | 7,862  | 5,952    | 18,046  | 696     | Eggs &TMR       | commercial        |
| 2000              | 0.252       | 0.397 | 0.350    | 0.039              | 5,165   | 8,136  | 7,171    | 4,364   | 801     | Eggs &TMR       | commercial        |
| Averages          |             |       |          |                    |         |        |          |         |         |                 |                   |
| 79-00             | 0.442       | 0.233 | 0.492    | 0.069              | 12,068  | 8,834  | 10,946   | 17,245  | 3,273   |                 |                   |
| 91-00             | 0.500       | 0.233 | 0.360    | 0.069              | 18,872  | 8,834  | 13,302   | 17,245  | 3,273   |                 |                   |
| 2001              | 0.175       | 0.226 | 0.599    | 0.032              | 3,482   | 4,483  | 11,907   | 2,850   | 632     | Eggs &TMR       | test              |

<sup>a</sup> There was no commercial fishery in 1984.

Appendix B. 14. Salmon catch and effort in the Canadian commercial fishery in the upper Stikine River, 1975-2001.

| Year              | Catch   |           |         |      |      |      | Effort |      |
|-------------------|---------|-----------|---------|------|------|------|--------|------|
|                   | Chinook |           | Sockeye | Coho | Pink | Chum | Permit |      |
|                   | Large   | non large |         |      |      |      | Days   | Days |
| 1975              | 178     |           | 270     | 45   | 0    | 0    |        |      |
| 1976              | 236     |           | 733     | 13   | 0    | 0    |        |      |
| 1977              | 62      |           | 1,975   | 0    | 0    | 0    |        |      |
| 1978              | 100     |           | 1,500   | 0    | 0    | 0    |        |      |
| 1979 <sup>b</sup> |         |           |         |      |      |      |        |      |
| 1980              | 156     |           | 700     | 40   | 20   | 0    |        |      |
| 1981              | 154     |           | 769     | 0    | 0    | 0    | 11.0   | 5.0  |
| 1982              | 76      |           | 195     | 0    | 0    | 0    | 8.0    | 4.0  |
| 1983              | 75      |           | 614     | 0    | 0    | 4    | 10.0   | 8.0  |
| 1984 <sup>c</sup> |         |           |         |      |      |      |        |      |
| 1985              | 62      |           | 1,084   | 0    | 0    | 0    | 14.0   | 6.0  |
| 1986              | 104     | 41        | 815     | 0    | 0    | 0    | 19.0   | 7.0  |
| 1987              | 109     | 19        | 498     | 0    | 0    | 19   | 20.0   | 7.0  |
| 1988              | 175     | 46        | 348     | 0    | 0    | 0    | 21.5   | 6.5  |
| 1989              | 54      | 17        | 493     | 0    | 0    | 0    | 14.0   | 7.0  |
| 1990              | 48      | 20        | 472     | 0    | 0    | 0    | 15.0   | 7.0  |
| 1991              | 117     | 32        | 761     | 0    | 0    | 0    | 13.0   | 6.0  |
| 1992              | 56      | 19        | 822     | 0    | 0    | 0    | 28.0   | 13.0 |
| 1993              | 44      | 2         | 1,692   | 0    | 0    | 0    | 48.0   | 22.0 |
| 1994              | 76      | 1         | 2,466   | 0    | 1    | 0    | 68.0   | 50.0 |
| 1995              | 9       | 17        | 2,355   | 0    | 0    | 0    | 54.0   | 25.0 |
| 1996              | 41      | 44        | 1,101   | 0    | 0    | 0    | 75.0   | 59.0 |
| 1997              | 45      | 6         | 2,199   | 0    | 0    | 0    | 42.0   | 29.0 |
| 1998              | 12      | 0         | 907     | 0    | 0    | 0    | 19.0   | 19.0 |
| 1999              | 24      | 12        | 625     | 0    | 0    | 0    | 19.0   | 18.0 |
| 2000              | 7       | 2         | 889     | 0    | 0    | 0    | 19.8   | 9.3  |
| Averages          |         |           |         |      |      |      |        |      |
| 75-00             | 61      |           | 1,012   | 4    | 1    | 1    | 27.3   | 16.2 |
| 91-00             | 43      | 14        | 1,382   | 0    | 0    | 0    | 38.6   | 25.0 |
| 2001              | 0       | 0         | 487     | 0    | 0    | 0    | 6.0    | 4.0  |

<sup>b</sup> Catches in 1979 were included in the lower river commercial catches.

<sup>c</sup> There was no commercial fishery in 1984.

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



Appendix B. 15. Salmon catch in the Canadian Aboriginal fishery located at Telegraph Creek, on the Stikine River, 1972-2001.

| Year               | Catch   |           |         |      |      |      |
|--------------------|---------|-----------|---------|------|------|------|
|                    | Chinook |           | Sockeye | Coho | Pink | Chum |
|                    | Large   | non large |         |      |      |      |
| 1972               |         |           | 4,373   | 0    | 0    | 0    |
| 1973               | 200     |           | 3,670   | 0    | 0    | 0    |
| 1974               | 100     |           | 3,500   | 0    | 0    | 0    |
| 1975               | 1,024   |           | 1,982   | 5    | 0    | 0    |
| 1976               | 924     |           | 2,911   | 0    | 0    | 0    |
| 1977               | 100     |           | 4,335   | 0    | 0    | 0    |
| 1978               | 400     |           | 3,500   | 0    | 0    | 0    |
| 1979               | 850     |           | 3,000   | 0    | 0    | 0    |
| 1980               | 587     |           | 2,100   | 100  | 0    | 0    |
| 1981               | 586     |           | 4,697   | 200  | 144  | 0    |
| 1982               | 618     |           | 4,948   | 40   | 60   | 0    |
| 1983               | 851     | 215       | 4,649   | 3    | 77   | 26   |
| 1984               | 643     | 59        | 5,327   | 1    | 62   | 0    |
| 1985               | 793     | 94        | 7,287   | 3    | 35   | 4    |
| 1986               | 1,026   | 569       | 4,208   | 2    | 0    | 12   |
| 1987               | 1,183   | 183       | 2,979   | 3    | 0    | 8    |
| 1988               | 1,178   | 197       | 2,177   | 5    | 0    | 3    |
| 1989               | 1,078   | 115       | 2,360   | 6    | 0    | 0    |
| 1990               | 633     | 259       | 3,022   | 17   | 0    | 0    |
| 1991               | 753     | 310       | 4,439   | 10   | 0    | 0    |
| 1992               | 911     | 131       | 4,431   | 5    | 0    | 0    |
| 1993               | 929     | 142       | 7,041   | 0    | 0    | 0    |
| 1994               | 698     | 191       | 4,167   | 4    | 0    | 0    |
| 1995               | 570     | 244       | 5,490   | 0    | 0    | 7    |
| 1996               | 722     | 156       | 6,918   | 2    | 0    | 3    |
| 1997               | 1,155   | 94        | 6,365   | 0    | 0    | 0    |
| 1998               | 538     | 95        | 5,586   | 0    | 0    | 0    |
| 1999               | 765     | 463       | 4,874   | 0    | 0    | 0    |
| 2000               | 1,109   | 386       | 6,107   | 3    | 0    | 0    |
| Averages           |         |           |         |      |      |      |
| 73-00 <sup>b</sup> | 863     |           | 4,360   | 14   | 13   | 2    |
| 91-00              | 815     | 221       | 5,542   | 2    | 0    | 1    |
| 2001               | 665     | 44        | 5,241   | 0    | 0    | 0    |

<sup>b</sup> Chinook averages only since 1983 when large fish and jacks were record

Appendix B. 16. Stock specific sockeye salmon catches in the Canadian upper river commercial and Aboriginal fisheries in the Stikine River, 1972-2001.

| Year              | Upper River Commercial |               |         |         |         | Aboriginal Fishery |         |         |       |         |
|-------------------|------------------------|---------------|---------|---------|---------|--------------------|---------|---------|-------|---------|
|                   | Tahltan                | Tuya Mainstem | Tahltan |         | Tahltan | Tuya Mainstem      | Tahltan |         | Wild  | Planted |
|                   |                        |               | Wild    | Planted |         |                    | 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 <sup>a</sup> |                        |               |         |         | 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 <sup>b</sup> |                        |               |         |         | 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              |         |         | 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      |
| Averages          |                        |               |         |         |         |                    |         |         |       |         |
| 75-00             | 823                    |               | 91      |         |         | 3,558              |         | 387     |       |         |
| 91-00             | 1,033                  |               | 114     |         |         | 3,925              |         | 413     |       |         |
| 2001              | 213                    | 229           | 45      | 148     | 65      | 1,795              | 2,939   | 507     | 1,454 | 341     |

<sup>a</sup> Catches in 1979 were included in the lower river commercial catches.

<sup>b</sup> There was no commercial fishery in 1984.

**Appendix B. 17. Salmon catch in the combined Canadian net fisheries in the Stikine River, 1972-2001.**

There was no commercial fishery in 1984.

Chinook averages only since 1983 when large and small fish were recorded separately.

ESSR catches not included.

| Year               | Catch     |       |         |        |       |       |
|--------------------|-----------|-------|---------|--------|-------|-------|
|                    | Chinook   |       | Sockeye | Coho   | Pink  | Chum  |
| Large              | non large |       |         |        |       |       |
| 1972               | 0         |       | 4,373   | 0      | 0     | 0     |
| 1973               | 200       |       | 3,670   | 0      | 0     | 0     |
| 1974               | 100       |       | 3,500   | 0      | 0     | 0     |
| 1975               | 1,202     |       | 2,252   | 50     | 0     | 0     |
| 1976               | 1,160     |       | 3,644   | 13     | 0     | 0     |
| 1977               | 162       |       | 6,310   | 0      | 0     | 0     |
| 1978               | 500       |       | 5,000   | 0      | 0     | 0     |
| 1979               | 1,562     | 63    | 13,534  | 10,720 | 1,994 | 424   |
| 1980               | 2,231     |       | 20,919  | 6,769  | 756   | 771   |
| 1981               | 1,404     |       | 27,017  | 2,867  | 3,857 | 1,128 |
| 1982               | 2,387     |       | 20,540  | 15,944 | 1,842 | 722   |
| 1983               | 1,418     | 645   | 21,120  | 6,173  | 1,120 | 304   |
| 1984 <sup>b</sup>  | 643       | 59    | 5,327   | 1      | 62    | 0     |
| 1985               | 1,111     | 185   | 25,464  | 2,175  | 2,356 | 536   |
| 1986               | 1,936     | 975   | 17,434  | 2,280  | 107   | 307   |
| 1987               | 2,201     | 444   | 9,615   | 5,731  | 646   | 459   |
| 1988               | 2,360     | 444   | 15,291  | 2,117  | 418   | 733   |
| 1989               | 2,669     | 289   | 20,032  | 6,098  | 825   | 674   |
| 1990               | 2,250     | 959   | 18,024  | 4,037  | 496   | 499   |
| 1991               | 1,511     | 660   | 22,763  | 2,648  | 394   | 208   |
| 1992               | 1,840     | 239   | 26,284  | 1,855  | 122   | 231   |
| 1993               | 1,803     | 308   | 47,197  | 2,616  | 29    | 395   |
| 1994               | 1,790     | 350   | 45,095  | 3,381  | 90    | 173   |
| 1995               | 1,646     | 860   | 53,467  | 3,418  | 48    | 263   |
| 1996               | 2,471     | 421   | 74,281  | 1,404  | 25    | 232   |
| 1997               | 4,483     | 286   | 65,559  | 401    | 269   | 222   |
| 1998               | 2,164     | 423   | 43,803  | 726    | 55    | 13    |
| 1999               | 2,916     | 1,264 | 38,055  | 181    | 11    | 8     |
| 2000               | 3,086     | 628   | 27,468  | 301    | 181   | 144   |
| Averages           |           |       |         |        |       |       |
| 72-00 <sup>b</sup> | 2,128     |       | 23,691  | 2,824  | 541   | 291   |
| 91-00              | 2,371     | 544   | 44,397  | 1,693  | 122   | 189   |
| 2001               | 1,491     | 103   | 25,600  | 233    | 78    | 56    |

<sup>b</sup> There was no commercial fishery in 1984.

<sup>c</sup> Chinook averages only since 1983 when large fish and jacks were recorded.

Appendix B. 18. Salmon catches in the Stikine River harvested under Canadian ESSR licenses, 1992-2001.

| Year   | Tahltan Area |        |         | Tuya Area |               |         |         |       |
|--|--------------|--------|---------|-----------|---------------|---------|---------|-------|
|  | Catch        |        |         | Tahltan   | Tuya Mainstem | Tahltan |         | Total |
|  | Total        | Wild   | Planted |           |               | Wild    | Planted |       |
| 1993   | 1,752        | 1,714  | 38      |           |               |         |         | 0     |
| 1994   | 6,852        | 5,682  | 1,170   |           |               |         |         | 0     |
| 1995   | 10,740       | 6,680  | 4,060   |           |               |         |         | 0     |
| 1996   | 14,339       | 12,667 | 1,672   |           | 216           |         |         | 216   |
| 1997   |              |        |         |           | 2,015         |         |         | 2,015 |
| 1998   |              |        |         |           | 6,103         |         |         | 6,103 |
| 1999   |              |        |         |           | 2,822         |         |         | 2,822 |
| 2000   |              |        |         |           | 1,283         |         |         | 1,283 |
| 2001   |              |        |         |           |               |         |         | 0     |
| Salmon taken for otolith samples when ESSR not operated. |              |        |         |           |               |         |         |       |
| 1997   | 378          | 302    | 76      |           |               |         |         |       |
| 1998   | 390          | 364    | 26      |           |               |         |         |       |
| 1999   | 429          | 404    | 25      |           |               |         |         |       |
| 2000   | 406          | 324    | 82      |           |               |         |         |       |
| 2001   | 50           | 30     | 20      |           | 410           |         |         |       |

Appendix B. 19. Salmon catches and effort in Canadian test fisheries in the Stikine River, 1985-2001.

| Year                              | Catches         |                    |         |       |       |      | Effort  |
|-----------------------------------|-----------------|--------------------|---------|-------|-------|------|---------|
|                                   | Chinook         |                    | Sockeye | Coho  | Pink  | Chum | Drift=# |
|                                   | Large<br>caught | released non large |         |       |       |      | Set=hr. |
| <b>Drift Test Fishery Catches</b> |                 |                    |         |       |       |      |         |
| 1985                              |                 |                    |         |       |       |      |         |
| 1986                              | 27              |                    | 12      | 412   | 226   | 8    | 25      |
| 1987 <sup>b</sup>                 | 128             |                    |         | 385   | 162   | 111  | 61      |
| 1988                              | 168             |                    | 14      | 325   | 75    | 9    | 33      |
| 1989                              | 116             |                    | 4       | 364   | 242   | 41   | 46      |
| 1990                              | 167             |                    | 6       | 447   | 134   | 5    | 29      |
| 1991                              | 90              |                    | 1       | 503   | 118   | 37   | 30      |
| 1992                              | 135             |                    | 27      | 393   | 75    | 13   | 23      |
| 1993                              | 94              |                    | 11      | 440   | 37    | 6    | 18      |
| 1994                              | 43              |                    | 4       | 179   | 71    | 6    | 20      |
| 1995                              | 18              |                    | 13      | 297   | 35    | 4    | 12      |
| 1996                              | 42              |                    | 5       | 262   | 55    | 4    | 55      |
| 1997                              | 30              |                    | 7       | 245   | 11    | 9    | 15      |
| 1998                              | 25              |                    | 11      | 190   | 207   | 20   | 40      |
| 1999                              | 53              |                    | 43      | 410   | 312   | 11   | 17      |
| 2000                              | 59              |                    | 4       | 374   | 60    | 9    | 45      |
| <b>Averages</b>                   |                 |                    |         |       |       |      |         |
| 86-00                             | 80              |                    | 12      | 348   | 121   | 20   | 31      |
| 91-00                             | 59              |                    | 13      | 329   | 98    | 12   | 28      |
| 2001                              | 128             |                    | 3       | 967   | 257   | 74   | 47      |
| <b>Set Test Fishery Catches</b>   |                 |                    |         |       |       |      |         |
| 1985                              |                 |                    |         | 1,340 |       |      |         |
| 1986                              |                 |                    |         |       |       |      |         |
| 1987 <sup>b</sup>                 | 61              |                    |         | 1,283 | 620   | 587  | 193     |
| 1988                              | 101             |                    | 15      | 922   | 130   | 23   | 65      |
| 1989                              | 101             |                    | 20      | 1,243 | 502   | 249  | 103     |
| 1990                              | 64              |                    | 12      | 1,493 | 271   | 42   | 48      |
| 1991                              | 77              |                    | 15      | 1,872 | 127   | 197  | 48      |
| 1992                              | 62              |                    | 21      | 1,971 | 193   | 56   | 43      |
| 1993                              | 85              |                    | 11      | 1,384 | 136   | 6    | 63      |
| 1994                              | 74              |                    | 34      | 414   | 0     | 0    | 0       |
| 1995                              | 61              |                    | 35      | 850   | 166   | 5    | 41      |
| 1996                              | 64              |                    | 40      | 338   | 0     | 0    | 0       |
| 1997                              |                 |                    |         |       |       |      |         |
| 1998                              |                 |                    |         |       |       |      |         |
| 1999                              | 49              |                    | 16      | 803   | 64    | 6    | 10      |
| 2000                              | 87              |                    | 0       | 1,015 | 181   | 25   | 120     |
| <b>Averages</b>                   |                 |                    |         |       |       |      |         |
| 86-00                             | 74              |                    | 20      | 1,132 | 199   | 100  | 61      |
| 91-00                             | 70              |                    | 22      | 1,081 | 108   | 37   | 41      |
| 2001                              | 56              |                    | 7       | 2,223 | 1,078 | 124  | 61      |

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| Year                                   | Catches         |          |           |         |       |      | Effort |         |
|--|-----------------|----------|-----------|---------|-------|------|--------|---------|
|  | Chinook         |          | non large | Sockeye | Coho  | Pink | Chum   | Drift=# |
|  | Large<br>caught | released |           |         |       |      |        | Set=hr. |
| <b>Additional Test Fishery Catches</b> |                 |          |           |         |       |      |        |         |
| 1992                                   | 417             |          | 134       | 594     | 0     | 0    | 0      | 85      |
| 1993                                   | 389             |          | 65        | 1,925   | 2     | 1    | 3      | 266     |
| 1994                                   | 178             |          | 40        | 840     | 0     | 0    | 0      | 131     |
| 1995                                   | 169             |          | 136       | 1,423   | 26    | 1    | 9      | 222     |
| 1996                                   | 192             |          | 31        | 712     | 0     | 0    | 0      | 138     |
| 1997                                   |                 |          |           |         |       |      |        |         |
| 1998                                   |                 |          |           |         |       |      |        |         |
| 1999                                   | 751             |          | 38        | 4,683   | 16    | 18   | 2      | 531     |
| 2000                                   | 787             |          | 14        | 989     | 195   | 0    | 9      | 1,427   |
| <b>Averages</b>                        |                 |          |           |         |       |      |        |         |
| 92-00                                  | 412             |          | 65        | 1,595   | 34    | 3    | 3      | 400     |
| 2001                                   | 1,652           |          | 49        | 91      | 426   | 0    | 1      | 1,399   |
| <b>Total Test Fishery Catches</b>      |                 |          |           |         |       |      |        |         |
| 1985                                   | 0               |          | 0         | 1,340   | 0     | 0    | 0      |         |
| 1986                                   | 27              |          | 12        | 412     | 226   | 8    | 25     |         |
| 1987                                   | 189             |          | 30        | 1,668   | 782   | 698  | 254    |         |
| 1988                                   | 269             |          | 29        | 1,247   | 205   | 32   | 98     |         |
| 1989                                   | 217             |          | 24        | 1,607   | 744   | 290  | 149    |         |
| 1990                                   | 231             |          | 18        | 1,940   | 405   | 47   | 77     |         |
| 1991                                   | 167             |          | 16        | 2,375   | 245   | 234  | 78     |         |
| 1992                                   | 614             |          | 182       | 2,958   | 268   | 69   | 66     |         |
| 1993                                   | 568             |          | 87        | 3,749   | 175   | 13   | 84     |         |
| 1994                                   | 295             |          | 78        | 1,433   | 71    | 6    | 20     |         |
| 1995                                   | 248             |          | 184       | 2,570   | 227   | 10   | 62     |         |
| 1996                                   | 298             |          | 76        | 1,312   | 55    | 4    | 55     |         |
| 1997                                   | 30              |          | 7         | 245     | 11    | 9    | 15     |         |
| 1998                                   | 25              |          | 11        | 190     | 207   | 20   | 40     |         |
| 1999                                   | 853             |          | 97        | 5,896   | 392   | 35   | 29     |         |
| 2000                                   | 933             | 226      | 18        | 2,378   | 436   | 34   | 174    |         |
| <b>Averages</b>                        |                 |          |           |         |       |      |        |         |
| 86-00                                  | 310             |          | 54        | 1,958   | 278   | 94   | 77     |         |
| 91-00                                  | 403             |          | 76        | 2,311   | 209   | 43   | 62     |         |
| 2001                                   | 1,836           | 401      | 59        | 3,281   | 1,761 | 198  | 109    |         |

<sup>a</sup> 1987 jack chinook catch was for both set and drift nets.

Appendix B. 20. Sockeye salmon stock proportions and catch by stock in the test fishery in the lower Stikine River, 1985-2001.

| Year     | Catch   |        |               |                   |         | Proportions |                    |               |          |        | Fishery<br>Timing |            |
|----------|---------|--------|---------------|-------------------|---------|-------------|--------------------|---------------|----------|--------|-------------------|------------|
|          | Tahltan |        | Tuya Mainstem | Marked<br>Tahltan | Tahltan |             | Average<br>Tahltan | Tuya Mainstem | Stock Id | Method |                   |            |
|          | U.S.    | Canada |               |                   | U.S.    | Canada      |                    |               |          |        |                   |            |
| 1985     | 560     | 439    |               | 841               |         | 0.418       | 0.328              | 0.372         |          | 0.628  | SPA               |            |
| 1986     | 164     | 127    |               | 267               |         | 0.398       | 0.308              | 0.352         |          | 0.648  | SPA&GPA           |            |
| 1987     | 513     | 397    |               | 1,213             |         | 0.308       | 0.238              | 0.273         |          | 0.727  | SPA&GPA           |            |
| 1988     | 408     | 295    |               | 895               |         | 0.327       | 0.237              | 0.282         |          | 0.718  | SPA&GPA           |            |
| 1989     |         | 414    |               | 1,192             |         |             | 0.258              | 0.258         |          | 0.742  | Eggs &TMR         |            |
| 1990     |         | 822    |               | 1,058             |         |             | 0.454              | 0.454         |          | 0.546  | Eggs &TMR         |            |
| 1991     |         | 1,443  |               | 931               |         |             | 0.608              | 0.608         |          | 0.392  | Eggs &TMR         |            |
| 1992     |         | 1,912  |               | 1,046             |         |             | 0.646              | 0.646         |          | 0.354  | Eggs &TMR         |            |
| 1993     |         | 2,184  |               | 1,564             |         |             | 0.583              | 0.583         |          | 0.417  | Eggs &TMR         |            |
| 1994     |         | 1,228  |               | 205               |         |             | 0.857              | 0.857         |          | 0.143  | Eggs &TMR         | commercial |
| 1995     |         | 2,064  | 20            | 486               | 729     |             | 0.803              | 0.803         | 0.008    | 0.189  | Eggs &TMR         | commercial |
| 1996     |         | 875    | 116           | 321               | 108     |             | 0.667              | 0.667         | 0.088    | 0.245  | Eggs &TMR         | commercial |
| 1997     |         | 97     | 54            | 94                | 20      |             | 0.396              | 0.396         | 0.220    | 0.384  | Eggs &TMR         | commercial |
| 1998     |         | 70     | 51            | 69                | 4       |             | 0.368              | 0.368         | 0.268    | 0.363  | Eggs &TMR         | commercial |
| 1999     |         | 3,031  | 1,564         | 1,301             | 113     |             | 0.514              | 0.514         | 0.265    | 0.221  | Eggs &TMR         | commercial |
| 2000     |         | 605    | 982           | 791               | 94      |             | 0.254              | 0.254         | 0.413    | 0.333  | Eggs &TMR         | commercial |
| Averages |         |        |               |                   |         |             |                    |               |          |        |                   |            |
| 85-00    |         |        |               |                   |         |             |                    | 0.480         |          | 0.441  |                   |            |
| 91-00    |         |        |               |                   |         |             |                    | 0.570         | 0.211    | 0.304  |                   |            |
| 2001     |         | 684    | 924           | 1,673             | 124     |             | 0.208              | 0.208         | 0.282    | 0.510  | Eggs &TMR         | test       |

Appendix B. 21. Estimated proportion of inriver run comprised of Tahltan, Tuya, and mainstem sockeye salmon stocks, 1979-2001.

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

| Year     | Tahltan |        | Average |       |          | Stock Id Method | Fishery Timing |
|----------|---------|--------|---------|-------|----------|-----------------|----------------|
|          | U.S.    | Canada | Tahltan | Tuya  | Mainstem |                 |                |
| 1979     | 0.433   |        | 0.433   |       | 0.567    | circuli counts  |                |
| 1980     | 0.305   |        | 0.305   |       | 0.695    | circuli counts  |                |
| 1981     | 0.475   |        | 0.475   |       | 0.525    | circuli counts  |                |
| 1982     | 0.618   |        | 0.618   |       | 0.382    | circuli counts  |                |
| 1983     | 0.489   | 0.423  | 0.456   |       | 0.544    | circuli counts  |                |
| 1984     | 0.635   | 0.394  | 0.493   |       | 0.507    | SPA             |                |
| 1985     | 0.621   | 0.363  | 0.466   |       | 0.534    | SPA             |                |
| 1986     | 0.398   | 0.500  | 0.449   |       | 0.551    | SPA&GPA         |                |
| 1987     | 0.338   | 0.257  | 0.304   |       | 0.696    | SPA&GPA         |                |
| 1988     | 0.209   | 0.122  | 0.172   |       | 0.828    | SPA&GPA         |                |
| 1989     |         | 0.188  | 0.188   |       | 0.812    | Eggs &TMR       |                |
| 1990     |         | 0.417  | 0.417   |       | 0.583    | Eggs &TMR       |                |
| 1991     |         | 0.561  | 0.561   |       | 0.439    | Eggs &TMR       |                |
| 1992     |         | 0.496  | 0.496   |       | 0.504    | Eggs &TMR       |                |
| 1993     |         | 0.477  | 0.477   |       | 0.523    | Eggs &TMR       |                |
| 1994     |         | 0.606  | 0.606   |       | 0.394    | Eggs &TMR       | commerci       |
| 1995     |         | 0.578  | 0.578   | 0.016 | 0.406    | Eggs &TMR       | commerci       |
| 1996     |         | 0.519  | 0.519   | 0.104 | 0.377    | Eggs &TMR       | commerci       |
| 1997     |         | 0.297  | 0.297   | 0.229 | 0.474    | Eggs &TMR       | commerci       |
| 1998     |         | 0.309  | 0.309   | 0.348 | 0.344    | Eggs &TMR       | commerci       |
| 1999     |         | 0.545  | 0.545   | 0.245 | 0.209    | Eggs &TMR       | commerci       |
| 2000     |         | 0.260  | 0.260   | 0.391 | 0.349    | Eggs &TMR       | commerci       |
| Averages |         |        |         |       |          |                 |                |
| 79-00    |         |        | 0.428   |       | 0.511    |                 |                |
| 91-00    |         |        | 0.465   |       | 0.402    |                 |                |
| 2001     |         | 0.202  | 0.202   | 0.268 | 0.530    | Eggs &TMR       | test           |



## Appendix B. 22. Counts of adult sockeye salmon migrating through Tahltan Lake weir, 1959-2001.

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

| Year     | Weir<br>Installed | Date of Arrival |        |        | Weir<br>Pulled | Total<br>Count | Brood-<br>stock | Samples<br>or ESSR | Otolith<br>Samples | Spawners |         |          |
|----------|-------------------|-----------------|--------|--------|----------------|----------------|-----------------|--------------------|--------------------|----------|---------|----------|
|          |                   | First           | 50%    | 90%    |                |                |                 |                    |                    | Total    | Natural | Hatchery |
| 1959     | 30-Jun            | 2-Aug           | 12-Aug | 16-Aug |                | 4,311          |                 |                    |                    |          |         |          |
| 1960     | 15-Jul            | 2-Aug           | 24-Aug | 27-Aug |                | 6,387          |                 |                    |                    |          |         |          |
| 1961     | 20-Jul            | 9-Aug           | 11-Aug | 15-Aug |                | 16,619         |                 |                    |                    |          |         |          |
| 1962     | 1-Aug             | 2-Aug           | 5-Aug  | 8-Aug  |                | 14,508         |                 |                    |                    |          |         |          |
| 1963     | 3-Aug             |                 |        |        |                | 1,780          |                 |                    |                    |          |         |          |
| 1964     | 23-Jul            | 26-Jul          | 14-Aug | 25-Aug |                | 18,353         |                 |                    |                    |          |         |          |
| 1965     | 19-Jul            | 18-Jul          | 2-Sep  | 7-Sep  |                | 1,471          |                 |                    |                    |          |         |          |
| 1966     | 12-Jul            | 3-Aug           | 13-Aug | 21-Aug |                | 21,580         |                 |                    |                    |          |         |          |
| 1967     | 11-Jul            | 14-Jul          | 21-Jul | 28-Jul |                | 38,801         |                 |                    |                    |          |         |          |
| 1968     | 11-Jul            | 21-Jul          | 25-Jul | 8-Aug  |                | 19,726         |                 |                    |                    |          |         |          |
| 1969     | 7-Jul             | 11-Jul          | 18-Jul | 31-Jul |                | 11,805         |                 |                    |                    |          |         |          |
| 1970     | 5-Jul             | 25-Jul          | 1-Aug  | 11-Aug |                | 8,419          |                 |                    |                    |          |         |          |
| 1971     | 12-Jul            | 19-Jul          | 28-Jul | 12-Aug |                | 18,523         |                 |                    |                    |          |         |          |
| 1972     | 13-Jul            | 13-Jul          | 19-Jul | 31-Aug | 21-Aug         | 52,545         |                 |                    |                    |          |         |          |
| 1973     | 10-Jul            | 24-Jul          | 30-Jul | 7-Aug  | 1-Sep          | 2,877          |                 |                    |                    |          |         |          |
| 1974     | 3-Jul             | 28-Jul          | 3-Aug  | 17-Aug | 13-Sep         | 8,101          |                 |                    |                    |          |         |          |
| 1975     | 10-Jul            | 25-Jul          | 8-Aug  | 17-Aug | 28-Aug         | 8,159          |                 |                    |                    |          |         |          |
| 1976     | 16-Jul            | 29-Jul          | 1-Aug  | 6-Aug  | 24-Aug         | 24,111         |                 |                    |                    |          |         |          |
| 1977     | 6-Jul             | 11-Jul          | 16-Jul | 10-Aug | 25-Aug         | 42,960         |                 |                    |                    |          |         |          |
| 1978     | 10-Jul            | 10-Jul          | 20-Jul | 29-Jul | 26-Aug         | 22,788         |                 |                    |                    |          |         |          |
| 1979     | 9-Jul             | 23-Jul          | 1-Aug  | 11-Aug | 31-Aug         | 10,211         |                 |                    |                    |          |         |          |
| 1980     | 4-Jul             | 15-Jul          | 22-Jul | 12-Aug | 3-Sep          | 11,018         |                 |                    |                    |          |         |          |
| 1981     | 30-Jun            | 16-Jul          | 26-Jul | 3-Aug  | 8-Sep          | 50,790         |                 |                    |                    |          |         |          |
| 1982     | 2-Jul             | 10-Jul          | 19-Jul | 29-Jul | 4-Sep          | 28,257         |                 |                    |                    |          |         |          |
| 1983     | 27-Jun            | 5-Jul           | 22-Jul | 5-Aug  | 7-Sep          | 21,256         |                 |                    |                    |          |         |          |
| 1984     | 20-Jun            | 19-Jul          | 24-Jul | 3-Aug  | 29-Aug         | 32,777         |                 |                    |                    |          |         |          |
| 1985     | 28-Jun            | 18-Jul          | 31-Jul | 6-Aug  | 5-Sep          | 67,326         |                 |                    |                    |          |         |          |
| 1986     | 10-Jul            | 26-Jul          | 4-Aug  | 11-Aug | 4-Sep          | 20,280         |                 |                    |                    |          |         |          |
| 1987     | 14-Jul            | 21-Jul          | 4-Aug  | 13-Aug | 27-Aug         | 6,958          |                 |                    |                    |          |         |          |
| 1988     | 16-Jul            | 16-Jul          | 6-Aug  | 14-Aug | 29-Aug         | 2,536          |                 |                    |                    |          |         |          |
| 1989     | 7-Jul             | 9-Jul           | 1-Aug  | 14-Aug | 4-Sep          | 8,316          | 2,210           |                    |                    | 6,106    |         |          |
| 1990     | 6-Jul             | 15-Jul          | 26-Jul | 3-Aug  | 28-Aug         | 14,927         | 3,302           |                    |                    | 11,625   |         |          |
| 1991     | 30-Jun            | 17-Jul          | 25-Jul | 7-Aug  | 5-Sep          | 50,135         | 3,552           |                    |                    | 46,583   |         |          |
| 1992     | 9-Jul             | 18-Jul          | 25-Jul | 3-Aug  | 2-Sep          | 59,907         | 3,694           |                    |                    | 56,213   |         |          |
| 1993     | 7-Jul             | 10-Jul          | 28-Jul | 10-Aug | 11-Sep         | 53,362         | 4,506           | 1,752              |                    | 47,104   | 46,074  | 1,030    |
| 1994     | 7-Jul             | 14-Jul          | 30-Jul | 9-Aug  | 7-Sep          | 46,363         | 3,378           | 6,852              |                    | 36,133   | 29,961  | 6,172    |
| 1995     | 8-Jul             | 9-Jul           | 24-Jul | 12-Aug | 16-Sep         | 42,317         | 4,902           | 10,740             |                    | 26,675   | 16,591  | 10,084   |
| 1996     | 6-Jul             | 14-Jul          | 22-Jul | 4-Aug  | 10-Sep         | 52,500         | 4,402           | 14,339             |                    | 33,759   | 29,823  | 3,936    |
| 1997     | 9-Jul             | 15-Jul          | 25-Jul | 26-Aug | 26-Sep         | 12,483         | 2,294           |                    | 378                | 9,811    | 7,829   | 1,982    |
| 1998     | 9-Jul             | 11-Jul          | 25-Jul | 26-Aug | 17-Sep         | 12,658         | 3,099           |                    | 390                | 9,169    | 8,553   | 616      |
| 1999     | 10-Jul            | 19-Jul          | 31-Jul | 13-Aug | 15-Sep         | 10,748         | 2,870           |                    | 429                | 7,449    | 6,952   | 497      |
| 2000     | 9-Jul             | 21-Jul          | 25-Jul | 3-Aug  | 4-Sep          | 6,076          | 1,717           |                    | 406                | 3,953    | 3,152   | 801      |
| Averages |                   |                 |        |        |                |                |                 |                    |                    |          |         |          |
| 59-00    | 9-Jul             | 19-Jul          | 30-Jul | 11-Aug | 4-Sep          | 22,977         |                 |                    |                    |          |         |          |
| 91-00    | 7-Jul             | 14-Jul          | 26-Jul | 11-Aug | 11-Sep         | 34,655         | 3,441           |                    |                    | 27,685   |         |          |
| 2001     | 8-Jul             | 19-Jul          | 31-Jul | 9-Aug  | 14-Sep         | 14,811         | 2,386           |                    | 50                 | 12,375   | 7,475   | 4,900    |

Appendix B. 23. Aerial survey counts of Mainstem sockeye salmon stocks in the Stikine River drainage, 1984-2001.

The index represents the combined counts from eight spawning areas.

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

| Year     | Chutine River | Scud River | Porcupine Slough | Christina Creek | Craig River | Bronson Slough | Verrett Creek | Verrett Slough | Escapement Index |
|----------|---------------|------------|------------------|-----------------|-------------|----------------|---------------|----------------|------------------|
| 1984     | 526           | 769        | 69               | 130             | 102         |                | 640           |                | 2,236            |
| 1985     | 253           | 282        | 69               | 67              | 27          |                | 383           |                | 1,081            |
| 1986     | 139           | 151        | 6                | 0               | 0           |                | 270           |                | 566              |
| 1987     | 6             | 490        | 62               | 6               | 30          |                | 103           |                | 697              |
| 1988     | 14            | 219        | 22               | 7               | 0           |                | 114           |                | 376              |
| 1989     | 29            | 269        | 133              | 10              | 60          | 60             | 180           | 68             | 809              |
| 1990     | 24            | 301        | 31               | 4               | 0           | 0              | 301           | 82             | 743              |
| 1991     | 0             | 100        | 61               |                 | 7           | 32             | 179           | 8              | 387              |
| 1992     | 164           | 1,242      | 90               | 50              | 17          | 138            | 163           | 22             | 1,886            |
| 1993     | 57            | 321        | 141              | 28              | 2           | 79             | 107           | 142            | 877              |
| 1994     | 267           | 292        | 66               |                 |             | 62             | 147           | 114            | 948              |
| 1995     | 13            | 260        | 11               |                 |             | 72             | 47            | 31             | 434              |
| 1996     | 134           | 351        | 149              |                 |             | 27             | 54            | 338            | 1,053            |
| 1997     | 204           | 271        | 25               |                 |             | 12             | 116           | 32             | 660              |
| 1998     | 230           | 246        | 89               |                 |             | 9              | 183           | 135            | 892              |
| 1999     | 56            | 301        | 64               |                 |             | 54             | 98            | 78             | 651              |
| 2000     | 47            | 86         | 86               |                 |             | 32             | 0             | 90             | 341              |
| Averages |               |            |                  |                 |             |                |               |                |                  |
| 84-00    | 127           | 350        | 69               |                 |             |                | 181           |                | 861              |
| 91-00    | 117           | 347        | 78               |                 |             | 52             | 109           | 99             | 813              |
| 2001     | 601           | 2,037      | 268              |                 |             | 163            | 217           | 232            | 3,518            |

Appendix B. 24. Estimates of sockeye salmon smolt migrating through Tahltan Lake smolt weir, 1984-2001.

Estimate changes due to overcrowding mortality, 1987 and expansions by average % of outmigration by date from historical data90-92.

| Year     | Weir Installed | Date of Arrival |        |        | Total Count | Total Estimate | Date and Expansion | Smolt     |          |
|----------|----------------|-----------------|--------|--------|-------------|----------------|--------------------|-----------|----------|
|          |                | First           | 50%    | 90%    |             |                |                    | Natural   | Hatchery |
| 1984     | 10-May         | 11-May          | 23-May | 6-Jun  |             | 218,702        |                    |           |          |
| 1985     | 25-Apr         | 23-May          | 31-May | 28-May |             | 613,531        |                    |           |          |
| 1986     | 8-May          | 10-May          | 31-May | 7-Jun  |             | 244,330        |                    |           |          |
| 1987     | 7-May          | 15-May          | 23-May | 24-May |             | 810,432        |                    |           |          |
| 1988     | 1-May          | 8-May           | 20-May | 6-Jun  |             | 1,170,136      |                    |           |          |
| 1989     | 5-May          | 8-May           | 22-May | 6-Jun  |             | 580,574        |                    |           |          |
| 1990     | 5-May          | 15-May          | 29-May | 5-Jun  | 595,147     | 610,407        | 6/14 97.5%         |           |          |
| 1991     | 5-May          | 14-May          | 21-May | 30-May | 1,439,676   | 1,487,265      | 6/13 96.8%         | 1,220,397 | 266,868  |
| 1992     | 7-May          | 13-May          | 21-May | 27-May | 1,516,150   | 1,555,026      | 6/14 97.5%         | 750,702   | 804,324  |
| 1993     | 7-May          | 11-May          | 17-May | 22-May |             | 3,255,045      |                    | 2,855,562 | 399,483  |
| 1994     | 8-May          | 8-May           | 16-May | 12-Jun |             | 915,119        |                    | 620,809   | 294,310  |
| 1995     | 5-May          | 6-May           | 13-May | 11-Jun |             | 822,284        |                    | 767,027   | 55,257   |
| 1996     | 11-May         | 11-May          | 20-May | 25-May |             | 1,559,236      |                    | 1,408,020 | 151,216  |
| 1997     | 7-May          | 11-May          | 23-May | 30-May |             | 518,202        |                    | 348,685   | 169,517  |
| 1998     | 7-May          | 8-May           | 25-May | 5-Jun  |             | 540,866        |                    | 326,420   | 214,446  |
| 1999     | 6-May          | 10-May          | 9-Jun  | 15-Jun |             | 762,033        |                    | 468,488   | 293,545  |
| 2000     | 7-May          | 9-May           | 22-May | 17-Jun |             | 619,274        |                    | 355,618   | 263,656  |
| Averages |                |                 |        |        |             |                |                    |           |          |
| 84-00    | 05-May         | 11-May          | 23-May | 03-Jun |             | 957,792        |                    |           |          |
| 91-00    | 05-May         | 11-May          | 23-May | 03-Jun |             | 1,203,435      |                    | 912,173   | 291,262  |
| 2001     | 6-May          | 7-May           | 24-May | 18-Jun |             | 1,495,642      |                    | 841,268   | 654,374  |

Appendix B. 25. Weir counts of Chinook salmon at Little Tahltan River, 1985-2001.

| Year              | Weir Installed | Date of Arrival |        |        | Total Broodstock and Other Spawners | Total            |                  |
|-------------------|----------------|-----------------|--------|--------|-------------------------------------|------------------|------------------|
|                   |                | First           | 50%    | 90%    |                                     | Natural Spawners | Natural Spawners |
| Large Chinook     |                |                 |        |        |                                     |                  |                  |
| 1985              | 3-Jul          | 4-Jul           | 30-Jul | 6-Aug  | 3,114                               |                  | 3,114            |
| 1986              | 28-Jun         | 29-Jun          | 21-Jul | 5-Aug  | 2,891                               |                  | 2,891            |
| 1987              | 28-Jun         | 4-Jul           | 24-Jul | 2-Aug  | 4,783                               |                  | 4,783            |
| 1988              | 26-Jun         | 27-Jun          | 18-Jul | 3-Aug  | 7,292                               |                  | 7,292            |
| 1989              | 25-Jun         | 26-Jun          | 23-Jul | 2-Aug  | 4,715                               |                  | 4,715            |
| 1990              | 22-Jun         | 29-Jun          | 23-Jul | 4-Aug  | 4,392                               |                  | 4,392            |
| 1991              | 23-Jun         | 25-Jun          | 20-Jul | 3-Aug  | 4,506                               |                  | 4,506            |
| 1992              | 24-Jun         | 4-Jul           | 21-Jul | 30-Jul | 6,627                               | -12              | 6,615            |
| 1993              | 20-Jun         | 21-Jun          | 16-Jul | 28-Jul | 11,449                              | -12              | 11,437           |
| 1994              | 18-Jun         | 28-Jun          | 22-Jul | 2-Aug  | 6,387                               | -14              | 6,373            |
| 1995              | 17-Jun         | 20-Jun          | 17-Jul | 4-Aug  | 3,072                               | 0                | 3,072            |
| 1996              | 17-Jun         | 26-Jun          | 16-Jul | 30-Jul | 4,821                               | 0                | 4,821            |
| 1997              | 14-Jun         | 22-Jun          | 16-Jul | 29-Jul | 5,557                               | -10              | 5,547            |
| 1998              | 13-Jun         | 19-Jun          | 14-Jul | 29-Jul | 4,879                               | -6               | 4,873            |
| 1999              | 18-Jun         | 27-Jun          | 19-Jul | 1-Aug  | 4,738                               | -5               | 4,733            |
| 2000              | 19-Jun         | 23-Jun          | 21-Jul | 5-Aug  | 6,640                               | -9               | 6,631            |
| Averages          |                |                 |        |        |                                     |                  |                  |
| 85-00             | 21-Jun         | 26-Jun          | 20-Jul | 01-Aug | 5,366                               |                  | 5,362            |
| 91-00             | 18-Jun         | 24-Jun          | 18-Jul | 31-Jul | 5,868                               |                  | 5,861            |
| 2001              | 20-Jun         | 23-Jun          | 18-Jul | 2-Aug  | 9,738                               | -8               | 9,730            |
| non large Chinook |                |                 |        |        |                                     |                  |                  |
| 1985              | 3-Jul          | 4-Jul           | 31-Jul | 10-Aug | 316                                 |                  | 3,430            |
| 1986              | 28-Jun         | 3-Jul           | 25-Jul | 6-Aug  | 572                                 |                  | 3,463            |
| 1987              | 28-Jun         | 3-Jul           | 26-Jul | 6-Aug  | 365                                 |                  | 5,148            |
| 1988              | 26-Jun         | 27-Jun          | 17-Jul | 2-Aug  | 327                                 |                  | 7,619            |
| 1989              | 25-Jun         | 26-Jun          | 23-Jul | 2-Aug  | 199                                 |                  | 4,914            |
| 1990              | 22-Jun         | 5-Jul           | 22-Jul | 30-Jul | 417                                 |                  | 4,809            |
| 1991              | 23-Jun         | 3-Jul           | 24-Jul | 7-Aug  | 313                                 |                  | 4,819            |
| 1992              | 24-Jun         | 12-Jul          | 22-Jul | 30-Jul | 131                                 |                  | 6,758            |
| 1993              | 20-Jun         | 30-Jun          | 14-Jul | 1-Aug  | 60                                  |                  | 11,509           |
| 1994              | 18-Jun         | 2-Jul           | 22-Jul | 5-Aug  | 121                                 |                  | 6,508            |
| 1995              | 17-Jun         | 22-Jun          | 28-Jul | 10-Aug | 135                                 |                  | 3,207            |
| 1996              | 17-Jun         | 12-Jul          | 25-Jul | 5-Aug  | 22                                  |                  | 4,843            |
| 1997              | 14-Jun         | 26-Jun          | 21-Jul | 1-Aug  | 54                                  |                  | 5,611            |
| 1998              | 13-Jun         | 26-Jun          | 20-Jul | 7-Aug  | 37                                  |                  | 4,916            |
| 1999              | 18-Jun         | 1-Jul           | 23-Jul | 6-Aug  | 202                                 |                  | 4,940            |
| 2000              | 19-Jun         | 23-Jun          | 20-Jul | 5-Aug  | 108                                 |                  | 6,748            |
| Averages          |                |                 |        |        |                                     |                  |                  |
| 85-00             | 21-Jun         | 30-Jun          | 22-Jul | 04-Aug | 211                                 |                  | 5,578            |
| 91-00             | 18-Jun         | 30-Jun          | 21-Jul | 04-Aug | 118                                 |                  | 5,986            |
| 2001              | 20-Jun         | 23-Jun          | 27-Jul | 3-Aug  | 269                                 |                  | 10,007           |

## Appendix B. 26. Index counts of Stikine large Chinook salmon escapements, 1979-2001.

Inriver run and escapement generated from mark-recapture studies, inriver and marine caught as reported in ADF&G fisheries data series reports

Total run from jointly accepted US and Canadian catch estimates. Counts do not include small Chinook. Terminal run includes only catches in the Stikine River and Dist

| Year     | Inriver |         | Marine<br>Catch | Total<br>Run <sup>c</sup> | % to<br>Little Tahltan | Little Tahltan |        | Tahltan | Beatty | Andrew Creek |       |
|----------|---------|---------|-----------------|---------------------------|------------------------|----------------|--------|---------|--------|--------------|-------|
|          | Run     | Catches |                 |                           |                        | Escapement     | Weir   | Aerial  | Aerial | Aerial       | Foot  |
| 1979     |         |         |                 |                           |                        |                | 1,166  | 2,118   |        | 327          |       |
| 1980     |         |         |                 |                           |                        |                | 2,137  | 960     | 122    | 282          |       |
| 1981     |         |         |                 |                           |                        |                | 3,334  | 1,852   | 558    | 536          |       |
| 1982     |         |         |                 |                           |                        |                | 2,830  | 1,690   | 567    | 672          |       |
| 1983     |         |         |                 |                           |                        |                | 594    | 453     | 83     | 366          |       |
| 1984     |         |         |                 |                           |                        |                | 1,294  |         | 126    | 389          |       |
| 1985     |         |         |                 |                           |                        |                | 3,114  | 1,598   | 1,490  | 147          | 320   |
| 1986     |         |         |                 |                           |                        |                | 2,891  | 1,201   | 1,400  | 183          | 708   |
| 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          | 343   |
| 1996     | 31,718  | 2,769   | 28,949          |                           | 0.167                  |                | 4,821  | 1,920   | 772    | 218          | 335   |
| 1997     | 31,509  | 4,513   | 26,996          |                           | 0.205                  |                | 5,547  | 1,907   | 260    | 218          | 293   |
| 1998     | 28,133  | 2,165   | 25,968          |                           | 0.188                  |                | 4,873  | 1,385   | 587    | 125          | 487   |
| 1999     | 23,716  | 3,769   | 19,947          |                           | 0.237                  |                | 4,733  | 1,379   |        |              | 605   |
| 2000     | 30,301  | 2,770   | 27,531          |                           | 0.241                  |                | 6,631  | 2,720   |        |              | 690   |
| Averages |         |         |                 |                           |                        |                |        |         |        |              |       |
| 79-00    |         |         |                 |                           |                        |                |        | 2,144   |        |              | 532   |
| 91-00    |         |         |                 |                           |                        |                | 5,862  | 2,224   |        |              | 556   |
| 2001     | 66,646  | 4,103   | 62,543          |                           | 0.156                  |                | 9,730  | 4,258   |        |              | 1,054 |

## Appendix B. 27. Index counts of Stikine coho salmon escapements, 1984-2001.

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

| Year    | Date   | Katete |        | Craig | Bronson |        | Scud   |        | Porcupine | Christina | Total |
|---------|--------|--------|--------|-------|---------|--------|--------|--------|-----------|-----------|-------|
|         |        | West   | Katete |       | Verrett | Slough | Slough | Slough |           |           |       |
| 1984    | 30-Oct | 147    | 313    | 0     | 15      | 42     |        |        |           |           | 517   |
| 1985    | 25-Oct | 590    | 1,217  | 735   | 39      | 0      | 924    | 365    |           |           | 3,870 |
| 1988    | 28-Oct | 32     | 227    |       | 175     |        | 97     | 53     | 0         |           | 584   |
| 1989    | 29-Oct | 336    | 896    | 992   | 848     | 120    | 707    | 90     | 55        |           | 4,044 |
| 1990    | 30-Oct | 94     | 548    | 810   | 494     |        | 664    | 430    |           |           | 3,040 |
| 1991    | 29-Oct | 302    | 878    | 985   | 218     |        | 221    | 352    |           |           | 2,956 |
| 1992    | 29-Oct | 295    | 1,346  | 949   | 320     |        | 462    | 316    |           |           | 3,688 |
| 1993    | 30-Oct |        |        |       |         |        | 206    | 324    |           |           |       |
| 1994    | 1-Nov  | 28     | 652    | 1,026 | 466     |        | 448    | 1,105  |           |           | 3,725 |
| 1995    | 30-Oct | 211    | 208    | 1,419 | 574     |        | 621    | 719    |           |           | 3,752 |
| 1996    | 30-Oct | 163    | 232    | 205   | 549     |        | 630    | 1,466  |           |           | 3,245 |
| 1997    | 1-Nov  | 2      | 0      | 19    | 116     |        | 272    | 648    |           |           | 1,057 |
| 1998    | 30-Oct | 14     | 63     | 141   | 282     |        | 143    | 450    |           |           | 1,093 |
| 1999    | 5-Nov  | 163    | 773    | 891   | 490     |        | 661    | 894    |           |           | 3,872 |
| 2000    | 2-Nov  |        |        |       | 5       |        | 95     | 206    |           |           | 306   |
| Average |        |        |        |       |         |        |        |        |           |           |       |
| 91-00   | 30-Oct | 149    | 529    | 744   | 378     |        | 402    | 543    |           |           | 2,614 |
| 2001    | 2-Nov  | 207    | 1,401  | 3,121 | 708     |        | 1,571  | 397    |           |           | 7,405 |

## Appendix B. 28. Stikine River sockeye salmon run size, 1979-2001.

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.

Escapement includes fish later captured for broodstock and biological samples. Catches include test fishery catches.

| Year                     | Inriver Run |         |         | Inriver |            | Marine  | Total   |
|--------------------------|-------------|---------|---------|---------|------------|---------|---------|
|                          | Canada      | U.S.    | Average | Catch   | Escapement | Catch   | Run     |
| 1979                     |             | 40,353  | 40,353  | 13,534  | 26,819     | 8,299   | 48,652  |
| 1980                     |             | 62,743  | 62,743  | 20,919  | 41,824     | 23,206  | 85,949  |
| 1981                     |             | 138,879 | 138,879 | 27,017  | 111,862    | 27,538  | 166,417 |
| 1982                     |             | 68,761  | 68,761  | 20,540  | 48,221     | 42,408  | 111,169 |
| 1983                     | 77,260      | 66,838  | 71,683  | 21,120  | 50,563     | 5,772   | 77,455  |
| 1984                     | 95,454      | 59,168  | 76,211  | 5,327   | 70,884     | 7,736   | 83,947  |
| 1985                     | 237,261     | 138,498 | 184,747 | 26,804  | 157,943    | 29,747  | 214,494 |
| 1986                     |             |         | 69,036  | 17,846  | 51,190     | 6,420   | 75,456  |
| 1987                     |             |         | 39,264  | 11,283  | 27,981     | 4,085   | 43,350  |
| 1988                     |             |         | 41,915  | 16,538  | 25,377     | 3,181   | 45,096  |
| 1989                     |             |         | 75,054  | 21,639  | 53,415     | 15,492  | 90,546  |
| 1990                     |             |         | 57,386  | 19,964  | 37,422     | 9,856   | 67,242  |
| 1991                     |             |         | 120,152 | 25,138  | 95,014     | 34,323  | 154,476 |
| 1992                     |             |         | 154,542 | 29,242  | 125,300    | 77,394  | 231,936 |
| 1993                     |             |         | 176,100 | 52,698  | 123,402    | 104,630 | 280,730 |
| 1994                     |             |         | 127,527 | 53,380  | 74,147     | 80,509  | 208,036 |
| 1995                     |             |         | 142,308 | 66,777  | 75,531     | 76,420  | 218,728 |
| 1996                     |             |         | 184,400 | 90,148  | 94,252     | 188,385 | 372,785 |
| 1997                     |             |         | 125,657 | 67,819  | 57,838     | 101,258 | 226,915 |
| 1998                     |             |         | 90,459  | 50,096  | 40,363     | 30,989  | 121,448 |
| 1999                     |             |         | 65,879  | 46,773  | 19,106     | 58,735  | 124,614 |
| 2000                     |             |         | 53,145  | 31,129  | 22,016     | 25,359  | 78,504  |
| Averages                 |             |         |         |         |            |         |         |
| 79-00                    |             |         | 98,464  | 33,442  | 65,021     | 43,716  | 142,179 |
| 91-00                    |             |         | 124,017 | 51,320  | 72,697     | 77,800  | 201,817 |
| 2001                     |             |         | 103,755 | 28,881  | 74,874     | 23,500  | 127,255 |
| Tahltan sockeye run size |             |         |         |         |            |         |         |
| 1979                     |             |         | 17,472  | 7,261   | 10,211     | 5,076   | 22,548  |
| 1980                     |             |         | 19,137  | 8,119   | 11,018     | 11,239  | 30,376  |
| 1981                     |             |         | 65,968  | 15,178  | 50,790     | 16,189  | 82,157  |
| 1982                     |             |         | 42,493  | 14,236  | 28,257     | 20,918  | 63,412  |
| 1983                     |             |         | 32,684  | 11,428  | 21,256     | 5,073   | 37,758  |
| 1984                     |             |         | 37,571  | 4,794   | 32,777     | 3,102   | 40,673  |
| 1985                     |             |         | 86,008  | 18,682  | 67,326     | 25,197  | 111,205 |
| 1986                     |             |         | 31,015  | 10,735  | 20,280     | 2,757   | 33,771  |
| 1987                     |             |         | 11,923  | 4,965   | 6,958      | 2,259   | 14,182  |
| 1988                     |             |         | 7,222   | 4,686   | 2,536      | 2,129   | 9,351   |
| 1989                     |             |         | 14,110  | 5,794   | 8,316      | 1,561   | 15,671  |
| 1990                     |             |         | 23,923  | 8,996   | 14,927     | 2,307   | 26,230  |
| 1991                     |             |         | 67,394  | 17,259  | 50,135     | 23,612  | 91,006  |
| 1992                     |             |         | 76,681  | 16,774  | 59,907     | 28,218  | 104,899 |
| 1993                     |             |         | 84,068  | 32,458  | 51,610     | 40,036  | 124,104 |
| 1994                     |             |         | 77,239  | 37,728  | 39,511     | 65,101  | 142,340 |
| 1995                     |             |         | 82,290  | 50,713  | 31,577     | 51,665  | 133,955 |
| 1996                     |             |         | 95,706  | 57,545  | 38,161     | 147,435 | 243,141 |
| 1997                     |             |         | 37,319  | 24,836  | 12,483     | 43,408  | 80,727  |
| 1998                     |             |         | 27,941  | 15,283  | 12,658     | 7,086   | 35,027  |
| 1999                     |             |         | 35,918  | 25,170  | 10,748     | 23,431  | 59,349  |
| 2000                     |             |         | 13,803  | 7,727   | 6,076      | 5,340   | 19,143  |
| Averages                 |             |         |         |         |            |         |         |
| 79-00                    |             |         | 44,904  | 18,198  | 26,705     | 24,234  | 69,137  |
| 91-00                    |             |         | 59,836  | 28,549  | 31,287     | 43,533  | 103,369 |
| 2001                     |             |         | 20,985  | 6,174   | 14,811     | 6,339   | 27,324  |

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| Year                      | Inriver Run |      |         | Inriver |            | Marine<br>Catch | Total<br>Run |
|---------------------------|-------------|------|---------|---------|------------|-----------------|--------------|
|                           | Canada      | U.S. | Average | Catch   | Escapement |                 |              |
| Tuya sockeye run size     |             |      |         |         |            |                 |              |
| 1995                      |             |      | 2,216   | 1,112   | 1,104      | 586             | 2,802        |
| 1996                      |             |      | 19,158  | 8,919   | 10,239     | 19,442          | 38,600       |
| 1997                      |             |      | 28,738  | 20,819  | 7,919      | 37,520          | 66,258       |
| 1998                      |             |      | 31,442  | 22,911  | 8,531      | 15,941          | 47,383       |
| 1999                      |             |      | 16,165  | 13,877  | 2,288      | 15,217          | 31,382       |
| 2000                      |             |      | 20,779  | 14,971  | 5,808      | 13,255          | 34,034       |
| 2001                      |             |      | 27,783  | 8,575   | 19,208     | 12,968          | 40,751       |
| Mainstem sockeye run size |             |      |         |         |            |                 |              |
| 1979                      |             |      | 22,880  | 6,273   | 16,608     | 3,223           | 26,103       |
| 1980                      |             |      | 43,606  | 12,800  | 30,806     | 11,967          | 55,573       |
| 1981                      |             |      | 72,911  | 11,839  | 61,072     | 11,349          | 84,260       |
| 1982                      |             |      | 26,267  | 6,304   | 19,964     | 21,490          | 47,757       |
| 1983                      |             |      | 38,999  | 9,692   | 29,307     | 699             | 39,698       |
| 1984                      |             |      | 38,640  | 533     | 38,107     | 4,634           | 43,274       |
| 1985                      |             |      | 98,739  | 8,122   | 90,617     | 4,550           | 103,289      |
| 1986                      |             |      | 38,022  | 7,111   | 30,910     | 3,663           | 41,685       |
| 1987                      |             |      | 27,342  | 6,318   | 21,023     | 1,826           | 29,168       |
| 1988                      |             |      | 34,693  | 11,852  | 22,841     | 1,052           | 35,745       |
| 1989                      |             |      | 60,944  | 15,845  | 45,099     | 13,931          | 74,875       |
| 1990                      |             |      | 33,464  | 10,968  | 22,495     | 7,549           | 41,013       |
| 1991                      |             |      | 52,758  | 7,879   | 44,879     | 10,712          | 63,470       |
| 1992                      |             |      | 77,861  | 12,468  | 65,393     | 49,176          | 127,037      |
| 1993                      |             |      | 92,033  | 20,240  | 71,792     | 64,594          | 156,627      |
| 1994                      |             |      | 50,288  | 15,652  | 34,636     | 15,408          | 65,696       |
| 1995                      |             |      | 57,802  | 14,953  | 42,850     | 24,169          | 81,971       |
| 1996                      |             |      | 69,536  | 23,684  | 45,852     | 21,508          | 91,044       |
| 1997                      |             |      | 59,600  | 22,164  | 37,436     | 20,330          | 79,930       |
| 1998                      |             |      | 31,077  | 11,902  | 19,175     | 7,962           | 39,039       |
| 1999                      |             |      | 13,797  | 7,726   | 6,071      | 20,087          | 33,884       |
| 2000                      |             |      | 18,563  | 8,431   | 10,132     | 6,764           | 25,327       |
| Averages                  |             |      |         |         |            |                 |              |
| 79-00                     |             |      | 48,174  | 11,489  | 36,685     | 14,847          | 63,021       |
| 91-00                     |             |      | 52,331  | 14,510  | 37,822     | 24,071          | 76,402       |
| 2001                      |             |      | 54,987  | 14,132  | 40,855     | 4,193           | 59,180       |

Appendix C. 1. Weekly salmon catch and effort in the Alaskan District 111 and Subdistrict 111-32 (Taku Inlet), commercial drift gillnet fishery, 2001.

| Week                 | Start Date | Catch   |         |        |         |         | Effort |           |           |
|----------------------|------------|---------|---------|--------|---------|---------|--------|-----------|-----------|
|                      |            | Chinook | Sockeye | Coho   | Pink    | Chum    | Boats  | Days Open | Boat Days |
| District 111 catches |            |         |         |        |         |         |        |           |           |
| 25                   | 17-Jun     | 539     | 11,829  | 0      | 4       | 9,478   | 96     | 3.0       | 288       |
| 26                   | 24-Jun     | 329     | 13,315  | 4      | 209     | 29,228  | 93     | 3.0       | 279       |
| 27                   | 1-Jul      | 294     | 24,259  | 9      | 4,390   | 45,946  | 106    | 4.0       | 424       |
| 28                   | 8-Jul      | 101     | 22,219  | 29     | 8,264   | 38,858  | 121    | 3.0       | 363       |
| 29                   | 15-Jul     | 112     | 51,378  | 122    | 15,907  | 52,603  | 132    | 4.0       | 528       |
| 30                   | 22-Jul     | 144     | 47,911  | 197    | 20,226  | 28,996  | 154    | 4.0       | 616       |
| 31                   | 29-Jul     | 118     | 68,965  | 684    | 20,978  | 18,691  | 154    | 5.0       | 770       |
| 32                   | 5-Aug      | 46      | 33,844  | 7,505  | 34,730  | 7,652   | 162    | 5.0       | 810       |
| 33                   | 12-Aug     | 11      | 12,295  | 3,470  | 17,088  | 3,824   | 92     | 4.0       | 368       |
| 34                   | 19-Aug     | 1       | 3,992   | 1,501  | 975     | 939     | 41     | 3.0       | 123       |
| 35                   | 26-Aug     | 0       | 377     | 1,571  | 41      | 327     | 26     | 2.0       | 52        |
| 36                   | 2-Sep      | 0       | 53      | 1,174  | 17      | 331     | 13     | 2.0       | 26        |
| 37                   | 9-Sep      | 0       | 7       | 1,129  | 0       | 25      | 6      | 2.0       | 12        |
| 38                   | 16-Sep     | 1       | 6       | 2,003  | 0       | 42      | 12     | 3.0       | 36        |
| 39                   | 23-Sep     | 0       | 0       | 1,995  | 0       | 29      | 6      | 2.0       | 12        |
| 40                   | 30-Sep     | 0       | 0       | 1,136  | 0       | 0       | 8      | 3.0       | 24        |
| Total                |            | 1,696   | 290,450 | 22,529 | 122,829 | 236,969 |        | 55.0      | 4,731     |

Alaska Hatchery Contributions for Large Chinook and Coho

| Week  | Start Date | Large Chinook |       | Coho     |        |
|-------|------------|---------------|-------|----------|--------|
|       |            | Hatchery      | Wild  | Hatchery | Wild   |
| 25    | 17-Jun     | 0             | 539   | 0        | 0      |
| 26    | 24-Jun     | 102           | 227   | 0        | 4      |
| 27    | 1-Jul      | 80            | 214   | 0        | 9      |
| 28    | 8-Jul      | 109           | -8    | 0        | 29     |
| 29    | 15-Jul     | 181           | -69   | 0        | 122    |
| 30    | 22-Jul     | 0             | 144   | 0        | 197    |
| 31    | 29-Jul     | 0             | 118   | 3        | 681    |
| 32    | 5-Aug      | 0             | 46    | 283      | 7,222  |
| 33    | 12-Aug     | 0             | 11    | 365      | 3,105  |
| 34    | 19-Aug     | 0             | 1     | 69       | 1,432  |
| 35    | 26-Aug     | 0             | 0     | 195      | 1,376  |
| 36    | 2-Sep      | 0             | 0     | 217      | 957    |
| 37    | 9-Sep      | 0             | 0     | 89       | 1,040  |
| 38    | 16-Sep     | 0             | 1     | 275      | 1,728  |
| 39    | 23-Sep     | 0             | 0     | 77       | 1,918  |
| 40    | 30-Sep     | 0             | 0     | 15       | 1,121  |
| Total |            | 472           | 1,224 | 1,588    | 20,941 |

Subdistrict 111-32 Catches (Taku Inlet)

|       |        |       |         |        |        |         |     |      |       |
|-------|--------|-------|---------|--------|--------|---------|-----|------|-------|
| 25    | 17-Jun | 539   | 11,669  | 0      | 4      | 9,363   | 95  | 3.0  | 285   |
| 26    | 24-Jun | 284   | 12,201  | 4      | 196    | 26,462  | 91  | 3.0  | 273   |
| 27    | 1-Jul  | 224   | 19,782  | 2      | 3,866  | 35,845  | 102 | 4.0  | 408   |
| 28    | 8-Jul  | 64    | 17,872  | 16     | 7,329  | 22,725  | 105 | 3.0  | 315   |
| 29    | 15-Jul | 71    | 40,945  | 91     | 12,467 | 26,865  | 121 | 4.0  | 484   |
| 30    | 22-Jul | 47    | 27,728  | 132    | 12,272 | 11,313  | 125 | 4.0  | 500   |
| 31    | 29-Jul | 41    | 32,292  | 453    | 6,735  | 6,021   | 110 | 5.0  | 550   |
| 32    | 5-Aug  | 16    | 13,159  | 1,090  | 5,166  | 2,456   | 92  | 5.0  | 460   |
| 33    | 12-Aug | 3     | 3,312   | 1,340  | 912    | 665     | 33  | 4.0  | 132   |
| 34    | 19-Aug | 0     | 476     | 930    | 176    | 363     | 26  | 3.0  | 78    |
| 35    | 26-Aug | 0     | 197     | 1,262  | 38     | 279     | 21  | 2.0  | 42    |
| 36    | 2-Sep  | 0     | 37      | 1,064  | 13     | 274     | 12  | 2.0  | 24    |
| 37    | 9-Sep  | 0     | 7       | 1,129  | 0      | 25      | 6   | 2.0  | 12    |
| 38    | 16-Sep | 1     | 6       | 2,003  | 0      | 42      | 12  | 3.0  | 36    |
| 39    | 23-Sep | 0     | 0       | 1,995  | 0      | 29      | 6   | 2.0  | 12    |
| 40    | 30-Sep | 0     | 0       | 1,136  | 0      | 0       | 8   | 3.0  | 24    |
| Total |        | 1,290 | 179,683 | 12,647 | 49,174 | 142,727 |     | 55.0 | 3,635 |

Subdistrict 111-34 Catches (Port Snettisham)



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, 2001.

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

| Week  | Little Trapper |       |         | Mainstem | Tatsamenie |         | Total |          |       | Wild   | U.S.     |
|-------|----------------|-------|---------|----------|------------|---------|-------|----------|-------|--------|----------|
|       | Kuthai         | Wild  | Planted |          | Wild       | Planted | Taku  | Crescent | Speel | Snett. | Hatchery |
| 25    | 0.760          | 0.187 | 0.000   | 0.045    | 0.000      | 0.003   | 0.995 | 0.005    | 0.000 | 0.005  | 0.000    |
| 26    | 0.403          | 0.358 | 0.000   | 0.225    | 0.000      | 0.011   | 0.996 | 0.000    | 0.001 | 0.002  | 0.002    |
| 27    | 0.202          | 0.350 | 0.000   | 0.309    | 0.076      | 0.004   | 0.942 | 0.001    | 0.050 | 0.051  | 0.007    |
| 28    | 0.030          | 0.220 | 0.000   | 0.404    | 0.202      | 0.008   | 0.864 | 0.055    | 0.053 | 0.108  | 0.028    |
| 29    | 0.012          | 0.124 | 0.000   | 0.367    | 0.280      | 0.045   | 0.827 | 0.015    | 0.064 | 0.080  | 0.093    |
| 30    | 0.031          | 0.100 | 0.000   | 0.226    | 0.241      | 0.040   | 0.637 | 0.009    | 0.035 | 0.045  | 0.318    |
| 31    | 0.000          | 0.058 | 0.000   | 0.251    | 0.282      | 0.044   | 0.635 | 0.010    | 0.015 | 0.024  | 0.341    |
| 32    | 0.000          | 0.055 | 0.000   | 0.229    | 0.207      | 0.028   | 0.519 | 0.026    | 0.002 | 0.028  | 0.453    |
| 33    | 0.000          | 0.030 | 0.000   | 0.190    | 0.084      | 0.026   | 0.330 | 0.000    | 0.050 | 0.050  | 0.619    |
| 34    | 0.000          | 0.030 | 0.000   | 0.190    | 0.084      | 0.026   | 0.330 | 0.000    | 0.050 | 0.050  | 0.619    |
| 35    | 0.000          | 0.030 | 0.000   | 0.190    | 0.084      | 0.026   | 0.330 | 0.000    | 0.050 | 0.050  | 0.619    |
| 36    | 0.000          | 0.030 | 0.000   | 0.190    | 0.084      | 0.026   | 0.330 | 0.000    | 0.050 | 0.050  | 0.619    |
| 37    | 0.000          | 0.030 | 0.000   | 0.190    | 0.084      | 0.026   | 0.330 | 0.000    | 0.050 | 0.050  | 0.619    |
| 38    | 0.000          | 0.030 | 0.000   | 0.190    | 0.084      | 0.026   | 0.330 | 0.000    | 0.050 | 0.050  | 0.619    |
| 39    | 0.000          | 0.030 | 0.000   | 0.190    | 0.084      | 0.026   | 0.330 | 0.000    | 0.050 | 0.050  | 0.619    |
| 40    | 0.000          | 0.030 | 0.000   | 0.190    | 0.084      | 0.026   | 0.330 | 0.000    | 0.050 | 0.050  | 0.619    |
| Total | 0.076          | 0.130 | 0.000   | 0.268    | 0.207      | 0.031   | 0.713 | 0.014    | 0.032 | 0.046  | 0.241    |

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, 2001.

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

| Week  | Little Trapper |        |         | Mainstem | Tatsamenie |         | Total   |          |       | Wild   | U.S.     |
|-------|----------------|--------|---------|----------|------------|---------|---------|----------|-------|--------|----------|
|       | Kuthai         | Wild   | Planted |          | Wild       | Planted | Taku    | Crescent | Speel | Snett. | Hatchery |
| 25    | 8,994          | 2,208  | 0       | 532      | 0          | 31      | 11,765  | 64       | 0     | 64     | 0        |
| 26    | 5,360          | 4,773  | 0       | 2,990    | 0          | 141     | 13,264  | 5        | 18    | 23     | 28       |
| 27    | 4,900          | 8,501  | 0       | 7,501    | 1,838      | 103     | 22,843  | 35       | 1,201 | 1,236  | 180      |
| 28    | 674            | 4,895  | 0       | 8,971    | 4,489      | 175     | 19,204  | 1,219    | 1,181 | 2,400  | 615      |
| 29    | 605            | 6,362  | 0       | 18,869   | 14,376     | 2,288   | 42,500  | 789      | 3,298 | 4,087  | 4,791    |
| 30    | 1,509          | 4,769  | 0       | 10,809   | 11,555     | 1,901   | 30,543  | 443      | 1,698 | 2,141  | 15,227   |
| 31    | 0              | 3,981  | 0       | 17,343   | 19,436     | 3,044   | 43,804  | 658      | 1,015 | 1,673  | 23,488   |
| 32    | 0              | 1,867  | 0       | 7,751    | 7,004      | 939     | 17,561  | 884      | 77    | 961    | 15,322   |
| 33    | 0              | 372    | 0       | 2,331    | 1,037      | 320     | 4,060   | 0        | 620   | 620    | 7,616    |
| 34    | 0              | 121    | 0       | 757      | 337        | 104     | 1,318   | 0        | 201   | 201    | 2,473    |
| 35    | 0              | 11     | 0       | 71       | 32         | 10      | 124     | 0        | 19    | 19     | 234      |
| 36    | 0              | 2      | 0       | 10       | 4          | 1       | 17      | 0        | 3     | 3      | 33       |
| 37    | 0              | 0      | 0       | 1        | 1          | 0       | 2       | 0        | 0     | 0      | 4        |
| 38    | 0              | 0      | 0       | 1        | 1          | 0       | 2       | 0        | 0     | 0      | 4        |
| 39    | 0              | 0      | 0       | 0        | 0          | 0       | 0       | 0        | 0     | 0      | 0        |
| 40    | 0              | 0      | 0       | 0        | 0          | 0       | 0       | 0        | 0     | 0      | 0        |
| Total | 22,042         | 37,862 | 0       | 77,938   | 60,109     | 9,057   | 207,008 | 4,097    | 9,331 | 13,428 | 70,014   |

Appendix C. 4. Weekly salmon catch and effort in the Canadian commercial fishery in the Taku River, 2001.

| Week  | Start Date | Catch   |           |         |       |      |      | Effort          |             |             |
|-------|------------|---------|-----------|---------|-------|------|------|-----------------|-------------|-------------|
|       |            | Chinook |           | Sockeye | Coho  | Pink | Chum | Average Permits | Days Fished | Permit Days |
|       |            | Large   | non large |         |       |      |      |                 |             |             |
| 25    | 17-Jun     | 408     | 1         | 2,117   | 0     | 0    | 0    | 8.67            | 3.00        | 26.00       |
| 26    | 24-Jun     | 621     | 78        | 4,312   | 0     | 0    | 0    | 10.00           | 3.00        | 30.00       |
| 27    | 1-Jul      | 262     | 30        | 3,928   | 0     | 0    | 0    | 10.50           | 4.00        | 42.00       |
| 28    | 8-Jul      | 90      | 5         | 3,094   | 23    | 0    | 0    | 12.33           | 3.00        | 37.00       |
| 29    | 15-Jul     | 60      | 3         | 9,641   | 36    | 0    | 0    | 13.00           | 3.50        | 45.50       |
| 30    | 22-Jul     | 13      | 1         | 7,401   | 99    | 0    | 0    | 8.40            | 5.00        | 42.00       |
| 31    | 29-Jul     | 3       | 0         | 8,449   | 357   | 0    | 0    | 10.00           | 5.00        | 50.00       |
| 32    | 5-Aug      | 0       | 0         | 5,456   | 427   | 0    | 0    | 10.00           | 5.00        | 50.00       |
| 33    | 12-Aug     | 1       | 0         | 2,813   | 752   | 0    | 0    | 10.75           | 4.00        | 43.00       |
| 34    | 19-Aug     | 0       | 0         | 449     | 692   | 0    | 0    | 4.33            | 3.00        | 13.00       |
| 35    | 26-Aug     |         |           |         |       |      |      |                 |             |             |
| 36    | 2-Sep      |         |           |         |       |      |      |                 |             |             |
| 37    | 9-Sep      |         |           |         |       |      |      |                 |             |             |
| 38    | 16-Sep     |         |           |         |       |      |      |                 |             |             |
| 39    | 23-Sep     | 0       | 0         | 0       | 182   | 0    | 0    | 1.00            | 3.00        | 3.00        |
| Total |            | 1,458   | 118       | 47,660  | 2,568 | 0    | 0    |                 | 41.50       | 381.50      |

Appendix C. 5. Weekly stock proportions of sockeye salmon harvested in the Canadian commercial fishery in the Taku River, 2001.

Data based on analysis of scale patterns and thermal marks.

| Week  | Start Date | Little Trapper |       |         |          | Tatsamenie |         |
|-------|------------|----------------|-------|---------|----------|------------|---------|
|       |            | Kuthai         | Wild  | Planted | Mainstem | Wild       | Planted |
| 25    | 17-Jun     | 0.894          | 0.001 | 0.000   | 0.083    | 0.021      | 0.000   |
| 26    | 24-Jun     | 0.719          | 0.101 | 0.000   | 0.180    | 0.000      | 0.000   |
| 27    | 1-Jul      | 0.614          | 0.290 | 0.000   | 0.040    | 0.056      | 0.000   |
| 28    | 8-Jul      | 0.195          | 0.318 | 0.000   | 0.400    | 0.087      | 0.000   |
| 29    | 15-Jul     | 0.032          | 0.191 | 0.000   | 0.501    | 0.214      | 0.063   |
| 30    | 22-Jul     | 0.055          | 0.203 | 0.000   | 0.467    | 0.242      | 0.033   |
| 31    | 29-Jul     | 0.002          | 0.122 | 0.000   | 0.457    | 0.368      | 0.050   |
| 32    | 5-Aug      | 0.000          | 0.121 | 0.000   | 0.332    | 0.464      | 0.082   |
| 33    | 12-Aug     | 0.000          | 0.133 | 0.000   | 0.289    | 0.543      | 0.035   |
| 34    | 19-Aug     | 0.000          | 0.082 | 0.000   | 0.460    | 0.342      | 0.116   |
| 35    | 26-Aug     | 0.000          | 0.082 | 0.000   | 0.460    | 0.342      | 0.116   |
| 36    | 2-Sep      | 0.000          | 0.082 | 0.000   | 0.460    | 0.342      | 0.116   |
| 37    | 9-Sep      | 0.000          | 0.082 | 0.000   | 0.460    | 0.342      | 0.116   |
| 38    | 16-Sep     | 0.000          | 0.082 | 0.000   | 0.460    | 0.342      | 0.116   |
| 39    | 23-Sep     | 0.000          | 0.082 | 0.000   | 0.460    | 0.342      | 0.116   |
| Total |            | 0.184          | 0.168 | 0.000   | 0.364    | 0.246      | 0.039   |

Appendix C. 6. Weekly stock-specific catch of sockeye salmon in the Canadian commercial fishery in the Taku River, 2001.

Data based on analysis of scale patterns and thermal marks.

| Week  | Start Date | Kuthai | Little Trapper |         |          | Tatsamenie |         |
|-------|------------|--------|----------------|---------|----------|------------|---------|
|       |            |        | Wild           | Planted | Mainstem | Wild       | Planted |
| 25    | 17-Jun     | 1,893  | 3              | 0       | 176      | 45         | 0       |
| 26    | 24-Jun     | 3,101  | 434            | 0       | 777      | 0          | 0       |
| 27    | 1-Jul      | 2,412  | 1,138          | 0       | 158      | 220        | 0       |
| 28    | 8-Jul      | 605    | 984            | 0       | 1,237    | 269        | 0       |
| 29    | 15-Jul     | 309    | 1,840          | 0       | 4,829    | 2,060      | 603     |
| 30    | 22-Jul     | 408    | 1,502          | 0       | 3,456    | 1,788      | 247     |
| 31    | 29-Jul     | 20     | 1,029          | 0       | 3,865    | 3,113      | 422     |
| 32    | 5-Aug      | 0      | 662            | 0       | 1,813    | 2,534      | 447     |
| 33    | 12-Aug     | 0      | 375            | 0       | 813      | 1,527      | 97      |
| 34    | 19-Aug     | 0      | 37             | 0       | 206      | 154        | 52      |
| 35    | 26-Aug     | 0      | 0              | 0       | 0        | 0          | 0       |
| 36    | 2-Sep      | 0      | 0              | 0       | 0        | 0          | 0       |
| 37    | 9-Sep      | 0      | 0              | 0       | 0        | 0          | 0       |
| 38    | 16-Sep     | 0      | 0              | 0       | 0        | 0          | 0       |
| 39    | 23-Sep     | 0      | 0              | 0       | 0        | 0          | 0       |
| Total |            | 8,748  | 8,005          | 0       | 17,331   | 11,709     | 1,868   |

Appendix C. 7. Weekly salmon catch and effort in the Canadian test and stock assessment fisheries in the Taku River, 2001.

| Week     | Start Date | Catch   |     |         |       |      |      | Effort          |             |             |
|----------|------------|---------|-----|---------|-------|------|------|-----------------|-------------|-------------|
|          |            | Chinook |     | Sockeye | Coho  | Pink | Chum | Average Permits | Days Fished | Permit Days |
| Large    | non large  |         |     |         |       |      |      |                 |             |             |
| 17       | 22-Apr     | 0       | 0   | 0       | 0     | 0    | 0    |                 |             |             |
| 18       | 29-Apr     | 100     | 0   | 0       | 0     | 0    | 0    |                 |             |             |
| 19       | 6-May      | 129     | 24  | 0       | 0     | 0    | 0    |                 |             |             |
| 20       | 13-May     | 177     | 23  | 0       | 0     | 0    | 0    |                 |             |             |
| 21       | 20-May     | 260     | 40  | 1       | 0     | 0    | 0    |                 |             |             |
| 22       | 27-May     | 195     | 56  | 1       | 0     | 0    | 0    |                 |             |             |
| 23       | 3-Jun      | 192     | 58  | 43      | 0     | 0    | 0    |                 |             |             |
| 24       | 10-Jun     | 122     | 28  | 200     | 0     | 0    | 0    |                 |             |             |
| 34       | 19-Aug     | 0       | 0   | 0       | 0     | 0    | 0    |                 |             |             |
| 35       | 26-Aug     | 0       | 0   | 1       | 17    | 0    | 0    |                 |             |             |
| 36       | 2-Sep      | 0       | 0   | 0       | 5     | 0    | 0    |                 |             |             |
| 37       | 9-Sep      | 0       | 0   | 1       | 6     | 0    | 0    |                 |             |             |
| 38       | 16-Sep     | 0       | 0   | 0       | 2     | 0    | 0    |                 |             |             |
| 39       | 23-Sep     | 0       | 0   | 0       | 1     | 0    | 0    |                 |             |             |
| 40       | 30-Sep     | 0       | 0   | 0       | 0     | 0    | 0    |                 |             |             |
| Total    |            | 1,175   | 229 | 247     | 31    | 0    | 0    |                 |             |             |
| released |            | 871     |     | 84      | 3,000 |      | 159  |                 |             |             |

Appendix C. 8. Mark-recapture estimate of above border run of sockeye, and coho salmon in the Taku River, 2001.

| Recovery Week                     | Start Date | Above Border Run | Canadian Harvests |       |            |              | Above Border Escapement |
|-----------------------------------|------------|------------------|-------------------|-------|------------|--------------|-------------------------|
|                                   |            |                  | Commercial        | Test  | Aboriginal | Recreational |                         |
| <b>Inseason Chinook Estimates</b> |            |                  |                   |       |            |              |                         |
| 19                                | 6-May      | 648              |                   | 204   |            |              | 444                     |
| 20                                | 13-May     | 2,879            |                   | 174   |            |              | 2,705                   |
| 21                                | 20-May     | 11,166           |                   | 232   |            |              | 10,934                  |
| 22                                | 27-May     | 11,712           |                   | 196   |            |              | 11,516                  |
| 23                                | 3-Jun      | 12,157           |                   | 194   |            |              | 11,963                  |
| 24                                | 10-Jun     | 10,809           |                   | 123   |            |              | 10,686                  |
| Inseason Estimate                 |            | 49,370           |                   | 1,123 |            |              | 48,247                  |
| Final escapement estimate         |            | 49,598           |                   | 1,175 | 125        |              | 46,644                  |
| <b>Sockeye</b>                    |            |                  |                   |       |            |              |                         |
| 18-25                             | 22-Apr     | 13,195           | 2,117             | 245   |            |              | 10,833                  |
| 26                                | 24-Jun     | 12,216           | 4,312             | 0     |            |              | 7,904                   |
| 27                                | 1-Jul      | 20,944           | 3,928             | 0     |            |              | 17,016                  |
| 28                                | 8-Jul      | 11,724           | 3,094             | 0     |            |              | 8,630                   |
| 29                                | 15-Jul     | 21,608           | 9,641             | 0     |            |              | 11,967                  |
| 30                                | 22-Jul     | 41,959           | 7,401             | 0     |            |              | 34,558                  |
| 31                                | 29-Jul     | 28,051           | 8,449             | 0     |            |              | 19,602                  |
| 32                                | 5-Aug      | 17,169           | 5,456             | 0     |            |              | 11,713                  |
| 33                                | 12-Aug     | 15,691           | 2,813             | 0     |            |              | 12,878                  |
| 34-40                             | 19-Aug     | 9,688            | 449               | 2     |            |              | 9,237                   |
| M-R Estimate                      |            | 192,245          |                   |       |            |              |                         |
| 95% C.I.                          |            | 180,447          | 204,044           |       |            |              |                         |
| Total Estimate                    |            | 192,245          | 47,660            | 247   | 210        |              | 144,128                 |
| <b>Coho</b>                       |            |                  |                   |       |            |              |                         |
| 28-33                             | 8-Jul      | 12,174           | 1,694             | 0     | 0          |              | 10,480                  |
| 34-36                             | 19-Aug     | 21,130           | 692               | 17    | 13         |              | 20,408                  |
| 37-41                             | 9-Sep      | 74,189           | 182               | 14    | 487        |              | 73,506                  |
| M-R Estimate                      |            | 107,493          |                   |       |            |              |                         |
| 95% C.I.                          |            | 89,136           | 125,849           |       |            |              |                         |
| Total Estimate                    |            | 107,493          | 3,099             | 31    | 500        |              | 104,394                 |

Appendix C. 9. Daily counts of adult sockeye salmon passing through Tatsamenie weir, 2001.

| Date                            | Count                           | Cumulative |         |
|---------------------------------|---------------------------------|------------|---------|
|                                 |                                 | Count      | Percent |
| 11-Aug                          | ---- Weir Fish Tight Aug 12---- |            |         |
| 12-Aug                          | 12                              | 12         | 0.1     |
| 13-Aug                          | 626                             | 638        | 2.8     |
| 14-Aug                          | 2,043                           | 2,681      | 11.9    |
| 15-Aug                          | 2,238                           | 4,919      | 21.8    |
| 16-Aug                          | 2,515                           | 7,434      | 32.9    |
| 17-Aug                          | 1,646                           | 9,080      | 40.2    |
| 18-Aug                          | 776                             | 9,856      | 43.7    |
| 19-Aug                          | 787                             | 10,643     | 47.1    |
| 20-Aug                          | 950                             | 11,593     | 51.4    |
| 21-Aug                          | 769                             | 12,362     | 54.8    |
| 22-Aug                          | 162                             | 12,524     | 55.5    |
| 23-Aug                          | 463                             | 12,987     | 57.5    |
| 24-Aug                          | 496                             | 13,483     | 59.7    |
| 25-Aug                          | 797                             | 14,280     | 63.3    |
| 26-Aug                          | 836                             | 15,116     | 67.0    |
| 27-Aug                          | 746                             | 15,862     | 70.3    |
| 28-Aug                          | 525                             | 16,387     | 72.6    |
| 29-Aug                          | 258                             | 16,645     | 73.7    |
| 30-Aug                          | 532                             | 17,177     | 76.1    |
| 31-Aug                          | 497                             | 17,674     | 78.3    |
| 1-Sep                           | 584                             | 18,258     | 80.9    |
| 2-Sep                           | 471                             | 18,729     | 83.0    |
| 3-Sep                           | 228                             | 18,957     | 84.0    |
| 4-Sep                           | 323                             | 19,280     | 85.4    |
| 5-Sep                           | 142                             | 19,422     | 86.0    |
| 6-Sep                           | 134                             | 19,556     | 86.6    |
| 7-Sep                           | 126                             | 19,682     | 87.2    |
| 8-Sep                           | 222                             | 19,904     | 88.2    |
| 9-Sep                           | 151                             | 20,055     | 88.8    |
| 10-Sep                          | 188                             | 20,243     | 89.7    |
| 11-Sep                          | 223                             | 20,466     | 90.7    |
| 12-Sep                          | 259                             | 20,725     | 91.8    |
| 13-Sep                          | 389                             | 21,114     | 93.5    |
| 14-Sep                          | 149                             | 21,263     | 94.2    |
| 15-Sep                          | 245                             | 21,508     | 95.3    |
| 16-Sep                          | 68                              | 21,576     | 95.6    |
| 17-Sep                          | 38                              | 21,614     | 95.7    |
| 18-Sep                          | 40                              | 21,654     | 95.9    |
| 19-Sep                          | 121                             | 21,775     | 96.5    |
| 20-Sep                          | 108                             | 21,883     | 96.9    |
| 21-Sep                          | 124                             | 22,007     | 97.5    |
| 22-Sep                          | 29                              | 22,036     | 97.6    |
| 23-Sep                          | 200                             | 22,236     | 98.5    |
| 24-Sep                          | 120                             | 22,355     | 99.0    |
| 25-Sep                          | 39                              | 22,394     | 99.2    |
| 26-Sep                          | 30                              | 22,424     | 99.3    |
| 27-Sep                          | 20                              | 22,444     | 99.4    |
| 28-Sep                          | 36                              | 22,480     | 99.6    |
| 29-Sep                          | 14                              | 22,494     | 99.6    |
| 30-Sep                          | 30                              | 22,524     | 99.8    |
| 1-Oct                           | 1                               | 22,525     | 99.8    |
| 2-Oct                           | 33                              | 22,558     | 99.9    |
| 3-Oct                           | 0                               | 22,558     | 99.9    |
| 4-Oct                           | 17                              | 22,575     | 100.0   |
| 5-Oct                           | 0                               | 22,575     | 100.0   |
| 6-Oct                           | 0                               | 22,575     | 100.0   |
| 7-Oct                           | 0                               | 22,575     | 100.0   |
| 8-Oct                           | 0                               | 22,575     | 100.0   |
| 9-Oct                           | 0                               | 22,575     | 100.0   |
| 10-Oct                          | ---- Weir Pulled ----           |            |         |
| Counts                          |                                 | 22,575     |         |
| Outlet spawners                 |                                 | <15        |         |
| Broodstock                      |                                 | -2,996     |         |
| Adj. released fish <sup>a</sup> |                                 | 486        |         |
| Spawners                        |                                 | 19,579     |         |

<sup>a</sup>The spawning success of the released fish is not known.

Appendix C. 10. Daily counts of adult sockeye salmon passing through Little Trapper Lake weir, 2001.

| Date     | Count                    | Cumulative |         |
|----------|--------------------------|------------|---------|
|          |                          | Count      | Percent |
| 25-Jul   | ----Weir Fish Tight ---- |            |         |
| 26-Jul   | 17                       | 17         | 0.10    |
| 27-Jul   | 16                       | 33         | 0.20    |
| 28-Jul   | 62                       | 95         | 0.56    |
| 29-Jul   | 287                      | 382        | 2.27    |
| 30-Jul   | 96                       | 478        | 2.84    |
| 31-Jul   | 160                      | 638        | 3.78    |
| 1-Aug    | 110                      | 748        | 4.44    |
| 2-Aug    | 379                      | 1,127      | 6.68    |
| 3-Aug    | 614                      | 1,741      | 10.33   |
| 4-Aug    | 1,576                    | 3,317      | 19.67   |
| 5-Aug    | 1,447                    | 4,764      | 28.26   |
| 6-Aug    | 932                      | 5,696      | 33.78   |
| 7-Aug    | 706                      | 6,402      | 37.97   |
| 8-Aug    | 902                      | 7,304      | 43.32   |
| 9-Aug    | 342                      | 7,646      | 45.35   |
| 10-Aug   | 1,817                    | 9,463      | 56.13   |
| 11-Aug   | 1,644                    | 11,107     | 65.88   |
| 12-Aug   | 1,727                    | 12,834     | 76.12   |
| 13-Aug   | 1,168                    | 14,002     | 83.05   |
| 14-Aug   | 704                      | 14,706     | 87.22   |
| 15-Aug   | 586                      | 15,292     | 90.70   |
| 16-Aug   | 323                      | 15,615     | 92.62   |
| 17-Aug   | 225                      | 15,840     | 93.95   |
| 18-Aug   | 269                      | 16,109     | 95.55   |
| 19-Aug   | 288                      | 16,397     | 97.25   |
| 20-Aug   | 30                       | 16,427     | 97.43   |
| 21-Aug   | 118                      | 16,545     | 98.13   |
| 22-Aug   | 65                       | 16,610     | 98.52   |
| 23-Aug   | 68                       | 16,678     | 98.92   |
| 24-Aug   | 36                       | 16,714     | 99.13   |
| 25-Aug   | 22                       | 16,736     | 99.26   |
| 26-Aug   | 32                       | 16,768     | 99.45   |
| 27-Aug   | 36                       | 16,804     | 99.67   |
| 28-Aug   | 10                       | 16,814     | 99.73   |
| 29-Aug   | 13                       | 16,827     | 99.80   |
| 30-Aug   | 5                        | 16,832     | 99.83   |
| 31-Aug   | 9                        | 16,841     | 99.89   |
| 1-Sep    | 16                       | 16,857     | 99.98   |
| 2-Sep    | 1                        | 16,858     | 99.99   |
| 3-Sep    | 0                        | 16,858     | 99.99   |
| 4-Sep    | 0                        | 16,858     | 99.99   |
| 5-Sep    | 0                        | 16,858     | 99.99   |
| 6-Sep    | 0                        | 16,858     | 99.99   |
| 7-Sep    | 2                        | 16,860     | 100.00  |
| 8-Sep    | 0                        | 16,860     | 100.00  |
| 9-Sep    | 0                        | 16,860     | 100.00  |
| 10-Sep   | ---- Weir Pulled ----    |            |         |
| Count    |                          | 16,860     |         |
|          | females                  | 8,049      |         |
|          | males                    | 8,811      |         |
| Spawners |                          | 16,860     |         |

Appendix C. 11. Daily counts of adult sockeye salmon passing through the Kuthai Lake weir, 2001.

| Date        | Cumulative             |       | Percent |
|-------------|------------------------|-------|---------|
|             | Count                  | Count |         |
| 4-Jul       | ---Weir Fish Tight --- |       |         |
| 5-Jul       | 0                      | 0     | 0.00    |
| 6-Jul       | 0                      | 0     | 0.00    |
| 7-Jul       | 0                      | 0     | 0.00    |
| 8-Jul       | 0                      | 0     | 0.00    |
| 9-Jul       | 0                      | 0     | 0.00    |
| 10-Jul      | 0                      | 0     | 0.00    |
| 11-Jul      | 0                      | 0     | 0.00    |
| 12-Jul      | 0                      | 0     | 0.00    |
| 13-Jul      | 0                      | 0     | 0.00    |
| 14-Jul      | 0                      | 0     | 0.00    |
| 15-Jul      | 0                      | 0     | 0.00    |
| 16-Jul      | 0                      | 0     | 0.00    |
| 17-Jul      | 0                      | 0     | 0.00    |
| 18-Jul      | 61                     | 61    | 3.67    |
| 19-Jul      | 14                     | 75    | 4.51    |
| 20-Jul      | 17                     | 92    | 5.53    |
| 21-Jul      | 42                     | 134   | 8.06    |
| 22-Jul      | 34                     | 168   | 10.10   |
| 23-Jul      | 65                     | 233   | 14.01   |
| 24-Jul      | 45                     | 278   | 16.72   |
| 25-Jul      | 93                     | 371   | 22.31   |
| 26-Jul      | 23                     | 394   | 23.69   |
| 27-Jul      | 87                     | 481   | 28.92   |
| 28-Jul      | 47                     | 528   | 31.75   |
| 29-Jul      | 18                     | 546   | 32.83   |
| 30-Jul      | 32                     | 578   | 34.76   |
| 31-Jul      | 30                     | 608   | 36.56   |
| 1-Aug       | 60                     | 668   | 40.17   |
| 2-Aug       | 19                     | 687   | 41.31   |
| 3-Aug       | 39                     | 726   | 43.66   |
| 4-Aug       | 58                     | 784   | 47.14   |
| 5-Aug       | 23                     | 807   | 48.53   |
| 6-Aug       | 47                     | 854   | 51.35   |
| 7-Aug       | 17                     | 871   | 52.38   |
| 8-Aug       | 69                     | 940   | 56.52   |
| 9-Aug       | 33                     | 973   | 58.51   |
| 10-Aug      | 182                    | 1,155 | 69.45   |
| 11-Aug      | 60                     | 1,215 | 73.06   |
| 12-Aug      | 34                     | 1,249 | 75.11   |
| 13-Aug      | 51                     | 1,300 | 78.17   |
| 14-Aug      | 31                     | 1,331 | 80.04   |
| 15-Aug      | 27                     | 1,358 | 81.66   |
| 16-Aug      | 33                     | 1,391 | 83.64   |
| 17-Aug      | 14                     | 1,405 | 84.49   |
| 18-Aug      | 38                     | 1,443 | 86.77   |
| 19-Aug      | 61                     | 1,504 | 90.44   |
| 20-Aug      | 8                      | 1,512 | 90.92   |
| 21-Aug      | 18                     | 1,530 | 92.00   |
| 22-Aug      | 11                     | 1,541 | 92.66   |
| 23-Aug      | 19                     | 1,560 | 93.81   |
| 24-Aug      | 14                     | 1,574 | 94.65   |
| 25-Aug      | 32                     | 1,606 | 96.57   |
| 26-Aug      | 17                     | 1,623 | 97.59   |
| 27-Aug      | 2                      | 1,625 | 97.71   |
| 28-Aug      | 2                      | 1,627 | 97.84   |
| 29-Aug      | 0                      | 1,627 | 97.84   |
| 30-Aug      | 0                      | 1,627 | 97.84   |
| 31-Aug      | 36                     | 1,663 | 100.00  |
| 1-Sep       | 0                      | 1,663 | 100.00  |
| 2-Sep       | 0                      | 1,663 | 100.00  |
| 3-Sep       | --- Weir Pulled ---    |       |         |
| Total count |                        | 1,663 |         |

Appendix C. 12. Daily counts of large (>659mm MEF length) Chinook salmon carcasses at the Nakina River weir, 2001.

| Date   | Count  |      |         |          | Cumulative |         |
|--------|--------|------|---------|----------|------------|---------|
|        | Female | Male | Unknown | Combined | Count      | Percent |
| 31-Jul |        |      |         | 18       | 18         | 0.01    |
| 1-Aug  |        |      |         | 29       | 47         | 0.02    |
| 2-Aug  |        |      |         | 79       | 126        | 0.06    |
| 3-Aug  |        |      |         | 57       | 183        | 0.09    |
| 4-Aug  |        |      |         | 0        | 183        | 0.09    |
| 5-Aug  |        |      |         | 0        | 183        | 0.09    |
| 6-Aug  |        |      |         | 51       | 234        | 0.12    |
| 7-Aug  |        |      |         | 14       | 248        | 0.13    |
| 8-Aug  |        |      |         | 155      | 403        | 0.21    |
| 9-Aug  |        |      |         | 0        | 403        | 0.21    |
| 10-Aug |        |      |         | 21       | 424        | 0.22    |
| 11-Aug |        |      |         | 216      | 640        | 0.33    |
| 12-Aug |        |      |         | 222      | 862        | 0.44    |
| 13-Aug |        |      |         | 194      | 1056       | 0.54    |
| 14-Aug |        |      |         | 244      | 1300       | 0.66    |
| 15-Aug |        |      |         | 148      | 1448       | 0.74    |
| 16-Aug |        |      |         | 207      | 1655       | 0.84    |
| 17-Aug |        |      |         | 54       | 1709       | 0.87    |
| 18-Aug |        |      |         | 106      | 1815       | 0.92    |
| 19-Aug |        |      |         | 75       | 1890       | 0.96    |
| 20-Aug |        |      |         | 20       | 1910       | 0.97    |
| 21-Aug |        |      |         | 41       | 1951       | 0.99    |
| 22-Aug |        |      |         | 8        | 1959       | 1.00    |
| 23-Aug |        |      |         | 6        | 1965       | 1.00    |
| Total  | 0      | 0    |         | 1,965    |            |         |



Appendix D. 1. Salmon catches and effort in the Alaskan District 111 and Subdistrict 111-32 (Taku Inlet) commercial drift gillnet fishery, 1960-2001.

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

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

| Year                 | Catch   |         |         |         |         |         | Effort       |              |
|----------------------|---------|---------|---------|---------|---------|---------|--------------|--------------|
|                      | Chinook | Sockeye | Coho    | Pink    | S. Chum | F. Chum | Boat<br>Days | Days<br>Open |
| District 111 Catches |         |         |         |         |         |         |              |              |
| 1960                 | 8,810   | 42,819  | 22,374  | 33,155  | 8,754   | 33,098  |              | 60.0         |
| 1961                 | 7,434   | 45,981  | 15,486  | 41,455  | 8,578   | 15,855  |              | 62.0         |
| 1962                 | 5,931   | 36,745  | 15,661  | 17,280  | 7,453   | 13,182  |              | 52.0         |
| 1963                 | 2,652   | 24,119  | 10,855  | 21,392  | 12,335  | 7,779   |              | 54.0         |
| 1964                 | 2,509   | 34,140  | 29,315  | 26,593  | 4,970   | 7,883   |              | 56.0         |
| 1965                 | 4,170   | 27,569  | 32,667  | 2,768   | 3,842   | 7,691   |              | 63.0         |
| 1966                 | 4,829   | 33,925  | 26,065  | 23,833  | 5,015   | 30,118  |              | 64.0         |
| 1967                 | 5,417   | 17,735  | 40,391  | 12,372  | 2,183   | 20,651  |              | 53.0         |
| 1968                 | 4,904   | 19,501  | 39,103  | 67,365  | 5,747   | 16,143  |              | 60.0         |
| 1969                 | 6,986   | 41,169  | 10,802  | 73,927  | 4,851   | 10,198  | 1,518        | 41.5         |
| 1970                 | 3,357   | 50,922  | 44,960  | 197,017 | 19,593  | 90,797  | 2,688        | 53.0         |
| 1971                 | 6,958   | 66,181  | 41,830  | 31,484  | 31,813  | 59,332  | 3,053        | 55.0         |
| 1972                 | 10,955  | 80,404  | 49,780  | 144,339 | 67,126  | 80,831  | 3,103        | 51.0         |
| 1973                 | 9,799   | 85,317  | 35,453  | 58,186  | 33,296  | 75,949  | 3,286        | 41.0         |
| 1974                 | 2,908   | 38,670  | 38,667  | 57,731  | 11,263  | 75,423  | 2,315        | 29.5         |
| 1975                 | 2,182   | 32,513  | 1,185   | 9,567   | 2,091   | 587     | 1,084        | 15.5         |
| 1976                 | 1,757   | 61,749  | 41,729  | 14,962  | 6,027   | 75,776  | 1,914        | 25.0         |
| 1977                 | 1,068   | 70,097  | 54,917  | 88,578  | 8,995   | 52,107  | 2,258        | 27.0         |
| 1978                 | 1,926   | 55,398  | 31,944  | 51,385  | 9,076   | 27,178  | 2,174        | 26.0         |
| 1979                 | 3,701   | 122,148 | 16,194  | 152,836 | 5,936   | 55,261  | 2,269        | 28.8         |
| 1980                 | 2,251   | 123,451 | 41,677  | 296,572 | 33,627  | 159,020 | 4,123        | 30.9         |
| 1981                 | 1,721   | 49,942  | 26,711  | 254,856 | 22,546  | 53,892  | 2,687        | 30.0         |
| 1982                 | 3,057   | 83,625  | 29,072  | 109,297 | 14,867  | 22,741  | 2,433        | 35.5         |
| 1983                 | 888     | 31,821  | 21,455  | 66,239  | 6,160   | 9,104   | 1,274        | 33.0         |
| 1984                 | 1,773   | 77,233  | 33,836  | 145,971 | 45,811  | 40,930  | 2,757        | 52.5         |
| 1985                 | 2,636   | 88,077  | 55,597  | 311,248 | 58,972  | 47,748  | 3,264        | 48.0         |
| 1986                 | 2,584   | 73,061  | 30,512  | 16,568  | 29,909  | 28,883  | 2,129        | 32.8         |
| 1987                 | 2,076   | 75,212  | 35,219  | 363,439 | 57,280  | 64,380  | 2,514        | 34.8         |
| 1988                 | 1,779   | 38,923  | 44,881  | 157,831 | 80,307  | 59,271  | 2,135        | 32.0         |
| 1989                 | 1,811   | 74,019  | 51,812  | 180,597 | 18,022  | 18,955  | 2,333        | 41.0         |
| 1990                 | 3,480   | 126,884 | 67,530  | 153,036 | 112,336 | 33,463  | 3,188        | 38.3         |
| 1991                 | 3,217   | 109,877 | 126,436 | 74,183  | 147,404 | 13,771  | 4,145        | 57.0         |
| 1992                 | 2,341   | 135,411 | 172,662 | 314,445 | 97,725  | 14,802  | 4,550        | 50.0         |
| 1993                 | 6,748   | 171,556 | 65,536  | 17,081  | 156,033 | 10,447  | 3,827        | 43.0         |
| 1994                 | 5,047   | 105,861 | 188,501 | 401,525 | 198,002 | 16,169  | 5,078        | 66.0         |
| 1995                 | 4,660   | 103,377 | 83,626  | 41,269  | 339,178 | 10,920  | 4,034        | 49.0         |
| 1996                 | 2,659   | 199,014 | 33,633  | 12,660  | 347,612 | 6,455   | 3,229        | 46.0         |
| 1997                 | 2,804   | 94,745  | 3,515   | 51,424  | 173,804 | 3,060   | 2,107        | 33.0         |
| 1998                 | 794     | 69,677  | 28,713  | 168,283 | 291,416 | 4,695   | 3,070        | 48.0         |
| 1999                 | 1,841   | 79,425  | 17,273  | 59,316  | 429,213 | 4,639   | 2,841        | 59.0         |
| 2000                 | 1,137   | 168,272 | 7,546   | 54,716  | 665,582 | 3,013   | 2,919        | 40.0         |
| Averages             |         |         |         |         |         |         |              |              |
| 60-00                | 3,745   | 74,794  | 43,052  | 106,751 | 87,433  | 33,712  |              | 44           |
| 91-00                | 3,125   | 123,722 | 72,744  | 119,490 | 284,597 | 8,797   | 3,580        | 49           |
| 2001                 | 1,696   | 290,450 | 22,529  | 122,829 | 235,276 | 1,693   | 4,731        | 54.0         |

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

| Year                                    | Catch   |         |         |         |         |         | Effort       |              |
|---|---------|---------|---------|---------|---------|---------|--------------|--------------|
|   | Chinook | Sockeye | Coho    | Pink    | S. Chum | F. Chum | Boat<br>Days | Days<br>Open |
| Subdistrict 111-32 Catches (Taku Inlet) |         |         |         |         |         |         |              |              |
| 1960                                    | 8,763   | 26,641  | 20,282  | 26,777  | 4,566   | 28,720  | 1,680        | 60.0         |
| 1961                                    | 7,269   | 30,805  | 14,618  | 34,615  | 6,863   | 14,876  | 2,901        | 62.0         |
| 1962                                    | 5,719   | 25,969  | 13,699  | 10,006  | 5,418   | 11,812  | 1,568        | 52.0         |
| 1963                                    | 2,547   | 16,079  | 9,406   | 18,102  | 8,085   | 7,071   | 1,519        | 51.0         |
| 1964                                    | 2,482   | 28,873  | 28,603  | 22,177  | 3,919   | 7,822   | 1,491        | 56.0         |
| 1965                                    | 4,146   | 23,828  | 32,382  | 2,641   | 3,604   | 7,691   | 1,332        | 60.0         |
| 1966                                    | 4,817   | 28,301  | 24,153  | 22,490  | 4,350   | 27,327  | 1,535        | 58.0         |
| 1967                                    | 5,351   | 14,537  | 39,983  | 11,619  | 1,569   | 20,463  | 1,663        | 50.0         |
| 1968                                    | 4,862   | 16,952  | 37,570  | 55,527  | 4,646   | 15,597  | 2,420        | 60.0         |
| 1969                                    | 6,874   | 38,260  | 10,131  | 66,991  | 4,233   | 9,926   | 1,413        | 42.0         |
| 1970                                    | 3,073   | 41,476  | 37,587  | 143,886 | 14,208  | 76,795  | 2,425        | 53.0         |
| 1971                                    | 6,753   | 62,459  | 38,571  | 30,765  | 31,110  | 54,696  | 2,849        | 55.0         |
| 1972                                    | 9,633   | 62,877  | 38,568  | 78,673  | 45,955  | 60,097  | 2,797        | 51.0         |
| 1973                                    | 9,525   | 80,063  | 29,770  | 55,234  | 30,817  | 61,025  | 3,135        | 41.0         |
| 1974                                    | 2,280   | 26,256  | 27,670  | 32,684  | 6,469   | 51,063  | 1,741        | 30.0         |
| 1975                                    | 1,998   | 28,201  | 429     | 8,084   | 1,639   | 31      | 986          | 15.0         |
| 1976                                    | 1,693   | 51,674  | 31,641  | 11,868  | 3,766   | 42,674  | 1,582        | 23.0         |
| 1977                                    | 754     | 47,512  | 48,403  | 67,072  | 5,436   | 43,595  | 1,879        | 27.0         |
| 1978                                    | 1,642   | 43,795  | 21,620  | 41,624  | 7,142   | 18,101  | 1,738        | 24.0         |
| 1979                                    | 3,016   | 103,043 | 12,741  | 114,324 | 4,317   | 46,142  | 2,011        | 29.0         |
| 1980                                    | 1,986   | 108,577 | 35,814  | 241,085 | 25,779  | 131,126 | 3,634        | 31.0         |
| 1981                                    | 1,325   | 39,963  | 20,936  | 98,524  | 10,407  | 40,212  | 1,740        | 22.0         |
| 1982                                    | 2,841   | 75,012  | 24,761  | 77,942  | 11,558  | 18,363  | 2,130        | 36.0         |
| 1983                                    | 689     | 25,957  | 17,665  | 40,996  | 3,171   | 7,813   | 1,065        | 31.0         |
| 1984                                    | 1,414   | 59,229  | 25,951  | 83,028  | 28,214  | 27,967  | 2,120        | 39.0         |
| 1985                                    | 2,152   | 70,160  | 45,106  | 176,710 | 35,897  | 40,530  | 2,116        | 37.0         |
| 1986                                    | 1,877   | 60,106  | 26,474  | 9,772   | 14,646  | 24,790  | 1,413        | 30.0         |
| 1987                                    | 1,534   | 54,436  | 23,342  | 200,203 | 31,992  | 28,891  | 1,517        | 30.0         |
| 1988                                    | 949     | 23,752  | 33,159  | 41,625  | 25,969  | 27,010  | 1,213        | 29.0         |
| 1989                                    | 1,606   | 68,104  | 44,034  | 141,385 | 15,254  | 15,491  | 1,909        | 36.0         |
| 1990                                    | 2,432   | 110,006 | 60,078  | 101,168 | 88,350  | 29,099  | 2,879        | 38.0         |
| 1991                                    | 2,614   | 96,006  | 118,902 | 44,347  | 97,577  | 12,279  | 3,324        | 52.0         |
| 1992                                    | 1,672   | 103,238 | 152,598 | 180,340 | 57,153  | 11,649  | 3,407        | 43.0         |
| 1993                                    | 4,413   | 144,982 | 58,062  | 8,801   | 101,356 | 7,760   | 3,372        | 43.0         |
| 1994                                    | 3,051   | 88,625  | 156,314 | 198,507 | 129,350 | 12,280  | 3,960        | 60.0         |
| 1995                                    | 3,497   | 81,266  | 70,826  | 18,469  | 192,557 | 8,786   | 3,061        | 45.0         |
| 1996                                    | 2,412   | 188,412 | 31,828  | 12,123  | 294,890 | 5,245   | 2,685        | 41.0         |
| 1997                                    | 2,724   | 84,115  | 2,993   | 38,794  | 143,354 | 1,936   | 1,761        | 30.0         |
| 1998                                    | 634     | 47,413  | 24,606  | 85,269  | 192,057 | 2,800   | 2,007        | 39.0         |
| 1999                                    | 1,762   | 68,914  | 14,086  | 43,958  | 327,706 | 2,643   | 2,563        | 58.0         |
| 2000                                    | 1,032   | 127,274 | 6,299   | 25,729  | 453,147 | 1,311   | 2,325        | 38.0         |
| Averages                                |         |         |         |         |         |         |              |              |
| 60-00                                   | 3,313   | 61,540  | 36,870  | 66,437  | 60,451  | 25,939  | 2,167        | 42           |
| 91-00                                   | 2,381   | 103,025 | 63,651  | 65,634  | 198,915 | 6,669   | 2,847        | 45           |
| 2001                                    | 1,290   | 179,683 | 12,647  | 49,174  | 141,715 | 1,012   | 3,635        | 55.0         |

## Appendix D. 2. Stock proportions and catches of sockeye salmon in the Alaska District 111 commercial drift gillnet fishery, 1983-2001.

| Data based on analysis of scale patterns, otolith marks, and incidence of brain parasites. Does not include catches inside Port Snettisham |                |        |         |            |        |         |         |          |        |        |         |
|--|----------------|--------|---------|------------|--------|---------|---------|----------|--------|--------|---------|
| Week   | Little Trapper |        |         | Tatsamenie |        |         | Total   |          |        | Wild   | U.S.    |
|  | Kuthai         | Wild   | Planted | Mainstem   | Wild   | Planted | Taku    | Crescent | Speel  | Snett. | Planted |
| 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   |
| 1989 <sup>a</sup>  | 0.077          |        |         |            | 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   |
| 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   |
| Average <sup>b</sup>   |                |        |         |            |        |         |         |          |        |        |         |
| 86-00  | 0.081          | 0.232  |         | 0.334      | 0.173  |         | 0.828   | 0.069    | 0.051  | 0.119  |         |
| 91-00  | 0.084          | 0.239  | 0.007   | 0.335      | 0.182  | 0.012   | 0.852   | 0.034    | 0.041  | 0.074  | 0.105   |
| 2001   | 0.076          | 0.130  | 0.000   | 0.268      | 0.207  | 0.031   | 0.713   | 0.014    | 0.032  | 0.046  | 0.241   |
| 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  |
| 1989a  | 5,696          |        |         |            | 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   |
| 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  |
| Average <sup>b</sup>   |                |        |         |            |        |         |         |          |        |        |         |
| 86-00  | 8,641          | 25,982 |         | 38,290     | 19,976 |         | 93,881  | 5,959    | 5,626  | 11,586 |         |
| 91-00  | 10,145         | 29,561 | 844     | 43,113     | 22,288 | 1,472   | 106,497 | 4,040    | 5,709  | 9,749  | 10,680  |
| 2001   | 22,042         | 37,862 | 0       | 77,938     | 60,109 | 9,057   | 207,008 | 4,097    | 9,331  | 13,428 | 70,014  |

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

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

Appendix D. 3. Proportion of wild Taku River sockeye salmon in the Alaskan District 111 commercial drift gillnet catch by week, 1983-2001.

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

| Year    | Week  |       |       |       |       |       |       |       |       |       | Total |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|         | 25    | 26    | 27    | 28    | 29    | 30    | 31    | 32    | 33    | 34    |       |
| 1983    |       | 0.996 | 0.842 | 0.819 | 0.663 | 0.527 | 0.836 | 0.534 | 0.719 | 0.759 | 0.755 |
| 1984    | 0.970 | 0.956 | 0.843 | 0.670 | 0.588 | 0.712 | 0.728 | 0.809 | 0.726 |       | 0.758 |
| 1985    | 0.999 | 0.986 | 0.928 | 0.974 | 0.868 | 0.706 | 0.737 | 0.826 | 0.801 |       | 0.838 |
| 1986    | 0.938 | 0.953 | 0.873 | 0.880 | 0.852 | 0.777 | 0.851 | 0.757 | 0.893 | 0.739 | 0.834 |
| 1987    |       | 0.982 | 0.901 | 0.884 | 0.948 | 0.414 | 0.619 | 0.689 | 0.841 | 0.731 | 0.720 |
| 1988    |       | 0.964 | 0.886 | 0.889 | 0.510 | 0.643 | 0.677 | 0.528 | 0.478 | 0.346 | 0.663 |
| 1989    | 0.943 | 0.989 | 0.979 | 0.852 | 0.835 | 0.641 | 0.681 | 0.919 | 0.676 |       | 0.848 |
| 1990    | 0.874 | 0.935 | 0.904 | 0.773 | 0.782 | 0.863 | 0.943 | 0.939 | 0.878 | 0.862 | 0.855 |
| 1991    | 0.988 | 0.979 | 0.953 | 0.979 | 0.951 | 0.933 | 0.936 | 0.890 | 0.885 | 0.875 | 0.941 |
| 1992    |       | 0.978 | 0.985 | 0.956 | 0.916 | 0.943 | 0.893 | 0.858 | 0.766 | 0.766 | 0.904 |
| 1993    |       | 0.961 | 0.901 | 0.837 | 0.856 | 0.781 | 0.790 | 0.829 | 0.738 | 0.706 | 0.822 |
| 1994    |       | 1.000 | 0.981 | 0.973 | 0.967 | 0.870 | 0.835 | 0.938 | 0.804 | 0.901 | 0.917 |
| 1995    | 0.942 | 0.889 | 0.903 | 0.858 | 0.872 | 0.868 | 0.761 | 0.759 | 0.705 | 0.740 | 0.841 |
| 1996    | 1.000 | 0.998 | 0.909 | 0.974 | 0.950 | 0.991 | 0.914 | 0.945 | 0.879 | 0.804 | 0.953 |
| 1997    | 0.992 | 0.970 | 0.910 | 0.926 | 0.951 | 0.939 | 0.939 | 0.925 | 0.872 | 0.906 | 0.938 |
| 1998    |       | 0.964 | 0.974 | 0.978 | 0.971 | 0.949 | 0.948 | 0.942 | 0.997 | 0.857 | 0.955 |
| 1999    |       | 0.966 | 0.988 | 0.953 | 0.934 | 0.917 | 0.878 | 0.833 | 0.732 | 0.665 | 0.917 |
| 2000    |       | 0.973 | 0.962 | 0.958 | 0.929 | 0.898 | 0.872 | 0.907 | 0.908 | 0.858 | 0.931 |
| Average |       |       |       |       |       |       |       |       |       |       |       |
| 83-00   | 0.961 | 0.969 | 0.923 | 0.896 | 0.852 | 0.798 | 0.824 | 0.824 | 0.794 | 0.768 | 0.855 |
| 91-00   | 0.981 | 0.968 | 0.947 | 0.939 | 0.930 | 0.909 | 0.877 | 0.883 | 0.829 | 0.808 | 0.912 |
| 2001    | 0.995 | 0.998 | 0.948 | 0.888 | 0.908 | 0.930 | 0.961 | 0.945 | 0.858 | 0.858 | 0.936 |

Appendix D. 4. Salmon catch in the U.S. subsistence and personal use fisheries in the Taku River, 1967-2001.

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

| Year     | Catch   |         |      |      |      |         |
|----------|---------|---------|------|------|------|---------|
|          | 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     |
| Averages |         |         |      |      |      |         |
| 67-00    | 11      | 793     | 55   | 93   | 7    |         |
| 91-00    | 20      | 1,115   | 64   | 100  | 3    | 122     |
| 2001     | 8       | 1,462   | 22   | 195  | 11   | 163     |

Appendix D. 5. Salmon catch and effort in the Canadian commercial fishery in the Taku River, 1979-2001.

| Year     | Catch   |           |         |        |        |        | Effort       |              |
|----------|---------|-----------|---------|--------|--------|--------|--------------|--------------|
|          | Chinook |           | Sockeye | Coho   | Pink   | Chum   | Boat<br>Days | Days<br>Open |
|          | Large   | non large |         |        |        |        |              |              |
| 1979     | 97      |           | 13,578  | 6,006  | 13,661 | 15,474 | 599          | 50.0         |
| 1980     | 225     |           | 22,602  | 6,405  | 26,821 | 18,516 | 476          | 39.0         |
| 1981     | 159     |           | 10,922  | 3,607  | 10,771 | 5,591  | 243          | 31.3         |
| 1982     | 54      |           | 3,144   | 51     | 202    | 3      | 38           | 13.0         |
| 1983     | 156     | 400       | 17,056  | 8,390  | 1,874  | 1,760  | 390          | 64.0         |
| 1984     | 294     | 221       | 27,242  | 5,357  | 6,964  | 2,492  | 288          | 30.0         |
| 1985     | 326     | 24        | 14,244  | 1,770  | 3,373  | 136    | 178          | 16.0         |
| 1986     | 275     | 77        | 14,739  | 1,783  | 58     | 110    | 148          | 17.0         |
| 1987     | 127     | 106       | 13,554  | 5,599  | 6,250  | 2,270  | 280          | 26.0         |
| 1988     | 555     | 186       | 12,014  | 3,123  | 1,030  | 733    | 185          | 14.7         |
| 1989     | 895     | 139       | 18,545  | 2,876  | 695    | 42     | 271          | 25.3         |
| 1990     | 1,258   | 128       | 21,100  | 3,207  | 378    | 12     | 295          | 28.3         |
| 1991     | 1,177   | 432       | 25,067  | 3,415  | 296    | 2      | 284          | 25.0         |
| 1992     | 1,445   | 147       | 29,472  | 4,077  | 0      | 7      | 291          | 27.0         |
| 1993     | 1,619   | 171       | 33,217  | 3,033  | 16     | 15     | 363          | 34.0         |
| 1994     | 2,065   | 235       | 28,762  | 14,531 | 168    | 18     | 497          | 74.0         |
| 1995     | 1,577   | 298       | 32,640  | 13,629 | 2      | 1      | 428          | 51.1         |
| 1996     | 3,331   | 144       | 41,665  | 5,028  | 0      | 0      | 415          | 65.0         |
| 1997     | 2,731   | 84        | 24,003  | 2,594  | 0      | 1      | 394          | 47.0         |
| 1998     | 1,107   | 227       | 19,038  | 5,090  | 0      | 2      | 299          | 42.0         |
| 1999     | 908     | 257       | 20,681  | 4,416  | 0      | 0      | 300          | 34.0         |
| 2000     | 1,576   | 87        | 28,009  | 4,395  | 0      | 0      | 351          | 39.0         |
| Averages |         |           |         |        |        |        |              |              |
| 79-00    | 998     | 187       | 21,422  | 4,926  | 3,298  | 2,145  | 319          | 36           |
| 91-00    | 1,754   | 208       | 28,255  | 6,021  | 48     | 5      | 362          | 44           |
| 2001     | 118     | 1,458     | 47,660  | 2,568  | 0      | 0      | 382          | 41.5         |

Appendix D. 6. Sockeye salmon stock proportions and catch by stock in the Canadian commercial fishery on the Taku River, 1986-2001.

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

| Year                  | Kuthai | Little Trapper |         | Mainstem | Tatsamenie |         | Other Hatchery | Total  |         |
|-----------------------|--------|----------------|---------|----------|------------|---------|----------------|--------|---------|
|                       |        | Wild           | Planted |          | Wild       | Planted |                | Wild   | Planted |
| Proportions           |        |                |         |          |            |         |                |        |         |
| 1986                  | 0.111  | 0.397          |         | 0.350    | 0.143      |         |                | 1.000  |         |
| 1987                  | 0.062  | 0.201          |         | 0.649    | 0.088      |         |                | 1.000  |         |
| 1988                  | 0.143  | 0.417          |         | 0.343    | 0.098      |         |                | 1.000  |         |
| 1989 <sup>a</sup>     | 0.053  | a              |         | a        | 0.203      |         |                | 1.000  |         |
| 1990                  | 0.112  | 0.388          |         | 0.338    | 0.163      |         |                | 1.000  |         |
| 1991                  | 0.064  | 0.308          |         | 0.452    | 0.176      |         |                | 1.000  |         |
| 1992                  | 0.092  | 0.240          |         | 0.569    | 0.099      |         |                | 1.000  |         |
| 1993                  | 0.126  | 0.392          |         | 0.432    | 0.049      |         |                | 1.000  |         |
| 1994                  | 0.158  | 0.482          |         | 0.302    | 0.058      |         |                | 1.000  |         |
| 1995                  | 0.047  | 0.427          | 0.010   | 0.373    | 0.112      | 0.031   |                | 0.959  | 0.041   |
| 1996                  | 0.105  | 0.221          | 0.008   | 0.442    | 0.215      | 0.010   |                | 0.982  | 0.018   |
| 1997                  | 0.120  | 0.282          | 0.019   | 0.277    | 0.294      | 0.008   |                | 0.973  | 0.027   |
| 1998                  | 0.225  | 0.207          | 0.028   | 0.254    | 0.283      | 0.003   |                | 0.969  | 0.031   |
| 1999                  | 0.389  | 0.305          | 0.008   | 0.145    | 0.147      | 0.006   |                | 0.986  | 0.014   |
| 2000                  | 0.172  | 0.205          | 0.000   | 0.326    | 0.282      | 0.016   |                | 0.984  | 0.016   |
| Averages <sup>b</sup> |        |                |         |          |            |         |                |        |         |
| 86-00                 | 0.132  | 0.319          | 0.012   | 0.375    | 0.161      | 0.012   |                | 0.990  | 0.024   |
| 91-00                 | 0.150  | 0.307          | 0.012   | 0.357    | 0.172      | 0.012   |                | 0.985  | 0.024   |
| 2001                  | 0.184  | 0.168          | 0.000   | 0.364    | 0.246      | 0.039   |                | 0.961  | 0.039   |
| Catch                 |        |                |         |          |            |         |                |        |         |
| 1986                  | 1,629  | 5,855          |         | 5,152    | 2,103      |         |                | 14,739 |         |
| 1987                  | 834    | 2,728          |         | 8,793    | 1,199      |         |                | 13,554 |         |
| 1988                  | 1,715  | 5,005          |         | 4,122    | 1,172      |         |                | 12,014 |         |
| 1989 <sup>a</sup>     | 990    | a              |         | a        | 3,763      |         |                | 18,545 |         |
| 1990                  | 2,355  | 8,183          |         | 7,131    | 3,431      |         |                | 21,100 |         |
| 1991                  | 1,601  | 7,721          |         | 11,327   | 4,418      |         |                | 25,067 |         |
| 1992                  | 2,699  | 7,085          |         | 16,764   | 2,924      |         |                | 29,472 |         |
| 1993                  | 4,192  | 13,036         |         | 14,347   | 1,641      |         |                | 33,217 |         |
| 1994                  | 4,544  | 13,858         |         | 8,684    | 1,676      |         |                | 28,762 |         |
| 1995                  | 1,528  | 13,934         | 331     | 12,185   | 3,659      | 1,003   |                | 31,306 | 1,334   |
| 1996                  | 4,357  | 9,195          | 331     | 18,422   | 8,959      | 401     |                | 40,933 | 732     |
| 1997                  | 2,891  | 6,758          | 456     | 6,637    | 7,060      | 201     |                | 23,346 | 657     |
| 1998                  | 4,279  | 3,944          | 533     | 4,829    | 5,397      | 56      |                | 18,449 | 589     |
| 1999                  | 8,044  | 6,314          | 171     | 2,992    | 3,034      | 126     |                | 20,384 | 297     |
| 2000                  | 4,809  | 5,745          | 0       | 9,122    | 7,897      | 436     |                | 27,573 | 436     |
| Averages <sup>b</sup> |        |                |         |          |            |         |                |        |         |
| 86-00                 | 3,098  | 7,812          | 304     | 9,322    | 3,889      | 371     |                | 23,897 | 674     |
| 91-00                 | 3,894  | 8,759          | 304     | 10,531   | 4,667      | 371     |                | 27,851 | 674     |
| 2001                  | 8,748  | 8,005          | 0       | 17,330   | 11,709     | 1,868   |                | 45,792 | 1,868   |

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

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

Appendix D. 7. Salmon catches in the Canadian Aboriginal fishery on the Taku River, 1980-2001.

| Year     | Chinook |           | Sockeye | Coho | Pink | Chum |
|----------|---------|-----------|---------|------|------|------|
|          | Large   | non large |         |      |      |      |
| 1980     | 85      |           | 150     | 0    | 0    | 15   |
| 1981     |         |           |         |      |      |      |
| 1982     |         |           |         |      |      |      |
| 1983     | 9       |           | 0       | 0    | 0    | 0    |
| 1984     | 0       |           | 50      | 15   | 0    | 0    |
| 1985     | 4       |           | 167     | 22   | 0    | 0    |
| 1986     | 10      |           | 200     | 50   | 0    | 0    |
| 1987     | 0       |           | 96      | 113  | 0    | 0    |
| 1988     | 27      |           | 245     | 98   | 0    | 0    |
| 1989     | 6       |           | 53      | 146  | 0    | 0    |
| 1990     | 0       |           | 89      | 6    | 0    | 0    |
| 1991     | 0       |           | 150     | 20   | 0    | 0    |
| 1992     | 121     |           | 352     | 187  | 0    | 0    |
| 1993     | 25      |           | 140     | 8    | 0    | 0    |
| 1994     | 119     |           | 239     | 162  | 4    | 0    |
| 1995     | 70      |           | 71      | 109  | 0    | 7    |
| 1996     | 63      |           | 360     | 24   | 0    | 0    |
| 1997     | 103     |           | 349     | 96   | 0    | 0    |
| 1998     | 60      |           | 239     | 0    | 0    | 0    |
| 1999     | 50      |           | 382     | 471  | 0    | 0    |
| 2000     | 50      |           | 140     | 342  | 0    | 0    |
| Averages |         |           |         |      |      |      |
| 83-00    | 40      |           | 185     | 104  | 0    | 0    |
| 91-00    | 66      |           | 242     | 142  | 0    | 1    |
| 2001     | 125     |           | 210     | 500  | 0    | 25   |



Appendix D. 8. Salmon catch in the Canadian test fishery in the Taku River, 1987-2001.

| Year              | Catch                                       |           |         |       |      |      |
|-------------------|---|-----------|---------|-------|------|------|
|                   | Chinook                                     |           | Sockeye | Coho  | Pink | Chum |
|                   | Large                                       | non large |         |       |      |      |
| 1987              |   |           | 237     | 807   |      |      |
| 1988              | 72  |           | 708     | 422   | 52   | 222  |
| 1989              | 31  |           | 207     | 1,011 | 0    | 13   |
| 1990              | 48  |           | 285     | 472   | 0    | 0    |
| 1991              | 0   |           | 163     | 2,004 | 3    | 295  |
| 1992              | 0   |           | 38      | 1,277 | 0    | 76   |
| 1993 <sup>a</sup> | 0   |           | 166     | 1,593 | 0    | 50   |
| 1994              | There was no Canadian test fishery in 1994. |           |         |       |      |      |
| 1995              | There was no Canadian test fishery in 1995. |           |         |       |      |      |
| 1996              | There was no Canadian test fishery in 1996. |           |         |       |      |      |
| 1997              |   |           |         |       |      |      |
| 1998              | There was no Canadian test fishery in 1998. |           |         |       |      |      |
| 1999              | 577   | 2         | 88      | 688   | 0    | 0    |
| 2000              | 1,312                                       | 87        | 319     | 710   | 0    | 0    |
| 2001              | 1,175                                       | 229       | 247     | 31    | 0    | 0    |

additional fish released

|      | Catch release |           |         |       |      |      |
|------|---------------|-----------|---------|-------|------|------|
|      | Chinook       |           | Sockeye | Coho  | Pink | Chum |
|      | Large         | non large |         |       |      |      |
| 1997 |               |           | 1       | 39    |      |      |
| 1998 |               |           |         |       |      |      |
| 1999 | 181           |           |         |       |      |      |
| 2000 | 439           |           |         |       |      |      |
| 2001 | 871           |           | 82      | 2,976 |      | 159  |

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

## Appendix D. 9. Taku River sockeye salmon run size, 1984-2001.

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

| Year     | Above Border M-R |            | Expansion                 |        |              | Expanded     |         | Canadian Catch | U.S. Catch a | Total Run | Exploitation Rate |
|----------|------------------|------------|---------------------------|--------|--------------|--------------|---------|----------------|--------------|-----------|-------------------|
|          | Run Estimate     | Start Date | Method                    | Factor | Run Estimate | Run Estimate |         |                |              |           |                   |
| 1984     | 133,414          | 17-Jun     | Ave.(88-90&95-96) FW CPUE | 0.056  | 141,254      | 27,292       | 113,962 | 58,543         | 199,796      | 0.430     |                   |
| 1985     | 118,160          | 16-Jun     | Ave.(88-90&95-96) FW CPUE | 0.047  | 123,974      | 14,411       | 109,563 | 74,729         | 198,703      | 0.449     |                   |
| 1986     | 104,162          | 22-Jun     | Ave.(88-90&95-96) FW CPUE | 0.095  | 115,045      | 14,939       | 100,106 | 60,934         | 175,980      | 0.431     |                   |
| 1987     | 87,554           | 21-Jun     | Ave.(88-90&95-96) FW CPUE | 0.088  | 96,023       | 13,887       | 82,136  | 55,154         | 151,178      | 0.457     |                   |
| 1988     | 86,629           | 19-Jun     | 1988 FW CPUE              | 0.065  | 92,641       | 12,967       | 79,674  | 25,811         | 118,452      | 0.327     |                   |
| 1989     | 99,467           | 18-Jun     | 1989 FW CPUE              | 0.128  | 114,068      | 18,805       | 95,263  | 63,367         | 177,435      | 0.463     |                   |
| 1990     | 117,385          | 10-Jun     | 1990 CPUE                 | 0.002  | 117,573      | 21,474       | 96,099  | 109,292        | 226,865      | 0.576     |                   |
| 1991     | 153,773          | 9-Jun      | Ave.(88-90&95-96) FW CPUE | 0.007  | 154,873      | 25,380       | 129,493 | 104,931        | 260,103      | 0.502     |                   |
| 1992     | 162,003          | 21-Jun     | Ave.(88-90&95-96) FW CPUE | 0.032  | 167,376      | 29,862       | 137,514 | 123,655        | 291,031      | 0.527     |                   |
| 1993     | 138,523          | 13-Jun     | Ave.(88-90&95-96) FW CPUE | 0.026  | 142,148      | 33,523       | 108,625 | 142,239        | 284,387      | 0.618     |                   |
| 1994     | 129,119          | 12-Jun     | Ave.(88-90&95-96) FW CPUE | 0.019  | 131,580      | 29,001       | 102,579 | 98,157         | 229,737      | 0.553     |                   |
| 1995     | 145,264          | 11-Jun     | 1995 FW CPUE              | 0.008  | 146,450      | 32,711       | 113,739 | 91,998         | 238,448      | 0.523     |                   |
| 1996     | 132,322          | 9-Jun      | 1996 FW CPUE              | 0.017  | 134,651      | 42,025       | 92,626  | 188,396        | 323,047      | 0.713     |                   |
| 1997     | 93,816           | 3-May      | 1997 FW CPUE              | 0.017  | 95,438       | 24,352       | 71,086  | 79,341         | 174,779      | 0.593     |                   |
| 1998     | 89,992           | 2-May      | No Expansion              |        | 89,992       | 19,277       | 70,715  | 50,646         | 140,638      | 0.497     |                   |
| 1999     | 113,706          | 14-May     | No Expansion              |        | 113,706      | 21,151       | 92,555  | 64,581         | 178,287      | 0.481     |                   |
| 2000     | 115,693          | 14-May     | No Expansion              |        | 115,693      | 28,468       | 87,225  | 132,846        | 248,539      | 0.649     |                   |
| Averages |                  |            |                           |        |              |              |         |                |              |           |                   |
| 84-00    |                  |            |                           |        | 122,933      | 24,090       | 98,843  | 89,686         | 212,619      | 0.535     |                   |
| 91-00    |                  |            |                           |        | 128,928      | 28,575       | 100,353 | 107,684        | 236,612      | 0.576     |                   |
| 2001     | 192,245          | 27-May     | No Expansion              |        | 192,245      | 48,117       | 144,128 | 208,470        | 400,715      | 0.640     |                   |

## Appendix D. 10. Sockeye salmon escapement estimates of Taku River and Port Snettisham sockeye salmon stocks, 1979-2001.

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

| Year              | Little Trapper |            | Tatsamenie |          | Tatsamenie |          | King Salmon Weir | Kuthai Lake Weir | Nahlin River Weir | Crescent Lake |          | Speel Lake    |              |
|-------------------|----------------|------------|------------|----------|------------|----------|------------------|------------------|-------------------|---------------|----------|---------------|--------------|
|                   | Count          | Escapement | Escapement | Spawners | Escapement | Spawners |                  |                  |                   | Escapement    | Spawners | Escapement    | Spawners     |
| 1980              |                |            |            |          |            |          |                  | 1,658            |                   |               |          |               |              |
| 1981              |                |            |            |          |            |          |                  | 2,299            |                   |               |          |               |              |
| 1982              |                |            |            |          |            |          |                  |                  |                   |               |          |               |              |
| 1983 <sup>a</sup> | 7,402          | 7,402      |            |          |            |          |                  |                  |                   | 19,422        | 19,422   | 10,484        | 10,484       |
| 1984              | 13,084         | 13,084     |            |          |            |          |                  |                  |                   | 6,707         | 6,707    | 9,764         | 9,764        |
| 1985 <sup>a</sup> | 14,889         | 14,889     | 13,093     | 13,093   |            |          |                  |                  |                   | 7,249         | 7,249    | 7,073         | 7,006        |
| 1986              | 13,820         | 13,820     | 11,446     | 11,446   |            |          |                  |                  |                   | 3,414         | 3,414    | 5,857         | 5,457        |
| 1987 <sup>a</sup> | 12,007         | 12,007     | 2,794      | 2,794    |            |          |                  |                  |                   | 7,839         | 7,839    | 9,319         | 9,319        |
| 1988              | 10,637         | 10,637     | 2,063      | 2,063    |            |          |                  |                  | <b>138</b>        | 1,199         | 1,199    | 969           | 710          |
| 1989              | 9,606          | 9,606      | 3,039      | 3,039    |            |          |                  |                  |                   | 1,109         | 775      | 12,229        | 10,114       |
| 1990              | 9,443          | 7,777      | 5,736      | 4,929    |            |          |                  |                  | 2,515             | 1,262         | 757      | 18,064        | 16,867       |
| 1991              | 22,942         | 21,001     | 8,381      | 7,585    |            |          |                  |                  |                   | 9,208         | 8,666    | 299           | 299          |
| 1992              | 14,372         | 12,732     | 6,576      | 5,681    |            |          |                  | <b>1,457</b>     | <b>297</b>        | 22,674        | 21,849   | 9,439         | 8,136        |
| 1993              | 17,432         | 16,685     | 5,028      | 4,230    |            |          |                  | 6,312            | 2,463             |               |          |               |              |
| 1994              | 13,438         | 12,691     | 4,371      | 3,578    |            |          |                  | 5,427            | 960               |               |          |               |              |
| 1995              | 11,524         | 11,524     |            |          | 5,780      | 4,387    |                  | 3,310            | 3,711             |               |          | 16,208        | 14,260       |
| 1996              | 5,483          | 5,483      |            |          | 10,381     | 8,026    |                  | 4,243            | 2,538             |               |          | 20,000        | 18,610       |
| 1997              | 5,924          | 5,924      |            |          | 8,363      | 5,981    |                  | 5,746            | 1,857             |               |          | <b>4,999</b>  |              |
| 1998              | 8,717          | 8,717      |            |          | 5,997      | 4,735    |                  | 1,934            | 345               |               |          | <b>13,358</b> |              |
| 1999              | 11,805         | 11,805     |            |          | 2,104      | 1,888    |                  | 10,042           |                   |               |          | <b>10,277</b> |              |
| 2000              | 11,551         | 11,551     |            |          | 7,575      | 6,094    |                  | 4,096            |                   |               |          | <b>6,764</b>  |              |
| Averages          |                |            |            |          |            |          |                  |                  |                   |               |          |               |              |
| 83-00             | 11,893         | 11,519     |            |          |            |          |                  |                  |                   |               |          |               | 9,694        |
| 91-00             | 12,319         | 11,811     | 6,089      | 5,269    | 6,700      | 5,185    |                  | 4,730            | 1,739             |               |          |               | 10,168       |
| 2001              | 16,860         | 16,860     | 22,575     | 21,094   | 19,613     | 18,132   |                  | 1,663            | 935               |               |          |               | <b>8,060</b> |

<sup>a</sup> Weir count plus spawning ground survey; Trapper 1983, 1985, 1987  
Minimum estimates of run size and incomplete counts are bold.

Appendix D. 11. Taku River Chinook salmon run size, 1989-2001.

The run estimates do not include spawning escapements below the U.S./Canada border.

Estimates are expanded if mark-recapture activities terminate prior to run completion.

| Year            | Above Border M-R |            | Confidence Intervals |         | Canadian Catch | Spawning Escapement | U.S. Catch | Total Run |
|-----------------|------------------|------------|----------------------|---------|----------------|---------------------|------------|-----------|
|                 | Run Estimate     | Start Date | Lower                | Upper   |                |                     |            |           |
| Large Fish Only |                  |            |                      |         |                |                     |            |           |
| 1989            | 41,464           |            | 29,263               | 51,395  | 1,135          | 40,329              |            |           |
| 1990            | 53,561           |            | 33,863               | 70,421  | 1,419          | 52,142              |            |           |
| 1991            |                  |            |                      |         | 1,555          |                     |            |           |
| 1992            |                  |            |                      |         | 1,636          |                     |            |           |
| 1993            |                  |            |                      |         | 1,716          |                     |            |           |
| 1994            |                  |            |                      |         | 2,187          |                     |            |           |
| 1995            | 35,622           |            | 23,887               | 43,723  | 1,817          | 33,805              | 2,791      | 38,413    |
| 1996            | 82,079           |            | 61,285               | 96,753  | 3,060          | 79,019              | 6,399      | 88,478    |
| 1997            | 117,514          | 3-May      | 79,878               | 149,998 | 2,576          | 114,938             | 7,214      | 124,728   |
| 1998            | 32,426           | 3-May      | 6,108                | 55,970  | 1,387          | 31,039              | 2,361      | 34,787    |
| 1999            | 18,483           | 3-May      | 11,978               | 27,490  | 1,697          | 16,786              | 3,179      | 24,610    |
| 2000            | 37,962           | 24-Apr     | 19,912               | 41,146  | 2,965          | 34,997              | 1,971      | 35,464    |
| 2001            | 49,598           | 28-Apr     | 30,285               | 55,675  | 2,954          | 46,644              | 1,965      | 47,899    |

Appendix D. 12. Aerial survey index escapement counts of Taku River Chinook salmon, 1975-2001.

| Year               | Kowatua | Tatsatua | Dudidontu | Tseta | Nakina | Nahlin | Total Index<br>Count without |
|--------------------|---------|----------|-----------|-------|--------|--------|------------------------------|
|                    |         |          |           |       |        |        | Tseta                        |
| 1975               |         |          | 15        |       | 1,800  | 274    | 2,089                        |
| 1976               | 341     | 620      | 40        |       | 3,000  | 725    | 4,726                        |
| 1977               | 580     | 573      | 18        |       | 3,850  | 650    | 5,671                        |
| 1978               | 490     | 550      |           | 21    | 1,620  | 624    | 3,284                        |
| 1979               | 430     | 750      | 9         |       | 2,110  | 857    | 4,156                        |
| 1980               | 450     | 905      | 158       |       | 4,500  | 1,531  | 7,544                        |
| 1981               | 560     | 839      | 74        | 258   | 5,110  | 2,945  | 9,528                        |
| 1982               | 289     | 387      | 130       | 228   | 2,533  | 1,246  | 4,585                        |
| 1983               | 171     | 236      | 117       | 179   | 968    | 391    | 1,883                        |
| 1984 <sup>ab</sup> | 279     | 616      |           | 176   | 1,887  | 951    | 3,733                        |
| 1985               | 699     | 848      | 475       | 303   | 2,647  | 2,236  | 6,905                        |
| 1986               | 548     | 886      | 413       | 193   | 3,868  | 1,612  | 7,327                        |
| 1987               | 570     | 678      | 287       | 180   | 2,906  | 1,122  | 5,563                        |
| 1988               | 1,010   | 1,272    | 243       | 66    | 4,500  | 1,535  | 8,560                        |
| 1989               | 601     | 1,228    | 204       | 494   | 5,141  | 1,812  | 8,986                        |
| 1990               | 614     | 1,068    | 820       | 172   | 7,917  | 1,658  | 12,077                       |
| 1991               | 570     | 1,164    | 804       | 224   | 5,610  | 1,781  | 9,929                        |
| 1992               | 782     | 1,624    | 768       | 313   | 5,750  | 1,821  | 10,745                       |
| 1993               | 1,584   | 1,491    | 1,020     | 491   | 6,490  | 2,128  | 12,713                       |
| 1994               | 410     | 1,106    | 573       | 614   | 4,792  | 2,418  | 9,299                        |
| 1995               | 550     | 678      | 731       | 786   | 3,943  | 2,069  | 7,971                        |
| 1996               | 1,620   | 2,011    | 1,810     | 1,201 | 7,720  | 5,415  | 18,576                       |
| 1997               | 1,360   | 1,148    | 943       | 648   | 6,095  | 3,655  | 13,201                       |
| 1998               | 473     | 675      | 807       | 360   | 2,720  | 1,294  | 5,969                        |
| 1999               | 561     | 431      | 527       | 221   | 1,900  | 532    | 3,951                        |
| 2000               | 702     | 953      | 482       | 160   | 2,907  | 728    | 5,772                        |
| Averages           |         |          |           |       |        |        |                              |
| 75-00              | 650     | 909      | 478       | 347   | 3,934  | 1,616  | 7,934                        |
| 91-00              | 861     | 1,128    | 847       | 502   | 4,793  | 2,184  | 10,314                       |
| 2001               | 1,050   | 1,024    | 479       | 202   | 1,552  | 935    | 5,040                        |

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

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

### Appendix D. 13. Taku River (above border) coho salmon run size, 1987-2001.

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

| Year     | Above Border M-R |             | Expansion            |                | Expanded<br>Estimate | Canadian<br>Catch | Escape. | U.S.<br>Catch | Total<br>Run | Total<br>Exploitation<br>Rate |
|----------|------------------|-------------|----------------------|----------------|----------------------|-------------------|---------|---------------|--------------|-------------------------------|
|          | Run<br>Estimate  | End<br>Date | Method               | Factor         |                      |                   |         |               |              |                               |
|          | 1987             | 43,750      | 20-Sep               | Test Fish CPUE | 1.42                 | 61,976            | 6,519   | 55,457        |              |                               |
| 1988     | 43,093           | 18-Sep      |                      | 1.00           | 43,093               | 3,643             | 39,450  |               |              |                               |
| 1989     | 60,841           | 1-Oct       |                      | 1.00           | 60,841               | 4,033             | 56,808  |               |              |                               |
| 1990     | 75,881           |             |                      | 1.00           | 75,881               | 3,685             | 72,196  |               |              |                               |
| 1991     | 132,923          |             |                      | 1.00           | 132,923              | 5,439             | 127,484 |               |              |                               |
| 1992     | 50,557           | 5-Sep       | District 111-32 CPUE | 1.79           | 90,394               | 5,541             | 84,853  | 96,371        | 186,677      | 0.545                         |
| 1993     | 62,076           | 11-Sep      | District 111-32 CPUE | 1.84           | 114,091              | 4,634             | 109,457 | 97,783        | 211,849      | 0.483                         |
| 1994     | 98,643           | 24-Sep      | District 111-32 CPUE | 1.13           | 111,036              | 14,693            | 96,343  | 228,700       | 339,643      | 0.716                         |
| 1995     | 61,738           | 30-Sep      | District 111-32 CPUE | 1.12           | 69,448               | 13,738            | 55,710  | 111,668       | 181,019      | 0.692                         |
| 1996     | 44,172           | 28-Sep      | District 111-32 CPUE | 1.12           | 49,687               | 5,052             | 44,635  | 44,596        | 94,216       | 0.526                         |
| 1997     | 35,035           | 27-Sep      | District 111-32 CPUE | 1.00           | 35,035               | 2,690             | 32,345  | 15,852        | 50,860       | 0.364                         |
| 1998     | 49,290           | 26-Sep      | District 111-32 CPUE | 1.35           | 66,472               | 5,090             | 61,382  | 53,454        | 119,840      | 0.488                         |
| 1999     | 59,052           | 3-Oct       | Troll CPUE           | 1.12           | 66,343               | 5,575             | 60,768  | 50,833        | 117,132      | 0.481                         |
| 2000     | 70,147           | 2-Oct       | no expansion         | 1.00           | 70,147               | 5,447             | 64,700  | 39,002        | 105,537      | 0.387                         |
| Averages |                  |             |                      |                |                      |                   |         |               |              |                               |
| 91-00    | 66,363           | 9/23        |                      | 1.25           | 80,558               | 6,790             | 73,768  | 81,569        | 156,308      | 0.528                         |
| 2001     | 107,493          | 5-Oct       | no expansion         | 1.00           | 107,493              | 3,099             | 104,394 | 55,286        | 160,883      | 0.351                         |

### Appendix D. 14. Escapement counts of Taku River coho salmon, 1984-2001.

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

Surveys Discontinued

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

Bold--Incomplete count or minimal estimates

Appendix D. 15. Canyon Island fish wheel salmon counts and periods of operation on the Taku River, 1983-2001.

| Total counts from both fishwheels and supplemental gillnet when water is too low for fishwheels |                     |         |         |       |        |       |           |          |
|---|---------------------|---------|---------|-------|--------|-------|-----------|----------|
| Year  | Period of Operation | Catch   |         |       |        |       | Pink      |          |
|   |                     | Chinook | Sockeye | Coho  | Pink   | Chum  | even year | odd year |
|   |                     |         |         |       |        |       |           |          |
| 1984  | 6/15-9/18           | 138     | 2,334   | 889   | 20,751 | 316   | 20,751    |          |
| 1985  | 6/16-9/21           | 184     | 3,601   | 1,207 | 27,670 | 1,376 |           | 27,670   |
| 1986  | 6/14-8/25           | 571     | 5,808   | 758   | 7,256  | 80    | 7,256     |          |
| 1987  | 6/15-9/20           | 285     | 4,307   | 2,240 | 42,786 | 1,533 |           | 42,786   |
| 1988  | 5/11-9/19           | 1,436   | 3,292   | 2,168 | 3,982  | 1,089 | 3,982     |          |
| 1989  | 5/05-10/01          | 1,811   | 5,650   | 2,243 | 31,189 | 645   |           | 31,189   |
| 1990  | 5/03-9/23           | 1,972   | 6,091   | 1,860 | 13,358 | 748   | 13,358    |          |
| 1991  | 6/08-10/15          | 680     | 5,102   | 4,922 | 23,553 | 1,063 |           | 23,553   |
| 1992  | 6/20-9/24           | 212     | 6,279   | 2,103 | 9,252  | 189   | 9,252     |          |
| 1993  | 6/12-9/29           | 562     | 8,975   | 2,552 | 1,625  | 345   |           | 1,625    |
| 1994  | 6/10-9/21           | 906     | 6,485   | 4,792 | 27,100 | 367   | 27,100    |          |
| 1995  | 5/4-9/27            | 1,535   | 6,228   | 2,535 | 1,712  | 218   |           | 1,712    |
| 1996  | 5/3-9/20            | 1,904   | 5,919   | 1,895 | 21,583 | 388   | 21,583    |          |
| 1997  | 5/3-10/1            | 1,321   | 5,708   | 1,665 | 4,962  | 485   |           | 4,962    |
| 1998  | 5/2-9/15            | 894     | 4,230   | 1,777 | 23,347 | 179   | 23,347    |          |
| 1999  | 5/3-10/3            | 440     | 4,636   | 1,848 | 23,503 | 164   |           | 23,503   |
| 2000  | 4/23-10/3           | 1,211   | 5,865   | 1,877 | 6,529  | 423   | 6,529     |          |
| Averages  |                     |         |         |       |        |       |           |          |
| 84-00   |                     | 945     | 5,324   | 2,196 | 17,068 | 565   | 14,795    | 19,625   |
| 91-00   |                     | 967     | 5,943   | 2,597 | 14,317 | 382   | 17,562    | 11,071   |
| 2001  | 4/23-10/5           | 1,262   | 6,201   | 2,380 | 9,134  | 250   |           | 9,134    |

Appendix E. 1. Weekly salmon catch and effort in the lower Alsek River fisheries, 2001.

| Week               | Start Date | Catch   |         |       |      |      | Effort |           |           |
|--------------------|------------|---------|---------|-------|------|------|--------|-----------|-----------|
|                    |            | Chinook | Sockeye | Coho  | Pink | Chum | Boats  | Days Open | Boat Days |
| Commercial Fishery |            |         |         |       |      |      |        |           |           |
| 23                 | 3-Jun      | 145     | 407     | 0     | 0    | 0    | 11     | 1.0       | 11.0      |
| 24                 | 10-Jun     | 147     | 445     | 0     | 0    | 0    | 12     | 1.0       | 12.0      |
| 25                 | 17-Jun     | 151     | 1,208   | 0     | 0    | 0    | 10     | 2.0       | 20.0      |
| 26                 | 24-Jun     | 70      | 543     | 0     | 0    | 0    | 9      | 1.0       | 9.0       |
| 27                 | 1-Jul      | 17      | 1,578   | 0     | 0    | 0    | 9      | 2.0       | 18.0      |
| 28                 | 8-Jul      | 9       | 2,105   | 0     | 0    | 0    | 10     | 2.0       | 20.0      |
| 29                 | 15-Jul     | 1       | 2,649   | 0     | 3    | 0    | 10     | 2.0       | 20.0      |
| 30                 | 22-Jul     | 0       | 939     | 0     | 1    | 1    | 10     | 2.0       | 20.0      |
| 31                 | 29-Jul     | 1       | 3,176   | 0     | 4    | 0    | 10     | 3.0       | 30.0      |
| 32                 | 5-Aug      | 0       | 668     | 3     | 0    | 2    | 9      | 1.0       | 9.0       |
| 33                 | 12-Aug     | 0       | 125     | 15    | 0    | 2    | 5      | 1.0       | 5.0       |
| 34                 | 19-Aug     | 0       | 108     | 232   | 0    | 1    | 5      | 3.0       | 15.0      |
| 35                 | 26-Aug     | 0       | 25      | 548   | 0    | 4    | 5      | 3.0       | 15.0      |
| 36                 | 2-Sep      | 0       | 13      | 800   | 0    | 4    | 5      | 3.0       | 15.0      |
| 37-38              | 9&16-Sep   | 0       | 6       | 1,311 | 0    | 3    |        |           | 15        |
| Total              |            | 541     | 13,995  | 2,909 | 8    | 17   | 125    | 51        | 234       |

Appendix E. 2. Weekly salmon catch and effort in the Canadian Aboriginal and sport fisheries in the Alsek River, 2001.

| Week                                      | Date   | Chinook           |                       |           |                    | Sockeye      |          |           |                    | Coho         |          |           |                    |
|---|--------|-------------------|-----------------------|-----------|--------------------|--------------|----------|-----------|--------------------|--------------|----------|-----------|--------------------|
|   |        | Recreational      |                       | Aborigina | Total <sup>b</sup> | Recreational |          | Aborigina | Total <sup>b</sup> | Recreational |          | Aborigina | Total <sup>b</sup> |
|   |        | Kept <sup>a</sup> | Released <sup>a</sup> |           |                    | Kept         | Released |           |                    | Kept         | Released |           |                    |
| 25  | 17-Jun | 0                 | 0                     | 0         | 0                  | 0            | 0        | 0         | 0                  | 0            | 0        | 0         | 0                  |
| 26  | 24-Jun | 0                 | 0                     | 0         | 0                  | 0            | 0        | 22        | 22                 | 0            | 0        | 0         | 0                  |
| 27  | 1-Jul  | 10                | 0                     | 1         | 11                 | 0            | 0        | 0         | 0                  | 0            | 0        | 0         | 0                  |
| 28  | 8-Jul  | 32                | 70                    | 6         | 38                 | 0            | 6        | 6         | 6                  | 0            | 0        | 0         | 0                  |
| 29  | 15-Jul | 86                | 133                   | 28        | 114                | 0            | 14       | 56        | 56                 | 0            | 0        | 0         | 0                  |
| 30  | 22-Jul | 24                | 51                    | 21        | 45                 | 0            | 6        | 30        | 30                 | 0            | 0        | 0         | 0                  |
| 31  | 29-Jul | 5                 | 0                     | 25        | 30                 | 0            | 0        | 50        | 50                 | 0            | 0        | 0         | 0                  |
| 32  | 5-Aug  | 0                 | 0                     | 27        | 27                 | 2            | 0        | 21        | 23                 | 0            | 0        | 0         | 0                  |
| 33  | 12-Aug | 2                 | 2                     | 8         | 10                 | 0            | 0        | 107       | 107                | 0            | 0        | 0         | 0                  |
| 34  | 19-Aug | 0                 | 2                     | 4         | 4                  | 0            | 0        | 71        | 71                 | 0            | 0        | 0         | 0                  |
| 35  | 26-Aug | 0                 | 0                     | 0         | 0                  | 2            | 0        | 311       | 313                | 0            | 0        | 0         | 0                  |
| 36  | 2-Sep  | 0                 | 0                     | 0         | 0                  | 0            | 0        | 207       | 207                | 0            | 0        | 0         | 0                  |
| 37  | 9-Sep  | 0                 | 0                     | 0         | 0                  | 0            | 0        | 152       | 152                | 0            | 0        | 0         | 0                  |
| 38  | 16-Sep | 0                 | 0                     | 0         | 0                  | 0            | 0        | 24        | 24                 | 0            | 0        | 0         | 0                  |
| 39  | 23-Sep | 0                 | 0                     | 0         | 0                  | 0            | 0        | 101       | 101                | 0            | 0        | 0         | 0                  |
| 40  | 30-Sep | 0                 | 0                     | 0         | 0                  | 0            | 2        | 0         | 0                  | 2            | 37       | 3         | 5                  |
| 41  | 7-Oct  | 0                 | 0                     | 0         | 0                  | 0            | 2        | 0         | 0                  | 70           | 40       | 2         | 72                 |
| 42  | 14-Oct | 0                 | 0                     | 0         | 0                  | 0            | 0        | 0         | 0                  | 22           | 44       | 0         | 22                 |
| Total                                     |        | 157               | 257                   | 120       | 277                | 4            | 30       | 1158      | 1162               | 94           | 121      | 5         | 99                 |
| Village Creek food fish <sup>c</sup>      |        |                   |                       | 3         |                    |              |          | 141       |                    |              |          | 0         |                    |
| Food fish above Klukshu Weir <sup>c</sup> |        |                   |                       | 87        |                    |              |          | 961       |                    |              |          | 2         |                    |

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

<sup>b</sup> Does not include released fish.

<sup>c</sup> The total food fish catch above the Klukshu Weir and at Village Creek are included in the weekly aboriginal catches.

Appendix E. 3. Daily counts of salmon passing through Klukshu River weir, 2001.

| Date   | All Chinook |            |       | Sockeye |            |       | Coho  |            |       |
|--------|-------------|------------|-------|---------|------------|-------|-------|------------|-------|
|        | Daily       | Cumulative |       | Daily   | Cumulative |       | Daily | Cumulative |       |
|        |             | Daily      | Prop. |         | Daily      | Prop. |       | Daily      | Prop. |
| 10-Jun | 0           | 0          | 0.000 | 0       | 0          | 0.000 | 0     | 0          | 0.000 |
| 11-Jun | 0           | 0          | 0.000 | 0       | 0          | 0.000 | 0     | 0          | 0.000 |
| 12-Jun | 0           | 0          | 0.000 | 0       | 0          | 0.000 | 0     | 0          | 0.000 |
| 13-Jun | 0           | 0          | 0.000 | 0       | 0          | 0.000 | 0     | 0          | 0.000 |
| 14-Jun | 0           | 0          | 0.000 | 0       | 0          | 0.000 | 0     | 0          | 0.000 |
| 15-Jun | 0           | 0          | 0.000 | 0       | 0          | 0.000 | 0     | 0          | 0.000 |
| 16-Jun | 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 | 0           | 0          | 0.000 | 0       | 0          | 0.000 | 0     | 0          | 0.000 |
| 25-Jun | 0           | 0          | 0.000 | 2       | 2          | 0.000 | 0     | 0          | 0.000 |
| 26-Jun | 1           | 1          | 0.001 | 1       | 3          | 0.000 | 0     | 0          | 0.000 |
| 27-Jun | 2           | 3          | 0.002 | 1       | 4          | 0.000 | 0     | 0          | 0.000 |
| 28-Jun | 3           | 6          | 0.003 | 0       | 4          | 0.000 | 0     | 0          | 0.000 |
| 29-Jun | 5           | 11         | 0.006 | 0       | 4          | 0.000 | 0     | 0          | 0.000 |
| 30-Jun | 0           | 11         | 0.006 | 3       | 7          | 0.001 | 0     | 0          | 0.000 |
| 1-Jul  | 4           | 15         | 0.008 | 4       | 11         | 0.001 | 0     | 0          | 0.000 |
| 2-Jul  | 2           | 17         | 0.009 | 2       | 13         | 0.001 | 0     | 0          | 0.000 |
| 3-Jul  | 2           | 19         | 0.010 | 0       | 13         | 0.001 | 0     | 0          | 0.000 |
| 4-Jul  | 2           | 21         | 0.012 | 2       | 15         | 0.001 | 0     | 0          | 0.000 |
| 5-Jul  | 2           | 23         | 0.013 | 3       | 18         | 0.002 | 0     | 0          | 0.000 |
| 6-Jul  | 2           | 25         | 0.014 | 3       | 21         | 0.002 | 0     | 0          | 0.000 |
| 7-Jul  | 4           | 29         | 0.016 | 0       | 21         | 0.002 | 0     | 0          | 0.000 |
| 8-Jul  | 1           | 30         | 0.016 | 3       | 24         | 0.002 | 0     | 0          | 0.000 |
| 9-Jul  | 2           | 32         | 0.018 | 5       | 29         | 0.003 | 0     | 0          | 0.000 |
| 10-Jul | 4           | 36         | 0.020 | 1       | 30         | 0.003 | 0     | 0          | 0.000 |
| 11-Jul | 3           | 39         | 0.021 | 2       | 32         | 0.003 | 0     | 0          | 0.000 |
| 12-Jul | 8           | 47         | 0.026 | 0       | 32         | 0.003 | 0     | 0          | 0.000 |
| 13-Jul | 11          | 58         | 0.032 | 3       | 35         | 0.003 | 0     | 0          | 0.000 |
| 14-Jul | 21          | 79         | 0.043 | 3       | 38         | 0.004 | 0     | 0          | 0.000 |
| 15-Jul | 22          | 101        | 0.055 | 6       | 44         | 0.004 | 0     | 0          | 0.000 |
| 16-Jul | 44          | 145        | 0.079 | 11      | 55         | 0.005 | 0     | 0          | 0.000 |
| 17-Jul | 641         | 786        | 0.431 | 90      | 145        | 0.014 | 0     | 0          | 0.000 |
| 18-Jul | 37          | 823        | 0.451 | 14      | 159        | 0.015 | 0     | 0          | 0.000 |
| 19-Jul | 55          | 878        | 0.481 | 11      | 170        | 0.017 | 0     | 0          | 0.000 |
| 20-Jul | 18          | 896        | 0.491 | 18      | 188        | 0.018 | 0     | 0          | 0.000 |
| 21-Jul | 37          | 933        | 0.511 | 45      | 233        | 0.023 | 0     | 0          | 0.000 |
| 22-Jul | 98          | 1,031      | 0.565 | 105     | 338        | 0.033 | 0     | 0          | 0.000 |
| 23-Jul | 50          | 1,081      | 0.592 | 21      | 359        | 0.035 | 0     | 0          | 0.000 |
| 24-Jul | 70          | 1,151      | 0.631 | 13      | 372        | 0.036 | 0     | 0          | 0.000 |
| 25-Jul | 27          | 1,178      | 0.645 | 6       | 378        | 0.037 | 0     | 0          | 0.000 |
| 26-Jul | 39          | 1,217      | 0.667 | 7       | 385        | 0.037 | 0     | 0          | 0.000 |
| 27-Jul | 45          | 1,262      | 0.692 | 8       | 393        | 0.038 | 0     | 0          | 0.000 |
| 28-Jul | 46          | 1,308      | 0.717 | 3       | 396        | 0.038 | 0     | 0          | 0.000 |
| 29-Jul | 50          | 1,358      | 0.744 | 4       | 400        | 0.039 | 0     | 0          | 0.000 |
| 30-Jul | 44          | 1,402      | 0.768 | 8       | 408        | 0.040 | 0     | 0          | 0.000 |
| 31-Jul | 18          | 1,420      | 0.778 | 4       | 412        | 0.040 | 0     | 0          | 0.000 |
| 1-Aug  | 69          | 1,489      | 0.816 | 9       | 421        | 0.041 | 0     | 0          | 0.000 |
| 2-Aug  | 110         | 1,599      | 0.876 | 83      | 504        | 0.049 | 0     | 0          | 0.000 |
| 3-Aug  | 31          | 1,630      | 0.893 | 10      | 514        | 0.050 | 0     | 0          | 0.000 |
| 4-Aug  | 13          | 1,643      | 0.900 | 7       | 521        | 0.051 | 0     | 0          | 0.000 |
| 5-Aug  | 10          | 1,653      | 0.906 | 4       | 525        | 0.051 | 0     | 0          | 0.000 |
| 6-Aug  | 19          | 1,672      | 0.916 | 6       | 531        | 0.052 | 0     | 0          | 0.000 |
| 7-Aug  | 12          | 1,684      | 0.923 | 20      | 551        | 0.054 | 0     | 0          | 0.000 |
| 8-Aug  | 8           | 1,692      | 0.927 | 43      | 594        | 0.058 | 0     | 0          | 0.000 |
| 9-Aug  | 6           | 1,698      | 0.930 | 2       | 596        | 0.058 | 0     | 0          | 0.000 |
| 10-Aug | 2           | 1,700      | 0.932 | 5       | 601        | 0.058 | 0     | 0          | 0.000 |
| 11-Aug | 1           | 1,701      | 0.932 | 5       | 606        | 0.059 | 0     | 0          | 0.000 |
| 12-Aug | 4           | 1,705      | 0.934 | 7       | 613        | 0.060 | 0     | 0          | 0.000 |
| 13-Aug | 4           | 1,709      | 0.936 | 197     | 810        | 0.079 | 1     | 1          | 0.001 |
| 14-Aug | 9           | 1,718      | 0.941 | 84      | 894        | 0.087 | 0     | 1          | 0.001 |
| 15-Aug | 11          | 1,729      | 0.947 | 14      | 908        | 0.088 | 0     | 1          | 0.001 |
| 16-Aug | 25          | 1,754      | 0.961 | 340     | 1,248      | 0.121 | 0     | 1          | 0.001 |



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| Date             | All Chinook |            |       | Sockeye |            |       | Coho  |            |       |
|------------------|-------------|------------|-------|---------|------------|-------|-------|------------|-------|
|                  | Daily       | Cumulative |       | Daily   | Cumulative |       | Daily | Cumulative |       |
|                  |             | Daily      | Prop. |         | Daily      | Prop. |       | Daily      | Prop. |
| 17-Aug           | 4           | 1,758      | 0.963 | 9       | 1,257      | 0.122 | 0     | 1          | 0.001 |
| 18-Aug           | 8           | 1,766      | 0.968 | 10      | 1,267      | 0.123 | 0     | 1          | 0.001 |
| 19-Aug           | 12          | 1,778      | 0.974 | 4       | 1,271      | 0.124 | 0     | 1          | 0.001 |
| 20-Aug           | 5           | 1,783      | 0.977 | 7       | 1,278      | 0.124 | 0     | 1          | 0.001 |
| 21-Aug           | 0           | 1,783      | 0.977 | 20      | 1,298      | 0.126 | 0     | 1          | 0.001 |
| 22-Aug           | 3           | 1,786      | 0.979 | 114     | 1,412      | 0.137 | 0     | 1          | 0.001 |
| 23-Aug           | 16          | 1,802      | 0.987 | 771     | 2,183      | 0.212 | 0     | 1          | 0.001 |
| 24-Aug           | 14          | 1,816      | 0.995 | 827     | 3,010      | 0.293 | 0     | 1          | 0.001 |
| 25-Aug           | 0           | 1,816      | 0.995 | 543     | 3,553      | 0.345 | 0     | 1          | 0.001 |
| 26-Aug           | 1           | 1,817      | 0.996 | 263     | 3,816      | 0.371 | 0     | 1          | 0.001 |
| 27-Aug           | 2           | 1,819      | 0.997 | 555     | 4,371      | 0.425 | 0     | 1          | 0.001 |
| 28-Aug           | 0           | 1,819      | 0.997 | 144     | 4,515      | 0.439 | 0     | 1          | 0.001 |
| 29-Aug           | 0           | 1,819      | 0.997 | 115     | 4,630      | 0.450 | 0     | 1          | 0.001 |
| 30-Aug           | 0           | 1,819      | 0.997 | 2,003   | 6,633      | 0.645 | 0     | 1          | 0.001 |
| 31-Aug           | 0           | 1,819      | 0.997 | 241     | 6,874      | 0.668 | 0     | 1          | 0.001 |
| 1-Sep            | 1           | 1,820      | 0.997 | 45      | 6,919      | 0.672 | 0     | 1          | 0.001 |
| 2-Sep            | 1           | 1,821      | 0.998 | 540     | 7,459      | 0.725 | 1     | 2          | 0.003 |
| 3-Sep            | 0           | 1,821      | 0.998 | 24      | 7,483      | 0.727 | 0     | 2          | 0.003 |
| 4-Sep            | 4           | 1,825      | 1.000 | 35      | 7,518      | 0.731 | 0     | 2          | 0.003 |
| 5-Sep            | 0           | 1,825      | 1.000 | 17      | 7,535      | 0.732 | 1     | 3          | 0.004 |
| 6-Sep            | 0           | 1,825      | 1.000 | 33      | 7,568      | 0.735 | 0     | 3          | 0.004 |
| 7-Sep            | 0           | 1,825      | 1.000 | 109     | 7,677      | 0.746 | 8     | 11         | 0.015 |
| 8-Sep            | 0           | 1,825      | 1.000 | 119     | 7,796      | 0.758 | 3     | 14         | 0.019 |
| 9-Sep            | 0           | 1,825      | 1.000 | 363     | 8,159      | 0.793 | 1     | 15         | 0.020 |
| 10-Sep           | 0           | 1,825      | 1.000 | 101     | 8,260      | 0.803 | 1     | 16         | 0.021 |
| 11-Sep           | 0           | 1,825      | 1.000 | 62      | 8,322      | 0.809 | 1     | 17         | 0.023 |
| 12-Sep           | 0           | 1,825      | 1.000 | 11      | 8,333      | 0.810 | 2     | 19         | 0.025 |
| 13-Sep           | 0           | 1,825      | 1.000 | 1,496   | 9,829      | 0.955 | 37    | 56         | 0.075 |
| 14-Sep           | 0           | 1,825      | 1.000 | 135     | 9,964      | 0.968 | 19    | 75         | 0.100 |
| 15-Sep           | 0           | 1,825      | 1.000 | 58      | 10,022     | 0.974 | 4     | 79         | 0.106 |
| 16-Sep           | 0           | 1,825      | 1.000 | 11      | 10,033     | 0.975 | 0     | 79         | 0.106 |
| 17-Sep           | 0           | 1,825      | 1.000 | 22      | 10,055     | 0.977 | 0     | 79         | 0.106 |
| 18-Sep           | 0           | 1,825      | 1.000 | 0       | 10,055     | 0.977 | 1     | 80         | 0.107 |
| 19-Sep           | 0           | 1,825      | 1.000 | 2       | 10,057     | 0.977 | 0     | 80         | 0.107 |
| 20-Sep           | 0           | 1,825      | 1.000 | 0       | 10,057     | 0.977 | 1     | 81         | 0.108 |
| 21-Sep           | 0           | 1,825      | 1.000 | 2       | 10,059     | 0.978 | 3     | 84         | 0.112 |
| 22-Sep           | 0           | 1,825      | 1.000 | 2       | 10,061     | 0.978 | 0     | 84         | 0.112 |
| 23-Sep           | 0           | 1,825      | 1.000 | 0       | 10,061     | 0.978 | 1     | 85         | 0.114 |
| 24-Sep           | 0           | 1,825      | 1.000 | 4       | 10,065     | 0.978 | 0     | 85         | 0.114 |
| 25-Sep           | 0           | 1,825      | 1.000 | 4       | 10,069     | 0.979 | 0     | 85         | 0.114 |
| 26-Sep           | 0           | 1,825      | 1.000 | 1       | 10,070     | 0.979 | 2     | 87         | 0.116 |
| 27-Sep           | 0           | 1,825      | 1.000 | 18      | 10,088     | 0.980 | 3     | 90         | 0.120 |
| 28-Sep           | 0           | 1,825      | 1.000 | 29      | 10,117     | 0.983 | 10    | 100        | 0.134 |
| 29-Sep           | 0           | 1,825      | 1.000 | 8       | 10,125     | 0.984 | 5     | 105        | 0.140 |
| 30-Sep           | 0           | 1,825      | 1.000 | 11      | 10,136     | 0.985 | 11    | 116        | 0.155 |
| 1-Oct            | 0           | 1,825      | 1.000 | 3       | 10,139     | 0.985 | 21    | 137        | 0.183 |
| 2-Oct            | 0           | 1,825      | 1.000 | 20      | 10,159     | 0.987 | 37    | 174        | 0.233 |
| 3-Oct            | 0           | 1,825      | 1.000 | 4       | 10,163     | 0.988 | 19    | 193        | 0.258 |
| 4-Oct            | 0           | 1,825      | 1.000 | 37      | 10,200     | 0.991 | 284   | 477        | 0.638 |
| 5-Oct            | 0           | 1,825      | 1.000 | 51      | 10,251     | 0.996 | 147   | 624        | 0.834 |
| 6-Oct            | 0           | 1,825      | 1.000 | 27      | 10,278     | 0.999 | 50    | 674        | 0.901 |
| 7-Oct            | 0           | 1,825      | 1.000 | 2       | 10,280     | 0.999 | 12    | 686        | 0.917 |
| 8-Oct            | 0           | 1,825      | 1.000 | 4       | 10,284     | 0.999 | 14    | 700        | 0.936 |
| 9-Oct            | 0           | 1,825      | 1.000 | 2       | 10,286     | 1.000 | 7     | 707        | 0.945 |
| 10-Oct           | 0           | 1,825      | 1.000 | 0       | 10,286     | 1.000 | 8     | 715        | 0.956 |
| 11-Oct           | 0           | 1,825      | 1.000 | 0       | 10,286     | 1.000 | 1     | 716        | 0.957 |
| 12-Oct           | 0           | 1,825      | 1.000 | 1       | 10,287     | 1.000 | 8     | 724        | 0.968 |
| 13-Oct           | 0           | 1,825      | 1.000 | 2       | 10,289     | 1.000 | 7     | 731        | 0.977 |
| 14-Oct           | 0           | 1,825      | 1.000 | 1       | 10,290     | 1.000 | 4     | 735        | 0.983 |
| 15-Oct           | 0           | 1,825      | 1.000 | 0       | 10,290     | 1.000 | 6     | 741        | 0.991 |
| 16-Oct           | 0           | 1,825      | 1.000 | 0       | 10,290     | 1.000 | 5     | 746        | 0.997 |
| 17-Oct           | 0           | 1,825      | 1.000 | 0       | 10,290     | 1.000 | 2     | 748        | 1.000 |
| 18-Oct           | 0           | 1,825      | 1.000 | 0       | 10,290     | 1.000 | 0     | 748        | 1.000 |
| Total Count      |             | 1,825      |       |         | 10,290     |       |       | 748        |       |
| Catch at weir    |             | 1,825      |       |         | 10,290     |       |       | 748        |       |
| Catch above weir |             | 87         |       |         | 961        |       |       | 2          |       |
| Total Escapement |             | 1,738      |       |         | 9,329      |       |       | 746        |       |

Appendix E. 4. Salmon catch and effort in the U.S. Commercial fishery in the Alsek River, 1960 to 2001.

| Year     | Catch   |         |        |      |       | Effort    |           |
|----------|---------|---------|--------|------|-------|-----------|-----------|
|          | Chinook | Sockeye | Coho   | Pink | Chum  | Boat Days | Days Open |
| 1960     |         |         |        |      |       |           |           |
| 1961     | 2,120   | 23,339  | 7,679  | 84   | 86    | 1,436     | 80.0      |
| 1962     |         |         |        |      |       |           |           |
| 1963     | 131     | 6,055   | 7,164  | 42   | 34    | 692       | 68.0      |
| 1964     | 591     | 14,127  | 9,760  | 144  | 367   | 592       | 68.0      |
| 1965     | 719     | 28,487  | 9,638  | 10   | 72    | 1,016     | 72.0      |
| 1966     | 934     | 29,091  | 2,688  | 22   | 240   | 500       | 64.0      |
| 1967     | 225     | 11,108  | 10,090 | 107  | 30    | 600       | 68.0      |
| 1968     | 215     | 26,918  | 10,586 | 82   | 240   | 664       | 68.0      |
| 1969     | 685     | 29,259  | 2,493  | 38   | 61    | 807       | 61.0      |
| 1970     | 1,128   | 22,654  | 2,188  | 6    | 26    | 670       | 52.3      |
| 1971     | 1,222   | 25,314  | 4,730  | 3    | 120   | 794       | 60.5      |
| 1972     | 1,827   | 18,717  | 7,296  | 37   | 280   | 640       | 65.0      |
| 1973     | 1,757   | 26,523  | 4,395  | 26   | 283   | 894       | 52.0      |
| 1974     | 1,162   | 16,747  | 7,046  | 13   | 107   | 699       | 46.0      |
| 1975     | 1,379   | 13,842  | 2,230  | 16   | 261   | 738       | 58.0      |
| 1976     | 512     | 19,741  | 4,883  | 0    | 368   | 550       | 58.5      |
| 1977     | 1,402   | 40,780  | 11,817 | 689  | 483   | 882       | 57.0      |
| 1978     | 2,441   | 50,580  | 13,913 | 59   | 233   | 929       | 57.0      |
| 1979     | 2,525   | 41,449  | 6,158  | 142  | 263   | 1,110     | 51.0      |
| 1980     | 1,382   | 25,522  | 7,863  | 21   | 1,005 | 773       | 42.0      |
| 1981     | 779     | 23,641  | 10,232 | 65   | 816   | 588       | 40.0      |
| 1982     | 532     | 27,443  | 6,534  | 6    | 358   | 552       | 33.0      |
| 1983     | 94      | 18,293  | 5,253  | 20   | 432   | 487       | 38.0      |
| 1984     | 60      | 14,326  | 7,868  | 24   | 1,610 | 429       | 33.0      |
| 1985     | 213     | 5,792   | 5,490  | 3    | 427   | 277       | 33.0      |
| 1986     | 481     | 24,791  | 1,344  | 13   | 462   | 517       | 34.0      |
| 1987     | 347     | 11,393  | 2,517  | 0    | 1,924 | 388       | 40.5      |
| 1988     | 223     | 6,286   | 4,986  | 7    | 908   | 324       | 34.0      |
| 1989     | 228     | 13,513  | 5,972  | 2    | 1,031 | 378       | 38.0      |
| 1990     | 78      | 17,013  | 1,437  | 0    | 495   | 374       | 38.0      |
| 1991     | 103     | 17,542  | 5,956  | 0    | 105   | 530       | 49.0      |
| 1992     | 301     | 19,298  | 3,116  | 1    | 120   | 372       | 46.0      |
| 1993     | 300     | 20,043  | 1,215  | 0    | 49    | 372       | 40.0      |
| 1994     | 805     | 19,639  | 4,182  | 0    | 32    | 403       | 61.0      |
| 1995     | 670     | 33,112  | 14,184 | 13   | 347   | 879       | 53.5      |
| 1996     | 772     | 15,182  | 5,514  | 0    | 165   | 419       | 51.0      |
| 1997     | 568     | 25,879  | 11,427 | 0    | 34    | 611       | 59.0      |
| 1998     | 550     | 15,007  | 4,925  | 1    | 145   | 358       | 41.0      |
| 1999     | 482     | 11,441  | 5,660  | 0    | 112   | 319       | 44.0      |
| 2000     | 677     | 9,522   | 5,103  | 5    | 130   | 307       | 37.0      |
| Averages |         |         |        |      |       |           |           |
| 60-00    | 786     | 21,010  | 6,296  | 44   | 366   | 617       | 51        |
| 91-00    | 526     | 18,667  | 6,128  | 2    | 124   | 478       | 47        |
| 2001     | 541     | 13,995  | 2,909  | 8    | 17    | 234       | 50.0      |

Appendix E. 5. Salmon catch in the U.S. subsistence and personal use fisheries in the Alsek River, 1976-2001.

| Catches are those reported on returned permits |         |         |      |
|--|---------|---------|------|
| Year   | Catch   |         |      |
|  | Chinook | Sockeye | Coho |
| 1976   | 13      | 51      | 5    |
| 1977   | 18      | 113     | 0    |
| 1978   |         |         |      |
| 1979   | 80      | 35      | 70   |
| 1980   | 57      | 41      | 62   |
| 1981   | 32      | 50      | 74   |
| 1982   | 87      | 75      | 50   |
| 1983   | 31      | 25      | 50   |
| 1984   |         |         |      |
| 1985   | 16      | 95      | 0    |
| 1986   | 22      | 241     | 45   |
| 1987   | 27      | 173     | 31   |
| 1988   | 13      | 148     | 9    |
| 1989   | 20      | 131     | 34   |
| 1990   | 85      | 144     | 12   |
| 1991   | 38      | 104     | 0    |
| 1992   | 15      | 37      | 44   |
| 1993   | 38      | 96      | 28   |
| 1994   | 60      | 47      | 20   |
| 1995   | 51      | 167     | 53   |
| 1996   | 60      | 67      | 28   |
| 1997   | 38      | 273     | 26   |
| 1998   | 63      | 158     | 42   |
| 1999   | 44      | 152     | 21   |
| 2000   | 73      | 146     | 31   |
| Averages                                       |         |         |      |
| 76-00  | 43      | 112     | 32   |
| 91-00  | 48      | 125     | 29   |
| 2001   | 19      | 72      | 45   |

Appendix E. 6. Salmon catches in the Canadian Aboriginal and sport fisheries in the Alsek River, 1976 to 2001.

| Year     | Chinook    |              |       | Sockeye    |              |        | Coho       |              |       |
|----------|------------|--------------|-------|------------|--------------|--------|------------|--------------|-------|
|          | Aboriginal | recreational | Total | Aboriginal | recreational | Total  | Aboriginal | recreational | Total |
| 1976     | 150        | 200          | 350   | 4,000      | 600          | 4,600  | 0          | 100          | 100   |
| 1977     | 350        | 300          | 650   | 10,000     | 500          | 10,500 | 0          | 200          | 200   |
| 1978     | 350        | 300          | 650   | 8,000      | 500          | 8,500  | 0          | 200          | 200   |
| 1979     | 1,300      | 650          | 1,950 | 7,000      | 750          | 7,750  | 0          | 100          | 100   |
| 1980     | 150        | 200          | 350   | 800        | 600          | 1,400  | 0          | 200          | 200   |
| 1981     | 150        | 315          | 465   | 2,000      | 808          | 2,808  | 0          | 109          | 109   |
| 1982     | 400        | 224          | 624   | 5,000      | 755          | 5,755  | 0          | 109          | 109   |
| 1983     | 300        | 312          | 612   | 2,550      | 732          | 3,282  | 0          | 16           | 16    |
| 1984     | 100        | 475          | 575   | 2,600      | 289          | 2,889  | 0          | 20           | 20    |
| 1985     | 175        | 250          | 425   | 1,361      | 100          | 1,461  | 50         | 100          | 150   |
| 1986     | 102        | 165          | 267   | 1,914      | 307          | 2,221  | 0          | 9            | 9     |
| 1987     | 125        | 367          | 492   | 1,158      | 383          | 1,541  | 0          | 49           | 49    |
| 1988     | 43         | 249          | 292   | 1,604      | 322          | 1,926  | 0          | 192          | 192   |
| 1989     | 234        | 272          | 506   | 1,851      | 319          | 2,170  | 0          | 227          | 227   |
| 1990     | 202        | 555          | 757   | 2,314      | 392          | 2,706  | 0          | 75           | 75    |
| 1991     | 509        | 388          | 897   | 2,111      | 303          | 2,414  | 0          | 227          | 227   |
| 1992     | 148        | 103          | 251   | 2,592      | 582          | 3,174  | 0          | 213          | 213   |
| 1993     | 152        | 171          | 323   | 2,361      | 329          | 2,690  | 0          | 37           | 37    |
| 1994     | 289        | 197          | 486   | 1,745      | 261          | 2,006  | 8          | 69           | 77    |
| 1995     | 580        | 1,044        | 1,624 | 1,745      | 682          | 2,427  | 83         | 527          | 610   |
| 1996     | 448        | 650          | 1,098 | 1,204      | 157          | 1,361  | 56         | 9            | 65    |
| 1997     | 232        | 298          | 530   | 484        | 36           | 520    | 5          | 0            | 5     |
| 1998     | 171        | 175          | 346   | 567        | 18           | 585    | 72         | 40           | 112   |
| 1999     | 238        | 174          | 412   | 554        | 0            | 554    | 0          | 28           | 28    |
| 2000     | 65         | 77           | 142   | 745        | 0            | 745    | 51         | 1            | 52    |
| Averages |            |              |       |            |              |        |            |              |       |
| 76-00    | 278        | 324          | 602   | 2,650      | 389          | 3,039  | 13         | 114          | 127   |
| 91-00    | 282        | 328          | 609   | 1,411      | 237          | 1,648  | 28         | 115          | 143   |
| 2001     | 120        | 157          | 277   | 1,173      | 4            | 1,177  | 5          | 94           | 99    |

Appendix E. 7. Annual Klukshu River weir counts of Chinook, sockeye, and coho salmon, 1976 to 2001.

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

| Year     | All Chinook |                      | Sockeye            |        |        | Coho <sup>a</sup> |       | Escapement <sup>b</sup> |
|----------|-------------|----------------------|--------------------|--------|--------|-------------------|-------|-------------------------|
|          | Count       | Escape. <sup>c</sup> | Early <sup>c</sup> | Late   | Total  | Escape.           | Count |                         |
| 1976     | 1,278       | 1,153                | 181                | 11,510 | 11,691 | 7,941             | 1,572 |                         |
| 1977     | 3,144       | 2,894                | 8,931              | 17,860 | 26,791 | 15,441            | 2,758 |                         |
| 1978     | 2,976       | 2,676                | 2,508              | 24,359 | 26,867 | 19,017            | 30    |                         |
| 1979     | 4,404       | 2,454                | 977                | 11,334 | 12,311 | 7,051             | 175   |                         |
| 1980     | 2,637       | 2,487                | 1,008              | 10,742 | 11,750 | 10,850            | 704   |                         |
| 1981     | 2,113       | 1,963                | 997                | 19,351 | 20,348 | 18,448            | 1,170 |                         |
| 1982     | 2,369       | 1,969                | 7,758              | 25,941 | 33,699 | 28,899            | 189   |                         |
| 1983     | 2,537       | 2,237                | 6,047              | 14,445 | 20,492 | 18,017            | 303   |                         |
| 1984     | 1,672       | 1,572                | 2,769              | 9,958  | 12,727 | 10,227            | 1,402 |                         |
| 1985     | 1,458       | 1,283                | 539                | 18,081 | 18,620 | 17,259            | 350   |                         |
| 1986     | 2,709       | 2,607                | 416                | 24,434 | 24,850 | 22,936            | 71    |                         |
| 1987     | 2,616       | 2,491                | 3,269              | 7,235  | 10,504 | 9,346             | 202   |                         |
| 1988     | 2,037       | 1,994                | 585                | 8,756  | 9,341  | 7,737             | 2,774 |                         |
| 1989     | 2,456       | 2,289                | 3,400              | 20,142 | 23,542 | 21,636            | 2,219 |                         |
| 1990     | 1,915       | 1,742                | 1,316              | 24,679 | 25,995 | 24,607            | 315   |                         |
| 1991     | 2,489       | 2,248                | 1,924              | 17,053 | 18,977 | 17,645            | 8,540 | 8,478                   |
| 1992     | 1,367       | 1,242                | 11,339             | 8,428  | 19,767 | 18,269            | 1,145 | 1,145                   |
| 1993     | 3,302       | 3,220                | 5,369              | 11,371 | 16,740 | 14,921            | 788   | 788                     |
| 1994     | 3,727       | 3,628                | 3,247              | 11,791 | 15,038 | 13,892            | 1,232 | 1,232                   |
| 1995     | 5,678       | 5,394                | 2,289              | 18,407 | 20,696 | 19,817            | 3,614 | 3,564                   |
| 1996     | 3,599       | 3,382                | 1,502              | 6,818  | 8,320  | 7,891             | 3,465 | 3,465                   |
| 1997     | 2,989       | 2,829                | 6,565              | 4,931  | 11,496 | 11,303            | 307   | 302                     |
| 1998     | 1,364       | 1,347                | 597                | 12,994 | 13,591 | 13,580            | 1,961 | 1,961                   |
| 1999     | 2,193       | 2,168                | 371                | 5,010  | 5,381  | 5,101             | 2,531 | 2,531                   |
| 2000     | 1,365       | 1,321                | 237                | 5,314  | 5,551  | 5,422             | 4,832 | 4,791                   |
| Averages |             |                      |                    |        |        |                   |       |                         |
| 76-00    | 2,576       | 2,344                | 2,966              | 14,038 | 17,003 | 14,690            | 1,702 |                         |
| 91-00    | 2,807       | 2,678                | 3,344              | 10,212 | 13,556 | 12,784            | 2,833 | 2,826                   |
| 2001     | 1,825       | 1,738                | 908                | 9,382  | 10,290 | 9,329             | 748   | 746                     |

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

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

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

Appendix E. 8. Alsek River sockeye salmon escapement 2000 to 2001.

The estimates are based on a mark-recapture study.

| Year | Inriver Run | Confidence Interval |        | Canadian Catch | Spawning Escapement | U.S. Catch | Total Run | Percent Klukshu |
|------|-------------|---------------------|--------|----------------|---------------------|------------|-----------|-----------------|
|      | Estimate    | Lower               | Upper  |                |                     |            |           |                 |
| 2000 | 37,887      | 23,410              | 52,365 | 745            | 37,142              | 9,668      | 47,555    | 14.7%           |
| 2001 | 31,164      | 23,143              | 39,185 | 1,177          | 29,987              | 14,067     | 45,231    | 33.0%           |

Appendix E. 9. Alsek River sockeye salmon counts from U.S. and Canadian aerial surveys and from the electronic counter at Village Creek, 1985-2001.

Surveys not made every year at each tributary.

| Year     | U.S. Aerial Surveys |             |             |             | Canada Aerial Surveys <sup>b</sup> |                  | Village Creek Counter |
|----------|---------------------|-------------|-------------|-------------|------------------------------------|------------------|-----------------------|
|          | Basin Creek         | Cabin Creek | Muddy Creek | Tanis River | Tatshenshini River                 | Neskataheen Lake |                       |
| 1985     | 2,600               |             |             | 2,200       |                                    |                  |                       |
| 1986     | 100                 |             | 300         | 2,700       | 536                                | 750              | 1,490                 |
| 1987     | 350                 | 220         |             | 1,600       |                                    |                  | 1,875                 |
| 1988     | 500                 |             |             | 750         | 433                                | 456              | <b>433</b>            |
| 1989     | 320                 |             |             | 680         | 1,689                              | 1,700            | 9,569                 |
| 1990     | 275                 | 300         |             | 3,500       |                                    |                  | <b>5,313</b>          |
| 1991     |                     |             |             | 800         |                                    |                  | <b>86</b>             |
| 1992     | 1,000               | 10          |             | 50          |                                    |                  | <b>7,447</b>          |
| 1993     | 4,800               |             |             | 900         |                                    |                  | <b>2,104</b>          |
| 1994     | 250                 |             |             | 600         | 366                                |                  | <b>3,921</b>          |
| 1995     | 2,700               |             |             | 350         |                                    |                  | 4,042                 |
| 1996     | 325                 |             |             | 650         |                                    |                  | 1,583                 |
| 1997     | 600                 |             |             | 350         |                                    |                  | 2,267                 |
| 1998     |                     |             |             | 130         |                                    |                  | 826                   |
| 1999     | 30                  |             |             | 800         |                                    |                  | <b>NA</b>             |
| 2000     | 25                  |             |             | 180         |                                    |                  | 1,860                 |
| Averages |                     |             |             |             |                                    |                  |                       |
| 85-00    | 991                 | 177         | 300         | 1,015       | 756                                | 969              | 4,116                 |
| 91-00    | 1,216               | 10          |             | 481         | 366                                |                  | 4,461                 |
| 2001     |                     |             |             | 700         |                                    |                  | <b>1,897</b>          |

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

Appendix E. 10. Aerial survey index counts of Alsek River Chinook salmon escapements, 1984 to 2001.

| Year     | Blanchard<br>River    | Takhanne<br>River | Goat<br>Creek   |
|----------|-----------------------|-------------------|-----------------|
| 1984     | 304                   | 158               | 28              |
| 1985     | 232                   | 184               |                 |
| 1986     | 556                   | 358               | 142             |
| 1987     | 624                   | 395               | 85              |
| 1988     | 437                   | 169               | 54              |
| 1989     | No Survey -Poor Cond. | 158               | 34              |
| 1990     | No Survey -Poor Cond. | 325               | 32              |
| 1991     | 121                   | 86                | 63              |
| 1992     | 86                    | 77                | 16              |
| 1993     | 326                   | 351               | 50              |
| 1994     | 349                   | 342               | 67 <sup>a</sup> |
| 1995     | 338                   | 260               |                 |
| 1996     | 132                   | 230               | 12              |
| 1997     | 109                   | 190               |                 |
| 1998     | 71                    | 136               | 39              |
| 1999     | 371                   | 194               | 51              |
| 2000     | 163                   | 152               | 33              |
| Averages |                       |                   |                 |
| 84-00    | 281                   | 221               | 50              |
| 91-00    | 207                   | 202               | 41              |
| 2001     | 543                   | 287               | 21              |

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

Appendix E. 11. Alsek River run of large Chinook salmon, 1997-2001. Estimates are based on a mark-recapture study and include the percent of Chinook salmon.

Estimates are based on a mark-recapture study and include the percent of Chinook salmon spawning in Klukshu River

| Year | Inriver Run |                              |        | U.S. Catch |                        | Total<br>Inriver<br>Run | Canadian Catch |                  |            |
|------|-------------|------------------------------|--------|------------|------------------------|-------------------------|----------------|------------------|------------|
|      | Dry Bay     | Confidence Interval<br>Lower | Upper  | Dry Bay    | Commercial Subsistence |                         | Aboriginal     | Sport Escapement | Escapement |
| 1997 | 15,250      | 9,081                        | 21,418 | 568        | 38                     | 15,856                  | 232            | 298              | 14,720     |
| 1998 | 4,967       | 3,027                        | 9,765  | 550        | 63                     | 5,580                   | 171            | 175              | 4,621      |
| 1999 | 11,969      | 8,243                        | 22,035 | 482        | 44                     | 12,495                  | 238            | 174              | 11,557     |
| 2000 | 8,432       | 6,805                        | 14,308 | 677        | 73                     | 9,182                   | 65             | 77               | 8,290      |
| 2001 | 11,246      | 9,146                        | 14,303 | 541        | 19                     | 11,806                  | 120            | 157              | 10,969     |

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

| Year | Weir Count |       | Percent<br>Klukshu |
|------|------------|-------|--------------------|
|      | All        | Large |                    |
| 1997 | 2,989      | 2,864 | 19.5%              |
| 1998 | 1,364      | 1,184 | 25.6%              |
| 1999 | 2,193      | 1,663 | 14.4%              |
| 2000 | 1,365      | 1,218 | 14.7%              |
| 2001 | 1,825      | 1,538 | 14.0%              |

Appendix E. 12. Aerial survey counts of coho salmon from U.S. lower Alsek River tributaries, 1985-2001.

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

Appendix F. 1. Tahltan Lake egg collection, fry plants, and survivals, 1989-2001.

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

| Brood Year        | Egg Take |                        | Designated Tahltan | Fry Planted | Percent Fertilized | Survival              |                  | Thermal Mark Pattern |
|-------------------|----------|------------------------|--------------------|-------------|--------------------|-----------------------|------------------|----------------------|
|                   | Target   | Collected <sup>a</sup> |                    |             |                    | Fertilized Egg to Fry | Green Egg to Fry |                      |
| 1989 <sup>a</sup> | 3.000    | 2.955                  | 2.955              | 1.042       | 0.704              | 0.501                 | 0.353            | 1:1.4                |
| 1990              | 5.000    | 4.511                  | 4.511              | 3.585       | 0.824              | 0.964                 | 0.795            | 1:1.3                |
| 1991              | 5.000    | 4.246                  | 1.514              | 1.415       | 0.949              | 0.984                 | 0.935            | 1:1.4                |
| 1992              | 5.400    | 4.901                  | 2.154              | 1.947       | 0.919              | 0.983                 | 0.904            | 1:1.5+2.3            |
| 1993              | 6.000    | 6.140                  | 0.969              | 0.904       | 0.946              | 0.986                 | 0.933            | 1:1.6+2.5N           |
| 1994              | 6.000    | 4.183                  | 1.418              | 1.143       | 0.929              | 0.868                 | 0.806            | 1:1.6                |
| 1995              | 6.000    | 6.891                  | 3.008              | 2.296       | 0.906              | 0.843                 | 0.763            | 1:1.7                |
| 1996              | 6.000    | 6.402                  | 3.169              | 2.313       | 0.923              | 0.791                 | 0.730            | 1:1.6                |
| 1997              | 6.000    | 3.221                  | 2.700              | 1.900       | 0.812              | 0.867                 | 0.704            | 2:1.6                |
| 1998              | 6.000    | 4.022                  | 1.998              | 1.671       | 0.911              | 0.918                 | 0.836            | 1:1.7                |
| 1999              | 6.000    | 3.505                  | 2.773              | 2.228       | 0.901              | 0.892                 | 0.803            | 2:1.6                |
| 2000              | 6.000    | 2.388                  | 2.388              | 1.873       | 0.920              | 0.853                 | 0.784            | 1:1.7                |
| Averages          |          |                        |                    |             |                    |                       |                  |                      |
| 91-00             | 5.533    | 4.447                  | 2.463              | 1.860       | 0.887              | 0.871                 | 0.779            |                      |
| 2001              | 6.000    | 3.306                  | 3.306              | 2.533       | 0.829              | 0.924                 | 0.766            | 2:1.6                |



Appendix F. 2. Tuya Lake fry plants and survivals, 1991-2001.

Numbers for eggs and fry are millions

| Brood Year        | Egg Take        |             | Percent Fertilized | Survival              |                  | Thermal Mark Pattern |
|-------------------|-----------------|-------------|--------------------|-----------------------|------------------|----------------------|
|                   | Designated Tuya | Fry Planted |                    | Fertilized Egg to Fry | Green Egg to Fry |                      |
| 1991              | 2.732           | 1.632       | 0.944              | 0.633                 | 0.597            | 1:1.6                |
| 1992              | 2.747           | 1.990       | 0.929              | 0.780                 | 0.724            | 1:1.7                |
| 1993              | 5.171           | 4.691       | 0.911              | 0.996                 | 0.907            | 1:1.4+2.5N           |
| 1994              | 2.765           | 2.267       | 0.870              | 0.943                 | 0.820            | 1:1.4                |
| 1995              | 3.883           | 2.474       | 0.795              | 0.802                 | 0.637            | 1:1.4+2.4            |
| 1996              | 3.233           | 2.614       | 0.932              | 0.868                 | 0.809            | 1:1.4                |
| 1997              | 0.521           | 0.433       | 0.911              | 0.912                 | 0.831            | 2:1.4                |
| 1998              | 2.024           | 1.603       | 0.917              | 0.864                 | 0.792            | 1:1.4                |
| 1999              | 1.053           | 0.867       | 0.960              | 0.858                 | 0.823            | 2:1.4                |
| 2000 <sup>a</sup> | 0.000           | 0.000       |                    |                       |                  |                      |
| Averages          |                 |             |                    |                       |                  |                      |
| 91-00             | 2.413           | 1.857       | 0.908              | 0.850                 | 0.771            |                      |
| 2001 <sup>a</sup> | 0.000           | 0.000       |                    |                       |                  |                      |

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

Appendix F. 3. Tatsamenie Lake egg collection, fry plants, and survivals, 1989-2001.

Appendix F.2. Tuya Lake fry plants and survivals, 1991-2001.

| Brood Year | Egg Take |                        | Fry Planted | Percent Fertilized | Survival <sup>b</sup> |                  | Thermal Mark Pattern | Last Date Released         |
|------------|----------|------------------------|-------------|--------------------|-----------------------|------------------|----------------------|----------------------------|
|            | Target   | Collected <sup>a</sup> |             |                    | Fry to Fry            | Green Egg to Fry |                      |                            |
| 1990       | 2.500    | 0.985                  | 0.985       | 0.673              | 0.775                 | 0.882            | 0.683                | 1:1.3 22-Jun               |
| 1991       | 1.500    | 1.360                  | 1.360       | 1.232              | 0.927                 | 0.977            | 0.906                | 2:1.4 26-Jun               |
| 1992       | 1.750    | 1.486                  | 1.486       | 0.909              | 0.858                 | 0.713            | 0.612                | 1:1.5 14-Jul               |
| 1993       | 2.500    | 1.144                  | 1.144       | 0.521              | 0.619                 | 0.735            | 0.455                | 2:1.5 14-Jul               |
| 1994       | 2.500    | 1.229                  | 1.229       | 0.898              | 0.801                 | 0.912            | 0.731                | 1:1.5 21-Jul               |
| 1995       | 2.500    | 2.407                  | 2.407       | 1.724              | 0.843                 | 0.850            | 0.716                | 1:1.5 25-Jun               |
| 1996       | 5.000    | 4.934                  | 4.934       | 3.945              | 0.849                 | 0.942            | 0.800                | 1:1.5&1:1.5,2,3 27-Jun     |
| 1997       | 5.000    | 4.651                  | 4.651       | 3.597              | 0.910                 | 0.850            | 0.773                | 2:1&2:1.5,2,3 9-Jul        |
| 1998       | 2.500    | 2.414                  | 2.414       | 1.769              | 0.897                 | 0.817            | 0.733                | 1:1.4+2.5&1:1.4+2.3 30-Jun |
| 1999       | 2.500    | 0.461                  | 0.461       | 0.350              | 0.922                 | 0.824            | 0.759                | 2:1.5 4-Jul                |
| 2000       | 3.000    | 2.816                  | 2.572       | 2.320              | 0.943                 | 0.956            | 0.902                | 1.1.5+2.3&1.1.5 26-Jun     |
| Averages   |          |                        |             |                    |                       |                  |                      |                            |
| 91-00      | 2.841    | 2.172                  | 2.149       | 1.631              | 0.850                 | 0.860            | 0.734                |                            |
| 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     |

Multiple Release Treatments

| Brood Year | Treatment 1 |             |                 |                    | Treatment 2 |             |                 |                    |
|------------|-------------|-------------|-----------------|--------------------|-------------|-------------|-----------------|--------------------|
|            | Mark        | Treatment   | Number Released | Last Date Released | Mark        | Treatment   | Number Released | Last Date Released |
| 1996       | 1:1.5       | onshore     | 3.441           | 27-Jun             | 1:1.5,2,3   | onshore     | 0.500           | 27-Jun             |
| 1997       | 2:1.5       | onshore     | 3.202           | 29-Jun             | 2:1.5,2,3   | fed at lake | 0.394           | 9-Jul              |
| 1998       | 1:1.4+2.5   | unfed       | 0.751           | 9-Jun              | 1:1.4+2.3   | fed at lake | 1.018           | 30-Jun             |
| 1999       | 2:1.5       | fed at lake | 0.350           | 4-Jul              |             |             |                 |                    |
| 2000       | 1.1.5+2.3   | fed early   | 1.265           | 15-Jun             | 1.1.5       | fed late    | 1.054           | 26-Jun             |
| 2001       | 2:1.5       | unfed early | 0.727           | 30-May             | 2:1.5,2,3   | fed         | 1.432           | 25-Jun             |

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

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