# PACIFIC SALMON COMMISSION TRANSBOUNDARY TECHNICAL COMMITTEE REPORT <br> ESTIMATES OF TRANSBOUNDARY RIVER SALMON PRODUCTION, HARVEST AND ESCAPEMENT, 1995 REPORT TCTR (97)-2 

## ACRONYMS

| ADF\&G | Alaska Department of Fish and Game |
| :--- | :--- |
| CPUE | Catch per unit effort |
| DFO | Department of Fisheries and Oceans (Canadian) |
| DIPAC | Douglas Island Pink and Chum (Hatchery) |
| ESSR | Excess Salmon to Spawning Requirement (surplus fishery license) |
| IHN | Infectious Hematopoietic Necrosis |
| MEF | Mid-Eye-Fork |
| POH | Post-Obital-Hyperal |
| SMM | Stikine Management Model |
| TAC | Total Allowable Catch |
| TRTFN | Taku River Tlingit First Nation |
| TBR | Transboundary River |
| TTC | Transboundary Technical Committee |
| PSC | Pacific Salmon Commission |

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## EXECUTIVE SUMMARY

Estimates of catches and escapements of Pacific salmon returning to the transboundary Stikine, Taku, and Alsek rivers for 1995 are presented and compared with historical patterns. Relevant information pertaining to the management of appropriate U.S. and Canadian fisheries is presented and the use of inseason management models is discussed.

## Stikine

The 1995 Stikine sockeye run is estimated at 218,700 fish, of which an estimated 143,200 fish were harvested in various fisheries, 4,900 were used for brood stock, and 70,600 escaped to spawn. The catch was the second highest recorded since 1982 when stock identification techniques were first used for marine catches. The run was the third highest since 1979 and was above the 1985-1994 average of 141,100 sockeye salmon. The estimated U.S. commercial catch of Stikine sockeye salmon in Districts 106 and 108 was 76,400 fish; the Canadian inriver commercial, aboriginal, spawning surplus, and test fishery catches were $48,000,5,500,10,700$ and 2,600 fish, respectively. Sockeye salmon from outplants into Tahltan and Tuya lakes contributed an estimated 27,300 fish to the U.S. harvests and 15,700 fish to Canadian catches. The postseason estimate of 218,700 sockeye salmon was above the preseason forecasts by Canada $(169,000)$ and the U.S. $(171,000)$. The Stikine Management Model correctly predicted a larger than average sockeye run, consisting of a strong Tahltan component and a weak mainstem component. Weekly inseason model forecasts ranged from 164,800 to 265,900 sockeye salmon; the final inseason model predictions were 164,800 (Canada) and 214,700 (U.S.). Canadian and U.S. final inseason estimates were different due to the U.S. using the commercial CPUE and Canada, the test fishery CPUE. Using the inseason estimates, both countries were harvesting just below their $50 \%$ of the TAC by their estimates. Using the postseason estimate of run size and total allowable catch, Canada harvested $35 \%$ of the total allowable catch and the U.S. harvested $47 \%$ of the total allowable catch. The brood stock take and terminal surplus escapement fishery removed 4,900 and 10,700 sockeye salmon, respectively, from the escapement to Tahltan Lake leaving a spawning escapement of 26,700 fish, $11 \%$ above the goal of 24,000 fish. The estimated spawning escapement of 42,800 non-Tahltan Stikine sockeye salmon was above the upper end of the escapement goal range ( 20,000 to 40,000 fish) for this stock group.

The catch of chinook salmon in Canadian commercial and aboriginal fisheries in the Stikine River was 1,600 large fish and 860 jacks, $15 \%$ below and $77 \%$ above the respective 1985-1994 averages. An additional 430 chinook salmon were taken in the Canadian inriver test fishery. The U.S. marine catch of chinook salmon in the District 106 and 108 mixed stock gillnet fisheries was 2,700 fish, approximately $23 \%$ above the 1985-1994 average catch. The spawning escapement of 3,100 chinook adults through the Little Tahltan River weir in 1995 was $45 \%$ below the 1985-1994 average and $42 \%$ below the joint U.S./Canada escapement goal of 5,300 fish. Surveys of other Stikine tributaries also showed below average escapements.

The U.S. marine harvest of Stikine River coho salmon is unknown since there is no stock identification program for this species; however, total mixed-stock coho catches of 170,600 and 17,800 fish in Districts 106 and 108 , respectively, were $8 \%$ and $48 \%$ above the $1985-1994$ averages. Alaskan hatchery fish comprised approximately $15 \%$ ( 28,400 fish) of the coho harvest from the two districts. The Canadian inriver coho catch of 3,400 fish was $4 \%$ above the previous 10 -year average. The estimated coho above-
border escapement of 21,200 fish was below the escapement goal range of 30,000 to 50,000 coho salmon; however, coho survey counts were above average.

## Taku

The 1995 Taku sockeye run estimate was 239,500 fish and included an estimated catch of 125,800 fish and an above-border spawning escapement of 113,700 fish. The run size, catch, and escapement were $14 \%$, $19 \%$, and $8 \%$ above the respective 1985-1994 averages. The estimated spawning escapement exceeded the upper level of the escapement goal range of 71,000 to 80,000 fish. An estimated 91,000 Taku sockeye salmon were taken in the District 111 commercial fishery and 2,100 sockeye salmon in the U.S. inriver personal use fisheries. Canadian inriver commercial and aboriginal fishery catches were 32,600 and 70 sockeye salmon, respectively. Since the escapement goal is expressed as a range, the resulting total allowable catch is also expressed as a range. In 1995, Canada harvested an estimated $19 \%$ to $21 \%$ and the U.S. took $55 \%$ to $58 \%$ of the total allowable catch.

The catch of large chinook salmon in the Canadian commercial fishery in the Taku River was 1,600 fish, 1.6 times the 1985-1994 average; in addition, 300 jack chinook were caught compared to an average of 170 fish. The chinook catch in the District 111 mixed stock gillnet fishery was 4,700 fish, 1.5 times the 1985-1994 average. Forty-one percent of the catch was estimated to be of Alaska hatchery origin. Escapements observed in six Taku River chinook index tributaries were evenly split between above and below average. The combined aerial survey count of the index tributaries was 8,760 fish, which was $8 \%$ below the 19851994 average of 9,500 fish, and $33 \%$ below the index escapement goal of 13,200 fish.

The Taku coho run was average in 1995. The U.S. harvest of 83,600 coho salmon in the District 111 mixed stock fishery was equal to the previous 10 -year average. Alaskan hatcheries contributed an estimated $16 \%$ of the District 111 harvest, or approximately 13,700 fish. The Canadian inriver commercial and food fishery catch was 13,700 coho salmon, roughly three times the previous 10 -year average. The above-border inriver run size is estimated at 69,400 coho salmon. After upriver Canadian catches are subtracted from the inriver run, the above-border spawning escapement is estimated at 55,700 coho salmon, which exceeds the interim escapement goal range of 27,500 to 35,000 fish.

The catch of pink salmon in District 111 was 41,300 fish, $79 \%$ below the $1985-1994$ average catcb. The Canadian commercial inriver harvest of pink salmon was only two fish. The escapement of pink salmon to the Taku River was very poor as evidenced by the fish wheel catch of 1,712 pink salmon, the second lowest catch since fish-wheel counts were started in 1985.

The catch of chum salmon in the District 111 fishery was 350,100 fish, composed of 339,200 summer run fish (prior to mid-August) and 10,900 fall run fish. The catch of summer chum salmon, primarily Alaskan hatchery stocks, was 1.7 times the 1994 record catch. The catch of fall chum salmon, composed of wild Taku River and Port Snettisham stocks, was 64\% below the 1985-1994 average. The reported Canadian inriver catch of only one chum salmon was below average. Escapement appeared to be poor; the Canyon Island fish wheel catch of 218 chum salmon was $72 \%$ below average.


#### Abstract

Alsek

For the Alsek River, the U.S. commercial catch of 33,100 Alsek sockeye salmon was more than double the 1985-1994 average. Canadian catches of 1,700 sockeye salmon in the aboriginal fishery and 680 in the sport fishery were $8 \%$ below and $107 \%$ above average, respectively. The escapement to the Klukshu River weir of 20,700 fish was $13 \%$ above the 1985-1994 average. The Klukshu weir counts of 2,300 early run (count through August 15) and 18,400 late run sockeye salmon were $27 \%$ below and $21 \%$ above the 1985 1994 averages, respectively.

The chinook run to the Alsek River was well above average. The U.S. Dry Bay catch of 670 fish was double the 1985-1994 average. The combined Canadian sport and aboriginal fishery catch of 1,600 fish was over three times the 1985-1994 average. The 5,700 chinook count through the Klukshu River weir was the highest count recorded since the weir was installed in 1976 and was more than double the 1985-1994 average of 2,400 fish. The Klukshu River escapement goal is 4,700 chinook salmon. Aerial survey index counts of other spawning systems were generally above average in spite of surveys being conducted a week later than normal.

The coho run to the Alsek River was well above average, but current stock assessment programs prevent an accurate comparison with historical runs. The U.S. Dry Bay catch of 14,200 coho salmon was almost four times the 1985-1994 average, while the combined Canadian inriver aboriginal and sport fishery catch of 600 fish was 4.8 times the 1985-1994 average. 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, the count of 3,600 coho salmon was the second highest count on record.


## INTRODUCTION

This report presents estimates of the 1995 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 week (U.S. management 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 in this report.

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 $182-30 \& 182-31$ for Alsek stocks. Therefore, the total catches of transboundary stocks made for this report will not match estimates made for the Joint Interception Committee Report.

## STIKINE RIVER

Stikine River salmon are harvested by U.S. gillnet fisheries in Alaskan Districts 106 and 108, by Canadian commercial gillnet fisheries located in the lower and upper Stikine River, and by a Canadian aboriginal fishery in the upper portion of the river (Figure 1). In 1994, a U.S. personal use fishery was established in the lower Stikine River. Additional catches of unknown quantity are taken in U.S. commercial troll and seine fisheries, and in sport fisheries near Wrangell and Petersburg. A small sport fishery also exists in the Canadian portion of the Stikine drainage. In 1992 a process to allow the issuance of an "Excess Salmon To Spawning Requirements" (ESSR) license was instigated by Canada to permit the terminal harvest of sockeye salmon at Tahltan Lake in years when escapement exceeded the escapement goal.


Figure 1. The Stikine River and principal US and Canadian fishing areas.

## Harvest Regulations and the Joint Management Model

Harvest arrangements for Stikine salmon were not negotiated by the Pacific Salmon Commission or Canadian and United States governments for the 1995 season. As a result, the Parties unilaterally developed the following management plans for the 1995 season:

1. Canada developed a fishing plan for the Stikine River that adopted the Treaty arrangements for sockeye and Chinook salmon (which had not expired) but excluded the 4,000 piece catch ceiling for coho salmon that had expired in 1993. The harvest sharing objective for the sockeye season was to share the total allowable catch (TAC) of Stikine River sockeye salmon, $50 \%$ to Canada and $50 \%$ to the United States. In the event that there was sockeye surplus to spawning requirements at Tahltan Lake, attempts would be made to harvest some of the surplus.
2. The United States management plan was to abide by the harvest sharing provisions that were in effect in 1993: to harvest $50 \%$ of the TAC of Stikine sockeye salmon, to incidentally harvest chinook salmon, and to provide for a Canadian harvest of 4,000 coho salmon.

The Transboundary Technical Committee met prior to the season to develop preliminary run forecasts and expectations, to update joint management and enhancement plans, and to determine new parameters for input into the inseason run forecast model, referred to as the Stikine Management Model (SMM). A joint management plan is being published for 1995 .

In 1995, the preseason forecasts were used during statistical week 24 (June 11 to June 17) through statistical week 27 (July 2 to July 8). Begiming the first week of July inseason forecasts of 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) in the Canadian lower-river test and commercial fisheries; the upper river catch in the aboriginal fishery and upper-river commercial fishery; the catch, effort, and average historical stock composition in Subdistrict 106-41; and the catch and average historical stock composition in District 108 and Subdistrict 106-30. Inseason otolith sampling was conducted to estimate the contribution of enhanced Stikine sockeye salmon to catches in these areas.

While the preseason forecasts of the Stikine sockeye run were done jointly, the actual values used by U.S. and Canada in the SMM differed slightly due to different updates of the smolt input data. Canada used a preseason forecast of 169,000 and U.S., 170,816 sockeye salmon (Table 1); both these estimates represent a run size substantially above the 1985-1994 average run size of 141,124 fish (Appendix B.32). Inseason predictions of the run size from the SMM ranged from 164,800 (Canadian estimate for statistical week 35) to 265,899 (U.S. estimate for statistical week 29) sockeye salmon (Table 1). The inseason forecasts indicated an above-average run and most were above the preseason estimates. U.S. and Canadian weekly predictions differed due to different updates of catch and stock composition being used by the two managers when they made their model runs and due to use of test fishery versus commercial CPUE as the input variable. Canada used the lesser of the two forecasts based on test fishery CPUE and lower Stikine commercial fishery CPUE; the United States consistently used the lower Stikine commercial fishery CPUE. The differences in the forecasts used are summarized in Table 1. By the end of the fishing season, the SMM predicted a run size of 164,800 sockeye salmon based on inriver test fishery CPUE and 214,728 sockeye salmon based on inriver commercial CPUE. Final estimates of the TAC ranged from 110,800 to 160,728 fish, with an allowable harvest of 55,400 to 80,364 sockeye salmon for each Party.

The SMM also predicts the Tahltan portion of the run independently from the total Stikine run forecasts. Estimates of the Tahltan run ranged from 103,200 (statistical week 35) to 138,900 (statistical week 28) sockeye salmon compared to the preseason forecasts of 155,000 (Canada) and 156,368 (U.S.). The final Canadian inseason forecast of the Tahltan Lake weir count (inriver run forecast minus inriver catch) was 25,940 sockeye salmon, compared to the actual Tahltan Lake weir count of 42,317 fish.

Table 1. Weekly forecasts of run size and total allowable catch for Stikine River sockeye salmon as determined inseason by the Stikine Management Model, 1995. ${ }^{\text {ab }}$

| Statistical Week | Start <br> Date | Forecasts |  | $\begin{gathered} \text { U.S. } \\ \text { TAC } \end{gathered}$ | Canada <br> TAC | Cumulative Catch |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Run Size | TAC |  |  | U.S. | Canada |
| Model Runs Generated by the U.S. |  |  |  |  |  |  |  |
| 24 | 11-Jun | 170,816 | 116,816 | 58,408 | 58,408 | 0 | 0 |
| 25 | 18-Jun | 170,816 | 116,816 | 58,408 | 58,408 | 6,059 | 0 |
| 26 | 25-Jun | 170,816 | 116,816 | 58,408 | 58,408 | 12,155 | 3,524 |
| 27 | 02-Jul | 170,816 | 116,816 | 58,408 | 58,408 | 20,272 | 4,338 |
| 28 | $09-\mathrm{Jul}$ | 241,577 | 187,577 | 93,788 | 93,788 | 49,900 | 18,650 |
| 29 | 16 -Jul | 265,899 | 211,899 | 105,949 | 105,949 | 63,047 | 33,372 |
| 30 | 23-Jul | 252,421 | 198,421 | 99,210 | 99,210 | 69,998 | 42,204 |
| 31 | 30-Jul | 232,514 | 178,514 | 89,257 | 89,257 | 73,482 | 47,096 |
| 32 | 06-Aug | 226,259 | 172,259 | 86,129 | 86,129 | 74,609 | 48,868 |
| 33 | 13-Aug | 214,728 | 160,728 | 80,364 | 80,364 |  |  |
| Model Runs Generated by Canada ${ }^{\text {a }}$ |  |  |  |  |  |  |  |
| 25 | 18-Jun | 169,000 | 115,000 | 57,500 | 57,500 | : | 0 |
| 26 | 25-Jun | 169,000 | 115,000 | 57,500 | 57,500 |  | 4,300 |
| 27 | 02-Jul | 204,600 | 150,600 | 75,300 | 75,300 | 30,400 | 13,600 |
| 28 | 09-Jul | 245,900 | 191,900 | 96,000 | 96,000 | 54,100 | 25,400 |
| 29 | 16-Jul | 262,500 | 208,500 | 104,300 | 104,300 | 64,300 | 36,200 |
| 30 | 23-Jul | 255,200 | 201,200 | 100,600 | 100,600 | 70,000 | 45,100 |
| 31 | 30-Jul | 220,100 | 166,100 | 83,100 | 83,100 | 73,500 | 48,600 |
| 32 | 06-Aug | 198,100 | 144,100 | 72,100 | 72,100 | 73,500 | 49,000 |
| 33 | 13-Aug | 168,600 | 114,600 | 57,300 | 57,300 | 78,800 | 51,700 |
| 34 | 20-Aug | 167,700 | 113,700 | 56,900 | 56,900 | 79,500 | 52,900 |
| 35 | 27-Aug | 164,800 | 110,800 | 55,400 | 55,400 |  |  |

a Inseason weekly U.S. forecasts were the preseason forecast for statistical weeks 24, 25, 26, and 27 and the model forecasts based on inriver commercial fishery CPUE for the remainder of the sockeye season.
b Inseason weekly Canadian forecasts were the preseason forecast for statistical weeks 25 and 26 and the lesser of the model forecasts based on the lower river test fishery and commercial fishery CPUE for the remainder of the season.

## U.S. Fisheries

The 1995 harvest in the District 106 commercial gillnet fishery included 951 chinook, 207,298 sockeye, 170,561 coho, 448,163 pink, and 300,078 chum salmon (Appendix A.5). In the District 108 fishery, 1,702 chinook, 76,756 sockeye, 17,834 coho, 37,788 pink, and 54,296 chum salmon were harvested (Appendix A.7). District 106 catch of chinook salmon was below the 1985-1994 average, while the catches of all other species were above the average. The chum salmon catch was the highest on record, and the sockeye catch was the third highest (Appendix B.5). District 108 catches of all salmon species were above the 1985-1994 average with the chum catch being the highest on record and the sockeye catch being the third highest on record following the 1993 and 1994 seasons (Figure 2). No test fishery was conducted in District 108 this year. The season was opened on the second Monday in June, as was done in 1994. Annual commercial and test fishery catches from 1964 to 1995 for these fisheries are provided in Appendix B. 1 through B. 16. Catches of each species in Districts 106 and 108 consist of fish of mixed stock origin; the contribution of Stikine River stocks is estimated only for sockeye salmon. Scales were sampled from the various subdistricts and were used for making postseason catch estimates. The proportion of the District 106 and 108 sockeye catch of Stikine River origin was estimated inseason using the historical proportions of each stock. Harvests of enhanced Tuya and Tahltan sockeye salmon were estimated by week and subdistrict from recovery and analysis of thermally marked otoliths.

The final estimate of the contribution of Stikine sockeye salmon to Districts 106 and 108 was 76,420 or $27 \%$ of the sockeye catch (Appendix B. 6 and B.8, Figure 3). The Sumner Strait fishery (Subdistricts 106-41 \& 106-42) harvested 19,865 Stikine sockeye salmon (Appendix A.2), $15 \%$ of the total sockeye harvest in that subdistrict; the Clarence Strait fishery (Subdistrict 106-30) harvested 5,814 Stikine sockeye salmon (Appendix A.4), $8 \%$ of the catch in that subdistrict; and the District 108 fishery, harvested 50,741 Stikine sockeye salmon (Appendix A.8), $66 \%$ of the District 108 catch (Appendix B.8).

The 1995 fishing season in District 108 began on June 12 (statistical week 24) and continued through September 19 (statistical week 38), while the District 106 fishing season began on June 18 (statistical week 25 ) and continued through September 25 (statistical week 39). The District 108 fishery was open for one day during the initial opening (statistical week 24; June 11 to June 17); the opening was based on the preseason expectation of a U.S. TAC of 58,408 Stikine River sockeye salmon. The initial opening in District 106 is normally two days and any decision to extend fishing is based on fishery catch rates estimated by management biologists on site in the fishery. During statistical weeks 25 to 29,31 to 32, and 37 to 38 (June 18 to July 18, July 30 to August 8, and September 10 to 22, respectively), District 106 was restricted to a two-day per week fishery. District 108 was also open concurrently for two days with District 106 during the same weeks, and for three days during statistical weeks 30 and 33 to $36^{\circ}$ (July 23 to 29, and August 13 to September 9). The following additional fishing times were permitted in District 108: a 2-day mid-week opening in statistical week 25 (June 18 to June 24); a 3.5-day mid-week openings in statistical weeks 26 through 28 (June 25 to July 15); a 2-day mid-week opening in statistical week 29 (July 16 to 22); and a 1 -day mid-week opening in statistical week 30 (July 23 to July 29). During this time period the SMM indicated a U.S. TAC of between 58,400 and 105,949 sockeye salmon based on the sockeye CPUE in the inriver commercial fishery (Table 1). The management approach of providing extra time in District 108 was used to regulate the harvest of the local island sockeye stocks in District 106 while maximizing the harvest of Stikine sockeye salmon in District 108. Effort was high and sockeye catches were not strong enough to warrant additional time in District 106 during the early weeks.


Figure 2. Average catches and fishing efforts compared with 1995 for the Alaskan Districts 106 and 108 and for the Canadian commercial fisheries in the Stikine River.


Figure 3. Sockeye catches for the Alaskan Districts 106 and 108 and the combined Canadian fisheries in the Stikine River and Stikine sockeye escapements, 1979-1995.

Area restrictions were used around the mouth of the Stikine River for the first two weeks (statistical weeks 24 and 25) and in portions of Frederick Sound each week during the sockeye and pink fisheries to protect adult chinook salmon returning to the Stikine River. During July and the first week of August the closure line for District 108 was moved in to the Point Rothsay to Indian Point line to avoid areas of known high chinook abundance.

The management emphasis changed from sockeye to pink salmon during statistical week 33 (August 8 to 14). This season there were 448,163 and 37,788 pink salmon harvested in District 106 and 108, respectively. The District 106 catch is $14 \%$ below the 1985-1993 odd-year average of 520,064 pink salmon, while District 108 catch is 2.2 times the respective average of 17,381 pink salmon. Pink catches in both districts are not always a true reflection of the pink salmon abundance in the area because the low pink salmon price, along with the high abundance of sockeye and coho salmon, affect the fishing patterns and methods. Three-day fishing periods were allowed during the two weeks of pink salmon management in both districts. The pink salmon escapements throughout Districts 106 and 108 were above average.

Coho salmon management in both the District 106 and 108 gillnet fisheries usually commences during late August or early September. During statistical week 35 (August 27 to September 2) the management emphasis changed from pink to coho salmon. Early gillnet catches of coho salmon were above or at average levels and the inseason outside troll fishery indicated an above average run. Prior to the change to coho management, the sockeye and pink salmon fisheries harvested approximately $50 \%$ of the total District 106 coho catch and about $38 \%$ of the total District 108 coho catch. Both districts were open for three days during statistical weeks 35 and 36 (August 27 to September 9), two days during statistical weeks 37 and 38 (September 10 to 23), and District 106 was open for one day during statistical week 39 (September 24 to 30). Effort and coho catch were higher than average through statistical week 36 while the CPUE was generally about average or below average each week. Normally the percentage of hatchery coho salmon starts to increase by mid-August and by the end of season makes up a high percentage of the weekly catch; however, this season the hatchery contribution did not increase until close to the end of the season and the proportion was slightly below the 1985-1994 average. The District 106 coho catch of 170,561 is the sixth highest on record and is $8 \%$ above the 1985-1994 average of 158,592 coho salmon. The District 108 coho catch of 17,834 is the tenth highest on record and is $50 \%$ higher than the 1985-1994 average of 12,006 fish. Fishing effort in both districts was higher than normal. The Alaska hatchery coho salmon contribution to the District 106 fishery is estimated at 27,330 fish (16\%) (Appendix A.5) and the contribution to the District 108 fishery is estimated at 1,085 fish (6\%) (Appendix A.7).

During the 1995 season, the gillnet fishery in District 106 was open for a total of 34 days (Appendix A.5), and in District 108 for 49.5 days (Appendix A.7); these were above the 1985-1994 average of 32.9 and 32.7 days, respectively. District 106 fishing effort in numbers of vessels was near the average for the first eight weeks (statistical weeks 25 to 32), above average for the following four weeks (statistical weeks 33 to 36), and below average for the last three weeks (statistical weeks 37 to 39) of the season. During the month of August and the first week of September the fishing effort in District 106 was $30 \%$ above average. The District 108 weekly fishing pressure was about average during the regular openings but increased to three times the average during the mid-week extensions. After the mid-week extensions were suspended the effort remained near average. The greatest number of boat-days in District 106 (429) and the greatest number of boats fishing (143) occurred in statistical week 34, which is the end of August. The effort of 3,657 boat-days in District 106 was 13\% higher than the 1985-1994 average of 3,247 boat-days (Figure 2, Appendix B.5). The District 108 effort was higher than average due to the extended fishing time allowed to harvest the large run of Stikine River sockeye salmon. The 1,214 boat-days fished in District 108 was $64 \%$ higher than the 1985-1994 average of 742 boat-days (Appendix B.7). Most of the boats fishing during the mid-week openings in District 108 did not fish the entire opening so the effort in boat-days was adjusted to better reflect the time actually fished during these openings. For this reason the boat-days given in

Appendix B. 7 are less than that obtained by multiplying the number of permits fished by the number of days the fishery was open.

While there was some effort in the U.S. personal use fishery in the lower Stikine River, there was no reported catch. In the U.S. recreational fishery, based on coded wire tag sampling in Wrangell and the creel survey in Petersburg, an estimated 2,011 chinook salmon were taken from May 1 to July 16, 1995. An estimated 812 of these were Alaska hatchery and 34 non-Alaskan hatchery chinook salmon.

## Canadian Fisheries

Catches from the combined Canadian commercial and aboriginal gillnet fisheries in the Stikine River in 1995 included 1,646 large chinook, 860 jack chinook, 53,467 sockeye, 3,418 coho, 48 pink, 263 chum salmon, and 270 steelhead (Appendix A. 9 to A.12). The sockeye catch was the highest on record and was 2.2 times the 1985-1994 average of 24,720 sockeye salmon. Catches of jack chinook, coho, and steelhead were also above average; whereas, the catches of large chinook, pink, and chum salmon were below average. In addition to these catches, 10,740 sockeye salmon were harvested terminally at Tahltan Lake in the ESSR fishery.

A test fishery was conducted again in the lower Stikine River, just upstream from the Canada/U.S. border, 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. Test fishery catches included 248 large chinook, 184 jack chinook, 2,570 sockeye, 227 coho, 10 pink, and 62 chum salmon, and 19 steelhead (Appendix A. 13 to A.14).

## Lower Stikine Commercial Fishery

Canadian commercial fishers in the lower Stikine harvested 1,067 large chinook, 599 jack chinook, 45,622 sockeye, 3,418 coho, 48 pink, 256 chum salmon, and 208 steelhead in 1995 (Appendix A.9). The sockeye catch exceeded the previous record of 38,464 sockeye salmon in 1993, and was $133 \%$ above the 1985-1994 average of 19,564 sockeye salmon (Appendix B.17). Catches of coho salmon and steelhead were also above average, whereas pink and chum catches were below average. A very strong Tahltan Lake sockeye run combined with relatively low fishing effort resulted in the fishery being open continuously from July 9 through July 29.

The fishery commenced at noon on Sunday, June 25 (statistical week 26), for a three day opening. Daily catches of sockeye salmon over the initial 48 hours were at record levels and the CPUE was more than $200 \%$ above average. Increasing sockeye catches, relatively low effort (i.e., thirteen fishers) and a projected catch shortfall for the week led to a 24 -hour extension.

In statistical week 27, the fishery opened for four days commencing Sunday, July 2. Test fishery catches of sockeye salmon were well above average just prior to the opening. Preliminary SMM outputs generated midweek indicated a run size forecast greater than 235,000 sockeye salmon and a shortfall in the catch was
indicated relative to weekly guidelines. As a result of these factors and the fact that the CPUE was approximately $70 \%$ above average, the fishery was extended 24 hours.

The sockeye run strength remained high over the next three weeks and SMM forecasts ranged from 245,900 to 262,500 sockeye salmon (Table 1). Decisions to increase the fishing times in statistical weeks 28-30 from the scheduled four days to seven days were made based on the above average run forecasts, above average CPUE, and a lagging of the cumulative catch relative to weekly guideline levels. A record weekly catch of 10,332 sockeye salmon occurred in statistical week 28 .

After July 30, weekly fishing times were reduce to five days (statistical weeks 31 and 32 ), and then to three days (statistical weeks 33 and 34) to conserve the weaker mainstem sockeye run. The weekly CPUE in the fishery during the latter half of the season dropped to average to below-average levels and model forecasts declined to below 200,000 sockeye salmon (Table 1).

Management emphasis switched to coho salmon as sockeye abundance dropped off after statistical week 34 (week ending August 26). The fishery was open for four days per week in each of statistical weeks 35 and 36 in light of average to above average coho CPUE and decreasing effort. The maximum coho catches of the season occurred during these weeks.

In statistical week 37, a four-day fishery was scheduled; however, fishing ceased after two days because of extremely high water. Effort continued to fall off in succeeding weeks and only one day was fished in statistical weeks 38-40.

The final inseason sockeye forecast indicated a Canadian TAC of 55,400 to 76,400 sockeye salmon. Accounting for the combined aboriginal and commercial harvest in the upper river, i.e., 7,845 sockeye salmon, the final inseason estimates translated into a lower river target range of approximately 47,600 to 68,600 sockeye salmon, which was above the actual lower river commercial catch of 45,622 sockeye salmon.

When comparing the sockeye CPUE for statistical weeks in 1995 with those of other years, the sockeye run timing appeared to be about one week earlier than normal. However, when the timing was adjusted for calendar dates, the run timing was about average. The maximum sockeye CPUE occurred in statistical week 28 , the third week of the fishery. Tahltan Lake sockeye salmon dominated the catch through the third week in July (statistical week 29); thereafter, the mainstem sockeye stock component made up the majority of the sockeye catch. Of the total lower river sockeye catch, an estimated 30,148 sockeye salmon were of Tahltan Lake origin ( $68 \%$ of the catch) and an estimated 14,581 sockeye salmon originated from the nonTahltan Stikine sockeye stock conglomerate.

Nineteen licensed fishers participated in the fishery throughout the season with an average of nine fishers present each week. The total effort in terms of boat-days was $534,74 \%$ above the 1985-1994 average of 307.6 boat-days (Appendix B.17). The above average effort level in 1995 was due to two factors: above average early sockeye run strength which resulted in extended fishing periods throughout July; and a coho fishery which lasted into October. Each fisher was allowed the use of two gillnets, one of which could be a drift net. This was the first year that additional gear was permitted throughout the entire season. In 1994, a second piece of fishing gear was allowed after the first 48 hours of fishing in each week. A delayed opening to June 25 and a maximum mesh size restriction of 150 mm through mid-July was implemented to reduce the incidental catch of chinook salmon.

It was evident by mid-July that the number of sockeye salmon reaching the Tahltan Lake weir would exceed escapement requirements. This prompted the issuance of an ESSR license which permitted the terminal harvest of sockeye salmon at Tahltan Lake. A total of 10,740 sockeye salmon was harvested under this license.

## Upper Stikine Commercial Fishery

A small commercial fishery has existed near Telegraph Creek on the upper Stikine River since 1975. The catch recorded in 1995 included nine large chinook salmon, far below the 1985-1994 average of 85 large fish; 17 jack chinook; and 2,355 sockeye salmon, the second highest catch on record and $149 \%$ above the 1985-1994 average of 945 sockeye salmon (Appendices A. 11 and B.19). The fishing effort was above average with one to three fishers fishing up to seven days per week. The fishery was open a total of 25 days and the total effort in terms of boat-days was 59 boats-days. For comparison, the previous 10 -year average fishing time was 13 days with an average effort of 26 boat-days (Appendix B.19). The additional time fished during the season was the result of the excellent run of Tahltan Lake sockeye salmon.

## Aboriginal Fishery

The Stikine aboriginal fishery centered around Telegraph Creek and harvested 570 large chinook, 244 jack chinook, 5,490 sockeye, and 7 chum salmon and 62 steelhead. The catch of sockeye salmon was $30 \%$ above the 1985-1994 average of 4,211 sockeye salmon, whereas, the harvest of large chinook salmon was $38 \%$ below the average of 918 chinook salmon. As in past years, fishing times were not restricted in this fishery. Weekly catches in 1995 and annual catches since 1972 are listed in Appendices A. 12 and B.20, respectively.

## Escapement

## Sockeye

A total of 42,317 sockeye salmon was counted through the Tahltan Lake weir in 1995 which was $28 \%$ above the 1985-1994 average of 33,011 sockeye salmon (Appendix B.25). Based on analysis of otoliths collected from the ESSR fishery, 15,997 fish (37.8\%) of the return originated from the 1990-1991 enhancement program. Of the total number of fish enumerated through the weir, 2,425 females and 2,425 males were collected for hatchery brood stock. In addition to the brood stock collection, 10,740 sockeye salmon were harvested under the ESSR license, leaving a spawning escapement of 26,727 fish. This is within the escapement range of 18,000 to 30,000 fish (Appendix B.25). The final inseason SMM indication of Tahltan weir count was 25,940 sockeye salmon, $39 \%$ below the actual weir count.

The total spawning escapement for the non-Tahltan stock group is estimated indirectly by computing the ratio of Tahltan to non-Tahltan components in the total inriver sockeye run from stock identification data collected in the lower river commercial and test fisheries. The ratio is applied to the estimated inriver Tahltan run size to develop an estimate of the total inriver non-Tahltan run size. The non-Tahltan escapement is estimated by subtracting the estimated catches of non-Tahltan sockeye salmon in the Canadian fisheries. The postseason estimate of non-Tabltan escapement is 41,662 sockeye salmon based on egg diameter data to estimate inriver stock composition of catches, and inriver commercial fishery CPUE data to give run timing. This estimate was $57 \%$ below the 1985-1994 average non-Tahltan escapement of 44,969 fish (Appendix B.32).

Aerial surveys of non-Tahltan sockeye escapement index areas indicated below average numbers of spawners in 1995 (Appendix B.27). The 1995 cumulative index count of 434 sockeye salmon was $45.1 \%$ of the 1985-1994 average of 963 fish. The 1995 survey conditions were fair to good. These surveys do not include all spawning populations; the index represents the combined counts from up to seven spawning areas.

## Chinook

This was the eleventh consecutive year of the operation of an adult chinook enumeration weir on the Little Tahltan River. The 1995 count of 3,072 large chinook salmon was $55 \%$ of the 1985-1994 average of 5,611 large fish. The 1995 escapement was below the Little Tahltan escapement goal of 5,300 chinook salmon (Appendix B.30). The count of jack chinook salmon was 135, 48\% of the 1985-1994 average of 282 fish. Daily counts from the 1995 program are presented in Appendix A. 17.

Results from aerial and foot surveys conducted on Stikine River tributaries indicated a below average chinook escapement in 1995. Survey counts for Little Tahltan River were 1,117 chinook salmon compared to the 1985-1994 average of 2,516 fish; for Beatty Creek, 152 chinook compared to the average of 336 fish; for Tahltan River, 696 chinook salmon compared to the average of 1,931 fish; and for Andrew Creek, 338 chinook salmon compared to the average of 638 fish (Figure 5, Appendix B.30).

## Coho

The lower Stikine River test fishery ended on statistical week 35 (week ending September 2), which precluded complete coverage of the coho run. From historical test fishery catch records, 1986 to 1990, approximately $75 \%$ of the coho run migrates through the lower river by statistical week 35 . The cumulative coho test fishery CPUE was expanded accordingly (1.57/0.75) and the resultant projected CPUE (2.09) was calculated to be $17.5 \%$ of the total 11.99 cumulative sockeye CPUE. The inriver coho run then was estimated to be $17.5 \%$ of the inriver sockeye run size of 142,308 fish, or 24,852 coho salmon. Subtracting the combined inriver catch of 3,418 coho salmon in the Canadian commercial fishery and 227 coho salmon taken in the inriver test fishery gives an estimated total coho escapement of 21,207 fish, which is well below the interim escapement goal range of 30,000 to 50,000 coho salmon; however, aerial surveys of six coho spawning index sites indicated above average spawning escapement (Appendix B.31).


Figure 4. Catches of chinook, coho, pink, and chum salmon in the combined Canadian fisheries in the Stikine River, 1979-1995.


Figure 5. Chinook salmon weir counts and index escapement estimates for major spawning areas and for the entire Stikine River, 1979-1995.

## Sockeye Run Reconstruction

The postseason estimate of the Stikine sockeye run size is 218,718 fish, of which 133,955 are of Tahltan Lake origin, 2,802 are of Tuya origin, and 81,971 are non-Tahltan fish (Table 2). These estimates are based on scale-pattern stock-composition estimates for U.S. Districts 106 and 108 catches; egg-diameter and otolith stock-composition estimates for inriver catches; Canadian commercial, aboriginal, ESSR, and test fishery catches; and escapement data. A Stikine run size of this magnitude is $55 \%$ above the 1985-1994 average run size of 141,124 sockeye salmon. The 1985-1994 average run sizes of Tahltan and non-Tahltan fish are 67,266 and 73,858 sockeye salmon, respectively (Appendix B.32).

The postseason estimate of the run size is $29 \%$ above the preseason forecast of 169,000 fish. This forecast was composed of a Tahltan component of 155,000 sockeye and a non-Tahltan component of 14,000 sockeye salmon. The Tahltan component of the run was estimated by averaging a smolt-based and a sibling-based forecast, 148,200 and 161,600 , respectively. The smolt-based forecast was closest ( $11 \%$ above) to the postseason estimate of 133,955 Tahltan sockeye. For the non-Tahltan sockeye component, the preseason sibling forecast of 14,000 sockeye salmon was $17 \%$ of the postseason non-Tahltan run size estimate of 81,971 fish.

Based on weekly random sampling of otoliths collected in District 106 and District 108 commercial fisheries, the contribution from Stikine sockeye fry plants consisted of approximately 27,961 sockeye salmon, 27,259 sockeye of Tahltan Lake origin, and 586 sockeye of Tuya Lake origin. Enhanced returns contributed 10,952 Tahltan and 1,092 Tnya fish to the combined commercial and aboriginal catches; 4,060 Tahltan fish to the ESSR fishery; and 729 Tahltan and 22 Tuya fish to the test fishery. These results are based on otolith sampling conducted in the Canadian fisheries and at Tahltan Lake.

For the Canadian analysis, the SMM appeared to underestimate the run size this season. The final inseason forecast of the run size derived from the SMM (164,800 sockeye) was $25 \%$ below the postseason estimate of the total run ( 218,718 sockeye). For the U.S. analysis, the final inseason forecast of 214,728 sockeye salmon was $2 \%$ below the postseason estimate. The SMM will be reviewed and updated to include 1995 data in making predictions for the 1996 season.

The Tahltan Lake smolt count in 1995 totaled 822,284 fish; these originated primarily from the 1993 spawning escapement of 47,104 sockeye salmon and the 1994 fry plant of 0.9 million fish. Otoliths extracted from a random portion of smolts from the 1995 emigration provide an estimate of the wild and hatchery contributions ( 767,027 and 55,257 , respectively). The estimate of wild smolt production was about what was expected; however, the number of enhanced smolts was much lower than expected. Possible causes for this apparent shortfall will be investigated.

Table 2. Run reconstruction for Stikine sockeye salmon, 1995.

|  | Tahltan | Tuya | non- <br> Tahltan | Total | Tahltan |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Wild | Hatchery |
| Escapement | 42,317 | 1,105 | 42,849 | 85,166 | 26,320 | 15,997 |
| Brood stock | 4,902 |  |  |  | 3,049 | 1,853 |
| ESSR | 10,740 |  |  |  | 6,680 | 4,060 |
| Spawning | 26,675 | 1,105 | 42,849 | 70,629 | 16,591 | 10,084 |
| Canadian Harvest |  |  |  |  |  |  |
| Indian Food | 4,941 | 139 | 410 | 5,490 | 3,514 | 1,427 |
| Upper Commercial | 2,120 | 60 | 176 | 2,355 | 1,507 | 612 |
| Lower Commercial | 30,848 | 893 | 13,881 | 45,622 | 21,936 | 8,912 |
| Total | 37,909 | 1,092 | 14,467 | 53,467 | 26,957 | 10,952 |
| \% Harvest | 42.3\% | $65.1 \%$ | 37.4\% | 41.2\% |  |  |
| Test Fishery Catch | 2,064 | 20 | 486 | 2,570 | 1335 | 729 |
| Inriver Run | 82,290 | 2,216 | 57,802 | 142,308 | 54,612 | 27,678 |
| U.S. Harvest ${ }^{\text {a }}$ |  |  |  |  |  |  |
| 106-41\& 106-42 | 13,292 | 125 | 6,448 | 19,865 | 6,514 | 6,778 |
| 106-30 | 3,423 | 0 | 2,391 | 5,814 | 2,668 | 755 |
| 108 | 34,950 | 461 | 15,330 | 50,741 | 15,224 | 19,726 |
| Total | 51,665 | 586 | 24,169 | 76,420 | 24,406 | 27,259 |
| \% Harvest | 57.7\% | 34.9\% | 62.6\% | 58.8\% |  |  |
| Test Fishery Catch | 0 | 0 | 0 | 0 |  |  |
| Total Run | 133,955 | 2,802 | 81,971 | 218,728 | 79,018 | 54,937 |
| Escapement Goal | 24,000 |  | 30,000 | 54,000 |  |  |
| TAC | 109,955 | 2,802 | 51,971 | 164,728 |  |  |
| Canada TAC | 54,977 | 1,401 | 25,986 | 82,364 |  |  |
| Actual Catch | 37,909 | 1,092 | 14,467 | 53,467 |  |  |
| \% of TAC | 34.5\% | 39.0\% | 27.8\% | 32.5\% |  |  |
| U.S. TAC | 54,977 | 1,401 | 25,986 | 82,364 |  |  |
| Actual Catch | 51,665 | 586 | 24,169 | 76,420 |  |  |
| \% of TAC | 47.0\% | 20.9\% | 46.5\% | 46.4\% |  |  |

a Estimates of U.S. harvest differ from Joint Interception Committee estimates because the estimates here are made only for District 106 and 108 gillnet fishery catches.

## TAKU RIVER

Taku River salmon are harvested in the U.S. gillnet fishery in Alaskan District 111, in northern Southeast Alaska seine and troll fisheries, and in the Juneau area sport fishery and inriver personal use fishery (Figure 6). Canadian fisheries for Taku River salmon include a commercial gillnet fishery located in the river near the U.S./Canada border, a sport fishery, and an aboriginal fishery.

## Harvest Regulations

As with Stikine River issues, efforts to renegotiate harvest shares of Taku River salmon during the Pacific Salmon Commission and government-to-government negotiations in the spring and summer of 1995 were not successful. As a result, the Parties unilaterally developed fishing plans for Taku River salmon stocks.

As in 1994, the Canadian 1995 management plan did not numerically constrain Canadian harvests of sockeye and coho salmon since provisions to do so had expired in 1993. The basic objective of the management plan for each species was to manage according to the conservation requirements, i.e., escapement goals established for each species. In agreement with unexpired portions of Annex IV, the plan did not permit targeting on chinook salmon in the Taku River since both Parties had previously agreed to rebuild chinook salmon by 1995.

The U.S. management plan reflected the provisions that were in effect for 1993, namely to provide for Canadian harvests of $18 \%$ of the TAC of wild Taku River sockeye salmon, $50 \%$ of the enhanced sockeye TAC, and 3,000 coho salmon. As with the Canadian management plan, targeting on chinook salmon was not permitted.

## U.S. Fisheries

The District 111 commercial drift gillnet fishery was opened June 18 and closed on September 27, for a total of 49 fishing days (Appendix C.1). Forty-five days were allowed in Taku Inlet (Subdistrict 111-32), 49 days in Stephens Passage (Subdistrict 111-31), and 12 days in Port Snettisham (Subdistricts 111-33 and 111-34). Lower Stephens Passage (Subdistrict 111-20) was not opened because of extremely poor local pink salmon runs. Fishing time in District 111 was $11 \%$ above the 1985-1994 average of 44.3 days. Fishing time in Taku Inlet was 13\% above the 1985-1994 average of 39.8 days. Fishing effort in the district, as measured by the maximum number of boats delivering fish each week times the number of days fished, totaled 4,034 boat-days and was $22 \%$ above the 1985-1994 average of 3,296 (Appendix D.1).


Figure 6. The Taku River and principal U.S. and Canadian fishing areas.

The 1995 commercial salmon harvest totaled 4,660 chinook, 103,377 sockeye, 83,626 coho, 41,269 pink, and 350,098 chum salmon (Figure 7, Appendix C.1). The catch of summer chum salmon was an all-time record, and chinook and sockeye catches were above average. The harvest of coho salmon was average, while catches of pink and fall chum salmon were below average. Hatchery stocks contributed significantly to catches of chinook, sockeye, coho, and summer chum salmon.

The chinook harvest of 4,660 fish was $47 \%$ above the 1985-1994 average of 3,172 , but the lowest harvest since 1992. Alaska hatchery fish comprised $41 \%$ ( 1,901 fish) of the catch (CWT estimate). Management actions taken for chinook conservation were implemented during the first week of the season when Taku Inlet was closed north of the latitude of Jaw Point. Chinook salmon non-retention was in place from August 11 through the end of the gillnet season as a result of an injunction issued by United States District Court Judge Barbara Rothstein.

The majority (79\%) of the sockeye harvest in District 111 occurred in Taku Inlet, with the remaining catch from Stephens Passage. Port Snettisham was closed to fishing during the summer season to continue rebuilding of Snettisham sockeye stocks. The contributions of Taku River sockeye salmon to the weekly commercial harvests were estimated by applying results of scale pattern analysis and the incidence of the brain parasite Myxobolus arcticus to the weekly sockeye catches. Contribution of enhanced sockeye resulting from domestic and joint U.S./Canada transboundary river projects were estimated inseason and reevaluated postseasonally by analysis of thermal otolith marks. Approximately 91,008 ( $88 \%$ ) of the total catch was estimated as Taku River stocks, 9,642 as Snettisham stocks, and 2,727 as U.S. enhanced stock. The U.S. enhanced stock catch was primarily five and six-ear-old returns from fry releases into Sweetheart Lake. The first five-year-old returns from the joint Taku River fry stocking project occurred in 1995; estimated totals of 1,017 Trapper Lake and 3,049 Tatsamenie Lake enhanced sockeye salmon were harvested in the District 111 gillnet fishery this year. The contribution of enhanced Tatsamenie fish is expanded based on an estimated readability index of $40 \%$ (U.S. otolith lab's best estimate based on voucher, i.e., juvenile baseline, and adult samples).

The summer chum catch (i.e., the District 111 chum harvest through statistical week 33; August 19) of 339,178 fish was a record, over 3.5 times the 1985-1994 average of 95,599 . The catch exceeded the previous record of 198,002 taken in 1994, and marked the third consecutive year the summer chum catch record has been broken. Quantitative contribution estimates of enhanced chum salmon are not available, but chum salmon returning from DIPAC fry releases are believed to have contributed to the majority of the catch. Stephens Passage catches comprised $43 \%$ ( 146,621 fish) of the total summer chum catch.

In contrast to the summer chum run, the fall chum run was again poor in 1995. The total fall chum harvest (chum salmon caught from August 20, statistical week 34, through the end of the season) was 10,920 fish. This is $35 \%$ of the 1985-1994 average of 30,789 fish. Chum salmon taken in the fall in District 111 are believed to be almost exclusively wild chum salmon stocks from the Taku and Whiting rivers.

The pink salmon catch of 41,269 in the District 111 gillnet fishery was just $21 \%$ of the 1985-1994 average of 198,995 fish. This was a result of the very poor returns to Taku River and Stephens Passage pink salmon systems, which were expected because of extremely poor escapements in the 1993 parent year. A total of 22,800 pink salmon ( $55 \%$ of the pink harvest) came from Stephens Passage. Returns of DIPAC hatchery pink salmon were greatly reduced because the last large production level release of pink salmon was in 1992; contribution rates of enhanced pink salmon is unknown.


Figure 7. Average catches and fishing efforts compared with 1995 values for the Alaskan District 111 commercial fishery and the Canadian commercial fishery in the Taku River.

The total catch of 83,626 coho salmon was approximately equal to the 10 -year average of 83,869 fish. This catch includes a combination of wild coho runs to the Taku River, Port Snettisham, Stephens Passage, and local Juneau area streams as well as Alaskan hatchery fish. The estimate of contribution of U.S. hatchery coho salmon to the fishery was 13,666 fish, or $16 \%$ of the total coho catch. Approximately $99 \%$ of the hatchery fish were from DIPAC Hatchery releases. The majority of the coho catch ( $85 \% ; 70,826$ fish) occurred in Taku Inlet.

Weekly fishing time in Taku Inlet during the summer season varied from two to four days. Sockeye fishing success was generally below that of the last five years but about equal to the 1985-1994 average. Management decisions for Taku Inlet were made based on sockeye abundance despite outstanding catches of chum salmon during the entire summer season. During statistical weeks 25 to 27 three days of fishing were allowed in Taku Inlet. Fishing time was extended to four days during statistical week 28 (July 9 through 15) because of excellent sockeye catches and adequate inriver run size estimates generated from the Canyon Island tagging program. Three days of fishing were allowed in Taku Inlet during statistical weeks 29 and 30 (July 16 through July 29), but catches and CPUE were well below average. During this time some of the better catches occurred in outer portions of Taku Inlet such as Pt. Arden, as well as Stephens Passage, which can be indicative of strong contributions of Snettisham sockeye salmon. Fishing time in Taku Inlet was, therefore, reduced to two days during statistical week 31 (July 30 through August 5). Despite continued below average catches in Taku Inlet again in statistical week 31, fishing time was increased to three days for the last two weeks of the summer season because excellent Canadian inriver harvests and inriver escapement estimates indicated improved run strength. Sockeye catches in statistical week 32 were slightly above average but catches in statistical week 33, particularly within Taku Inlet, were well below average.

Given the estimates available for Taku and Snettisham sockeye run sizes it is surprising that better sockeye catches and CPUE were not experienced in the District 111 fishery. It is possible that catch rates were negatively affected by the strong contributions of two-ocean sockeye salmon apparent in the catch as well as among Taku River and Port Snettisham escapements; these small fish are less susceptible to capture in the commonly used gillnet mesh sizes ( 5.25 to 5.38 inches) in District 111. The unprecedented harvests of summer chum salmon may also have reduced fishing success for other species. Additionally, postseason analysis of detailed stock assessment data will indicate whether the small fish size may have caused upward bias in mark-recapture estimates of Taku River sockeye abundance.

Sockeye and chum catches were well above average throughout the summer season in Stephens Passage. An extra 24 hours of fishing time was allowed south of Circle Point (Subdistrict 111-31) each week from July 5 through August 5 (statistical weeks 27 through 31) to target on Limestone Inlet enhanced chum salmon returns; a six-inch minimum mesh restriction was employed during the final 24 hours of fishing in statistical weeks 27 through 30 to limit the harvest of Snettisham sockeye salmon. A mesh restriction was not implemented during statistical week 31 because by then returns were composed primarily of three-yearold chum salmon, which were not easily catchable in the larger mesh gear, and initial aerial surveys of Crescent Lake indicated the sockeye escapement to this system was doing well. Chum catches in Stephens Passage dropped off in statistical week 31. Fishing time in Stephens Passage during statistical weeks 32 and 33 was limited to three days to ensure an adequate escapement of sockeye salmon to Speel Lake, the brood source for the developing Snettisham Hatchery sockeye salmon enhancement program.

Fall management was initiated on August 20 (statistical week 34); Port Snettisham was reopened to fishing for the fall season. Three days of fishing were allowed each week in the district through the end of September (statistical week 39). Coho catches were above average through statistical week 36 (September 3 to 9 ), but dropped off to well below average in statistical week 37, when only 4,319 coho salmon were taken. As a result, a two-day fishery was announced for statistical week 38 but due to the dramatically improved catches the fishery was extended to three days. Port Snettisham was closed in statistical week 39 due to lagging coho escapements to Crescent Lake noticed during sockeye egg-take operations at this location. Coho catches declined in statistical week 39 and the district was closed, along with all other drift gillnet fishing districts in Southeast Alaska. Catches of fall chum salmon were below average throughout the fall season.

Several other fisheries in the Juneau area harvested transboundary river stocks in 1995. Estimates of harvest in the U.S. personal use fishery in the lower Taku River are 37 chinook, 2,058 sockeye, 202 coho, 83 pink, and 12 chum salmon (Appendix D.4). The spring Juneau-area sport fishery harvested an estimated 3,988 chinook salmon. An estimated 1,920 (48\%) were mature wild spawners and additional $2,011(50 \%)$ were of Alaskan hatchery origin (coded-wire-tag estimate). The July Hawk Inlet purse seine fishery in northern Chatham Strait was not opened this year due to very poor runs of pink salmon to the Taku River and the Stephens Passage and Lymn Canal systems.

## Canadian Fisheries

Taku River commercial fishers harvested 32,640 sockeye, 13,629 coho, 1,577 large chinook, 298 jack chinook (fish less than 2.27 kg ), 2 pink, and 1 chum salmon, and 205 steelhead in 1995 (Appendix C.4). Catches of sockeye, coho, and chinook salmon were above average. The sockeye catch was the second highest on record and was $55 \%$ above the 1985-1994 average of 21,071 sockeye salmon. The coho catch was also the second highest on record and was more than three times the previous 10 -year average of 4,341 coho salmon. The catch of large chinook salmon was $62 \%$ above the previous 10 -year average of 974 fish, and the catch of jack chinook salmon was $81 \%$ above the previous 10 -year average of 165 jack chinook salmon. With the exception of steelhead, the catches of other species were below average (Figure 7, Appendix D.5). The fishery was open for a total of 51 days, well above the previous 10 -year average of 29 days and the seasonal fishing effort was 428 boat-days, $53 \%$ above the 1985-1994 average of 279 boat-days. The above average fishing time and effort along with the above average catch of coho salmon was reflected in the existence of a fall fishery which in many previous years had been curtailed by Treaty restrictions.

In addition to the commercial catches, the aboriginal fishery harvested 70 chinook, 71 sockeye, 109 coho, 7 chum salmon, and 4 steelhead in 1995.

The Taku River Tlingit First Nation (TRTFN), in cooperation with the Department of Fisheries and Oceans (DFO), conducted a creel census of the Nakina River in 1995. A total of 33 non-guided fishers have returned completed questionnaires; information from the returns was expanded to provide the an estimate of 1,518 chinook salmon landed, including 1,422 released and 96 retained.

The Canadian preseason forecast predicted a run size of $211,300^{2}$ sockeye salmon, which was close to the 1984-1994 average run size of 205,718 sockeye salmon.

The commercial fishery commenced at noon on Sunday, June 18 (statistical week 25) for a scheduled opening of two days. The sockeye CPUE was approximately double the average value for this week; however, low water levels, which may have increased catchability, and concerns about potential effects on increasing incidental chinook catches lead to the decision to close the fishery after two days.

Fishing time was increased to three days per week in the following week and remained at that level through July 22 (statistical week 29). Above average sockeye CPUE persisted until statistical week 29 when the CPUE dipped below average.

The fishery in the early part of statistical week 30 (July 23 to 30 ) was seriously impacted by flooding conditions which caused catches and effort to drop significantly. The fishery closed on Wednesday after the scheduled three days. By Thursday, fishing conditions had improved enough to warrant providing additional fishing time to compensate for the lost fishing opportunity earlier in the week. The fishery was reopened for an additional 27 hours commencing 09:00 Thursday during which time catches improved greatly.

Above average CPUE in the first 48 hours of fishing in statistical week 31 (July 30 to August 5) prompted a 24 -hour extension over the scheduled three-day opening. This became the peak sockeye fishing week of the season and, compared to previous years, both the catch of 6,781 sockeye salmon and the CPUE of 144 sockeye salmon per boat-day were the second highest on record for this week. Inseason population estimates from the Canada/U.S. mark-recapture program at Canyon Island indicated that the sockeye escapement goal of 71,000 to 80,000 fish was surpassed by this time in the season.

The statistical week 32 (August 6 to 12) fishery was extended by 24 hours over the scheduled three days, again in response to above average run strength. Thereafter, fishing times remained at three days per week through mid-September and the end of the sockeye season. With the exception of statistical week 33, the sockeye CPUE was well above average for the latter half of the season.

Throughout the season, the weekly catches and CPUE of coho salmon were well above average with the exception of statistical week 37 (September 10 to 16) which was washed out by a Tulsequah flood. By the end of August, the cumulative coho CPUE was the highest on record and was $48 \%$ above average. The cumulative catch through statistical week 34 was also a record high, 6,753 pieces. These factors indicated a strong early component to the coho run. The maximum catch of coho salmon occurred in statistical week 36 (September 3 to 9 ), one week later than in 1994. Fishing time was increased to four days commencing statistical week 37 (September 10) as the number of fishers active in the fishery declined.

The inseason forecasts of the sockeye run ranged from approximately 163,300 fish in statistical week 27 to 248,900 fish in statistical week 35 (Table 3). The forecasts were derived from inseason harvest data and estimates of the cumulative inriver run from the Canada/U.S. mark-recapture program. Expansions of the data to project total-season run forecasts were conducted utilizing historical run timing data; it was assumed that the run timing was average to one week earlier than normal. This assumption was made to account for

[^0]the relative lateness of weeks in 1995 relative to actual calendar dates. For example, statistical week 35 in 1995 was the week of August 27 to September 2, whereas in 1994, statistical week 35 occurred August 21 to August 27. Generally, greater emphasis was placed on the forecasts developed under the early run timing scenario.

Forecasts of the sockeye salmon spawning escapement were also made and ranged from approximately 101,800 fish (statistical week 28) to 144,100 sockeye salmon (statistical week 26). The final inseason forecast indicated a run size of approximately 248,800 sockeye salmon and a spawning escapement of approximately 117,400 fish. According to the postseason run size estimate of 239,516 sockeye salmon, the total Canadian catch of 32,711 sockeye salmon represented approximately $19 \%$ to $21 \%$ of the TAC.

As in recent years, both set and drift gillnetting techniques were utilized with the majority of the catch taken in drift gillnets. Mesh sizes were restricted to less than 150 mm through mid-July to minimize the incidental catch of chinook salmon.

Contribution of enhanced sockeye in the Canadian catch was estimated from analysis of otolith marks. The harvest of 1,334 fish, $4 \%$ of the catch of 32,640 fish, consisted of 331 and 1,003 from Trapper and Tatsamenie lake outplants, respectively.

Table 3. Canadian inseason forecasts of run size, TAC, and spawning escapement of Taku sockeye salmon, 1995.

| Statistical Week | Run Size Forecast | TAC $^{a}$ | Spawning Esc. <br> Forecast |
| :---: | :---: | :---: | :---: |
| preseason | 211,300 | 136,300 | 75,000 |
| 25 | 211,300 | 136,300 | 75,000 |
| 26 | 211,300 | 136,300 | 144,100 |
| 27 | 163,300 | 88,300 | 122,300 |
| 28 | 181,600 | 106,600 | 101,800 |
| 29 | 183,700 | 108,700 | 113,500 |
| 30 | 210,500 | 135,500 | 109,200 |
| 31 | 213,400 | 138,400 | 121,200 |
| 32 | 232,500 | 157,500 | 102,200 |
| 33 | 236,400 | 161,400 | 111,200 |
| 34 | 236,400 | 161,400 | 111,200 |
| 35 | 248,800 | 173,800 | 117,400 |

a The TAC is calculated by subtracting the midpoint of the escapement goal range $(75,000)$ from the run size forecast.

## 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. The weir at Little Tatsamenie Lake was relocated to Tatsamenie Lake in 1995. Additional sockeye enumeration programs were conducted at Kuthai Lake and the Nahlin River by the TRTFN in 1995.

A mark-recapture program has been operated annually from 1984 to 1995 to estimate the above-border inriver run size (i.e., border escapement); spawning escapement may then be estimated by subtracting the inriver catch. The 1995 estimate of border escapement is 146,450 sockeye salmon and the spawning escapement, 113,739 fish (Appendix D.9). This spawning escapement is $8 \%$ above the 1984-1994 average of 105,001 fish and is $42 \%$ higher than the upper limit of the interim escapement goal range of 71,000 to 80,000 sockeye salmon (Figure 8 ).

The escapement through the Little Trapper Lake weir was 11,524 sockeye salmon, $13.1 \%$ lower than the 1983-1994 average of 13,256 fish (Appendix D.9).

Prior to 1995, weir counts for the Tatsamenie system were made at Little Tatsamenie Lake and included fish which spawn between Little Tatsamenie and Tatsamenie lakes as well as fish which spawn in Tatsamenie Lake and its outlet stream. In 1995 the weir was moved upstream to Tatsamenie Lake. The escapement count through the Tatsamenie Lake weir was 5,780 sockeye salmon. To be comparable with earlier spawning estimates, it needed to be expanded to represent the entire Tatsamenie system. In addition, the weir was installed late in relation to the run timing so the weir count was first expanded to include the missed portion of the upper Tatsamenie run (approximately 12\%). In 1994 weirs were operated at both Little Tatsamenie and Tatsamenie lakes; approximately $40 \%$ of the fish counted at the Little Tatsamenie weir did not migrate as far as the upper weir site at Tatsamenie Lake. Since this was from only one year and seemed high to the biologist working on the system, the upper Tatsamenie estimate was expanded by $1 / 0.8$ rather than $1 / 0.6$. The resulting escapement to the entire Tatsamenie system, rounded to the nearest thousand, was 8,000 fish. A total of 1,393 sockeye salmon were taken for brood stock leaving a spawning escapement of 6,607 sockeye salmon for 1995 , the third highest spawning escapement since 1985 when estimates were first recorded

The sockeye count through the Kuthai Lake weir was 3,310 fish, the third highest recorded for the weir and close to the average count of 3,431 sockeye salmon.

The sockeye count through the Nablin weir was 3,711 fish, the highest recorded since counts were started in 1988 and nearly twice the average count of 1,275 fish.


Figure 8. Sockeye catches for the Alaskan District 111, the Icy and Chatham Straits, the combined Canadian commercial and food fisheries in the Taku River, and Taku sockeye escapements, 1979-1995.

Taku Drainage Index Counts


Figure 9. Taku River chinook index escapement counts, 1975-1995.

## Chinook

Aerial surveys of the large chinook salmon (three-ocean and larger) to the six escapement index areas annually surveyed by the Alaska Department of Fish and Game (ADF\&G) were as follows: Nakina, 3,943; Kowatua, 550; Tatsamenie, 678; Dudidontu, 731; Tseta, 786; Nahlin, 2,069 fish (Appendix D.10). The total of 8,757 large chinook salmon observed was below the record count of 13,204 in 1993 and $8 \%$ below the 10 -year average of 9,515 fish. The interim index escapement goal for the Taku drainage is 13,200 large chinook salmon to the six index areas.

The number of chinook carcasses counted at the Nakina River weir in 1995 was 2,012 fish. A total of 3,401 chinook salmon was counted through the Nahlin River weir.

## 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. Tags were applied though statistical week 39 and tag recovery occurred until statistical week 40 (October 1 to 7). Since the mark-recapture data used did not cover the full migration period, District 111 CPUE information was fit to a normal curve to provide an estimate of the proportion of the run that was missed; the estimate of 61,739 was subsequently expanded by 0.889 . The above-border escapement was estimated to be 69,448 fish and the spawning escapement was 55,710 fish (Appendix D.11). The spawning escapement is below the 1987-1994 average of 80,256 coho salmon; however, it is well above the interim escapement goal of 27,500 to 35,000 coho salmon.

A total of 14 coho salmon was counted from August $8-10$ at a weir located on the Nahlin River which was operated by the TRTFN; this count is incomplete and, therefore, not comparable to the previous average (1988 and 1992-1994) of 1,183 coho salmon. The Tatsamenie Lake weir was not in operation long enough to achieve a meaningful coho estimate.

Pink

A total of 1,712 pink salmon was counted at the Canyon Island fish wheels (Appendix D.14). There was no program in place to estimate the escapement of pink salmon to the Taku River in 1995 due to the low expected run. Pink salmon runs on the Taku were previously strong in odd years (1985-1991 odd-year average $=31,300$ fish $)$ until 1993, which was the year with the lowest catch ( 1,625 fish). The 1994 catch was 27,100 pink salmon compared with the 1984-1992 even-year average of 10,920 fish.

## Chum

There was no program in place to estimate the system-wide escapement of chum salmon. Low catch and CPUE information from the Canyon Island fish wheels and inriver commercial fishery (Appendix D.5) indicated that there was a below average chum salmon run in 1995. A total of 218 chum salmon was captured in the fish wheels, $72 \%$ below the 1985-1994 average catch of 744 chum salmon (Appendix D.14). Chum salmon were observed in only three of the five index areas which are aerial surveyed by the TRTFN; the count in these areas was 87 chum salmon. Aerial surveys of Canadian mainstem spawning areas conducted by ADF\&G reported more fish than the TRTFN surveys; however, the escapement was still considered poor.

The Taku River fall chum run has continually declined since 1989. It is unlikely that the spawning escapement goal of 50,000 to 80,000 chum salmon was achieved.

## Steelhead

There was no program in place to estimate the system-wide steelhead escapement. An escapement goal has not been set for this species.

## Sockeye Run Reconstruction

The estimated U.S. harvest of Taku River sockeye salmon in the District 111 fishery is 91,008 fish ( 86,942 wild fish, and 1,017 and 3,049 from Trapper and Tatsamenie outplants, respectively). An additional 2,058 sockeye salmon was estimated to have been taken in the U.S. inriver personal use fishery (Table 4).

The estimate of the magnitude of the above-border sockeye run in 1995, based on the joint Canada/U.S. mark-recapture program, was 146,450 fish. Subtracting the Canadian inriver catch of 32,711 sockeye salmon in the commercial and aboriginal fisheries from the above-border run estimate results in an aboveborder escapement estimate of 113,739 fish.

The run size estimate, determined by summing the estimated U.S. harvest ( 91,008 commercial and 2,058 personal use fish) and the above-border run (146,450), was 239,516 sockeye salmon, which was $14 \%$ above the 1984-1994 average run size of 210,918 fish (Appendix D.13). Based on the escapement goal range of 71,000 to 80,000 fish, the TAC was 159,516 to 168,516 sockeye salmon, of which the U.S. harvested $55 \%$ to $58 \%$ and Canada harvested $19 \%$ to $21 \%$ (Table 4). The overall exploitation rate was estimated to be $53 \%$ in 1995.

Table 4. Taku and Snettisham sockeye salmon run reconstruction, 1995. Estimates do not include Taku spawning escapements below the U.S./Canada border or Taku sockeye salmon harvested in marine areas outside District 111.

|  | Taku | Snettisham Stocks |
| :---: | :---: | :---: |
| Escapement | 113,739 | Not Available |
| Canadian Harvest |  |  |
| Commercial |  |  |
| Wild | 31,306 |  |
| Enhanced | 1,334 |  |
| Food Fishery | 71 |  |
| Total | 32,711 |  |
| \% Harvest | 26.0\% |  |
| Test Fishery Catch | 0 |  |
| Above Border Run | 146,450 |  |
| U.S. Harvest ${ }^{\text {a }}$ |  |  |
| District 111 |  |  |
| Wild | 86,942 | 9,642 |
| Enhanced | 4,066 | 2,727 |
| Personal Use | 2,058 |  |
| Total | 93,066 |  |
| \% Harvest | 74.0\% |  |
| Test Fishery Catch | 0 |  |
| Total Run | 239,516 |  |
| Taku Harvest Plan | Minimum | Maximun |
| Escapement Goal | 71,000 | 80,000 |
| TAC | 168,516 | 159,516 |
| Canadian portion | 19.4\% | 20.5\% |
| U.S. Portion | 55.2\% | 58.3\% |

[^1]
## 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 10). An unknown quantity 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 10).


Figure 10. The Alsek River and principal U.S. and Canadian fishing areas.

## Harvest Regulations

Although catch sharing of Alsek salmon stocks between Canada and the U.S. has not been specified, Annex IV does call for a cooperative attempt to rebuild depressed chinook and early-run sockeye stocks. Interim escapement goal ranges for Alsek sockeye and coho salmon have been set by the Transboundary Technical Committee at 33,000 to 58,000 sockeye salmon, and 5,400 to 25,000 coho salmon. Instead of a system-wide chinook escapement goal, a revised goal, expressed in terms of the Klukshu stock only, has been established at 4,700 chinook salmon which is currently under review. The revision made in the fall of 1991 reflected the desire to reduce the uncertainty over expansion factors which had no scientific backing.

## U.S. Fisheries

The Dry Bay commercial set gillnet fishery harvested 670 chinook, 33,112 sockeye, 14,184 coho, 13 pink, and 347 chum salmon (Appendix E.1). The fishery was open for 53.5 days, $29 \%$ longer than the 1985-1994 average of 41 days (Appendix E.4). The majority of fishing time ( 34 days) occurred late in the season (August through early October) after the sockeye run had largely passed through the fishery. Effort remained high into September as a result of the two week closure of the East Alsek River. The total effort expended in the fishery was 926 boat-days, which exceeded the 1985-1994 average of 398 boat-days by $132 \%$ (Figure 11).

Preseason expectations were for an average run of early sockeye salmon, a below average run of late run sockeye and an average run of chinook salmon. These expectations were based on parent-year escapements to the Klukshu River.

The Alsek River was opened to commercial fishing on statistical week 23, the first Monday in June (June 4). This marked the second year in a row that the Alsek was opened on the earliest date allowed by regulation. The initial opening was limited to 12 hours in order to evaluate the effectiveness of chinook conservation measures. Fishery performance indicated that the early segment of the sockeye run was not strong and that the chinook harvest was above expected levels. Fishing time was not extended during the initial opening. CPUE was slightly above average during the second week of the season, and fishing time was increased to two days during this time. Fishing time was maintained at one day during the third week (statistical week 25; June 18 to 24) of the season, and was increased to three days for statistical week 26. Two days were allowed for the next two statistical weeks (27 and 28; July 2 to July 15) of the season. Both the management model and the CPUE figures continued to indicate a strong run, and in statistical weeks 29 and 30 (July 16 to 29) fishing time was increased to three and four days, respectively. Fifty-three percent ( 17,496 sockeye), were caught during these last two weeks of July. Fishery performance was used to adjust fishing time during the last three weeks of the sockeye season (statistical weeks 31 to 33; July 30 to August 19) when openings were set for two days, one day, and three days, respectively. The East Alsek River sockeye run did not develop as expected, and the East Alsek River remained on reduced fishing time through the second week of August. The East Alsek River was then closed from August 8 through August 28. Effort that normally would have been directed towards the East Alsek River remained on the Alsek, and effort levels were above average throughout the sockeye season. The effort of 926 boat-days was the fifth highest since 1963.


Figure 11. Average catches and fishing efforts compared with 1995 values for the Alaskan Dry Bay commercial fishery and the Canadian combined aboriginal and sport fisheries in the Alsek River.

As a reflection of the strong area-wide coho run, fishing times were maintained at four days for statistical weeks 35 to 40 before being dropped to three days for statistical week 41 (October 8 to 14) the final week of the season. The coho harvest of 14,184 was the highest since 1959 and was almost four times the 19851994 average of 3,622 . A survey on October 10 revealed average to above average escapement in Dry Bay area local creeks. The Alsek was closed for the season on October 12.

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 1962 and chinook salmon are now harvested only incidentally during the sockeye fishery in early June. In 1995, the early June periods were limited in time in order to reduce the impact on chinook salmon. Commercial fishers were encouraged to reduce the harvest of chinook salmon by remaining at the fishing site and releasing live fish. This voluntary program has been used with some success on the Situk River under similar circumstances. As in recent years, gillnet mesh size was restricted to a maximum of six inches through July 1. The chinook harvest of 670 fish was more than double the 1985-1994 average of 308 fish, but was below the 1961-1994 average of 858 chinook salmon. Seventy-six percent of the chinook catch ( 511 fish), was taken during the first two weeks of the season.

The Alsek River sockeye harvest of 33,112 fish was $113 \%$ above the $1985-1994$ average of 15,546 , and was the highest catch since 1979 (Figure 12). The majority of the harvest ( $92 \%, 30,595$ sockeye) was taken in the river, with the remainder of the catch coming from the surf area. 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 generally based on catch and CPUE figures gathered inseason during that particular period. Parent-year escapement information and the Alsek management model projections were also factors in determining the weekly fishing periods. The management model uses multiple regression analysis of fishery catch and effort data to generate weekly projections of the U.S. Alsek River catch, the Klukshu River escapement, and total index run size (U.S. catch + Klukshu weir count). Model results tend to get more accurate as the season progresses; early season projections are of limited use for management purposes. In 1995, model projections were quite accurate, with catch, escapement, and index run size all being slightly underestimated (Table 5). Various factors affect the accuracy of the model, including the relative strengths of early and late runs to Klukshu, the abundance of stocks not represented in the model (e.g., Village Creek stock), and the accuracy of manager's projections of effort levels.

Table 5. Inseason U.S. forecasts of the 1995 Alsek River sockeye sahmon catch, Klukshu River weir count, and index run size (catch + Klukshu weir count).

|  | Start |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Statistical Week | Date | Total <br> Catch | Klukshu <br> Count | Index <br> Run |
| 26 | 25-Jun | 23,268 | 18,729 | 41,997 |
| 27 | 2-Jul | 20,229 | 17,581 | 37,810 |
| 28 | 9-Jul | 18,381 | 17,358 | 35,739 |
| 29 | 16-Jul | 21,990 | 17,647 | 39,637 |
| 30 | 23-Jul | 29,231 | 19,022 | 48,253 |
| 31 | 30-Jul | 30,113 | 18,769 | 48,882 |
| Actual |  |  |  |  |



Figure 12. Alsek sockeye catches and weir counts, 1979-1995.

## Canadian Fisheries

The center of aboriginal fishing activity in the Alsek drainage occurs at the Champagne/Aishihik Indian 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. Gaff fisheries also exist on Village Creek, Goat Creek, and the Blanchard River.

As in recent years, management actions were taken to conserve chinook and early run sockeye stocks. The fishing plan for the aboriginal fishery for the period prior to August 13 allowed only elders to fish by means of fish traps for 1.25 days per week. From this date on, fishing by traps was allowed 3.25 days per week.

The gaff fishery was open seven days per week in all areas to September 5; however, gaffing for sockeye salmon in the Klukshu River was prohibited prior to August 13, except by elders. Gaffing for chinook salmon was prohibited in the waters of Goat Creek, Stanley Creek, and the Parton River.

The aboriginal food fishery harvested an estimated 580 chinook, 1,745 sockeye, and 83 coho salmon. The Klukshu chinook weir count of 5,678 was approximately $136 \%$ above average (1985-1994) and the aboriginal catch of 580 chinook salmon was almost twice average. The sockeye catch was $8 \%$ below the 1985-1994 average of 1,901 fish (Appendix E.6), while the weir count of 20,696 sockeye salmon was $13 \%$ above the 1985-1994 average of 18,337 fish. The food fishery catch data was summarized weekly from daily catch statistics gathered inseason. Weekly catches and annual comparisons appear in Appendices E. 2 and E. 6.

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. Retention of sockeye salmon in the recreational fishery was prohibited prior to August 15 to protect early runs. The chinook daily catch and possession limits were one and two, respectively; the overall daily catch and possession limits for salmon were two and four, respectively. Sport fishing in the Dalton Post area was open from 6:00 a.m. Saturday to 12:00 noon Tuesday each week until July 27 when the area was opened seven days per week as a result of the record chinook salmon run. On August 15 the original restrictions, 6:00 am Saturday to 12:00 noon Tuesday, were reinstated in the Dalton Post area. After September 31, the fishery was open seven days per week and extended to include the Klukshu River. The headwater areas within the drainage, upstream of the British Columbia/Yukon border, were closed for the season to protect spawning chinook salmon.

The recreational fishery harvested an estimated 1,044 chinook, 682 sockeye, and 527 coho salmon. Compared to 1985-1994 average sport catches, the chinook catch was 2.8 times the average of 272 fish, the sockeye catch was 2.1 times the average of 330 fish, and the coho catch was 3.4 times the average of 120 fish. The catch data were derived from a creel census program conducted in the Dalton Post area by the Klukshu weir personnel. Additional catch data were collected in other tributaries by DFO fishery officers. Weekly estimates and annual comparisons are listed in Appendices E. 2 and E.6.

## Escapement

It is currently not possible to accurately assess whether the system-wide escapement goals for Alsek sockeye and coho salmon are being met because total drainage enumeration programs are not established. A large, but unknown, and presumably 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 do, however, allow annual comparisons of escapement indices. The most reliable comparative escapement index for Alsek drainage salmon stocks is the Klukshu River weir count

## Sockeye

A total of 20,696 sockeye salmon was counted through the Klukshu weir in 1995 and consisted of a below average (1985-1994) early run count of 2,289 (count through August 15), and an above average late run of 18,407 fish. The early run count was $27 \%$ below the 1985-1994 average of 3,140 fish. The late run count, however, was $21 \%$ above the 1985-1994 average of 15,197 sockeye salmon (Appendix E.7). The estimated Village Creek sockeye escapement was 4,041 sockeye salmon, $19 \%$ below the 1986-1994 average of 5,018 fish (Appendix E.8).

Comparative counts for other Alsek index tributaries appear in Appendix E.8. A count of 2,700 sockeye salmon for Basin Creek was well above the 1985-1994 average count of 1,133 fish. The maximum count for the Tanis River was 350 sockeye salmon, $75 \%$ below the 1985-1994 average of 1,408 fish. Cabin Creek was not surveyed in 1995.

## Chinook

The most reliable comparative escapement chinook salmon index for the Alsek drainage is the Klukshu weir count. The chinook weir count in 1995 of 5,678 fish was $136 \%$ above the 1985-1994 average of 2,408 fish (Figure 13, Appendix E.7). The 1995 count was the highest count recorded since the start of the weir program in 1976, and marks the first year that the interim escapement goal of 4,700 Klukshu chinook salmon was achieved.

Due to poor weather conditions, aerial chinook surveys were delayed approximately one week from the estimated peak spawning period in 1995. Counts, therefore, are lower than expected. The count of 260 chinook salmon in the Takhanne River was above the 1985-1994 average of 228 fish by $14 \%$. Aerial counts of 338 chinook salmon at the Blanchard River were close to the 1985-1994 averages of 337 chinook salmon. The survey at Goat Creek was too late for a meaningful count (Appendix E.9). The aerial survey count of 1,053 Klukshu chinook salmon was $19 \%$ of the weir count of 5,678 fish.

## Coho

Although it is understood that the Klukshu weir count of coho salmon is incomplete and does not include fish that migrate after mid-October, the 1995 count of 3,614 fish was $105 \%$ above the 1985-1994 average of 1,764 fish.

Escapement counts for coho salmon on the U.S. side of the border were generally average. The combined systems coho salmon survey count of 1,050 fish was essentially equal to the 1985-1994 average of 1,043 fish.

## Run Reconstruction

Estimates of the Klukshu contribution to the sockeye salmon run to the Alsek drainage vary from 37\%, as estimated from an ADF\&G mark-recapture study conducted 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. Using the $37 \%$ to $60 \%$ contribution range, the estimated 1995 sockeye salmon escapement in the Alsek River was on the order of 32,000 (Canada) to 54,000 (U.S.) fish and the estimated Alsek sockeye salmon run was on the order of 65,000 (Canada) to 87,000 (U.S.) sockeye salmon. The interim sockeye salmon escapement goal for the Alsek River is from 33,000 (U.S.) to 58,000 (Canada) fish.

Table 6. Catch and Klukshu index escapement data for Alsek sockeye, chinook, and coho salmon for 1995.

|  | Sockeye | Chinook | Coho |
| :--- | ---: | ---: | ---: |
| Escapement Index |  |  |  |
| Klukshu Weir Count |  |  |  |
| Klukshu Escapement | 20,696 | 5,678 | 3,614 |
|  | 19,817 | 5,394 | 3,564 |
| Harvest $^{\text {b }}$ |  |  |  |
| U.S. Commercial | 33,112 | 670 | 14,184 |
| U.S. Subsistence | 167 | 51 | 53 |
| Canadian Sport | 682 | 1,044 | 527 |
| Canadian Aboriginal | 1,745 | 580 | 83 |
| Total | 35,706 | 2,345 | 14,847 |

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.


Figure 13. Alsek chinook catches and weir counts, 1979-1995.


Figure 14. Alsek coho catches and weir counts, 1979-1995. The weir count for coho is incomplete because the weir is dismantled before the entire coho run has passed.

## APPENDICES

Appendix A.1. Weekly salmon catch and effort in the Alaskan Subdistrict 106-41 and 106-42 (Sumner Strait) commercial drift gillnet fishery, 1995.

| Week | Start | Catch |  |  |  |  | Effort |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | Permit |
|  | Date | Chinook | Sockeye | Coho | Pink | Chum | Permits | Days | Days |
| 25 | 18-Jun | 243 | 6,359 | 706 | 322 | 14,789 | 59 | 2 | 118 |
| 26 | 25-Jun | 155 | 11,232 | 2,178 | 6,669 | 16,135 | 77 | 2 | 154 |
| 27 | 2-Jul | 75 | 8,184 | 1,769 | 6,412 | 19,291 | 67 | 2 | 134 |
| 28 | 9-Jul | 121 | 17,357 | 2,765 | 9,565 | 20,618 | 78 | 2 | 156 |
| 29 | 16 -Jul | 24 | 12,403 | 2,429 | 5,284 | 16,006 | 81 | 2 | 162 |
| 30 | 23-Jul | 25 | 28,565 | 5,529 | 16,335 | 24,371 | 76 | 3 | 228 |
| 31 | 30-Jul | 11 | 15,630 | 5,932 | 18,865 | 13,329 | 82 | 2 | 164 |
| 32 | 6-Aug | 9 | 13,363 | 7,563 | 25,430 | 15,709 | 68 | 2 | 136 |
| 33 | 13-Aug | 0 | 11,768 | 13,746 | 28,832 | 18,639 | 67 | 3 | 201 |
| 34 | 20-Aug | 0 | 6,824 | 16,632 | 26,058 | 13,326 | 88 | 3 | 264 |
| 35 | 27-Aug | 0 | 1,678 | 22,267 | 7,119 | 7,738 | 81 | 3 | 243 |
| 36 | 3-Sep | 0 | 284 | 16,236 | 2,874 | 5,016 | 70 | 3 | 210 |
| 37 | 10-Sep | 0 | 39 | 7,786 | 180 | 2,059 | 50 | 2 | 100 |
| 38 | 17-Sep | 0 | 27 | 4,019 | 58 | 2,281 | 37 | 2 | 74 |
| 39 | 24-Sep | 0 | 0 | 56 | 1 | 62 | 5 | 1 | 5 |
| Total |  | 663 | 133,713 | 109,613 | 154,004 | 189,369 | 986 | 34 | 2,349 |

Appendix A.2. Weekly stock proportions and catches of sockeye salmon harvested in the Alaskan Subdistrict 106-41\& 106-42 (Sumner Strait) commercial drift gillnet fishery, 1995. Data based on scale pattern analysis.

| Week | Alaska | Canada | Stikine |  |  |  | Thermal Marked Tahltan | CPUE of Stikine Fish |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{array}{r} \text { All }^{\alpha} \\ \text { Tahltan } \end{array}$ | Tuya | $\begin{array}{r} \text { non- } \\ \text { Tahltan } \end{array}$ | Total |  | $\begin{array}{r} \mathrm{All}^{\mathrm{a}} \\ \text { Tahltan } \end{array}$ | Tuya | $\begin{array}{r} \text { Non- } \\ \text { Tahltan } \end{array}$ | $\begin{array}{r} \mathrm{All} \\ \text { Stikine } \end{array}$ |
| Proportions |  |  |  |  |  |  |  |  |  |  |  |
| 25 | 0.193 | 0.376 | 0.390 | 0.000 | 0.040 | 0.431 | 0.185 | 0.225 | 0.000 | 0.062 | 0.179 |
| 26 | 0.195 | 0.327 | 0.424 | 0.000 | 0.053 | 0.477 | 0.225 | 0.330 | 0.000 | 0.111 | 0.268 |
| 27 | 0.303 | 0.306 | 0.391 | 0.000 | 0.000 | 0.391 | 0.130 | 0.255 | 0.000 | 0.000 | 0.184 |
| 28 | 0.294 | 0.559 | 0.130 | 0.000 | 0.016 | 0.147 | 0.054 | 0.155 | 0.000 | 0.051 | 0.126 |
| 29 | 0.485 | 0.473 | 0.018 | 0.010 | 0.014 | 0.042 | 0.030 | 0.015 | 1.000 | 0.031 | 0.025 |
| 30 | 0.294 | 0.631 | 0.003 | 0.000 | 0.072 | 0.075 | 0.005 | 0.005 | 0.000 | 0.254 | 0.072 |
| 31 | 0.370 | 0.605 | 0.005 | 0.000 | 0.020 | 0.025 | 0.020 | 0.005 | 0.000 | 0.055 | 0.018 |
| 32 | 0.214 | 0.694 | 0.003 | 0.000 | 0.089 | 0.092 | 0.010 | 0.003 | 0.000 | 0.247 | 0.069 |
| 33 | 0.233 | 0.719 | 0.013 | 0.000 | 0.034 | 0.048 | 0.010 | 0.008 | 0.000 | 0.057 | 0.021 |
| 34 | 0.174 | 0.692 | 0.000 | 0.000 | 0.134 | 0.134 | 0.000 | 0.000 | 0.000 | 0.098 | 0.027 |
| 35 | 0.174 | 0.692 | 0.000 | 0.000 | 0.134 | 0.134 | 0.000 | 0.000 | 0.000 | 0.026 | 0.007 |
| 36 | 0.174 | 0.692 | 0.000 | 0.000 | 0.134 | 0.134 | 0.000 | 0.000 | 0.000 | 0.005 | 0.001 |
| 37 | 0.174 | 0.692 | 0.000 | 0.000 | 0.134 | 0.134 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 |
| 38 | 0.174 | 0.692 | 0.000 | 0.000 | 0.134 | 0.134 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 |
| Total | 0.287 | 0.565 | 0.099 | 0.001 | 0.048 | 0.149 | 0.051 |  |  |  |  |
| Catches |  |  |  |  |  |  |  |  |  |  |  |
| 25 | 1,229 | 2,392 | 2,481 | 0 | 257 | 2,738 | 1,177 | 21.0 | 0.0 | 2.2 | 23.2 |
| 26 | 2,195 | 3,678 | 4,759 | 0 | 600 | 5,359 | 2,527 | 30.9 | 0.0 | 3.9 | 34.8 |
| 27 | 2,477 | 2,507 | 3,200 | 0 | 0 | 3,200 | 1,064 | 23.9 | 0.0 | 0.0 | 23.9 |
| 28 | 5,102 | 9,711 | 2,264 | 0 | 280 | 2,544 | 929 | 14.5 | 0.0 | 1.8 | 16.3 |
| 29 | 6,018 | 5,863 | 221 | 125 | 176 | 522 | 374 | 1.4 | 0.8 | 1.1 | 3.2 |
| 30 | 8,401 | 18,022 | 98 | 0 | 2,044 | 2,142 | 143 | 0.4 | 0.0 | 9.0 | 9.4 |
| 31 | 5,780 | 9,460 | 73 | 0 | 317 | 390 | 312 | 0.4 | 0.0 | 1.9 | 2.4 |
| 32 | 2,864 | 9,276 | 40 | 0 | 1,183 | 1,223 | 134 | 0.3 | 0.0 | 8.7 | 9.0 |
| 33 | 2,741 | 8,467 | 156 | 0 | 404 | 560 | 118 | 0.8 | 0.0 | 2.0 | 2.8 |
| 34 | 1,184 | 4,725 | 0 | 0 | 915 | 915 | 0 | 0.0 | 0.0 | 3.5 | 3.5 |
| 35 | 291 | 1,162 | 0 | 0 | 225 | 225 | 0 | 0.0 | 0.0 | 0.9 | 0.9 |
| 36 | 49 | 197 | , | 0 | 38 | 38 | 0 | 0.0 | 0.0 | 0.2 | 0.2 |
| 37 | 7 | 27 | 0 | 0 | 5 | 5 | 0 | 0.0 | 0.0 | 0.1 | 0.1 |
| 38 | 5 | 19 | 0 | 0 |  | 4 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 38,343 | 75,505 | 13,292 | 125 | 6,448 | 19,865 | 6,778 | 93.6 | 0.8 | 35.2 | 129.6 |

All Tahltan includes wild and thermally marked fish.

Appendix A.3. Weekly salmon catch and effort in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 1995.

| Week | Start | Catch |  |  |  |  | Effort |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | Permit |
|  | Date | Chinook | Sockeye | Coho | Pink | Chum | Permits | Days | Days |
| 25 | 18-Jun | 43 | 366 | 109 | 74 | 814 | 8 | 2 | 16 |
| 26 | 25-Jun | 53 | 991 | 381 | 1,070 | 3,637 | 12 | 2 | 24 |
| 27 | 2-Jul | 67 | 5,927 | 2,115 | 8,264 | 10,310 | 31 | 2 | 62 |
| 28 | $9-\mathrm{Jul}$ | 56 | 5,404 | 1,140 | 4,320 | 8,574 | 44 | 2 | 88 |
| 29 | 16-Jul | 27 | 6,097 | 1,374 | 5,928 | 16,094 | 45 | 2 | 90 |
| 30 | 23-Jul | 17 | 11,066 | 2,140 | 8,661 | 11,215 | 45 | 3 | 135 |
| 31 | 30-Jul | 7 | 12,400 | 3,649 | 21,706 | 15,939 | 53 | 2 | 106 |
| 32 | 6-Aug | 18 | 11,499 | 3,810 | 62,848 | 11,897 | 54 | 2 | 108 |
| 33 | 13-Aug | 0 | 12,027 | 6,486 | 68,070 | 12,827 | 68 | 3 | 204 |
| 34 | 20-Aug | 0 | 5,004 | 4,602 | 62,357 | 4,687 | 59 | 3 | 177 |
| 35 | 27-Aug | 0 | 2,338 | 11,363 | 38,729 | 4,923 | 47 | 3 | 141 |
| 36 | 3-Sep | 0 | 428 | 18,442 | 11,580 | 6,849 | 56 | 3 | 168 |
| 37 | 10-Sep | 0 | 17 | 2,764 | 516 | 1,523 | 20 | 2 | 40 |
| 38 | 17-Sep | 0 | 20 | 2,416 | 36 | 1,361 | 29 | 2 | 58 |
| 39 | 24-Sep | 0 | 1 | 157 | 0 | 59 | 5 | 1 | 5 |
| Total |  | 288 | 73,585 | 60,948 | 294,159 | 110,709 | 576 | 34 | 1,422 |

Appendix A.4. Weekly stock proportions and catches of sockeye salmon harvested in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 1995. Data based on scale pattern analysis.

| Week | Alaska | Canada | Stikine |  |  |  | Thermal Marked Tahltan | CPUE of Stikine Fish |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \text { All }^{\mathrm{a}} \\ \text { Tahltan } \end{gathered}$ | Tuya | non- <br> Tahltan | Total |  | $\begin{gathered} \text { All }^{\mathrm{a}} \\ \text { Tahltan } \end{gathered}$ | Tuya | Non- Tahltan | $\mathrm{All}$ <br> Stikine |
| Proportions |  |  |  |  |  |  |  |  |  |  |  |
| 25 | 0.480 | 0.310 | 0.193 | 0.000 | 0.018 | 0.211 | 0.000 | 0.081 | 0.000 | 0.019 | 0.063 |
| 26 | 0.480 | 0.310 | 0.193 | 0.000 | 0.018 | 0.211 | 0.110 | 0.146 | 0.000 | 0.034 | 0.115 |
| 27 | 0.332 | 0.357 | 0.299 | 0.000 | 0.012 | 0.311 | 0.040 | 0.524 | 0.000 | 0.054 | 0.392 |
| 28 | 0.495 | 0.359 | 0.111 | 0.000 | 0.035 | 0.146 | 0.020 | 0.125 | 0.000 | 0.100 | 0.118 |
| 29 | 0.462 | 0.426 | 0.010 | 0.000 | 0.102 | 0.111 | 0.010 | 0.012 | 0.000 | 0.323 | 0.099 |
| 30 | 0.466 | 0.487 | 0.032 | 0.000 | 0.015 | 0.047 | 0.000 | 0.048 | 0.000 | 0.056 | 0.050 |
| 31 | 0.338 | 0.599 | 0.029 | 0.000 | 0.034 | 0.063 | 0.010 | 0.062 | 0.000 | 0.186 | 0.097 |
| 32 | 0.364 | 0.634 | 0.001 | 0.000 | 0.001 | 0.002 | 0.010 | 0.002 | 0.000 | 0.003 | 0.002 |
| 33 | 0.344 | 0.607 | 0.000 | 0.000 | 0.048 | 0.048 | 0.000 | 0.000 | 0.000 | 0.133 | 0.037 |
| 34 | 0.181 | 0.779 | 0.000 | 0.000 | 0.040 | 0.040 | 0.000 | 0.000 | 0.000 | 0.053 | 0.015 |
| 35 | 0.181 | 0.779 | 0.000 | 0.000 | 0.040 | 0.040 | 0.000 | 0.000 | 0.000 | 0.031 | 0.009 |
| 36 | 0.181 | 0.779 | 0.000 | 0.000 | 0.040 | 0.040 | 0.000 | 0.000 | 0.000 | 0.005 | 0.001 |
| 37 | 0.181 | 0.779 | 0.000 | 0.000 | 0.040 | 0.040 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 |
| 38 | 0.181 | 0.779 | 0.000 | 0.000 | 0.040 | 0.040 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 |
| 39 | 0.181 | 0.779 | 0.000 | 0.000 | 0.040 | 0.040 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Total | 0.370 | 0.551 | 0.047 | 0.000 | 0.032 | 0.079 | 0.010 |  |  |  |  |
| Catches |  |  |  |  |  |  |  |  |  |  |  |
| 25 | 176 | 113 | 71 | 0 | 6 | 77 | 0 | 4.4 | 0.0 | 0.4 | 4.8 |
| 26 | 475 | 307 | 191 | 0 | 18 | 209 | 109 | 8.0 | 0.0 | 0.7 | 8.7 |
| 27 | 1,969 | 2,113 | 1,774 | 0 | 71 | 1,845 | 238 | 28.6 | 0.0 | 1.1 | 29.8 |
| 28 | 2,674 | 1,940 | 601 | 0 | 189 | 790 | 108 | 6.8 | 0.0 | 2.1 | 9.0 |
| 29 | 2,819 | 2,599 | 58 | 0 | 621 | 679 | 61 | 0.6 | 0.0 | 6.9 | 7.5 |
| 30 | 5,160 | 5,388 | 355 | 0 | 163 | 518 | 0 | 2.6 | 0.0 | 1.2 | 3.8 |
| 31 | 4,190 | 7,427 | 361 | 0 | 422 | 783 | 124 | 3.4 | 0.0 | 4.0 | 7.4 |
| 32 | 4,186 | 7,293 | 12 | 0 | 8 | 20 | 115 | 0.1 | 0.0 | 0.1 | 0.2 |
| 33 | 4,142 | 7,305 | 0 | 0 | 580 | 580 | 0 | 0.0 | 0.0 | 2.8 | 2.8 |
| 34 | 904 | 3,900 | 0 | 0 | 201 | 201 | 0 | 0.0 | 0.0 | 1.1 | 1.1 |
| 35 | 422 | 1,822 | 0 | 0 | 94 | 94 | 0 | 0.0 | 0.0 | 0.7 | 0.7 |
| 36 | 77 | 334 | 0 | 0 | 17 | 17 | 0 | 0.0 | 0.0 | 0.1 | 0.1 |
| 37 | 3 | 13 | 0 | 0 | 1 | 1 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 38 | 4 | 16 | 0 | 0 | 1 | 1 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 39 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 27,201 | 40,570 | 3,423 | 0 | 2,391 | 5,814 | 755 | 54.6 | 0.0 | 21.4 | 76.0 |

All Tahltan includes wild and thermally marked fish.

Appendix A.5. Weekly salmon catch in the Alaskan District 106 commercial drift gillnet fisheries, 1995. Catches do not include blind Slough terminal area harvests. Effort may be less than the sum of effort from 106-41\& 106-42 and 106-30 because some boats fished in more than one subdistrict.

| Week | Start <br> Date | Catch |  |  |  |  | Effort |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  | Permit |
|  |  | Chinook | Sockeye | Coho | Pink ${ }^{3}$ | Chum | Permits | Days | Days |
| 25 | 18-Jun | 286 | 6,725 | 815 | 396 | 15,603 | 67 | 2 | 134 |
| 26 | $25-\mathrm{Jon}$ | 208 | 12,223 | 2,559 | 7,739 | 19,772 | 88 | 2 | 176 |
| 27 | 2-JuI | 142 | 14,11] | 3,884 | 14,676 | 29,601 | 95 | 2 | 190 |
| 28 | $9 . \mathrm{Jul}$ | 177 | 22,761 | 3,905 | 13,885 | 29,192 | 114 | 2 | 228 |
| 29 | $16-\mathrm{Jul}$ | 51 | 18,500 | 3,803 | 11,212 | 32,100 | 122 | 2 | 244 |
| 30 | 23-Jul | 42 | 39,631 | 7,669 | 24,996 | 35,586 | 116 | 3 | 348 |
| 31 | 30-Jul | 18 | 28,030 | 9,581 | 40,571 | 29,268 | 131 | 2 | 262 |
| 32 | 6-Aug | 27 | 24,862 | 11,373 | 88,278 | 27,606 | 121 | 2 | 242 |
| 33 | 13-Aug | 0 | 23,795 | 20,232 | 96,902 | 31,466 | 127 | 3 | 381 |
| 34 | 20-Aug | 0 | 11,828 | 21,234 | 88,415 | 18,013 | 143 | 3 | 429 |
| 35 | 27-Aug | 0 | 4,016 | 33,630 | 45,848 | 12,661 | 126 | 3 | 378 |
| 36 | 3-Scp | 0 | 712 | 34,678 | 14,454 | 11,865 | 121 | 3 | 363 |
| 37 | 10-Sep | 0 | 56 | 10,550 | 696 | 3,582 | 70 | 2 | 140 |
| 38 | 17-Sep | 0 | 47 | 6,435 | 94 | 3,642 | 66 | 2 | 132 |
| 39 | 24-Sep | 0 | 1 | 213 | 1 | 121 | 10 | 1 | 10 |
| Total |  | 951 | 207,298 | 170,561 | 448,163 | 300,078 | 1,517 | 34 | 3,657 |
| Alaska Hatchery Contribution |  |  |  |  |  |  |  |  |  |
| 25 | 18-Jun | 154 | 0 | 130 |  | 6,955 |  |  |  |
| 26 | 25-Jun | 84 | 34 | 442 |  | 6,870 |  |  |  |
| 27 | $2-\mathrm{Jul}$ | 85 | 21 | 595 |  | 7,789 |  |  |  |
| 28 | 9 -Jul | 0 | 83 | 325 |  | 14,900 |  |  |  |
| 29 | 16-Jul | 15 | 605 | 166 |  | 12,313 |  |  |  |
| 30 | $23-\mathrm{Jul}$ | 0 | 1,053 | 160 |  | 7,353 |  |  |  |
| 31 | 30-Jul | 7 | 1,264 | 138 |  | 8,027 |  |  |  |
| 32 | 6-Aug | 8 | 853 | 15 |  | 7,378 |  |  |  |
| 33 | 13-Aug | 0 | 555 | 1,019 |  | 0 |  |  |  |
| 34 | 20-Aug | 0 | 79 | 2,842 |  | 832 |  |  |  |
| 35 | 27-Aug | 0 | 0 | 4,442 |  | 0 |  |  |  |
| 36 | 3-Sep | 0 | 6 | 10,263 |  | 0 |  |  |  |
| 37 | 10-Sep | 0 | 0 | 4,098 |  | 0 |  |  |  |
| 38 | 17-Sep | 0 | 0 | 2,695 |  | 0 |  |  |  |
| 39 | 24-Sep | 0 | 0 | 0 |  | 0 |  |  |  |
| 40 | 1-Oct |  |  |  |  |  |  |  |  |
| 41 | 8-Oct |  |  |  |  |  |  |  |  |
| Total |  | 353 | 4,553 | 27,330 |  | 72,417 |  |  |  |
| Catches not including Alaska hatchery contributions |  |  |  |  |  |  |  |  |  |
| 25 | 18-Jun | 132 | 6,725 | 685 | 396 | 8,648 | 67 | 2 | 134 |
| 26 | 25-Jun | 124 | 12,189 | 2,117 | 7,739 | 12,902 | 88 | 2 | 176 |
| 27 | $2-\mathrm{Jul}$ | 57 | 14,090 | 3,289 | 14,676 | 21,812 | 95 | 2 | 190 |
| 28 | 9-Jul | 177 | 22,678 | 3,580 | [3,885 | 14,292 | 114 | 2 | 228 |
| 29 | 16-Jul | 36 | 17,895 | 3,6,37 | 11,212 | 19,787 | 122 | 2 | 244 |
| 30 | 23-Jul | 42 | 38,578 | 7,509 | 24,996 | 28,233 | 116 | 3 | 348 |
| 31 | 30-Jul | I! | 26,766 | 9,443 | 40,571 | 21,241 | 131 | 2 | 262 |
| 32 | 6-Aug | 19 | 24,009 | 11,358 | 88,278 | 20,228 | 121 | 2 | 242 |
| 33 | 13-Aug | 0 | 23,240 | 19,213 | 96,902 | 31,466 | 127 | 3 | 381 |
| 34 | 20-Aug | 0 | 11,749 | 18,392 | 88,415 | 17,181 | 143 | 3 | 429 |
| 35 | 27-Autg | 0 | 4,016 | 29,188 | 45,848 | 12,661 | 126 | 3 | 378 |
| 36 | 3-Sep | 0 | 706 | 24,415 | 14,454 | 11,865 | [2] | 3 | 363 |
| 37 | 10-Sep | 0 | 56 | 6,452 | 696 | 3,582 | 70 | 2 | 140 |
| 38 | 17-Sep | 0 | 47 | 3,740 | 94 | 3,642 | 66 | 2 | 132 |
| 39 | 24-Sep | 0 | 1 | 213 | 1 | 121 | 10 | 1 | 10 |
| Total |  | 598 | 202,745 | 143,231 | 448,163 | 227,661 | 1,517 | 34 | 3,657 |

[^2]Appendix A.6. Weekly stock proportions of sockeye salmon harvested in the Alaskan District 106 commercial drift gillnet fisheries, 1995. Data based on SPA.

| Week | Alaska | Canada | Stikine |  |  |  | Thermal <br> Marked <br> Tahltan | CPUE of Stikine Fish |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | All ${ }^{\text {a }}$ <br> Tahltan | Tuy ${ }^{\text {a }}$ | $\begin{array}{r} \text { non- } \\ \text { Tahltan } \\ \hline \end{array}$ | Total |  | All ${ }^{\text {a }}$ <br> Tahltan | Tuya |  | $\mathrm{All}$ <br> Stikine |
| Proportions |  |  |  |  |  |  |  |  |  |  |  |
| 25 | 0.209 | 0.373 | 0.379 | 0.000 | 0.039 | 0.419 | 0.175 | 0.210 | 0.000 | 0.062 | 0.171 |
| 26 | 0.218 | 0.326 | 0.405 | 0.000 | 0.051 | 0.456 | 0.216 | 0.310 | 0.000 | 0.111 | 0.258 |
| 27 | 0.315 | 0.327 | 0.352 | 0.000 | 0.005 | 0.358 | 0.092 | 0.289 | 0.000 | 0.012 | 0.216 |
| 28 | 0.342 | 0.512 | 0.126 | 0.000 | 0.021 | 0.146 | 0.046 | 0.139 | 0.000 | 0.065 | 0.119 |
| 29 | 0.478 | 0.457 | 0.015 | 0.007 | 0.043 | 0.065 | 0.024 | 0.013 | 1.000 | 0.104 | 0.040 |
| 30 | 0.342 | 0.591 | 0.011 | 0.000 | 0.056 | 0.067 | 0.004 | 0.014 | 0.000 | 0.201 | 0.062 |
| 31 | 0.356 | 0.602 | 0.015 | 0.000 | 0.026 | 0.042 | 0.016 | 0.018 | 0.000 | 0.090 | 0.036 |
| 32 | 0.284 | 0.666 | 0.002 | 0.000 | 0.048 | 0.050 | 0.010 | 0.002 | 0.000 | 0.156 | 0.042 |
| 33 | 0.289 | 0.663 | 0.007 | 0.000 | 0.041 | 0.048 | 0.005 | 0.005 | 0.000 | 0.082 | 0.024 |
| 34 | 0.177 | 0.729 | 0.000 | 0.000 | 0.094 | 0.094 | 0.000 | 0.000 | 0.000 | 0.083 | 0.021 |
| 35 | 0.178 | 0.743 | 0.000 | 0.000 | 0.079 | 0.079 | 0.000 | 0.000 | 0.000 | 0.027 | 0.007 |
| 36 | 0.178 | 0.745 | 0.000 | 0.000 | 0.078 | 0.078 | 0.000 | 0.000 | 0.000 | 0.005 | 0.001 |
| 37 | 0.176 | 0.719 | 0.000 | 0.000 | 0.106 | 0.106 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 |
| 38 | 0.177 | 0.729 | 0.000 | 0.000 | 0.094 | 0.094 | 0.000 | 0.000 | 0.000 | 0.001 | 0.000 |
| 39 | 0.181 | 0.779 | 0.000 | 0.000 | 0.040 | 0.040 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Total | 0.316 | 0.560 | 0.081 | 0.001 | 0.043 | 0.124 | 0.036 |  |  |  |  |
| Catches |  |  |  |  |  |  |  |  |  |  |  |
| 25 | 1,405 | 2,505 | 2,552 | 0 | 263 | 2,815 | 1,177 | 19.0 | 0.0 | 2.0 | 21.0 |
| 26 | 2,670 | 3,985 | 4,950 | 0 | 618 | 5,568 | 2,636 | 28.1 | 0.0 | 3.5 | 31.6 |
| 27 | 4,446 | 4,620 | 4,974 | 0 | 71 | 5,045 | 1,302 | 26.2 | 0.0 | 0.4 | 26.6 |
| 28 | 7,776 | 11,651 | 2,865 | 0 | 469 | 3,334 | 1,037 | 12.6 | 0.0 | 2.1 | 14.6 |
| 29 | 8,837 | 8,462 | 279 | 125 | 797 | 1,201 | 435 | 1.1 | 0.5 | 3.3 | 4.9 |
| 30 | 13,561 | 23,410 | 453 | 0 | 2,207 | 2,660 | 143 | 1.3 | 0.0 | 6.3 | 7.6 |
| 31 | 9,970 | 16,887 | 434 | 0 | 739 | 1,173 | 436 | 1.7 | 0.0 | 2.8 | 4.5 |
| 32 | 7,050 | 16,569 | 52 | 0 | 1,191 | 1,243 | 249 | 0.2 | 0.0 | 4.9 | 5.1 |
| 33 | 6,883 | 15,772 | 156 | 0 | 984 | 1,140 | 118 | 0.4 | 0.0 | 2.6 | 3.0 |
| 34 | 2,088 | 8,625 | 0 | 0 | 1,116 | 1,116 | 0 | 0.0 | 0.0 | 2.6 | 2.6 |
| 35 | 713 | 2,984 | 0 | 0 | 319 | 319 | 0 | 0.0 | 0.0 | 0.8 | 0.8 |
| 36 | 127 | 530 | 0 | 0 | 55 | 55 | 0 | 0.0 | 0.0 | 0.2 | 0.2 |
| 37 | 10 | 40 | 0 | 0 | 6 | 6 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 38 | 8 | 34 | 0 | 0 | 4 | 4 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 39 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 65,544 | 116,075 | 16,715 | 125 | 8,839 | 25,679 | 7,533 | 90.6 | 0.5 | 31.5 | 122.7 |

Numbers may not sum due to rounding error.
a All Tahltan includes wild and thermally marked fish.

Appendix A.7. Weekly salmon catch and effort in the Alaskan District 108 commercial drift gillnet fishery, 1995. Catches do not include Ohmer Creek terminal area harvests. 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 open.

| Week | Start | Catch |  |  |  |  | Effort |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |  |
|  |  | Chinook | Sockeyc | Coho | Pink | Chum | Permits | Days | Days |
| 24 | 11-Jun | 73 | 219 | 6 | 0 | 50 | 17 | 1.0 | 17 |
| 25 | 18-Jun | 273 | 6,373 | 351 | 31 | 945 | 46 | 4.0 | 83 |
| 26 | 25-Jun | 379 | 23,976 | 348 | 1,909 | 7,356 | 87 | 5.5 | 212 |
| 27 | 2-Jul | 365 | 19,426 | 895 | 4,572 | 11,194 | 114 | 5.5 | 168 |
| 28 | $9-\mathrm{Jul}$ | 285 | 12,793 | 324 | 2,856 | 7,103 | 78 | 5.5 | 177 |
| 29 | 16-Jul | 194 | 6,896 | 732 | 8,423 | 14,629 | 75 | 4.0 | 135 |
| 30 | 23-Jul | 74 | 4,871 | 508 | 7,771 | 6,794 | 59 | 4.0 | 114 |
| 31 | 30-Jul | 25 | 871 | 329 | 4,875 | 1,980 | 13 | 2.0 | 26 |
| 32 | 6-Aug | 34 | 321 | 670 | 2,623 | 1,800 | 9 | 2.0 | 18 |
| 33 | 13-Aug | 0 | 344 | 1,394 | 3,169 | 1,143 | 15 | 3.0 | 45 |
| 34 | 20-Aug | 0 | 236 | 1,122 | 645 | 348 | 11 | 3.0 | 33 |
| 35 | 27-Aug | 0 | 368 | 5,079 | 446 | 396 | 23 | 3.0 | 69 |
| 36 | 3-Sep | 0 | 59 | 5,507 | 460 | 477 | 27 | 3.0 | 81 |
| 37 | 10-Scp | 0 | 1 | 358 | 8 | 23 | 12 | 2.0 | 24 |
| 38 | 17-Sep | 0 | 2 | 211 | 0 | 58 | 7 | 2.0 | 14 |
| Total |  | 1,702 | 76,756 | 17,834 | 37,788 | 54,296 | 593 | 49.5 | 1,214 |
| Alaska Hatchery Contribution |  |  |  |  |  |  |  |  |  |
| 24 | 11-Jun | 20 | 0 | 4 |  | 0 |  |  |  |
| 25 | 18-Jun | 117 | 0 | 0 |  | 0 |  |  |  |
| 26 | 25-Jun | 147 | 0 | 35 |  | 3,891 |  |  |  |
| 27 | 2-Jul | 98 | 0 | 118 |  | 6,446 |  |  |  |
| 28 | $9-\mathrm{Jul}$ | 191 | 0 | 26 |  | 1,671 |  |  |  |
| 29 | 16-Jul | 93 | 59 | 16 |  | 4,489 |  |  |  |
| 30 | 23-Jul | 85 | 126 | 11 |  | 1,148 |  |  |  |
| 31 | 30-Jul | 3 | 24 | 0 |  | 171 |  |  |  |
| 32 | 6-Aug | 4 | 15 | 0 |  | 254 |  |  |  |
| 33 | 13-Aug | 0 | 44 | 0 |  | 263 |  |  |  |
| 34 | 20-Aug | 0 | 0 | 230 |  | 0 |  |  |  |
| 35 | 27-Aug | 0 | 0 | 15 |  | 0 |  |  |  |
| 36 | 3-Sep | 0 | 0 | 198 |  | 0 |  |  |  |
| 37 | 10-Sep | 0 | 0 | 392 |  | 0 |  |  |  |
| 38 | 17-Sep | 0 | 0 | 40 |  | 0 |  |  |  |
| Total |  | 758 | 268 | 1,085 |  | 18,333 |  |  |  |
| Catches not including Alaska hatchery contributions |  |  |  |  |  |  |  |  |  |
| 24 | 11-Jun | 53 | 219 | 2 | 0 | 50 | 17 | 1 | 17 |
| 25 | 18-Jun | 156 | 6,373 | 351 | 31 | 945 | 46 | 4 | 83 |
| 26 | 25-Jun | 232 | 23,976 | 313 | 1,909 | 3,465 | 87 | 6 | 212 |
| 27 | 2-JuI | 267 | 19,426 | 777 | 4,572 | 4,748 | 114 | 6 | 168 |
| 28 | 9 -Jul | 94 | 12,793 | 298 | 2,856 | 5,432 | 78 | 6 | 177 |
| 29 | 16-Jul | 101 | 6,837 | 716 | 8,423 | 10,140 | 75 | 4 | 135 |
| 30 | 23-JuI | -11 | 4,745 | 497 | 7,771 | 5,646 | 59 | 4 | 114 |
| 31 | 30-Jul | 22 | 847 | 329 | 4,875 | 1,809 | 13 | 2 | 26 |
| 32 | 6-Aug | 30 | 306 | 670 | 2,623 | 1,546 | 9 | 2 | 18 |
| 33 | 13-Aug | 0 | 300 | 1,394 | 3,169 | 880 | 15 | 3 | 45 |
| 34 | 20-Aug | 0 | 236 | 892 | 645 | 348 | 11 | 3 | 33 |
| 35 | 27-Aug | 0 | 368 | 5,064 | 446 | 396 | 23 | 3 | 69 |
| 36 | 3-Scp | 0 | 59 | 5,309 | 460 | 477 | 27 | 3 | 81 |
| 37 | 10-Sep | 0 | 1 | -34 | 8 | 23 | 12 | 2 | 24 |
| 38 | 17-Sep | 0 | 2 | 171 | 0 | 58 | 7 | 2 | 14 |
| Total |  | 944 | 76,488 | 16,749 | 37,788 | 35,963 | 593 | 50 | 1,214 |

Appendix A.8. Weekly stock proportions and stock-specific catch of sockeye salmon in the Alaskan District 108 commercial drift gillnet fishery, 1995. Catches do not include Ohmer Creek terminal area harvests. Data based on SPA.

| Week | Alaska | Canada | Stikine |  |  |  | Thermal Marked Tahltan | CPUE of Stikine Fish |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\mathrm{All}^{\mathrm{a}}$ <br> Tahltan | Tuya | Tahltan | Total |  | Tahltan | Tuya | Non- <br> Tahltan |  |
| Proportions |  |  |  |  |  |  |  |  |  |  |  |
| 24 | 0.256 | 0.265 | 0.374 | 0.000 | 0.105 | 0.479 | 0.210 | 0.022 | 0.000 | 0.009 | 0.017 |
| 25 | 0.051 | 0.145 | 0.636 | 0.000 | 0.167 | 0.804 | 0.391 | 0.218 | 0.000 | 0.088 | 0.166 |
| 26 | 0.084 | 0.265 | 0.546 | 0.004 | 0.101 | 0.651 | 0.343 | 0.277 | 0.176 | 0.078 | 0.198 |
| 27 | 0.106 | 0.237 | 0.508 | 0.014 | 0.135 | 0.657 | 0.308 | 0.263 | 0.615 | 0.107 | 0.205 |
| 28 | 0.124 | 0.181 | 0.458 | 0.008 | 0.229 | 0.694 | 0.152 | 0.148 | 0.209 | 0.114 | 0.135 |
| 29 | 0.339 | 0.103 | 0.236 | 0.000 | 0.321 | 0.557 | 0.106 | 0.054 | 0.000 | 0.113 | 0.077 |
| 30 | 0.309 | 0.087 | 0.065 | 0.000 | 0.539 | 0.604 | 0.047 | 0.012 | 0.000 | 0.158 | 0.069 |
| 31 | 0.206 | 0.044 | 0.025 | 0.000 | 0.726 | 0.751 | 0.060 | 0.004 | 0.000 | 0.167 | 0.068 |
| 32 | 0.237 | 0.144 | 0.008 | 0.000 | 0.612 | 0.619 | 0.017 | 0.001 | 0.000 | 0.075 | 0.030 |
| 33 | 0.237 | 0.144 | 0.008 | 0.000 | 0.612 | 0.619 | 0.017 | 0.000 | 0.000 | 0.032 | 0.013 |
| 34 | 0.237 | 0.144 | 0.008 | 0.000 | 0.612 | 0.619 | 0.017 | 0.000 | 0.000 | 0.030 | 0.012 |
| 35 | 0.237 | 0.144 | 0.008 | 0.000 | 0.612 | 0.619 | 0.017 | 0.000 | 0.000 | 0.022 | 0.009 |
| 36 | 0.237 | 0.144 | 0.008 | 0.000 | 0.612 | 0.619 | 0.017 | 0.000 | 0.000 | 0.003 | 0.001 |
| 37 | 0.237 | 0.144 | 0.008 | 0.000 | 0.612 | 0.619 | 0.017 | 0.000 | 0.000 | 0.000 | 0.000 |
| 38 | 0.237 | 0.144 | 0.008 | 0.000 | 0.612 | 0.619 | 0.017 | 0.000 | 0.000 . | 0.001 | 0.000 |
| Total | 0.135 | 0.204 | 0.455 | 0.006 | 0.200 | 0.661 | 0.257 |  |  |  |  |
| Catch |  |  |  |  |  |  |  |  |  |  |  |
| 24 | 56 | 58 | 82 | 0 | 23 | 105 | 46 | 4.8 | 0.0 | 1.4 | 6.2 |
| 25 | 325 | 926 | 4,056 | 0 | 1,066 | 5,122 | 2,489 | 48.9 | 0.0 | 12.8 | 61.7 |
| 26 | 2,004 | 6,364 | 13,101 | 97 | 2,410 | 15,608 | 8,235 | 61.9 | 0.5 | 11.4 | 73.8 |
| 27 | 2,057 | 4,609 | 9,875 | 268 | 2,617 | 12,760 | 5,979 | 59.0 | 1.6 | 15.6 | 76.2 |
| 28 | 1,592 | 2,318 | 5,862 | 96 | 2,925 | 8,883 | 1,942 | 33.2 | 0.5 | 16.6 | 50.3 |
| 29 | 2,339 | 713 | 1,627 | 0 | 2,217 | 3,844 | 731 | 12.1 | 0.0 | 16.5 | 28.6 |
| 30 | 1,506 | 424 | 315 | 0 | 2,626 | 2,941 | 229 | 2.8 | 0.0 | 23.0 | 25.8 |
| 31 | 179 | 38 | 22 | 0 | 632 | 654 | 52 | 0.8 | 0.0 | 24.3 | 25.2 |
| 32 | 76 | 46 | 2 | 0 | 196 | 199 | 6 | 0.1 | 0.0 | 10.9 | 11.0 |
| 33 | 82 | 49 | 3 | 0 | 210 | 213 | 6 | 0.1 | 0.0 | 4.7 | 4.7 |
| 34 | 56 | 34 | 2 | 0 | 144 | 146 | 4 | 0.1 | 0.0 | 4.4 | 4.4 |
| 35 | 87 | 53 | 3 | 0 | 225 | 228 | 6 | 0.0 | 0.0 | 3.3 | 3.3 |
| 36 | 14 | 8 | 0 | 0 | 36 | 37 | 1 | 0.0 | 0.0 | 0.4 | 0.5 |
| 37 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 38 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0.0 | 0.0 | 0.1 | 0.1 |
| Total | 10,374 | 15,641 | 34,950 | 461 | 15,330 | 50,741 | 19,726 | 223.8 | 2.6 | 145.4 | 371.8 |

All Tahltan includes wild and thermally marked fish.

Appendix A.9. Weekly salmon and steelhead trout catch and effort in the Canadian commercial fishery in the lower Stikine River, 1995.

| Week | Start Date | Catch |  |  |  |  | Effort |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Chinook |  | Sockeye | Coho | Pink | Chum $\begin{array}{r}\text { Steel- } \\ \text { head }\end{array}$ |  | Permits | Days | Permit Days |
|  |  | Jacks | Large |  |  |  |  |  |  |  |  |
| 26 | 25-Jun | 315 | 468 | 4,312 | 0 | 0 | 2 | 0 | 13.50 | 4.0 | 54.0 |
| 27 | 2-Jul | 145 | 281 | 8,750 | 0 | 1 | 17 | 0 | 14.20 | 5.0 | 71.0 |
| 28 | $9-\mathrm{Jul}$ | 71 | 144 | 10,332 | 0 | 5 | 30 | 0 | 11.71 | 7.0 | 82.0 |
| 29 | 16-Jul | 53 | 129 | 9,124 | 8 | 16 | 57 | 0 | 10.86 | 7.0 | 76.0 |
| 30 | 23-Jul | 10 | 26 | 6,603 | 39 | 22 | 48 | 1 | 8.86 | 7.0 | 62.0 |
| 31 | 30-Jul | 4 | 12 | 2,923 | 113 | 2 | 15 | 10 | 6.80 | 5.0 | 34.0 |
| 32 | 6-Aug | 1 | 6 | 2,102 | 319 | 2 | 8 | 40 | 8.20 | 5.0 | 41.0 |
| 33 | 13-Aug | 0 | 1 | 500 | 185 | 0 | 32 | 8 | 6.33 | 3.0 | 19.0 |
| 34 | 20-Aug | 0 | 0 | 517 | 578 | 0 | 16 | 46 | 9.00 | 3.0 | 27.0 |
| 35 | 27-Aug | 0 | 0 | 350 | 1,097 | 0 | 24 | 58 | 7.50 | 4.0 | 30.0 |
| 36 | 3-Sep | 0 | 0 | 108 | 978 | 0 | 3 | 43 | 6.50 | 4.0 | 26.0 |
| 37 | 10-Sep | 0 | 0 | 1 | 57 | 0 | 1 | 1 | 4.00 | 2.0 | 8.0 |
| 38 | 17-Sep | 0 | 0 | 0 | 17 | 0 | 2 | 0 | 2.00 | 1.0 | 2.0 |
| 39 | 24-Sep | 0 | 0 | 0 | 15 | 0 | 1 | 1 | 1.00 | 1.0 | 1.0 |
| 40 | 1-Oct | 0 | 0 | 0 | 12 | 0 | 0 | 0 | 1.00 | 1.0 | 1.0 |
| Total |  | 599 | 1,067 | 45,622 | 3,418 | 48 | 256 | 208 |  | 59.0 | 534.0 |

Appendix A.10. Weekly sockeye salmon stock proportions and catch by stock in the Canadian commercial fishery in the lower Stikine River, 1995. Sex specific age compositions were calculated and the stock composition of the females sampled for egg diameters was expanded to the catch by age.

| Week | $\begin{aligned} & \text { Prop. } \\ & \text { Tahltan } \end{aligned}$ | Prop. <br> Tuya | Catch |  |  | Thermal <br> Marked <br> Tahltan | CPUE |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Tahltan | Tuya | $\begin{aligned} & \text { Non- } \\ & \text { Tahiltan } \end{aligned}$ |  | Tahitan | Tuya | $\begin{aligned} & \text { non- } \\ & \text { Tahltan } \end{aligned}$ | Total |
| 26 | 0.970 | 0.000 | 4,183 | 0 | 129 | 1,602 | 77.463 | 0.000 | 2.389 | 79.852 |
| 27 | 0.921 | 0.030 | 8,056 | 262 | 432 | 2,345 | 113.465 | 3.690 | 6.085 | 123.239 |
| 28 | 0.814 | 0.044 | 8,410 | 457 | 1,465 | 2,527 | 102.599 | 5.581 | 17.867 | 126.046 |
| 29 | 0.665 | 0.012 | 6,065 | 110 | 2,949 | 1,689 | 79.782 | 1.444 | 38.795 | 120.021 |
| 30 | 0.440 | 0.010 | 2,908 | 64 | 3,631 | 581 | 46.888 | 1.032 | 58.546 | 106.466 |
| 31 | 0.261 | 0.000 | 762 | 0 | 2,161 | 103 | 22.412 | 0.000 | 63.559 | 85.971 |
| 32 | 0.157 | 0.000 | 330 | 0 | 1,772 | 65 | 8.049 | 0.000 | 43.220 | 51.268 |
| 33 | 0.134 | 0.000 | 67 | 0 | 433 | 0 | 3.528 | 0.000 | 22.801 | 26.330 |
| 34 | 0.130 | 0.000 | 67 | 0 | 450 | 0 | 2.481 | 0.000 | 16.667 | 19.148 |
| 35 | 0.000 | 0.000 | 0 | 0 | 350 | 0 | 0.000 | 0.000 | 11.667 | 11.667 |
| 36 | 0.000 | 0.000 | 0 | 0 | 108 | 0 | 0.000 | 0.000 | 4.154 | 4.154 |
| 37 | 0.000 | 0.000 | 0 | 0 | 1 | 0 | 0.000 | 0.000 | 0.125 | 0.125 |
| 38 | 0.000 | 0.000 | 0 | 0 | 0 | 0 | 0.000 | 0.000 | 0.000 | 0.000 |
| 39 | 0.000 | 0.000 | 0 | 0 | 0 | 0 | 0.000 | 0.000 | 0.000 | 0.000 |
| Total |  |  | 30,848 | 893 | 13,881 | 8,912 | 456.666 | 11.747 | 285.873 | 754.286 |
| Proportion |  |  | 0.676 | 0.020 | 0.304 | 0.195 | 0.605 | 0.016 | 0.379 |  |

Appendix A.11. Weekly salmon and steelhead trout catch and effort in the Canadian commercial fishery in the upper Stikine River, 1995. It is assumed that $90 \%$ of the sockeye catch is of Tahltan Lake origin and the ratio of Tahltan to Tuya is the same as in the lower river commercial fishery.


Appendix A.12. Weekly salmon and steelhead trout catch and effort in the Canadian Aboriginal fishery located at Telegraph Creek, on the Stikine River, 1995. 90\% of the sockeye catch is assumed to be of Tahltan Lake origin and the ratio of Tahltan to Tuya is the same as in the lower river commercial fishery.

| Week | Start <br> Date | Chinook |  | Catch |  |  |  | Effort |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Sockeye | Coho | Pink | Chum | Steelhead | Permits | Days | Permit Days |
|  |  | Jacks | Large |  |  |  |  |  |  |  |  |
| 21 | 21-May | 2 | 19 | 0 | 0 | 0 | 0 | 55 | 1.6 | 11 | 17.1 |
| 22 | 28-May | 10 | 23 | 0 | 0 | 0 | 0 | 3 | 1.9 | 7 | 13.0 |
| 23 | 4-Jun | 31 | 103 | 4 | 0 | 0 | 0 | 2 | 4.7 | 7 | 33.0 |
| 24 | 11-Jun | 15 | 59 | 1 | 0 | 0 | 0 | 2 | 2.8 | 6 | 17.0 |
| 25 | 18-Jun | 47 | 111 | 20 | 0 | 0 | 0 | 0 | 3.6 | 7 | 25.0 |
| 26 | 25-Jun | 32 | 48 | 360 | 0 | 0 | 0 | 0 | 3.6 | 7 | 25.0 |
| 27 | 2-Jul | 30 | 40 | 507 | 0 | 0 | 0 | 0 | 4.7 | 7 | 33.0 |
| 28 | $9-\mathrm{Jul}$ | 24 | 52 | 1,661 | 0 | 0 | 0 | 0 | 11.1 | 7 | 78.0 |
| 29 | 16 -Jul | 30 | 50 | 1,560 | 0 | 0 | 0 | 0 | 13.6 | 7 | 95.0 |
| 30 | 23-Jul | 7 | 17 | 548 | 0 | 0 | 0 | 0 | 6.3 | 7 | 44.0 |
| 31 | 30-Jul | 13 | 24 | 441 | 0 | 0 | 0 | 0 | 4.9 | 7 | 34.0 |
| 32 | 6-Aug | 2 | 17 | 221 | 0 | 0 | 0 | 0 | 2.9 | 7 | 20.0 |
| 33 | 13-Aug | 1 | 4 | 65 | 0 | 0 | 0 | 0 | 1.7 | 7 | 11.9 |
| 34 | 20-Aug | 0 | 3 | 102 | 0 | 0 | 7 | 0 | 1.8 | 4 | 7.0 |
| Total |  | 244 | 570 | 5,490 | 0 | 0 | 7 | 62 | 65.0 | 98 | 452.9 |

Appendix A.13. Weekly salmon and steelhead trout catch and effort in the Canadian test fishery in the Stikine River, 1995.

| Week | Start Date | Catch |  |  |  |  |  |  | \# Drifts/ <br> Set Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Chinook |  | Sockeyc | Coho | Pink | Chum | Steelhead |  |
|  |  | Jacks | Adults |  |  |  |  |  |  |
| Drift gillnet |  |  |  |  |  |  |  |  |  |
| 25 | 18-Jun | 10 | 15 | 40 | 0 | 0 | 0 | 0 | 60 |
| 26 | 25-Jun | 2 | 1 | 57 | 0 | 0 | 0 | 0 | 30 |
| 27 | 2-JuI | 0 | 2 | 79 | 0 | 0 | 0 | 0 | 25 |
| 28 | 9 -Jul | 1 | 0 | 22 | 0 | 1 | 2 | 0 | 15 |
| 29 | 16-Jul | 0 | 0 | 20 | 0 | 0 | 0 | 0 | 15 |
| 30 | 23-Jul | 0 | 0 | 15 | 1 | 0 | 0 | 0 | 15 |
| 31 | 30-Jul | 0 | 0 | 24 | 2 | 0 | 2 | 1 | 25 |
| 32 | 6-Aug | 0 | 0 | 15 | 6 | 0 | 4 | 0 | 25 |
| 33 | 13-Aug | 0 | 0 | 14 | 10 | 1 | 4 |  | 40 |
| 34 | 20-Aug | 0 | 0 | 11 | 8 | 2 | 0 | 2 | 20 |
| 35 | 27-Aug | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 15 |
| Total |  | 13 | 18 | 297 | 35 | 4 | 12 | 4 | 285 |
| Set gillnet |  |  |  |  |  |  |  |  |  |
| 25 | 18-Jun | 25 | 42 | 211 | 0 | 0 | 1 | 0 | 264 |
| 26 | 25-Jun | 8 | 15 | 276 | 0 | 0 | 0 | 0 | 120 |
| 27 | 2-Jul | 2 | 1 | 132 | 0 | 0 | 1 | 0 | 72 |
| 28 | $9-\mathrm{Jul}$ | 0 | 1 | 35 | 0 | 1 | 0 | 0 | 24 |
| 29 | 16-JuI |  |  |  |  |  |  |  |  |
| 30 | 23-Jul |  |  |  |  |  |  |  |  |
| 31 | 30-Jul | 0 | 1 | 38 | 5 | 0 | 5 | 0 | 48 |
| 32 | 6-Aug | 0 | 1 | 58 | 17 | 2 | 8 | 1 | 72 |
| 33 | 13-Aug | 0 | 0 | 69 | 78 | 2 | 17 | 8 | 168 |
| 34 | 20-Aug | 0 | 0 | 21 | 34 | 0 | 7 | 3 | 72 |
| 35 | 27-Aug | 0 | 0 | 10 | 32 | 0 | 2 | 2 | 48 |
| Total |  | 35 | 61 | 850 | 166 | 5 | 41 | 14 | 888 |
| Additional Drifts |  |  |  |  |  |  |  |  |  |
| 25 | 18-Jun | 115 | 141 | 437 | 0 | 0 | 0 | 0 | 102 |
| 26 | 25-Jun | 11 | 23 | 512 | 0 | 0 | 3 | 0 | 54 |
| 27 | 2-Jul | 10 | 4 | 391 | 0 | 0 | 2 | 0 | 34 |
| 28 | 9 9-Jul |  |  |  |  |  |  |  |  |
| 29 | 16-Jul |  |  |  |  |  |  |  |  |
| 30 | 23-Jul |  |  |  |  |  |  |  |  |
| 31 | 30-Jul | 0 | 0 | 42 | 5 | 1 | 2 | 0 | 15 |
| 32 | 6-Aug | 0 | 1 | 36 | 18 | 0 | 2 | 1 | 14 |
| 33 | 13-Aug | 0 | 0 | 5 | 3 | 0 | 0 | 0 | 3 |
| Total |  | 136 | 169 | 1,423 | 26 | 1 | 9 | 1 | 222 |
| Total Test Fishery Catch |  |  |  |  |  |  |  |  |  |
| 25 | 18-Jun | 150 | 198 | 688 | 0 | 0 | 1 | 0 |  |
| 26 | 25-Jun | 21 | 39 | 845 | 0 | 0 | 3 | 0 |  |
| 27 | 2-JuI | 12 | 7 | 602 | 0 | 0 | 3 | 0 |  |
| 28 | $9-\mathrm{Jul}$ | 1 | 1 | 57 | 0 | 2 | 2 | 0 |  |
| 29 | 16-Jul | 0 | 0 | 20 | 0 | 0 | 0 | 0 |  |
| 30 | 23-Jul | 0 | 0 | 15 | 1 | 0 | 0 | 0 |  |
| 31 | 30-Jul | 0 | 1 | 104 | 12 | 1 | 9 | 1 |  |
| 32 | 6-Aug | 0 | 2 | 109 | 41 | 2 | 14 | 2 |  |
| 33 | 13-Aug | 0 | 0 | 88 | 91 | 3 | 21 | 9 |  |
| 34 | 20-Aug | 0 | 0 | 32 | 42 | 2 | 7 | 5 |  |
| 35 | 27-Aug | 0 | 0 | 10 | 40 | 0 | 2 | 2 |  |
| Total Tcst Catch |  | 184 | 248 | 2,570 | 227 | 10 | 62 | 19 |  |

Appendix A.14. Weekly catch, CPUE, and migratory timing of Tahltan and non-Tahltan sockeye stocks in the Stikine River test fishery, 1995. Sex specific age composition were calculated and the smoothed stock compositions of the females sampled for egg diameters was expanded to the catch by age.

|  | Proportions |  |  | Catch |  |  | CPUE |  |  |  | Migratory Timing |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Week | Tahltan | Tuya | non- <br> Tahltan | Tahltan | Tuya | non- <br> Tahtan | Tahltan | Tuya | non- <br> Tahltan | Total | Tahltan | Tuya | Tahltan |
| Drift gillnet |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25 | 0.900 | 0.000 | 0.100 | 36 | 0 | 4 | 0.600 | 0.000 | 0.067 | 0.667 | 0.050 | 0.000 | 0.006 |
| 26 | 0.910 | 0.009 | 0.080 | 52 | [ | 5 | 1.729 | 0.018 | 0.153 | 1.900 | 0.144 | 0.002 | 0.013 |
| 27 | 0.905 | 0.015 | 0.080 | 72 | I | 6 | 2.861 | 0.047 | 0.252 | 3.160 | 0.239 | 0.004 | 0.021 |
| 28 | 0.891 | 0.055 | 0.055 | 20 | 1 | 1 | 1.307 | 0.080 | 0.080 | 1.467 | 0.109 | 0.007 | 0.007 |
| 29 | 0.400 | 0.000 | 0.600 | 8 | 0 | 12 | 0.533 | 0.000 | 0.800 | 1.333 | 0.044 | 0.000 | 0.067 |
| 30 | 0.438 | 0.000 | 0.563 | 7 | 0 | 8 | 0.438 | 0.000 | 0.563 | 1.000 | 0.036 | 0.000 | 0.047 |
| 31 | 0.291 | 0.000 | 0.709 | 7 | 0 | 17 | 0.280 | 0.000 | 0.680 | 0.960 | 0.023 | 0.000 | 0.057 |
| 32 | 0.218 | 0.000 | 0.782 | 3 | 0 | 12 | 0.131 | 0.000 | 0.469 | 0.600 | 0.011 | 0.000 | 0.039 |
| 33 | 0.135 | 0.000 | 0.865 | 2 | 0 | 12 | 0.047 | 0.000 | 0.303 | 0.350 | 0.004 | 0.000 | 0.025 |
| 34 | 0.000 | 0.000 | 1.000 | 0 | 0 | I1 | 0.000 | 0.000 | 0.550 | 0.550 | 0.000 | 0.000 | 0.046 |
| 35 | 0.000 | 0.000 | 1.000 | 0 | 0 | 0 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| Total |  |  |  | 206 | 3 | 88 | 7.925 | 0.145 | 3.917 | 11.987 |  |  |  |
| Proportion |  |  |  | 0.693 | 0.010 | 0.298 |  |  | Proportio | n of rim | 0.661 | 0.012 | 0.327 |
| Set gillnet |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25 | 0.900 | 0.000 | 0.100 | 190 | 0 | 21 | 0.719 | 0.000 | 0.080 | 0.799 | 0.081 | 0.000 | 0.009 |
| 26 | 0.910 | 0.009 | 0.080 | 251 | 3 | 22 | 2.093 | 0.022 | 0.185 | 2.300 | 0.235 | 0.002 | 0.021 |
| 27 | 0.905 | 0.015 | 0.080 | 120 | 2 | 11 | 1.660 | 0.027 | 0.146 | 1.833 | 0.187 | 0.003 | 0.016 |
| 28 | 0.891 | 0.055 | 0.055 | 31 | 2 | 2 | 1.299 | 0.080 | 0.080 | 1.458 | 0.146 | 0.009 | 0.009 |
| $29 \sim$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 31 | 0.291 | 0.000 | 0.709 | 11 | 0 | 27 | 0.231 | 0.000 | 0.561 | 0.792 | 0.026 | 0.000 | 0.063 |
| 32 | 0.218 | 0.000 | 0.782 | 13 | 0 | 45 | 0.176 | 0.000 | 0.630 | 0.806 | 0.020 | 0.000 | 0.071 |
| 33 | 0.135 | 0.000 | 0.865 | 9 | 0 | 60 | 0.055 | 0.000 | 0.355 | 0.411 | 0.006 | 0.000 | 0.040 |
| 34 | 0.000 | 0.000 | 1.000 | 0 | 0 | 21 | 0.000 | 0.000 | 0.292 | 0.292 | 0.000 | 0.000 | 0.033 |
| 35 | 0.000 | 0.000 | 1.000 | 0 | 0 | 10 | 0.000 | 0.000 | 0.208 | 0.208 | 0.000 | 0.000 | 0.023 |
| Total |  |  |  | 62.5 | 6 | 219 | 6.233 | 0.129 | 2.537 | 8.899 | 0.700 | 0.014 | 0.285 |
| Proportion |  |  |  | 0.735 | 0.008 | 0.257 |  |  |  |  |  |  |  |
| Additional Drifts ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25 | 0.900 | 0.000 | 0.100 | 393 | 0 | 44 | 3.855 | 0.000 | 0.430 | 4.284 | 0.119 | 0.000 | 0.013 |
| 26 | 0.910 | 0.009 | 0.080 | 466 | 5 | 41 | 8.629 | 0.090 | 0.763 | 9.481 | 0.267 | 0.003 | 0.024 |
| 27 | 0.905 | 0.015 | 0.080 | 354 | 6 | 31 | 10.411 | 0.172 | 0.917 | 11.500 | 0.322 | 0.00 .5 | 0.028 |
| 28 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 29 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 31 | 0.291 | 0.000 | 0.709 | 12 | 0 | 30 | 0.816 | 0.000 | 1.984 | 2.800 | 0.025 | 0.000 | 0.061 |
| 32 | 0.218 | 0.000 | 0.782 | 8 | 0 | 28 | 0.561 | 0.000 | 2.010 | 2.571 | 0.017 | 0.000 | 0.062 |
| 33 | 0.135 | 0.000 | 0.865 | 1 | 0 | 4 | 0.225 | 0.000 | 1.442 | 1.667 | 0.007 | 0.000 | 0.045 |
| Total |  |  |  | 1,234 | 11 | 178 | 24.496 | 0.262 | 7.546 | 32.304 | 0.758 | 0.008 | 0.234 |
| Proportion |  |  |  | 0.867 | 0.008 | 0.125 |  |  |  |  |  |  |  |
| Total test fishery catches |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25 | 0.900 | 0.000 | 0.100 | 619 | 0 | 69 |  |  |  |  |  |  |  |
| 26 | 0.910 | 0.009 | 0.080 | 769 | 8 | 68 |  |  |  |  |  |  |  |
| 27 | 0.905 | 0.015 | 0.080 | 545 | 9 | 48 |  |  |  |  |  |  |  |
| 28 | 0.891 | 0.055 | 0.055 | 51 | 3 | 3 |  |  |  |  |  |  |  |
| 29 | 0.400 | 0.000 | 0.600 | 8 | 0 | 12 |  |  |  |  |  |  |  |
| 30 | 0.438 | 0.000 | 0.563 | 7 | 0 | 8 |  |  |  |  |  |  |  |
| 31 | 0.291 | 0.000 | 0.709 | 30 | 0 | 74 |  |  |  |  |  |  |  |
| 32 | 0.218 | 0.000 | 0.782 | 24 | 0 | 85 |  |  |  |  |  |  |  |
| 33 | 0.135 | 0.000 | 0.865 | 12 | 0 | 76 |  |  |  |  |  |  |  |
| 34 | 0.000 | 0.000 | 1.000 | 0 | 0 | 32 |  |  |  |  |  |  |  |
| 35 | 0.000 | 0.000 | 1.000 | 0 | 0 | 10 |  |  |  |  |  |  |  |
| Total |  |  |  | 2,064 | 20 | 486 |  |  |  |  |  |  |  |
| Proportion |  |  |  | 0.803 | 0.008 | 0.189 |  |  |  |  |  |  |  |

a Catch was appontioned based on samples from standard drift catch.

Appendix A.15. Daily counts of adult sockeye salmon passing through Tabltan Lake weir, 1995.

| Date | Count | Cumulative |  | Date | Count | Cumulative |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Count | Percent |  |  | Count | Percent |
| 8-Jut | 0 | 0 | 0.0 | 15-Aug | 152 | 39,039 | 92.3 |
| 9-Jul | 430 | 430 | 1.0 | 16-Aug | 278 | 39,317 | 92.9 |
| 10-JuI | 1,099 | 1,529 | 3.6 | 17-Aug | 140 | 39,457 | 93.2 |
| \|1-Jul | 541 | 2,070 | 4.9 | 18-Aug | 146 | 39,603 | 93.6 |
| [2-Jul | 229 | 2,299 | 5.4 | 19-Aug | 190 | 39,793 | 94.0 |
| [3-Jul | 204 | 2,503 | 5.9 | 20-Aug | 515 | 40,308 | 95.3 |
| $14-\mathrm{Jug}$ | 163 | 2,666 | 6.3 | 21-Aug | 240 | 40,548 | 95.8 |
| [5-Jul | 54 | 2,720 | 6.4 | 22-Aug | 303 | 40,85I | 96.5 |
| 16-Jul | 1,333 | 4,053 | 9.6 | 23-Aug | 146 | 40,997 | 96.9 |
| 17-Ju1 | 2,827 | 6,880 | 16.3 | 24-Aug | 165 | 41,162 | 97.3 |
| 18-JuI | 1,962 | 8,842 | 20.9 | 25-Aug | 65 | 41,227 | 97.4 |
| 19-JuI | 2,403 | 11,245 | 26.6 | 26-Aug | 109 | 41,336 | 97.7 |
| 20-Jul | 2,099 | 13,344 | 31.5 | 27-Aug | 46 | 41,382 | 97.8 |
| 21-Jul | 2,587 | 15,931 | 37.6 | 28-Aug | 92 | 41,474 | 98.0 |
| 22-Jul | 1,656 | 17,587 | 41.6 | 29-Aug | 44 | 41,518 | 98.1 |
| 23-Jul | 1,512 | 19,099 | 45.1 | 30-Aug | 9 | 41,527 | 98.1 |
| 24-Jul | 2,228 | 21,327 | 50.4 | 31-Aug | 53 | 41,580 | 98.3 |
| 25 -Jul | 1,023 | 22,350 | 52.8 | 1-Sep | 167 | 41,747 | 98.7 |
| $26-\mathrm{Jul}$ | 1,740 | 24,090 | 56.9 | 2-Sep | 81 | 41,828 | 98.8 |
| 27-Jul | 898 | 24,988 | 59.0 | 3-Sep | 86 | 41,914 | 99.0 |
| 28-Jul | 1,287 | 26,275 | 62.1 | 4-Sep | 9 | 41,923 | 99.1 |
| 29-JuI | 811 | 27,086 | 64.0 | 5-Sep | 171 | 42,094 | 99.5 |
| 30-Jul | 497 | 27,583 | 65.2 | 6 -Sep | 117 | 42,211 | 99.7 |
| 31-Jul | 590 | 28,173 | 66.6 | 7 -Sep | 70 | 42,281 | 99.9 |
| 1-Aug | 1,400 | 29,573 | 69.9 | 8 -Sep | 22 | 42,303 | 100.0 |
| 2-Aug | 1,157 | 30,730 | 72.6 | $9-\mathrm{Scp}$ | 1 | 42,304 | 100.0 |
| 3-Aug | 1,125 | 31,855 | 75.3 | 10-Sep | 1 | 42,305 | 100.0 |
| 4-Aug | 1,444 | 33,299 | 78.7 | 11-Sep | 5 | 42,310 | 100.0 |
| 5-Aug | 486 | 33,785 | 79.8 | 12-Sep | 1 | 42,311 | 100.0 |
| 6-Aug | 1,055 | 34,840 | 82.3 | 13-Sep | 1 | 42,312 | 100.0 |
| 7-Aug | 490 | 35,330 | 83.5 | 14-Sep | 0 | 42,312 | 100.0 |
| 8-Aug | 747 | 36,077 | 85.3 | 15-Sep | 4 | 42,316 | 100.0 |
| 9-Aug | 747 | 36,824 | 87.0 | 16-Sep | 1 | 42,317 | 100.0 |
| 10-Atg | 497 | 37,321 | 88.2 | 17-Scp | 0 | 42,317 | 100.0 |
| 11-Aug | 690 | 38,011 | 89.8 | 18-Sep | 0 | 42,317 | 100.0 |
| 12-Aug | 353 | 38,364 | 90.7 | 19-Sep | 0 | 42,317 | 100.0 |
| 13-Aug | 181 | 38,545 | 91.1 | 20-Sep | 0 | 42,317 | 100.0 |
| 14-Aug | 342 | 38,887 | 91.9 |  |  |  |  |
| Total Counted |  |  |  | 42,317 |  |  |  |
| Fish removed for brood stock |  |  |  | $-4,902^{3}$ |  |  |  |
| Fish removed for ESSR |  |  |  | $-10,740^{\text {b }}$ |  |  |  |
| Total Spawners |  |  |  | 26,675 |  |  |  |
| Wild Spawners |  |  |  | 16,591 |  |  |  |
| Spawners from fry plants |  |  |  | 10,084 |  |  |  |

A total of 2,451 femates and 2,451 males were taken for brood stock.
h Fish were harvested with an Excess to Salmon Spawning Requirements (ESSR) license.

Appendix A.16. Daily counts of sockeye salmon smolt migrating through Tahltan Lake smolt weir, 1995.

| Date | Count | Cumulative |  | Date | Count | Cumulative |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Count | Percent |  |  | Count | Percent |
| 5-May | 0 | 0 | 0.0 | 4-Jun | 5,013 | 496,081 | 60.3 |
| 6-May | 1 | 1 | 0.0 | 5-Jun | 3,279 | 499,360 | 60.7 |
| 7-May | 10 | 11 | 0.0 | 6-Jun | 5,569 | 504,929 | 61.4 |
| 8-May | 48 | 59 | 0.0 | 7-Jun | 29,326 | 534,255 | 65.0 |
| 9-May | 320 | 379 | 0.0 | 8-Jun | 41,446 | 575,701 | 70.0 |
| 10-May | 577 | 956 | 0.1 | 9 -Jun | 73,894 | 649,595 | 79.0 |
| 11-May | 619 | 1,575 | 0.2 | 10-Jun | 88,000 | 737,595 | 89.7 |
| 12-May | 2,493 | 4,068 | 0.5 | 11-Jun | 7,366 | 744,961 | 90.6 |
| 13-May | 3,115 | 7,183 | 0.9 | 12-Jun | 1,042 | 746,003 | 90.7 |
| 14-May | 79,404 | 86,587 | 10.5 | 13-Jun | 4,638 | 750,641 | 91.3 |
| 15-May | 26,932 | 113,519 | 13.8 | 14-Jun | 2,343 | 752,984 | 91.6 |
| 16-May | 54,526 | 168,045 | 20.4 | 15-Jun | 2,023 | 755,007 | 91.8 |
| 17-May | 51,961 | 220,006 | 26.8 | 16-Jun | 511 | 755,518 | 91.9 |
| 18-May | 53,606 | 273,612 | 33.3 | 17-Jun | 1,351 | 756,869 | 92.0 |
| 19-May | 17,962 | 291,574 | 35.5 | 18-Jun | 1,380 | 758,249 | 92.2 |
| 20-May | 13,382 | 304,956 | 37.1 | 19-Jun | 3,030 | 761,279 | 92.6 |
| 21-May | 9,376 | 314,332 | 38.2 | 20-Jun | 6,262 | 767,541 | 93.3 |
| 22-May | 12,794 | 327,126 | 39.8 | 21-Jun | 22,545 | 790,086 | 96.1 |
| 23-May | 15,260 | 342,386 | 41.6 | 22-Jun | 7,000 | 797,086 | 96.9 |
| 24-May | 7,312 | 349,698 | 42.5 | 23-Jun | 11,314 | 808,400 | 98.3 |
| 25-May | 4,513 | 354,211 | 43.1 | 24-Jun | 1,962 | 810,362 | 98.6 |
| 26-May | 2,749 | 356,960 | 43.4 | $25-\mathrm{Jun}$ | 2,518 | 812,880 | 98.9 |
| 27-May | 80,071 | 437,031 | 53.1 | 26-Jun | 3,953 | 816,833 | 99.3 |
| 28-May | 28,498 | 465,529 | 56.6 | 27-Jun | 1,754 | 818,587 | 99.6 |
| 29-May | 16,114 | 481,643 | 58.6 | 28-Jun | 3,004 | 821,591 | 99.9 |
| 30-May | 2,166 | 483,809 | 58.8 | 29-Jun | 375 | 821,966 | 100.0 |
| 31-May | 1,745 | 485,554 | 59.0 | 30-Jun | 318 | 822,284 | 100.0 |
| 1-Jun | 1,534 | 487,088 | 59.2 |  |  |  |  |
| 2-Jun | 2,230 | 489,318 | 59.5 | Wild | 767,027 |  |  |
| 3-Jun | 1,750 | 491,068 | 59.7 | Hatchery | 55,257 |  |  |


| Appendix A. 17. | Daily counts of adult chinook salmon passing through Little Tathltan weir, 1995. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Large Chinook |  |  | Chinook Jacks |  |  |
|  | Cumulative |  |  | Cumulative |  |  |
| Date | Count | Count | Percent | Count | Comnt | Percent |
| 17-Jun | --... | eir installed | .-.......... |  |  |  |
| 18-Jun | 0 | 0 | 0.0 | 0 | 0 | 0.0 |
| 19-Jun | 0 | 0 | 0.0 | 0 | 0 | 0.0 |
| 20-Jun | 3 | 3 | 0.1 | 0 | 0 | 0.0 |
| 21-Jun | 0 | 3 | 0.1 | 0 | 0 | 0.0 |
| 22-Jun | 28 | 31 | 1.0 | 1 | I | 0.7 |
| 23-Jun | 16 | 47 | 1.5 | 0 | 1 | 0.7 |
| 24-Jun | 0 | 47 | 1.5 | 0 | 1 | 0.7 |
| 25-Jun | 4 | 51 | 1.7 | 0 | 1 | 0.7 |
| 26-Jun | 0 | 51 | 1.7 | 0 | 1 | 0.7 |
| 27-Jun | 11 | 62 | 2.0 | 0 | I | - 0.7 |
| 28-Jun | 64 | 126 | 4.1 | 0 |  | 0.7 |
| 29-Jın | 114 | 240 | 7.8 | 0 | 1 | 0.7 |
| 30-Jtn | 29 | 269 | 8.8 | 4 | 5 | 3.7 |
| T-Jul | 76 | 345 | 11.2 | 1 | 6 | 4.4 |
| 2-Jul | 157 | 502 | 16.3 | 3 | 9 | 6.7 |
| 3-Jul | 108 | 610 | 19.9 | 3 | 12 | 8.9 |
| 4-Jul | 24 | 634 | 20.6 | I | 13 | 9.6 |
| 5-Jul | 0 | 634 | 20.6 | 0 | 13 | 9.6 |
| 6-Jul | 15 | 649 | 21.1 | 2 | 15 | 11.1 |
| 7-Jul | 150 | 799 | 26.0 | 6 | 21 | 15.6 |
| 8-JuI | 154 | 953 | 31.0 | 5 | 26 | 19.3 |
| $9-\mathrm{JuI}$ | 0 | 953 | 31.0 | 0 | 26 | 19.3 |
| 10-Jul | 91 | 1,044 | 34.0 | 0 | 26 | 19.3 |
| 11-Jul | 198 | 1,242 | 40.4 | 9 | 35 | 25.9 |
| 12-JuI | 0 | 1,242 | 40.4 | 0 | 35 | 25.9 |
| 13-Jul | 49 | 1,291 | 42.0 | 0 | 35 | 25.9 |
| 14-Jul | 139 | 1,430 | 46.5 | 2 | 37 | 27.4 |
| 15-Jul | 10 | 1,440 | 46.9 | 0 | 37 | 27.4 |
| 16-Jul | 68 | 1,508 | 49.1 | 1 | 38 | 28.1 |
| 17-Jul | 59 | 1,567 | 51.0 | 0 | 38 | 28.1 |
| 18-Jul | 24 | 1,591 | 51.8 | 0 | 38 | 28.1 |
| 19-Jul | 60 | 1,651 | 53.7 | 3 | 4 L | 30.4 |
| 20-Jul | 72 | 1,723 | 56.1 | 5 | 46 | 34.1 |
| 21-Jul | 22.3 | 1,946 | 63.3 | 10 | 56 | 41.5 |
| 22-Jul | 66 | 2,012 | 65.5 | 2 | 58 | 43.0 |
| 23-JuI | 74 | 2,086 | 67.9 | 1 | 59 | 43.7 |
| 24-Jul | 45 | 2,131 | 69.4 | 2 | 61 | 45.2 |
| 25-Jul | 55 | 2,186 | 71.2 | 1 | 62 | 45.9 |
| 26-Jul | 58 | 2,244 | 73.0 | 3 | 65 | 48.1 |
| 27-Jul | 21 | 2,265 | 73.7 | 2 | 67 | 49.6 |
| 28-Jul | 61 | 2,326 | 75.7 | 2 | 69 | 51.1 |
| 29-Jul | 100 | 2,426 | 79.0 | 3 | 72 | 53.3 |
| 30-Jul | 111 | 2,537 | 82.6 | 4 | 76 | 56.3 |
| 31-Jul | 88 | 2,625 | 85.4 | 9 | 85 | 63.0 |
| 1-Aug | 2 | 2,627 | 85.5 | 1 | 86 | 63.7 |
| 2-Aug | 12 | 2,639 | 85.9 | 0 | 86 | 63.7 |
| 3-Aug | 61 | 2,700 | 87.9 | 2 | 88 | 65.2 |
| 4-Aug | 100 | 2,800 | 91.1 | 4 | 92 | 68.1 |
| 5-Aug | 78 | 2,878 | 93.7 | 5 | 97 | 71.9 |
| 6-Allg | 0 | 2,878 | 93.7 | 0 | 97 | 71.9 |
| 7-Aug | 56 | 2,934 | 95.5 | 4 | 101 | 74.8 |
| 8-Aug | 21 | 2,955 | 96.2 | 3 | 104 | 77.0 |
| 9-Aug | 38 | 2,993 | 97.4 | 8 | 112 | 83.0 |
| 10-Aug | 43 | 3,036 | 98.8 | 18 | 1.30 | 96.3 |
| 11-Aug | 35 | 3,071 | 100.0 | 4 | 134 | 99.3 |
| 12-Aug | 0 | 3,071 | 100.0 | 0 | 134 | 99.3 |
| 13-Aug | 1 | 3,072 | 100.0 | 1 | 135 | 100.0 |
| 14-Aug | 0 | 3,072 | 100.0 | 0 | 135 | 100.0 |
| 15-Aug | 0 | 3,072 | 100.0 | 0 | 135 | 100.0 |
| Total Counted |  | 3,072 |  |  | 135 |  |
| Adjustments |  | 0 |  |  |  |  |
| Total Spawners |  | 3,072 |  |  | 135 |  |

Appendix B.1. Salmon catch and effort in the Alaskan Subdistrict 106-41 and 106-42 (Sumner Strait) commercial drift gillnet fishery, 1964-1995.

| Year | Catch |  |  |  |  | Effort |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Permit Days | $\begin{aligned} & \text { Days } \\ & \text { Open } \end{aligned}$ |
|  | Chinook | Sockeye | Coho | Pink | Chum |  |  |
| 1960 | 24 | 9,005 | 277 | 1,103 | 362 | 251 | 17.0 |
| 1961 | 75 | 9,488 | 1,851 | 26,435 | 9,657 | 359 | 48.0 |
| 1962 | 131 | 19,692 | 6,548 | 45,987 | 9,544 | 811 | 44.0 |
| 1963 | 308 | 45,364 | 15,702 | 134,974 | 50,301 | 2,311 | 47.0 |
| 1964 | 316 | 52,943 | 27,338 | 183,402 | 22,913 | 2,344 | 49.0 |
| 1965 | 679 | 58,736 | 30,570 | 162,271 | 15,763 | 1,658 | 50.8 |
| 1966 | 690 | 65,721 | 30,792 | 96,287 | 24,235 | 2,080 | 74.3 |
| 1967 | 668 | 60,148 | 10,573 | 52,284 | 19,626 | 1,463 | 27.0 |
| 1968 | 1,010 | 50,212 | 46,111 | 82,012 | 39,001 | 2,997 | 52.0 |
| 1969 | 607 | 46,258 | 6,094 | 92,075 | 6,393 | 1,147 | 31.0 |
| 1970 | 420 | 26,812 | 15,153 | 29,102 | 18,092 | 905 | 41.0 |
| 1971 | 671 | 33,991 | 24,727 | 283,739 | 19,329 | 1,619 | 50.0 |
| 1972 | 1,747 | 74,745 | 60,827 | 40,644 | 46,511 | 2,152 | 41.0 |
| 1973 | 1,540 | 55,254 | 24,921 | 160,297 | 62,486 | 2,253 | 26.0 |
| 1974 | 1,342 | 46,760 | 28,889 | 57,296 | 38,045 | 1,579 | 28.0 |
| 1975 | 467 | 19,319 | 4,650 | 29,340 | 7,762 | 515 | 17.0 |
| 1976 | 237 | 9,319 | 10,367 | 20,251 | 2,301 | 366 | 19.0 |
| 1977 | 202 | 47,408 | 1,819 | 51,038 | 4,240 | 447 | 17.0 |
| 1978 | 274 | 1,422 | 26,762 | 9,546 | 3,142 | 389 | 26.5 |
| 1979 | 458 | 34,807 | 12,087 | 176,395 | 16,816 | 952 | 25.0 |
| 1980 | 205 | 48,434 | 10,894 | 17,072 | 15,162 | 596 | 16.0 |
| 1981 | 598 | 132,293 | 13,161 | 220,194 | 25,682 | 1,732 | 25.0 |
| 1982 | 648 | 121,556 | 21,376 | 10,338 | 11,911 | 1,083 | 22.0 |
| 1983 | 268 | 28,153 | 41,208 | 74,347 | 13,001 | 875 | 32.0 |
| 1984 | 136 | 27,372 | 19,124 | 99,807 | 28,461 | 587 | 32.0 |
| 1985 | 548 | 172,088 | 50,577 | 319,379 | 45,566 | 1,726 | 38.0 |
| 1986 | 421 | 85,247 | 104,328 | 105,347 | 48,471 | 1,896 | 32.0 |
| 1987 | 441 | 79,165 | 17,776 | 117,059 | 25,877 | 978 | 20.0 |
| 1988 | 452 | 57,337 | 6,349 | 10,894 | 42,210 | 815 | 18.0 |
| 1989 | 581 | 107,886 | 55,671 | 418,044 | 40,156 | 1,716 | 34.0 |
| 1990 | 759 | 104,922 | 94,526 | 84,543 | 42,474 | 1,827 | 34.0 |
| 1991 | 857 | 88,723 | 136,798 | 64,182 | 84,970 | 2,118 | 39.0 |
| 1992 | 743 | 146,608 | 190,885 | 38,483 | 100,666 | 2,630 | 40.0 |
| 1993 | 458 | 129,859 | 134,902 | 296,986 | 96,995 | 2,728 | 38.0 |
| 1994 | 456 | 157,526 | 191,664 | 66,225 | 125,818 | 2,988 | 43.0 |
| Averages |  |  |  |  |  |  |  |
| 60-94 | 555 | 64,416 | 42,151 | 105,068 | 33,255 | 1,454 | 34.1 |
| 85-94 | 572 | 112,936 | 98,348 | 152,114 | 65,320 | 1,942 | 33.6 |
| 1995 | 663 | 133,713 | 109,613 | 154,004 | 189,369 | 2,349 | 34.0 |

Appendix B.2. Stock proportions and catches of sockeye salmon in the Alaskan Subdistrict 106-41 and 106-42 (Sumner Strait) commercial drift gillnet fishery, 1985-1995. Data based on SPA.

| Year | Alaska | Canada | Stikine |  |  |  | Thermal <br> Marked <br> Tahltan | $\begin{aligned} & \text { Wild } \\ & \text { Tahltan } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | All $^{2}$ Tahltan | Tuya | non- <br> Tahltan | Total |  |  |
| 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 | 0.040 | 0.127 |
| Averages |  |  |  |  |  |  |  |  |
| 85-94 | 0.600 | 0.290 | 0.070 |  | 0.040 | 0.110 |  |  |
| 1995 | 0.287 | 0.565 | 0.099 | 0.001 | 0.048 | 0.149 | 0.051 | 0.049 |
| 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 | 40,832 | 33,406 | 11,459 |  | 3,026 | 14,485 |  |  |
| 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 | 6,230 | 19,934 |
| A verages |  |  |  |  |  |  |  |  |
| 85-94 | 64,247 | 34,260 | 9,289 |  | 5,140 | 14,429 |  |  |
| 1995 | 38,343 | 75,505 | 13,292 | 125 | 6,448 | 19,865 | 6,778 | 6,514 |

Numbers do not sum due to rounding.
a All Tahltan includes wild and thermally marked fish.

Appendix B. 3 Salmon catch and effort in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 1964-1995.

| Year | Catch |  |  |  |  | Effort |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Permit Days | $\begin{aligned} & \text { Days } \\ & \text { Open } \end{aligned}$ |
|  | Chinook | Sockeye | Coho | Pink | Chum |  |  |
| 1960 | 22 | 1,349 | 59 | 143 | 140 | 118 | 13.0 |
| 1961 | 341 | 11,126 | 13,083 | 97,801 | 54,822 | 1,378 | 57.0 |
| 1962 | 1,177 | 27,341 | 35,728 | 210,633 | 49,575 | 3,882 | 52.0 |
| 1963 | 1,250 | 35,462 | 36,376 | 379,093 | 39,723 | 3,278 | 51.0 |
| 1964 | 1,766 | 23,598 | 37,316 | 259,684 | 21,305 | 3,039 | 49.0 |
| 1965 | 1,123 | 29,013 | 45,158 | 463,577 | 11,895 | 2,849 | 50.8 |
| 1966 | 975 | 24,126 | 32,031 | 304,645 | 16,521 | 2,898 | 74.3 |
| 1967 | 650 | 26,237 | 7,097 | 39,325 | 6,744 | 1,048 | 27.0 |
| 1968 | 306 | 14,459 | 21,040 | 87,095 | 22,365 | 1,968 | 52.0 |
| 1969 | 270 | 24,060 | 4,186 | 104,998 | 4,510 | 1,026 | 31.0 |
| 1970 | 365 | 15,966 | 20,317 | 65,790 | 14,139 | 1,025 | 41.0 |
| 1971 | 665 | 19,211 | 23,358 | 244,236 | 18,351 | 1,517 | 50.0 |
| 1972 | 826 | 26,593 | 32,600 | 48,823 | 25,871 | 1,276 | 41.0 |
| 1973 | 391 | 16,741 | 13,526 | 143,324 | 25,243 | 1,303 | 26.0 |
| 1974 | 584 | 10,586 | 16,762 | 47,107 | 12,264 | 712 | 28.0 |
| 1975 | 2,120 | 12,732 | 26,312 | 173,675 | 16,206 | 1,159 | 8.5 |
| 1976 | 147 | 6,162 | 8,759 | 119,188 | 4,567 | 527 | 21.0 |
| 1977 | 469 | 19,615 | 6,582 | 368,069 | 9,060 | 940 | 21.0 |
| 1978 | 2,408 | 40,152 | 28,816 | 215,169 | 13,403 | 1,148 | 16.0 |
| 1979 | 2,262 | 31,566 | 15,996 | 471,817 | 18,691 | 1,848 | 25.0 |
| 1980 | 375 | 58,988 | 5,772 | 28,594 | 11,115 | 749 | 25.0 |
| 1981 | 967 | 49,708 | 9,453 | 217,379 | 8,614 | 1,321 | 26.0 |
| 1982 | 1,000 | 72,140 | 10,288 | 15,141 | 6,719 | 647 | 21.0 |
| 1983 | 299 | 20,689 | 21,234 | 133,943 | 7,143 | 589 | 37.0 |
| 1984 | 756 | 64,281 | 22,235 | 243,448 | 41,797 | 1,236 | 24.0 |
| 1985 | 1,141 | 92,899 | 40,565 | 265,567 | 24,095 | 1,372 | 36.0 |
| 1986 | 1,283 | 60,462 | 90,584 | 203,137 | 33,818 | 1,664 | 31.0 |
| 1987 | 395 | 57,262 | 16,758 | 126,423 | 16,148 | 799 | 20.0 |
| 1988 | 652 | 35,192 | 6,754 | 58,665 | 27,410 | 682 | 19.0 |
| 1989 | 963 | 84,848 | 36,714 | 683,150 | 27,195 | 1,583 | 34.0 |
| 1990 | 1,349 | 80,883 | 69,709 | 234,643 | 30,758 | 1,676 | 34.0 |
| 1991 | 1,209 | 54,389 | 61,005 | 68,557 | 38,760 | 1,505 | 39.0 |
| 1992 | 612 | 56,547 | 108,050 | 55,765 | 39,802 | 1,603 | 40.0 |
| 1993 | 534 | 76,096 | 96,136 | 240,974 | 37,606 | 1,646 | 38.0 |
| 1994 | 298 | 53,522 | 76,167 | 113,769 | 50,200 | 1,606 | 43.0 |
| Averages |  |  |  |  |  |  |  |
| 64-94 | 876 | 40,604 | 32,622 | 188,570 | 20,720 | 1,386 | 33.2 |
| 85-94 | 844 | 65,210 | 60,244 | 205,065 | 32,579 | 1,414 | 33.4 |
| 1995 | 288 | 73,585 | 60,948 | 294,159 | 110,709 | 1,422 | 34.0 |

Appendix B.4. Stock proportions and catches of sockeye salmon in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 1985-1995. Data based on SPA.

| Year | Alaska | Canada | Stikine |  |  |  | Thermal Marked Tahltan | $\begin{array}{r} \text { Wild } \\ \text { Tahltan } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\mathrm{All}^{\mathrm{II}}$ <br> Tahltan | Tuya | $\begin{array}{r} \text { non- } \\ \text { Tahltan } \end{array}$ | Total |  |  |
| 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 | 0.015 | 0.055 |
| Average |  |  |  |  |  |  |  |  |
| 85-94 | 0.672 | 0.265 | 0.026 |  | 0.036 | 0.063 |  |  |
| 1995 | 0.370 | 0.551 | 0.047 | 0.000 | 0.032 | 0.079 | 0.010 | 0.036 |
| 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 | $\because$ |  |
| 1990 | 52,188 | 27,506 | 114 |  | 1,075 | 1,189 |  |  |
| 1991 | 37,164 | 13,971 | 2,804 |  | 450 | 3,255 |  |  |
| 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 | 789 | 2,923 |
| Average |  |  |  |  |  |  |  |  |
| 85-94 | 42,152 | 18,883 | 1,699 |  | 2,476 | 4,175 |  |  |
| 1995 | 27,201 | 40,570 | 3,423 | 0 | 2,391 | 5,814 | 755 | 2,668 |

All Tahltan includes wild and thermally marked fish.

Appendix B.5. Salmon catch and effort in the Alaskan District 106 commercial drift gillnet fisheries, 19641995. Catches do not include Blind Slough terminal area harvests. Effort maybe less than the sum of effort from 106-41/106-42 and 106-30 since some boats fished in more than one subdistrict.

| Year | Catch |  |  |  |  | Effort |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chinook | Sockeye | Coho | Pink | Chum | Permit Days | $\begin{aligned} & \text { Days } \\ & \text { Open } \end{aligned}$ |
| 1960 | 46 | 10,354 | 336 | 1,246 | 502 |  |  |
| 1961 | 416 | 20,614 | 14,934 | 124,236 | 64,479 |  |  |
| 1962 | 1,308 | 47,033 | 42,276 | 256,620 | 59,119 |  |  |
| 1963 | 1,558 | 80,826 | 52,078 | 514,067 | 90,024 |  |  |
| 1964 | 2,082 | 76,541 | 64,654 | 443,086 | 44,218 | 5,383 | 49.0 |
| 1965 | 1,802 | 87,749 | 75,728 | 625,848 | 27,658 | 4,507 | 50.8 |
| 1966 | 1,665 | 89,847 | 62,823 | 400,932 | 40,756 | 4,978 | 74.3 |
| 1967 | 1,318 | 86,385 | 17,670 | 91,609 | 26,370 | 2,511 | 27.0 |
| 1968 | 1,316 | 64,671 | 67,151 | 169,107 | 61,366 | 4,965 | 52.0 |
| 1969 | 877 | 70,318 | 10,280 | 197,073 | 10,903 | 2,112 | 31.0 |
| 1970 | 78.5 | 42,778 | 35,470 | 94,892 | 32,231 | 1,863 | 41.0 |
| 1971 | 1,336 | 53,202 | 48,085 | 527,975 | 37,680 | 2,774 | 47.0 |
| 1972 | 2,573 | 101,338 | 93,427 | 89,467 | 72,382 | 3,311 | 41.0 |
| 1973 | 1,931 | 71,995 | 38,447 | 303,621 | 87,729 | 3,300 | 26.0 |
| 1974 | 1,926 | 57,346 | 45,651 | 104,403 | 50,309 | 2,177 | 28.0 |
| 1975 | 2,587 | 32,051 | 30,962 | 203,015 | 23,968 | 1,781 | 18.0 |
| 1976 | 384 | 15,48I | 19,126 | 139.439 | 6,868 | 922 | 22.0 |
| 1977 | 671 | 67,023 | 8,401 | 419,107 | 13,300 | 1,381 | 28.0 |
| 1978 | 2,682 | 41,574 | 55,578 | 224,715 | 16,545 | 1,567 | 27.1 |
| 1979 | 2,720 | 66,373 | 28,083 | 648,212 | 35,507 | 2,784 | 31.4 |
| 1980 | 580 | 107,422 | 16,666 | 45,666 | 26,277 | 1,329 | 25.0 |
| 1981 | 1,565 | 182,001 | 22,614 | 437,573 | 34,296 | 2,928 | 26.0 |
| 1982 | 1,648 | 193,696 | 31,664 | 25,479 | 18,630 | 1,659 | 22.5 |
| 1983 | 567 | 48,842 | 62,442 | 208,290 | 20,144 | 1,422 | 31.4 |
| 1984 | 892 | 91,653 | 41,359 | 343,255 | 70,258 | 1,783 | 31.4 |
| 1985 | 1,689 | 264,987 | 91,142 | 584,946 | 69,661 | 2,625 | 31.4 |
| 1986 | 1,704 | 145,709 | 194,912 | 308,484 | 82,289 | 3,446 | 31.4 |
| 1987 | 836 | 136,427 | 34,534 | 243,482 | 42,025 | 1,726 | 19.5 |
| 1988 | 1,104 | 92,529 | 13,103 | 69,559 | 69,620 | 1,460 | [8.5 |
| 1989 | 1,544 | 192,734 | 92,385 | 1,101,194 | 67,351 | 3,080 | 34.0 |
| 1990 | 2,108 | 185,805 | 164,235 | 319,186 | 73,232 | 3,440 | 34.0 |
| 1991 | 2,066 | 143,112 | 197,803 | 132,739 | 123,730 | 3,642 | 39.0 |
| 1992 | 1,355 | 203,155 | 298,935 | 94,248 | 140,468 | 4,227 | 40.0 |
| 1993 | 992 | 205,955 | 231,038 | 537,960 | 134,601 | 4,353 | 38.0 |
| 1994 | 754 | 211,048 | 267,831 | 179,994 | [76,018 | 4,468 | 43.0 |
| Averages |  |  |  |  |  |  |  |
| 60-94 | 1,411 | 110,637 | 79,426 | 300,470 | 56,013 | 2,8.36 | 34.1 |
| 85-94 | 1,415 | 178,146 | 158,592 | 357,179 | 97,900 | 3,247 | 32.9 |
| 1995 | 951 | 207,298 | 170,561 | 448,163 | 300,078 | 3,657 | 34.0 |


| Alaska Hatchery Contribution |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1989 |  |  | 5,081 |  |  |  |  |
| 1990 |  |  | 42,859 |  |  |  |  |
| 1991 |  |  | 64,088 |  |  |  |  |
| 1992 |  |  | 84,568 |  |  |  |  |
| 1993 |  |  | 77,860 |  |  |  |  |
| 1994 | 414 | 1,667 | 39,841 |  | 67,I14 |  |  |
| Averages |  |  |  |  |  |  |  |
| 89-94 |  |  | 52,383 |  |  |  |  |
| 1995 | 353 | 4,553 | 27,330 |  | 72,417 |  |  |
| Catches not including Alaska hatchery contributions |  |  |  |  |  |  |  |
| 1989 | 1,544 | 192,734 | 87,304 | 1,101,194 | 67,351 | 3,080 | 34.0 |
| 1990 | 2,108 | 185,805 | 121,376 | 319,186 | 73,232 | 3,440 | 34.0 |
| 1991 | 2,066 | 143,112 | 133,715 | 132,739 | 123,730 | 3,642 | 39.0 |
| 1992 | 1,355 | 203,155 | 214,367 | 94,248 | 140,468 | 4,227 | 40.0 |
| 1993 | 992 | 205,955 | 153,178 | 537,960 | 134,601 | 4,353 | 38.0 |
| 1994 | 340 | 209,381 | 227,990 | 179,994 | 108,904 | 4,468 | 43.0 |
| Averages |  |  |  |  |  |  |  |
| 89-94 | 1,401 | 190,024 | 156,322 | 394,220 | 108,048 | 3,868 | 38.0 |
| 1995 | 598 | 202,745 | 143,231 | 448,163 | 227,661 | 3,657 | 34.0 |

Appendix B.6. Stock proportions and catches of sockeye salmon in the Alaskan District 106 commercial drift gillnet fisheries, 1982-1995. Catches do not include Blind Slough terminal area harvest. Data based on SPA.

| Year | Alaska | Canada | Stikine |  |  |  | Thermal <br> Marked <br> Tahltan | $\begin{array}{r} \text { Wild } \\ \text { Tahiltan } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{array}{r} \text { All }^{1} \\ \text { Tahltan } \end{array}$ | Tuya | $\begin{array}{r} \text { non- } \\ \text { Tahltan } \end{array}$ | Total |  |  |
| Proportions |  |  |  |  |  |  |  |  |
| 1982 | 0.486 | 0.319 |  |  |  | 0.194 |  |  |
| 1983 | 0.668 | 0.217 | 0.103 |  | 0.013 | 0.116 |  |  |
| 1984 | 0.658 | 0.269 | 0.029 |  | 0.044 | 0.074 |  |  |
| 1985 | 0.479 | 0.419 | 0.091 |  | 0.011 | 0.102 |  |  |
| 1986 | 0.689 | 0.293 | 0.014 |  | 0.004 | 0.018 |  |  |
| 1987 | 0.827 | 0.155 | 0.010 |  | 0.007 | 0.017 |  |  |
| 1988 | 0.874 | 0.106 | 0.020 |  | 0.001 | 0.020 |  |  |
| 1989 | 0.657 | 0.311 | 0.006 |  | 0.026 | 0.032 |  |  |
| 1990 | 0.608 | 0.371 | 0.005 |  | 0.016 | 0.021 |  |  |
| 1991 | 0.545 | 0.331 | 0.100 |  | 0.024 | 0.124 |  |  |
| 1992 | 0.595 | 0.232 | 0.070 |  | 0.102 | 0.172 |  |  |
| 1993 | 0.400 | 0.338 | 0.098 |  | 0.164 | 0.262 |  |  |
| 1994 | 0.579 | 0.254 | 0.142 |  | 0.025 | 0.167 | 0.033 | 0.108 |
| Averages |  |  |  |  |  |  |  |  |
| 83-94 | 0.631 | 0.275 | 0.057 |  | 0.037 | 0.094 |  |  |
| 1995 | 0.316 | 0.560 | 0.081 | 0.001 | 0.043 | 0.124 | 0.036 | 0.044 |
| Catches |  |  |  |  |  |  |  |  |
| 1982 | 94,225 | 61,821 |  |  |  | 37,650 |  |  |
| 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 | 77,996 | 47,376 | 14,263 |  | 3,476 | 17,740 |  |  |
| 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 | 7,019 | 22,857 |
| Averages |  |  |  |  |  |  |  |  |
| 83-94 | 96,406 | 47,221 | 9,797 |  | 6,739 | 16,536 |  |  |
| 1995 | 65,544 | 116,075 | 16,715 | 125 | 8,839 | 25,679 | 7,533 | 9,182 |

All Tahltan includes wild and thermally marked fish.

Appendix B.7. Salmon catch and effort in the Alaskan District 108 commercial drift gillnet fishery, 1964-1995. Catches do not include Ohmer Creek terminal area harvests. 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 |  |  |  |  | Effor Permit Days | $\begin{aligned} & \text { Days } \\ & \text { Open } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chinook | Sockeye | Coho | Pink | Chum |  |  |
| 1964 | 2,911 | 20,299 | 29,388 | 114,555 | 10,771 |  | 62.0 |
| 1965 | 3,106 | 21,419 | 8,301 | 4,729 | 2,480 | . | 48.0 |
| 1966 | 4,516 | 36,710 | 16,493 | 61,908 | 17,730 |  | 62.0 |
| 1967 | 6,372 | 29,226 | 6,747 | 4,713 | 5,955 |  | 40.0 |
| 1968 | 4,604 | 14,594 | 36,407 | 91,028 | 14,537 |  | 61.0 |
| 1969 | 5,021 | 19,209 | 5,790 | 11,877 | 2,311 | 967 | 46.0 |
| 1970 | 3,207 | 15,120 | 18,403 | 20,523 | 12,305 | 1,222 | 51.0 |
| 1971 | 3,717 | 18,143 | 14,876 | 21,806 | 4,665 | 1,070 | 57.0 |
| 1972 | 9,3,32 | 51,734 | 38,520 | 17,153 | 17,363 | 2,095 | 64.0 |
| 1973 | 9,254 | 21,387 | 5,837 | 6,585 | 6,680 | 1,519 | 39.0 |
| 1974 | 8,199 | 2,428 | 16,021 | 4,188 | 2,107 | 1,178 | 28.5 |
| 1975 | 1,534 | 0 | 0 | 0 | 1 | 258 | 8.0 |
| 1976 | 1,123 | 18 | 6,056 | 722 | 124 | 372 | 19.0 |
| 1977 | 1,443 | 48,374 | 14,405 | 16,253 | 4,233 | 742 | 23.0 |
| 1978 | 531 | 56 | 32,650 | 1,157 | 1,001 | 565 | 12.0 |
| 1979 | 91 | 2,158 | 234 | 13,478 | 1,064 | 94 | 5.0 |
| 1980 | 631 | 14,053 | 2,946 | 7,224 | 6,910 | 327 | 22.0 |
| 1981 | 283 | 8,833 | 1,403 | 1.466 | 3,594 | 177 | 9.0 |
| 1982 | 1,033 | 6,911 | 19,971 | 16,988 | 741 | 494 | 21.0 |
| 1983 | 47 | 178 | 15,369 | 4,171 | 675 | 263 | 17.0 |
| 1984 | 14 | 1,290 | 5,141 | 4,960 | 1,892 | 56 | 8.6 |
| 1985 | 20 | 1,060 | 1,926 | 5,325 | 1,892 | 70 | 14.0 |
| 1986 | 102 | 4,185 | 7,439 | 4,901 | 5,928 | 246 | 25.0 |
| 1987 | 149 | 1,629 | 1,015 | 3,343 | 949 | 81 | 13.0 |
| 1988 | 206 | 1,246 | 12 | 144 | 3,109 | 66 | 8.0 |
| 1989 | 310 | 10,083 | 4,261 | 27,640 | 3,375 | 216 | 28.0 |
| 1990 | 557 | 11,574 | 8,218 | 13,822 | 9,382 | 359 | 34.0 |
| 1991 | 1,504 | 22,275 | 15,864 | 10,935 | 11,402 | 1,114 | 48.5 |
| 1992 | 967 | 52,717 | 22,127 | 66,742 | 15,458 | 1,029 | 51.0 |
| 1993 | 1,628 | 76,874 | 14,307 | 39,661 | 22,504 | 1,333 | 48.0 |
| 1994 | 1,996 | 97,224 | 44,891 | 35,405 | 27,658 | 2,908 | 57.0 |
| Averages |  |  |  |  |  |  |  |
| 64-94 | 2,400 | 19,710 | 13,388 | 20,432 | 7,058 | 724 | 33.2 |
| 85-94 | 744 | 27,887 | 12,006 | 20,792 | 10,166 | 742 | 32.7 |
| 1995 | 1,702 | 76,756 | 17,834 | 37,788 | 54,296 | 1,214 | 49.5 |


| Alaska Hatchery Contribution |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1989 |  | 55 |  |  |  |  |
| 1990 |  | 2,539 |  |  |  |  |
| 1991 |  | 3,458 |  |  |  |  |
| 1992 |  | 7,036 |  |  |  |  |
| 1993 |  | 887 |  |  |  |  |
| 1994 571 | 4 | 2,040 |  | 2,159 |  |  |
| Averages |  |  |  |  |  |  |
| 89.94 |  | 2,669 |  |  |  |  |
| 1995 | 268 | 1,085 |  | 18,333 |  |  |
| Catches not including Alaska hatchery contributions |  |  |  |  |  |  |
| 1989 310 | 10,083 | 4,206 | 27,640 | 3,375 | 216 | 28.0 |
| 1990 557 | 11,574 | 5,679 | 13,822 | 9,382 | 359 | 34.0 |
| 1991 1,504 | 22,275 | 12,406 | 10,935 | 11,402 | 1,114 | 48.5 |
| 1992967 | 52,717 | 15,091 | 66,742 | 15,458 | 1,029 | 51.0 |
| 1993 1,628 | 76,874 | 13,420 | 39,661 | 22,504 | 1,333 | 48.0 |
| 1994 1,425 | 97,220 | 42,851 | 35,405 | 25,499 | 2,908 | 57.0 |
| Averages |  |  |  |  |  |  |
| 89-94 1,065 | 45,124 | 15,609 | 32,368 | 14,603 | 1,160 | 44.4 |
| 1995 | 76,488 | 16,749 | 37,788 | 35,963 | 1,214 | 49.5 |

Appendix B.8. Stock proportions and catches of sockeye salmon in the Alaskan District 108 commercial drift gillnet fishery, 1985-1995. Catches do not include Ohmer Creek terminal area harvests. Data based on SPA.

| Year | Alaska | Canada | Stikine |  |  |  | Thermal <br> Marked <br> Tahltan | $\begin{gathered} \text { Wild } \\ \text { Tahltan } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | All $^{\text {a }}$ Tahltan | Tuya | $\begin{array}{r} \text { non- } \\ \text { Tahltan } \end{array}$ | Total |  |  |
| 1984 |  |  |  |  |  |  |  |  |
| 1985 | 0.064 | 0.000 | 0.292 |  | 0.644 | 0.936 |  |  |
| 1986 | 0.206 | 0.017 | 0.094 |  | 0.683 | 0.777 |  |  |
| 1987b | 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 | 0.116 | 0.246 |
| Averages |  |  |  |  |  |  |  |  |
| 85-94 | 0.201 | 0.073 | 0.242 |  | 0.484 | 0.726 |  |  |
| 1995 | 0.135 | 0.204 | 0.455 | 0.006 | 0.200 | 0.661 | 0.257 | 0.198 |
| 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 | 11,286 | 23,936 |
| Averages |  |  |  |  |  |  |  |  |
| 85-94 | 6,909 | 3,645 | 8,058 |  | 9,275 | 17,332 |  |  |
| 1995 | 10,374 | 15,641 | 34,950 | 461 | 15,330 | 50,741 | 19,726 | 15,224 |

Numbers do not sum due to rounding.
a All Tahltan includes wild and thermally marked fish.
b There was no data available to determine the ratio of Tahltan to non-Tahltan Stikine stocks; a 1:1 ratio was assumed.

Appendix B.9. Salmon catch in the Alaskan Subdistrict 106-41 (Sumner Strait) test fishery, 19841995.

| Year | Catch |  |  |  |  | Boat Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chinook | Sockeye | Coho | Pink | Chum |  |
| 1984 | 13 | 1,370 | 101 | 975 | 793 | 142.51 |
| 1985 | 16 | 4,345 | 301 | 3,230 | 746 | 156.31 |
| 1986 | 23 | 982 | 177 | 60 | 248 | 99.45 |
| 1987 | 24 | 2,659 | 799 | 4,117 | 741 | 508.10 |
| 1988 | 11 | 1,020 | 89 | 137 | 772 | 121.00 |
| 1989 | 11 | 2,043 | 275 | 6,069 | 856 | 60.20 |
| 1990 | 13 | 2,256 | 432 | 372 | 552 | 7.00 |
| 1991 | There was no test fishery in 1991. |  |  |  |  |  |
| 1992 | There was no test fishery in 1992. |  |  |  |  |  |
| 1993 | There was no test fishery in 1993. |  |  |  |  |  |
| 1994 | 0 | 12 |  | 0 | 16 | 11.00 |
| 1995 | There was no | test fishery | 1995. |  |  |  |

Appendix B.10. Stock proportions and catches of sockeye salmon in the Alaskan Subdistrict 106-41 and 106-42 (Sumner Strait) test fishery, 1984-1995. Data based on SPA.

| Year | Alaska | Canada | Stikine |  |  | Thermal Marked Tahltan | Wild Tahltan |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\mathrm{All}^{\mathrm{a}}$ <br> Tahltan | nonTahltan | Total |  |  |
| 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 |  |  |
| 1991 | There was no | est fishery | i 1991. |  |  |  |  |
| 1992 | There was no | est fishery | in 1992. |  |  |  |  |
| 1993 | There was no | est fishery | i 1993. |  |  |  |  |
| 1994 | 0.500 | 0.250 | 0.250 | 0.000 | 0.250 | 0.083 | 0.167 |
| 1995 | There was no | est fishery | i 1995. |  |  |  |  |
| Catch |  |  |  |  |  |  |  |
| 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 |  |  |
| 1991 | There was no | est fishery | 1991. |  |  |  |  |
| 1992 | There was no | est fishery | 1992. |  |  |  |  |
| 1993 | There was no | est fishery | 1993. |  |  |  |  |
| 1994 | 6 | 3 | 3 | 0 | 3 | 1 | 2 |
| 1995 | There was no | est fishery | 1995. |  |  |  |  |

a All Tahltan includes thermally marked fish.

Appendix B.11. Salmon catch in the Alaskan Subdistrict 106-30 (Clarence Strait) test fishery, 19861995.

|  | Catch |  |  |  |  | Boat <br> Year |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Chinook | Sockeye | Coho | Pink | Chum | Hours |
| 1986 | 24 | 363 | 95 | 80 | 58 | 23.25 |
| 1987 | 1 | 899 | 589 | 1,705 | 467 | 384.00 |
| 1988 | 10 | 16 | 412 | 112 | 598 | 119.70 |
| 1989 | 4 | 37 | 464 | 431 | 329 |  |
| 1990 | There was no test fishery in 1990. |  |  |  |  |  |
| 1991 | There was no test fishery in 1991. |  |  |  |  |  |
| 1992 | There was no test fishery in 1992. |  |  |  |  |  |
| 1993 | There was no test fishery in 1993. |  |  |  |  |  |
| 1994 | There was no test fishery in 1994. |  |  |  |  |  |
| 1995 | There was no test fishery in 1995. |  |  |  |  |  |

Appendix B.12. Stock proportions and catches of sockeye salmon in the Alaskan Subdistrict 106-30 (Clarence Strait) test fishery, 1986-1995. Data based on SPA.

| Year | Alaska | Canada | Stikine |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Tahltan | $\begin{array}{r} \text { non- } \\ \text { Tahltan } \end{array}$ | Total |
| 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 |
| 1990 | There was no test fishery in 1990. |  |  |  |  |
| 1991 | There was no test fishery in 1991. |  |  |  |  |
| 1992 | There was no test fishery in 1992. |  |  |  |  |
| 1993 | There was no test fishery in 1993. |  |  |  |  |
| 1994 | There was no test fishery in 1994. |  |  |  |  |
| 1995 | There was no test fishery in 1995. |  |  |  |  |
| 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 |
| 1990 | There was no test fishery in 1990. |  |  |  |  |
| 1991 | There was no test fishery in 1991. |  |  |  |  |
| 1992 | There was no test fishery in 1992. |  |  |  |  |
| 1993 | There was no test fishery in 1993. |  |  |  |  |
| 1994 | There was no test fishery in 1994. |  |  |  |  |
| 1995 | There was no test fishery in 1995. |  |  |  |  |

Appendix B.13. Salmon catch and effort in the Alaskan District 106 test fisheries 1984-1995.

| Year | Catch |  |  |  |  | Boat Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chinook | Sockeye | Coho | Pink | Chum |  |
| 1984 | 13 | 1,370 | 101 | 975 | 793 | 142.51 |
| 1985 | 16 | 4,345 | 301 | 3,230 | 746 | 156.31 |
| 1986 | 47 | 1,345 | 272 | 140 | 306 | 122.70 |
| 1987 | 25 | 3,558 | 1,388 | 5,822 | 1,208 | 892.10 |
| 1988 | 21 | 1,036 | 501 | 249 | 1,370 | 240.70 |
| 1989 | 15 | 2,080 | 739 | 6,500 | 1,185 | 60.20 |
| 1990 | 13 | 2,256 | 432 | 372 | 552 | 7.00 |
| 1991 | There were no test fisheries in 1991. |  |  |  |  |  |
| 1992 | There were no test fisheries in 1992. |  |  |  |  |  |
| 1993 | There were no test fisheries in 1993. |  |  |  |  |  |
| 1994 | 0 | 12 | 1 | 0 | 16 | 11.00 |
| 1995 | There were | test fishe | 1995. |  |  |  |

Appendix B.14. Stock proportions and catches of sockeye salmon in the Alaskan District 106 test fisheries, 1984-1995. Data based on SPA.

| Year | Alaska | Canada | Stikine |  |  | Thermal Marked Tahltan | Wild <br> Tahltan |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\mathrm{All}^{\mathrm{a}}$ Tahltan | non- <br> Tahltan | Total |  |  |
| 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 |  |  |
| 1991 | There were no | test fisher | 1991. |  |  |  |  |
| 1992 | There were no | test fisher | in 1992. |  |  |  |  |
| 1993 | There were no | test fisher | in 1993. |  |  |  |  |
| 1994 | 0.500 | 0.250 | 0.250 | 0.000 | 0.250 | 0.083 | 0.167 |
| 1995 | There were no | test fisher | - 1995. |  |  |  |  |
| Catch |  |  |  |  |  |  |  |
| 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 |  |  |
| 1991 | There were no | test fisher | 1991. |  |  |  |  |
| 1992 | There were no | test fisher | 1992. |  |  |  |  |
| 1993 | There were no | test fisher | 1993. |  |  |  |  |
| 1994 | 6 | 3 | 3 | 0 | 3 | 1 | 2 |
| 1995 | There were no | test fisher | 1995. |  |  |  |  |

[^3]Appendix B.15. Salmon catch and effort tin the Alaskan District 108 test fishery, 1984-1995.

| Year | Catch |  |  |  |  | Boat <br> Hours |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chinook | Sockeye | Coho | Pink | Chum |  |
| 1984 | 37 | 641 | 11 | 822 | 813 |  |
| 1985 | 33 | 1,258 | 11 | 465 | 381 | 71.67 |
| 1986 | 79 | 564 | 3 | 36 | 315 | 72.15 |
| 1987 | 30 | 290 | 13 | 1,957 | 488 | 76.87 |
| 1988 | 65 | 451 | 9 | 1,091 | 1,009 | 126.83 |
| 1989 | 15 | 1,038 | 45 | 2,459 | 283 | 63.47 |
| 1990 | 19 | 866 | 45 | 942 | 643 | 7.00 |
| 1991 | 21 | 893 | 18 | 390 | 455 | 154.99 |
| 1992 | 26 | 1,299 | 23 | 855 | 252 | 79.00 |
| 1993 | 30 | 303 | 0 | 18 | 31 | 45.00 |
| 1994 | There was no test fishery in 1994. |  |  |  |  |  |
| Averages |  |  |  |  |  |  |
| 84-93 | 36 | 760 | 18 | 904 | 467 | 77.44 |
| 1995 | There was no | test fishery | 995. |  |  |  |

Appendix B.16. Stock proportions and catches of sockeye salmon in the Alaskan District 108 test fishery, 1985-1995. Data based on SPA.


Appendix B.17. Salmon and steelhead trout catch and effort in the Canadian commercial fishery in the lower Stikine River, 1979-1995.

| Year | Catch |  |  |  |  |  |  | Effort <br> Permit |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chinook |  | Sockeye | Coho | Pink | Chum | Steelhead |  |  |
|  | Jacks | Large |  |  |  |  |  | Days | Days |
| $1979{ }^{\text {a }}$ | 63 | 712 | 10,534 | 10,720 | 1,994 | 424 | 264 | 756.0 | 42.0 |
| 1980 |  | 1,488 | 18,119 | 6,629 | 736 | 771 | 362 | 668.0 | 41.0 |
| 1981 |  | 664 | 21,551 | 2,667 | 3,713 | 1,128 | 280 | 522.0 | 32.0 |
| 1982 |  | 1,693 | 15,397 | 15,904 | 1,782 | 722 | 828 | 1,063.0 | 71.0 |
| 1983 | 430 | 492 | 15,857 | 6,170 | 1,043 | 274 | 667 | 434.0 | 54.0 |
| $1984{ }^{\text {b }}$ |  |  |  |  |  |  |  |  |  |
| 1985 | 91 | 256 | 17,093 | 2,172 | 2,321 | 532 | 231 | 145.5 | 22.5 |
| 1986 | 365 | 806 | 12,411 | 2,278 | 107 | 295 | 192 | 239.0 | 13.5 |
| 1987 | 242 | 909 | 6,138 | 5,728 | 646 | 432 | 217 | 287.0 | 20.0 |
| 1988 | 201 | 1,007 | 12,766 | 2,112 | 418 | 730 | 258 | 320.0 | 26.5 |
| 1989 | 157 | 1,537 | 17,179 | 6,092 | 825 | 674 | 127 | 325.0 | 23.0 |
| 1990 | 680 | 1,569 | 14,530 | 4,020 | 496 | 499 | 188 | 328.0 | 29.0 |
| 1991 | 318 | 641 | 17,563 | 2,638 | 394 | 208 | 71 | 282.4 | 39.0 |
| 1992 | 89 | 873 | 21,031 | 1,850 | 122 | 231 | 129 | 235.4 | 55.0 |
| 1993 | 164 | 830 | 38,464 | 2,616 | 29 | 395 | 63 | 483.8 | 58.0 |
| 1994 | 158 | 1,016 | 38,462 | 3,377 | 89 | 173 | 75 | 430.1 | 74.0 |
| Averages ${ }^{\text {c }}$ |  |  |  |  |  |  |  |  |  |
| 79-94 |  | 1,163 | 18,473 | 4,998 | 981 | 499 | 263 | 434.6 | 40.0 |
| 85-94 | 247 | 944 | 19,564 | 3,288 | 545 | 417 | 155 | 307.6 | 36.1 |
| 1995 | 599 | 1,067 | 45,622 | 3,418 | 48 | 256 | 208 | 534.0 | 59.0 |

The lower river commercial catch in 1979 includes the upper river commercial catch.
b There was no commercial fishery in 1984.
c Chinook average for 1979-1994 is for jacks and large fish combined.

Appendix B.18. Sockeye salmon stock proportions and catch by stock in the Canadian commercial fishery in the lower Stikine River, 1979-1995. Stock compositions based on: scale circuli counts 1970-1983; SPA in 1985; average of SPA and genetic analysis 1986; SPA in 1987 and 1988; and egg diameter in 1989-1995.

| Year | Proportions |  |  | Prop. <br> Marked <br> Tahltan | Catch |  |  | Tahltan |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Tahltan | Tuya | non- <br> Tahltan |  | Tahltan | Tuya | non- <br> Tahltan |  |  |
|  |  |  |  |  |  |  |  | Wild | Planted |
| 1979 | 0.433 |  | 0.567 |  | 4,561 |  | 5,973 |  |  |
| 1980 | 0.309 |  | 0.691 |  | 5,599 |  | 12,520 |  |  |
| 1981 | 0.476 |  | 0.524 |  | 10,258 |  | 11,293 |  |  |
| 1982 | 0.624 |  | 0.376 |  | 9,608 |  | 5,789 |  |  |
| 1983 | 0.422 |  | 0.578 |  | 6,692 |  | 9,165 |  |  |
| $1984{ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |
| 1985 | 0.623 |  | 0.377 |  | 10,649 |  | 6,444 |  |  |
| 1986 | 0.489 |  | 0.511 |  | 6,069 |  | 6,342 |  |  |
| 1987 | 0.225 |  | 0.775 |  | 1,380 |  | 4,758 |  |  |
| 1988 | 0.161 |  | 0.839 |  | 2,062 |  | 10,704 |  |  |
| 1989 | 0.164 |  | 0.836 |  | 2,813 |  | 14,366 |  |  |
| 1990 | 0.346 |  | 0.654 |  | 5,029 |  | 9,501 |  |  |
| 1991 | 0.634 |  | 0.366 |  | 11,136 |  | 6,427 |  |  |
| 1992 | 0.482 |  | 0.518 |  | 10,134 |  | 10,897 |  |  |
| 1993 | 0.537 |  | 0.463 |  | 20,662 |  | 17,802 |  |  |
| 1994 | 0.616 |  | 0.384 |  | 23,678 |  | 14,784 |  |  |
| Averages |  |  |  |  |  |  |  |  |  |
| 79-94 | 0.436 |  | 0.564 |  | 8,689 |  | 9,784 |  |  |
| 85-94 | 0.428 |  | 0.572 |  | 9,361 |  | 10,203 |  |  |
| 1995 | 0.676 | 0.020 | 0.304 | 0.195 | 30,848 | 893 | 13,881 | 21,936 | 8,912 |

There was no commercial fishery in 1984.

Appendix B.19. Salmon and steelhead trout catch and effort in the Canadian commercial fishery in the upper Stikine River, 1975-1995.

| Year | Catch |  |  |  |  |  |  | Effor <br> Permit <br> Days | Days |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chinook |  | Sockeye | Coho | Pink | Chum | Steelhead |  |  |
|  | Jacks | Large |  |  |  |  |  |  |  |
| 1975 |  | 178 | 270 | 45 | 0 | 0 | 0 |  |  |
| 1976 |  | 236 | 733 | 13 | 0 | 0 | 0 |  |  |
| 1977 |  | 62 | 1,975 | 0 | 0 | 0 | 0 |  |  |
| 1978 |  | 100 | 1,500 | 0 | 0 | 0 | 0 |  |  |
| $1979{ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |
| 1980 |  | 156 | 700 | 40 | 20 | 0 | 0 |  |  |
| 1981 |  | 154 | 769 | 0 | 0 | 0 | 0 | 11.0 | 5.0 |
| 1982 |  | 76 | 195 | 0 | 0 | 0 | 0 | 8.0 | 4.0 |
| 1983 |  | 75 | 614 | 0 | 0 | 4 | 1 | 10.0 | 8.0 |
| $1984{ }^{\text {b }}$ |  |  |  |  |  |  |  |  |  |
| 1985 |  | 62 | 1,084 | 0 | 0 | 0 | 0 | 14.0 | 6.0 |
| 1986 | 41 | 104 | 815 | 0 | 0 | 0 | 0 | 19.0 | 7.0 |
| 1987 | 19 | 109 | 498 | 0 | 0 | 19 | 0 | 20.0 | 7.0 |
| 1988 | 46 | 175 | 348 | 0 | 0 | 0 | 0 | 21.5 | 6.5 |
| 1989 | 17 | 54 | 493 | 0 | 0 | 0 | 0 | 14.0 | 7.0 |
| 1990 | 20 | 48 | 472 | 0 | 0 | 0 | 0 | 15.0 | 7.0 |
| 1991 | 32 | 117 | 761 | 0 | 0 | 0 | 0 | 13.0 | 6.0 |
| 1992 | 19 | 56 | 822 | 0 | 0 | 0 | 0 | 28.0 | 13.0 |
| 1993 | 2 | 44 | 1,692 | 0 | 0 | 0 | 2 | 48.0 | 22.0 |
| 1994 | 1 | 76 | 2,466 | 0 | 1 | 0 | 0 | 68.0 | 50.0 |
| Averages $^{\text {c }}$ |  |  |  |  |  |  |  |  |  |
| 75-94 |  | 109 | 900 | 5 | 1 | 1 | 0 |  |  |
| 85-94 | 22 | 85 | 945 | 0 | 0 | 2 | 0 | 26.1 | 13.2 |
| 1995 | 17 | 9 | 2,355 | 0 | 0 | 0 | 0 | 59.0 | 25.0 |

Catches in 1979 were included in the lower river commercial catches.
b There was no commercial fishery in 1984.
c Chinook average for 1975-1994 is for jacks and large fish combined.

Appendix B.20. Salmon and steelhead trout catch in the Canadian aboriginal fishery located at Telegraph Creek, on the Stikine River, 1972-1995.

| Year | Catch |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chinook |  | Sockeye | Coho | Pink | Chum | Steelhead |
|  | Jacks | Large |  |  |  |  |  |
| 1972 |  |  | 4,373 | 0 | 0 | 0 | 0 |
| 1973 |  | 200 | 3,670 | 0 | 0 | 0 | 0 |
| 1974 |  | 100 | 3,500 | 0 | 0 | 0 | 0 |
| 1975 |  | 1,024 | 1,982 | 5 | 0 | 0 | 0 |
| 1976 |  | 924 | 2,911 | 0 | 0 | 0 | 0 |
| 1977 |  | 100 | 4,335 | 0 | 0 | 0 | 0 |
| 1978 |  | 400 | 3,500 | 0 | 0 | 0 | 0 |
| 1979 |  | 850 | 3,000 | 0 | 0 | 0 | 0 |
| 1980 |  | 587 | 2,100 | 100 | 0 | 0 | 0 |
| 1981 |  | 586 | 4,697 | 200 | 144 | 0 | 4 |
| 1982 |  | 618 | 4,948 | 40 | 60 | 0 | 0 |
| 1983 | 215 | 851 | 4,649 | 3 | 77 | 26 | 46 |
| 1984 | 59 | 643 | 5,327 | 1 | 62 | 0 | 2 |
| 1985 | 94 | 793 | 7,287 | 3 | 35 | 4 | 9 |
| 1986 | 569 | 1,026 | 4,208 | 2 | 0 | 12 | 2 |
| 1987 | 183 | 1,183 | 2,979 | 3 | 0 | 8 | 2 |
| 1988 | 197 | 1,178 | 2,177 | 5 | 0 | 3 | 3 |
| 1989 | 115 | 1,078 | 2,360 | 6 | 0 | 0 | 0 |
| 1990 | 259 | 633 | 3,022 | 17 | 0 | 0 | 11 |
| 1991 | 310 | 753 | 4,439 | 10 | 0 | 0 | 0 |
| 1992 | 131 | 911 | 4,431 | 5 | 0 | 0 | 3 |
| 1993 | 142 | 929 | 7,041 | 0 | 0 | 0 | 2 |
| 1994 | 191 | 698 | 4,167 | 4 | 0 | 0 | 9 |
| Averages $^{\text {a }}$ |  |  |  |  |  |  |  |
| 72-94 |  | 806 | 3,961 | 18 | 16 | 2 | 4 |
| 85-94 | 219 | 918 | 4,211 | 6 | 4 | 3 | 4 |
| 1995 | 244 | 570 | 5,490 | 0 | 0 | 7 | 62 |

a Chinook average for 1972-1994 is for jacks and large fish combined.

Appendix B.21. Catch by stock for sockeye salmon harvested in the Canadian upper river commercial and aboriginal fisheries in the Stikine River, 1972-1995.

|  | Upper River Commercial |  |  |  |  | Canadian Aboriginal Fishery |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Tahltan | Tuya | NonTahltan | Tahltan |  | Tahltan | Planted Tuya | Non- <br> Tahltan | Tahltan |  |
|  |  |  |  | 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 | 0 |  | 0 |  |  | 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 | 0 |  | 0 |  |  | 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 |  |  | 3,750 |  | 417 |  |  |
| Averages |  |  |  |  |  |  |  |  |  |  |
| 72-94 | 729 |  | 81 |  |  | 3,565 |  | 396 |  |  |
| 85-94 | 851 |  | 95 |  |  | 3,790 |  | 42 I |  |  |
| 1995 | 2,120 | 60 | 176 | 1,507 | 612 | 4,941 | 139 | 410 | 3,514 | 1,427 |

Appendix B.22. Salmon and steelhead trout catch in the combined Canadian net fisheries in the Stikine River, 1972-1995. ESSR catches not included.

| Year | Catch |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chinook |  | Sockeye | Coho | Pink | Chum | Steelhead |
|  | Jacks | Large |  |  |  |  |  |
| 1972 | 0 | 0 | 4,373 | 0 | 0 | 0 | 0 |
| 1973 | 0 | 200 | 3,670 | 0 | 0 | 0 | 0 |
| 1974 | 0 | 100 | 3,500 | 0 | 0 | 0 | 0 |
| 1975 | 0 | 1,202 | 2,252 | 50 | 0 | 0 | 0 |
| 1976 | 0 | 1,160 | 3,644 | 13 | 0 | 0 | 0 |
| 1977 | 0 | 162 | 6,310 | 0 | 0 | 0 | 0 |
| 1978 | 0 | 500 | 5,000 | 0 | 0 | 0 | 0 |
| 1979 | 63 | 1,562 | 13,534 | 10,720 | 1,994 | 424 | 264 |
| 1980 | 0 | 2,231 | 20,919 | 6,769 | 756 | 771 | 362 |
| 1981 | 0 | 1,404 | 27,017 | 2,867 | 3,857 | 1,128 | 284 |
| 1982 | 0 | 2,387 | 20,540 | 15,944 | 1,842 | 722 | 828 |
| 1983 | 645 | 1,418 | 21,120 | 6,173 | 1,120 | 304 | 714 |
| $1984{ }^{\text {a }}$ | 59 | 643 | 5,327 | 1 | 62 | 0 | 2 |
| 1985 | 185 | 1,111 | 25,464 | 2,175 | 2,356 | 536 | 240 |
| 1986 | 975 | 1,936 | 17,434 | 2,280 | 107 | 307 | 194 |
| 1987 | 444 | 2,201 | 9,615 | 5,731 | 646 | 459 | 219 |
| 1988 | 444 | 2,360 | 15,291 | 2,117 | 418 | 733 | 261 |
| 1989 | 289 | 2,669 | 20,032 | 6,098 | 825 | 674 | 127 |
| 1990 | 959 | 2,250 | 18,024 | 4,037 | 496 | 499 | 199 |
| 1991 | 660 | 1,511 | 22,763 | 2,648 | 394 | 208 | 71 |
| 1992 | 239 | 1,840 | 26,284 | 1,855 | 122 | 231 | 132 |
| 1993 | 308 | 1,803 | 47,197 | 2,616 | 29 | 395 | 67. |
| 1994 | 350 | 1,790 | 45,095 | 3,381 | 90 | 173 | 84 |
| Averages ${ }^{\text {b }}$ |  |  |  |  |  |  |  |
| 72-94 |  | 1,655 | 16,713 | 3,282 | 657 | 329 | 176 |
| 85-94 | 485 | 1,947 | 24,720 | 3,294 | 548 | 422 | 159 |
| 1995 | 860 | 1,646 | 53,467 | 3,418 | 48 | 263 | 270 |

There was no commercial fishery in 1984.
b Chinook average for 1972-1994 is for jacks and large fish combined.

Appendix B.23. Salmon catches in the Stikine River harvested under Canadian ESSR licenses, 19921995.

| Year | Sockeye | Wild | Planted |
| ---: | ---: | ---: | ---: |
| 1992 |  |  |  |
| 1993 | 1,752 | 1,714 | 38 |
| 1994 | 6,852 | 5,682 | 1,170 |
| 1995 | 10,740 | 6,680 | 4,060 |

Appendix B.24. Salmon and steelhead trout catches and effort in Canadian test fisheries in the Stikine River, 1985-1995.

|  | Catclies |  |  |  |  |  |  | $\begin{array}{r} \text { Effort } \\ \text { Drift }=\text { \# } \\ \text { Set }=\text { hr. } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chinook |  |  |  |  |  |  |  |
| Year | Jacks | Large | Sockeye | Coho | Pink | Chum | Steelhead |  |
| Drift Test Fishery Catches |  |  |  |  |  |  |  |  |
| 1985 |  |  |  |  |  |  |  |  |
| 1986 | 12 | 27 | 412 | 226 | 8 | 25 | 0 | 405 |
| $1987{ }^{\text {a }}$ |  | 128 | 385 | 162 | 111 | 61 | 0 | 845 |
| 1988 | 14 | 168 | 325 | 75 | 9 | 33 | 7 | 720 |
| 1989 | 4 | 116 | 364 | 242 | 41 | 46 | 5 | 870 |
| 1990 | 6 | 167 | 447 | 134 | 5 | 29 | 6 | 673 |
| 1991 | 1 | 90 | 503 | 118 | 37 | 30 | 3 | 509 |
| 1992 | 27 | 135 | 393 | 75 | 13 | 23 | 7 | 312 |
| 1993 | 11 | 94 | 440 | 37 | 6 | 18 | 7 | 304 |
| 1994 | 4 | 4.3 | 179 | 71 | 6 | 20 | 7 | 175 |
| Averages |  |  |  |  |  |  |  |  |
| 85-94 | 10 | 108 | 383 | 127 | 26 | 32 | 5 | 535 |
| 1995 | 13 | 18 | 297 | 35 | 4 | 12 | 4 | 285 |
| Sct Test Fishery Catches |  |  |  |  |  |  |  |  |
| 1985 |  |  | 1,340 |  |  |  |  |  |
| 1986 |  |  |  |  |  |  |  |  |
| $1987^{\text {a }}$ |  | 61 | 1,283 | 620 | 587 | 193 | 0 | 1,456 |
| 1988 | 15 | 101 | 922 | 130 | 23 | 65 | 14 | 1,380 |
| 1989 | 20 | 101 | 1,243 | 502 | 249 | 103 | 17 | 1,392 |
| 1990 | 12 | 64 | 1,493 | 271 | 42 | 48 | 18 | 1,212 |
| 1991 | 15 | 77 | 1,872 | 127 | 197 | 48 | 1 | 1,668 |
| 1992 | 21 | 62 | 1,971 | 193 | 56 | 43 | 19 | 1,249 |
| 1993 | 11 | 85 | 1,384 | 136 | 6 | 63 | 6 | 1,224 |
| 1994 | 34 | 74 | 414 | 0 | 0 | 0 | 0 | 456 |
| Averages |  |  |  |  |  |  |  |  |
| 85-94 | 18 | 78 | 1,325 | 247 | 14.5 | 70 | 9 | 1,255 |
| 1995 | 35 | 61 | 850 | 166 | 5 | 41 | 14 | 888 |

Additional Test Fishery Catches
1985
1986
1987
1988
1989
1990
1991

| 1991 | 134 | 417 | 594 | 0 | 0 | 0 | 0 | 85 |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1992 | 65 | 389 | 1,925 | 2 | 1 | 3 | 2 | 266 |
| 1993 | 40 | 178 | 840 | 0 | 0 | 0 | 0 | 131 |


| Averages |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 85-94 | 80 | 328 | 1,120 | 1 | 0 | 1 | 1 | 161 |
| 1995 | 136 | 169 | 1,423 | 26 | ! | 9 | 1 | 222 |
| Total Test Fishery Catehes |  |  |  |  |  |  |  |  |
| 1985 | 0 | 0 | 1,340 | 0 | 0 | 0 | 0 |  |
| 1986 | 12 | 27 | 412 | 226 | 8 | 25 | 0 |  |
| 1987 | 30 | 189 | 1,668 | 782 | 698 | 254 | 0 |  |
| 1988 | 29 | 269 | 1,247 | 205 | 32 | 98 | 2 I |  |
| 1989 | 24 | 217 | 1,607 | 744 | 290 | 149 | 22 |  |
| 1990 | 18 | 231 | 1,940 | 405 | 47 | 77 | 24 |  |
| 1991 | 16 | 167 | 2,375 | 245 | 234 | 78 | 4 |  |
| 1992 | 182 | 614 | 2,958 | 268 | 69 | 66 | 26 |  |
| 1993 | 87 | 568 | 3,749 | 175 | 13 | 84 | 15 |  |
| 1994 | 78 | 295 | 1,433 | 71 | 6 | 20 | 7 |  |
| Averages |  |  |  |  |  |  |  |  |
| 85-94 | 48 | 258 | 1,873 | 312 | 140 | 85 | 12 |  |
| 1995 | 184 | 248 | 2,570 | 227 | 10 | 62 | 19 |  |

Appendix B.25. Sockeye salmon stock proportions and catch by stock in the test fishery in the lower Stikine River, 1985-1995. Stock composition based on: SPA 1985; average of SPA and GPA 1986-1988; egg diameter 1989-1995.

| Year | Catch Tahltan |  | Catch <br> Tuya | Catch Thermalnon- MarkedTahltan Tahltan | Proportion Tahltan |  | Average Proportion ${ }^{\text {a }}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | non- |
|  | U.S. | Canada |  |  | U.S. | Canada | Tahltan | Tuya | Tahltan |
| 1985 | 560 | 439 |  |  | 841 | 0.418 | 0.328 | 0.372 |  | 0.628 |
| 1986 | 164 | 127 |  | 267 | 0.398 | 0.308 | 0.352 |  | 0.648 |
| 1987 | 513 | 397 |  | 1,213 | 0.308 | 0.238 | 0.273 |  | 0.727 |
| 1988 | 408 | 295 |  | 895 | 0.327 | 0.237 | 0.282 |  | 0.718 |
| 1989 |  | 414 |  | 1,192 |  | 0.258 | 0.258 |  | 0.742 |
| 1990 |  | 822 |  | 1,058 |  | 0.454 | 0.454 |  | 0.546 |
| 1991 |  | 1,443 |  | 931 |  | 0.608 | 0.608 |  | 0.392 |
| 1992 |  | 1,912 |  | 1,046 |  | 0.646 | 0.646 |  | 0.354 |
| 1993 |  | 2,184 |  | 1,564 |  | 0.583 | 0.583 |  | 0.417 |
| 1994 |  | 1,228 |  | 205 |  | 0.857 | 0.857 |  | 0.143 |
| Averages |  |  |  |  |  |  |  |  |  |
| 85-94 |  |  |  |  |  |  | 0.469 |  | 0.531 |
| 1995 |  | 2,064 | 20 | $486 \quad 729$ |  | 0.803 | 0.803 | 0.008 | 0.189 |

Average proportions are from averages of weekly estimates.

Appendix B.26. Estimated proportion of inriver run comprised of Tahltan Lake and non-Tahltan sockeye stocks, 1979-1995. Stock compositions based on: scale circuli counts 19791983; SPA in 1985; average of SPA and GPA 1986-1988; and egg diameter analysis in 1989-1994. 1994 \& 1995 data from commercial catch and CPUE.

| Year | Tahltan |  | Average ${ }^{\text {a }}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | non- |
|  | U.S. | Canada | Tahltan | Tuya | Tahltan |
| 1979 | 0.433 |  | 0.433 |  | 0.567 |
| 1980 | 0.305 |  | 0.305 |  | 0.695 |
| 1981 | 0.475 |  | 0.475 |  | 0.525 |
| 1982 | 0.618 |  | 0.618 |  | 0.382 |
| 1983 | 0.489 | 0.423 | 0.456 |  | 0.544 |
| 1984 | 0.635 | 0.394 | 0.493 |  | 0.507 |
| 1985 | 0.621 | 0.363 | 0.466 |  | 0.534 |
| 1986 | 0.398 | 0.500 | 0.449 |  | 0.551 |
| 1987 | 0.338 | 0.257 | 0.304 |  | 0.696 |
| 1988 | 0.209 | 0.122 | 0.172 |  | 0.828 |
| 1989 |  | 0.188 | 0.188 |  | 0.812 |
| 1990 |  | 0.417 | 0.417 |  | 0.583 |
| 1991 |  | 0.561 | 0.561 |  | 0.439 |
| 1992 |  | 0.496 | 0.496 |  | 0.504 |
| 1993 |  | 0.477 | 0.477 |  | 0.523 |
| 1994 |  | 0.606 | 0.606 |  | 0.394 |
| Averages |  |  |  |  |  |
| 79-94 |  |  | 0.432 |  | 0.568 |
| 85-94 |  |  | 0.414 |  | 0.586 |
| 1995 |  | 0.578 | 0.578 | 0.016 | 0.406 |

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

Appendix B.27. Counts of adult sockeye salmon migrating through Tahltan Lake weir, 1959-1995.

Thermal mark data not yet available.

| Year | Weir | Date of Arrival |  |  | Total BroodCount stock |  | ESSR | Total Spawners | Natural Spawners | Hatchery Spawners |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Installed | First | 50\% | 90\% |  |  |  |  |  |  |
| 1959 | 30-Jun | 02-Aug | 12-Aug | 16-Aug | 4,311 |  |  |  |  |  |
| 1960 | 15-Jul | 02-Aug | 24-Aug | 27-Aug | 6,387 |  |  |  |  |  |
| 1961 | 20-Jul | 09-Aug | 11-Aug | 15-Aug | 16,619 |  |  |  |  |  |
| $1962^{\text {a }}$ | 01-Aug | 02-Aug | 05-Aug | 08-Aug | 14,508 |  |  |  |  |  |
| $1963{ }^{\text {b }}$ | 03-Aug |  |  |  | 1,780 |  |  |  |  |  |
| 1964 | 23-Jul | 26-Jul | 14-Aug | 25-Aug | 18,353 |  |  |  |  |  |
| $1965^{\text {c }}$ | 19-Jul | 18-Jul | 02-Sep | 07-Sep | 1,471 |  |  |  |  |  |
| 1966 | 12-Jul | 03-Aug | 13-Aug | 21-Aug | 21,580 |  |  |  |  |  |
| 1967 | 11-Jul | 14-Jul | 21-Jul | 28-Jul | 38,801 |  |  |  |  |  |
| 1968 | 11-Jul | 21-Jul | $25-\mathrm{Jul}$ | 08-Aug | 19,726 |  |  |  |  |  |
| 1969 | 07-Jul | 11-Jul | 18-Jul | 31-Jul | 11,805 |  |  |  |  |  |
| 1970 | $05-\mathrm{Jul}$ | 25-Jul | 01-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 | 52,545 |  |  |  |  |  |
| 1973 | $10-\mathrm{Jul}$ | 24-Jul | 30-Jul | 07-Aug | 2,877 |  |  |  |  |  |
| 1974 | 03-Jul | 28-Jul | 03-Aug | 17-Aug | 8,101 |  |  |  |  |  |
| 1975 | 10-Jul | 25-Jul | 08-Aug | 17-Aug | 8,159 |  |  |  |  |  |
| 1976 | 16-Jul | 29-Jul | 01-Aug | 06-Aug | 24,111 |  |  |  |  |  |
| 1977 | $06-\mathrm{Jul}$ | 11-Jul | 16-Jul | 10-Aug | 42,960 |  |  |  |  |  |
| 1978 | 10-Jul | 10-Jul | $20-\mathrm{Jul}$ | 29-Jul | 22,788 |  |  |  |  |  |
| 1979 | 09 -Jul | 23 -Jul | 01-Aug | 11-Aug | 10,211 |  |  |  |  |  |
| 1980 | 04-Jul | 15-Jul | 22-Jul | 12-Aug | 11,018 |  |  |  |  |  |
| 1981 | 30-Jun | 16-Jul | 26-Jul | 03-Aug | 50,790 |  |  |  |  |  |
| 1982 | 02-Jul | 10-Jul | 19-Jul | 29-Jul | 28,257 |  |  |  |  |  |
| 1983 | 27-Jun | 05-Jul | 22 -Jul | 05-Aug | 21,256 |  |  |  |  |  |
| 1984 | 20-Jun | 19-Jul | $24-\mathrm{Jul}$ | 03-Aug | 32,777 |  |  |  |  |  |
| 1985 | 28-Jun | 18-Jul | 31-Jul | 06-Aug | 67,326 |  |  |  |  |  |
| 1986 | 10 -Jul | 26-Jul | 04-Aug | 11-Aug | 20,280 |  |  |  |  |  |
| 1987 | 14-Jul | 21-Jul | 04-Aug | 13-Aug | 6,958 |  |  |  |  |  |
| 1988 | 16-JuF | 16-Jul | 06-Aug | 14-Aug | 2,536 |  |  |  |  |  |
| 1989 | 07-Jul | $09-\mathrm{Jul}$ | 01-Aug | 14-Aug | 8,316 | 2,210 |  | 6,106 |  |  |
| 1990 | 06-Jul | 15-Jul | 26-Jul | 03-Aug | 14,927 | 3,302 |  | 11,625 |  |  |
| 1991 | 15-Jul | 17-Jul | $25-\mathrm{Jul}$ | 07-Aug | 50,135 | 3,552 |  | 46,583 |  |  |
| 1992 | $10-\mathrm{Jul}$ | $18-\mathrm{Jul}$ | $25-\mathrm{Jul}$ | 03-Aug | 59,907 | 3,694 |  | 56,213 |  |  |
| 1993 | $10-\mathrm{Jul}$ | $10-\mathrm{Jul}$ | 28-Jul | 10-Aug | 53,362 | 4,506 | 1,752 | 47,104 | 46,074 | 1,030 |
| 1994 | 10-Jul | 14-Jul | 30-Jul | 09-Aug | 46,363 | 3,378 | 6,852 | 36,133 | 29,961 | 6,172 |
| Averages |  |  |  |  |  |  |  |  |  |  |
| 59-94 | 10-Jul | 19-Jul | 31-Jul | 11-Aug | 23,007 |  |  |  |  |  |
| 85-94 | 09 -Jul | 16-Jul | 30-Jul | 09-Aug | 33,011 |  |  |  |  |  |
| 1995 | 08-Jul | $09-\mathrm{Jul}$ | 24-Jul | 12-Aug | 42,317 | 4,902 | 10,740 | 26,675 | 16,591 | 10,084 |

a Question as to date weir installed.
b Daily counts unavailable.
c A slide occurred blocking the entrance for awhile.

Appendix B.28. Aerial survey counts of non-Tahltan sockeye stocks in the Stikine River drainage, 1984-1995. The index represents the combined counts from eight spawning areas.

| Year | Chutine <br> River | Scud <br> River | Porcupine <br> Slough | Christina <br> Creek | Craig <br> River | Bronson <br> Slough | Verrett <br> Creek | Verrett <br> Slough | Escapement <br> Index |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1984 | 526 | 769 | 69 | 130 | 102 |  | 640 |  | 2,236 |
| 185 | 253 | 282 | 69 | 67 | 27 |  | 383 |  | 1,081 |
| 1986 | 139 | 151 | 8 | 0 | 0 |  | 270 |  | 568 |
| 1987 | 0 | 490 | 62 | 6 | 30 |  | 103 |  | 691 |
| 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 | 1242 | 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 |
| Averages |  |  |  |  |  |  |  |  |  |
| $84-94$ | 134 | 403 | 68 | 34 | 25 | 62 | 235 | 73 | 964 |
| 1995 | 13 | 260 | 11 |  |  | 72 | 47 | 31 | 434 |

Appendix B.29. Estimates of sockeye salmon smolt migrating through Tahltan Lake smolt weir, 19841995.

| Year | Weir <br> Installed | Date of Arrival |  |  | Total Estimate | Natural Smolt | Hatchery Smolt |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | First | 50\% | 90\% |  |  |  |
| 1984 | 10-May | 11-May | 23-May | 06-Jun | 218,702 |  |  |
| 1985 | $25-\mathrm{Apr}$ | 23-May | 31-May | 28-May | 613,531 |  |  |
| 1986 | 08-May | 10-May | 31-May | 07-Jun | 244,330 |  |  |
| $1987{ }^{\text {a }}$ | 07-May | 15-May | 23-May | 24-May | 810,432 |  |  |
| 1988 | 01-May | 08-May | 20-May | 06-Jun | 1,170,136 |  |  |
| 1989 | 05-May | 08-May | 22-May | $06-\mathrm{Jum}$ | 580,574 |  |  |
| $1990{ }^{\text {b }}$ | 05-May | 15-May | 29-May | 05-Jun | 610,407 |  |  |
| $1991{ }^{\text {c }}$ | 05-May | 14-May | 21-May | 30-May | 1,487,265 | 1,220,397 | 266,868 |
| $1992{ }^{\text {d }}$ | 07-May | 13-May | 21-May | 27-May | 1,555,026 | 750,702 | 804,324 |
| 1993 | 07-May | 11-May | 17-May | 22-May | 3,255,045 | 2,855,562 | 399,483 |
| 1994 | 08-May | 08-May | 16-May | 12-Jun | 915,119 | 620,809 | 294,310 |
| Averages |  |  |  |  |  |  |  |
| 84-94 | 05-May | 12-May | 23-May | 01-Jun | 1,041,870 | 1,361,868 | 441,246 |
| 1995 | 05-May | 06-May | 27-May | 11-Jun | 822,284 | 767,027 | 55,257 |

a Estimate includes approximately 30,000 mortalities from overcrowding on $5 / 22,1987$.
b Estimate of 595,147 on June 14 expanded by average $\%$ of out migration by date ( $97.5 \%$ ) from historical data.
c Estimate of $1,439,673$ on June 13 expanded by average $\%$ of out migration by date ( $96.8 \%$ ) from historical data.
d Estimate of $1,516,150$ on June 14 expanded by average $\%$ of out migration by date ( $97.5 \%$ ) from historical data.

Appendix B.30. Weir counts of chinook salmon at Little Tahltan River, 1985-1995.

| Year | $\begin{array}{r} \text { Weir } \\ \text { Installed } \\ \hline \end{array}$ | First Arrival | $\begin{array}{r} 50 \% \\ \text { Arrival } \\ \hline \end{array}$ | $\begin{array}{r} 90 \% \\ \text { Arrival } \\ \hline \end{array}$ | Total Count | Brood- stock and Other | Natural Spawners | Total <br> Natural Spawners |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Large Chinook |  |  |  |  |  |  |  |  |
| 1985 | 03-Jul | 04-Jul | 30-Jul | 06-Aug | 3,114 |  | 3,114 |  |
| 1986 | 28-Jun | 29-Jun | 21-Jul | 05-Aug | 2,891 |  | 2,891 |  |
| 1987 | 28-Jun | 04-Jul | 24-Jul | 02-Aug | 4,783 |  | 4,783 |  |
| 1988 | 26-Jun | 27-Jun | 18-Jul | 03-Aug | 7,292 |  | 7,292 |  |
| 1989 | 25-Jun | 26-Jun | 23-Jul | 02-Aug | 4,715 |  | 4,715 |  |
| 1990 | 22-Jun | 29-Jun | 23-Jul | 04-Aug | 4,392 |  | 4,392 |  |
| 1991 | 23-Jun | 25-Jun | 20-Jul | 03-Aug | 4,506 |  | 4,506 |  |
| 1992 | 24-Jun | 04-Jul | 21-Jul | 30-Jul | 6,627 | -12 | 6,615 |  |
| 1993 | 20-Jun | 21-Jun | $16-\mathrm{Jul}$ | 28-Jul | 11,449 | -24 | 11,425 |  |
| 1994 | 18-Jun | 28-Jun | 22-Jul | 02-Aug | 6,387 | -27 | 6,360 |  |
| Averages |  |  |  |  |  |  |  |  |
| 85-94 | 24-Jun | 28-Jun | 21-Jul | 02-Aug | 5,616 |  | 5,609 |  |
| 1995 | 17-Jun | 20-Jun | 17-Jul | 04-Aug | 3,072 | 0 | 3,072 |  |
| Jack Chinook (fish<600mm poh length) |  |  |  |  |  |  |  |  |
| 1985 | 03-Jul | 04-JuI | 31-Jul | 10-Aug | 316 |  |  | 3,430 |
| 1986 | 28-Jun | $03-\mathrm{Jul}$ | $25-\mathrm{Jul}$ | 06-Aug | 572 |  |  | 3,463 |
| 1987 | 28-Jun | 03-Jul | 26-Jul | 06-Aug | 365 |  |  | 5,148 |
| 1988 | 26-Jun | 27-Jun | 17-Jul | 02-Aug | 327 |  |  | 7,619 |
| 1989 | 25-Jun | 26-Jun | 23-Jul | 02-Aug | 199 |  |  | 4,914 |
| 1990 | 22-Jun | $05-\mathrm{Jul}$ | 22-Jul | 30-Jul | 417 |  |  | 4,809 |
| 1991 | 23-Jun | 03-Jul | 24-Jul | 07-Aug | 313 |  |  | 4,819 |
| 1992 | 24-Jun | 12-Jul | $22-\mathrm{JuI}$ | 30-Jul | 131 |  |  | 6,746 |
| 1993 | 20-Jun | 30-Jun | $14-\mathrm{Jul}$ | 01-Aug | 60 |  |  | 11,485 |
| 1994 | 18-Jun | 02-JuI | $22-\mathrm{JuI}$ | 05-Aug | 121 |  |  | 6,481 |
| Averages |  |  |  |  |  |  |  |  |
| 85-94 | 24-Jun | 02-Jul | 22-Jul | 03-Aug | 282 |  |  | 5,891 |
| 1995 | 17-Jun | 22-Jun | $28-\mathrm{Jul}$ | 10-Aug | 135 |  |  | 3,207 |

Appendix B.31. Index counts of Stikine chinook escapements, 1979-1995. Counts do not include jacks (fish less than 600 mm mef length).

| Year | Little <br> Tahltan <br> Weir ${ }^{\text {a }}$ | Little <br> Tahltan <br> Aerial | Tahltan Aerial | Beatty Aerial | Andrew Foot |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1979 |  | 1,166 | 2,118 |  | $382^{\text {b }}$ Andrew weir count includes brood stock. |
| 1980 |  | 2,137 | 960 | 122 | $363^{\text {b }}$ Andrew weir count includes brood stock. |
| 1981 |  | 3,334 | 1,852 | 558 | $654^{\text {b }}$ Andrew weir count includes brood stock. |
| 1982 |  | 2,830 | 1,690 | 567 | $947^{\text {b }}$ Andrew weir count includes brood stock. |
| 1983 |  | 594 | 453 | 83 | $444^{\mathrm{b}}$ Andrew weir count includes brood stock. |
| 1984 |  | 1,294 |  | 126 | $389{ }^{\text {b }}$ Andrew weir count includes brood stock. |
| 1985 | 3,114 | 1,598 | 1,490 | 147 | 319 |
| 1986 | 2,891 | 1,201 | 1,400 | 183 | 707 |
| 1987 | 4,783 | 2,706 | 1,390 | 312 | 788 Andrew helicopter survey. |
| 1988 | 7,292 | 3,796 | 4,384 | 593 | 564 |
| 1989 | 4,715 | 2,527 | c | 362 | 530 Tahltan not surveyed due to visibility. |
| 1990 | 4,392 | 1,755 | 2,134 | 271 | 664 |
| 1991 | 4,506 | 1,768 | 2,445 | 193 | 400 Andrew fixed wind survey. |
| 1992 | 6,627 | 3,607 ${ }^{\text {b }}$ | 1,891 | 362 | 778 Andrew helicopter survey, Little Tahltan includes brood stock. |
| 1993 | 11,425 | 4,010 | 2,249 | 757 | 1,060 |
| 1994 | 6,360 | 2,422 | c | 184 | 572 Andrew helicopter survey - Tahltan no survey. |
| Averages |  |  |  |  |  |
| 79-94 |  | 2,297 | 1,747 | 321 | 598 |
| 85-94 | 5,611 | 2,539 | 1,931 | 336 | 638 |
| 1995 | 3,072 | 1,117 | 696 | 152 | 338 |

Numbers are weir counts.
b Count includes fish later removed for brood stock.
c Not surveyed due to poor visibility.

Appendix B.32. Index counts of Stikine coho salmon escapements, 1984-1995.

| Year | Date | Katete <br> South | Katete <br> North | Craig | Verret | Scud <br> Slough | Porcupine | Christina | Total |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1984 | 30 -Oct | 147 | 313 | 0 | 15 |  |  | 517 |  |
| 1985 | 25 -Oct | 590 | 1,217 | 735 | 39 | 924 | 365 | 3,870 |  |
| 1988 | $28-$ Oct | 32 | 227 | a | 175 | 97 | 53 | 0 | 584 |
| 1989 | $29-$ Oct | 336 | 896 | 992 | 848 | 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 | a | $a$ | $a$ | $a$ | 206 | 324 |  |  |
| 1994 | $11 / 1 \& 2$ | 28 | 652 | 1,026 | 466 | 448 | 1,105 | 3,725 |  |
| Average |  |  |  |  |  |  |  |  |  |
| $84-94$ |  | 228 | 760 | 785 | 322 | 466 | 379 | 28 | 2,803 |
| 1995 | 30 -Oct | 211 | 208 | 1,419 | 574 | 621 | 719 |  | 3,752 |

Poor observation conditions.

Appendix B.33. Stikine River sockeye salmon run size, 1979-1995. Catches include test fishery catches.

| Year | Inriver Run Size Estimates |  |  | Inriver Catch | Escapement ${ }^{\text {b }}$ | Marine Catch | Total Run |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Canada | U.S. | Average ${ }^{\text {a }}$ |  |  |  |  |
| 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 | 42,666 | 111,427 |
| 1983 | 77,260 | 66,838 | 71,683 | 21,120 | 50,563 | 5,779 | 77,463 |
| 1984 | 95,454 | 59,168 | 76,211 | 5,327 | 70,884 | 7,788 | 83,999 |
| 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 | 34,199 | 154,351 |
| 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 |
| Averages |  |  |  |  |  |  |  |
| 79-94 |  |  | 94,022 | 23,937 | 70,085 | 30,049 | 124,072 |
| 85-94 |  |  | 104,572 | 27,453 | 77,119 | 36,551 | 141,124 |
| 1995 |  |  | 142,308 | 66,777 | 75,531 | 76,420 | 218,728 |
| 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 | 20,496 | 62,990 |
| 1983 |  |  | 32,684 | 11,428 | 21,256 | 5,063 | 37,747 |
| 1984 |  |  | 37,571 | 4,794 | 32,777 | 3,025 | 40,596 |
| 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 | 23,511 | 90,905 |
| 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 |
| Averages |  |  |  |  |  |  |  |
| 79-94 |  |  | 43,432 | 13,693 | 29,738 | 15,885 | 59,317 |
| 85-94 |  |  | 47,958 | 15,808 | 32,151 | 19,308 | 67,266 |
| 1995 |  |  | 82,290 | 50,713 | 31,577 | 51,665 | 133,955 |
| Tuya |  |  |  |  |  |  |  |
| 1995 |  |  | 2,216 | 1,112 | 1,105 | 586 | 2,802 |

Appendix B.33. (page 2 of 2 )

| Year | Inriver Run Size Estimates |  |  | Inriver Catch | Escapement ${ }^{\text {b }}$ | Marine Catch | $\begin{aligned} & \text { Total } \\ & \text { Run } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Canada | U.S. | Average ${ }^{\text {a }}$ |  |  |  |  |
| Non-Tahltan 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 | 22,170 | 48,437 |
| 1983 |  |  | 38,999 | 9,692 | 29,307 | 717 | 39,716 |
| 1984 |  |  | 38,640 | 533 | 38,107 | 4,763 | 43,403 |
| 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 | 10,687 | 63,446 |
| 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 |
| Averages |  |  |  |  |  |  |  |
| 79-94 |  |  | 50,590 | 10,244 | 40,347 | 14,164 | 64,755 |
| 85-94 |  |  | 56,614 | 11,646 | 44,969 | 17,244 | 73,858 |
| 1995 |  |  | 57,802 | 14,953 | 42,849 | 24,169 | 81,971 |

The averages for 1983-1985 are averages of weekly run timing estimates as well as stock composition estimates and are not simple averages of total estimates for the season.
b Escapement includes fish later captured for brood stock.

Appendix C.1. Weekly salmon catch and effort in the Alaskan District 111 and Subdistrict 111-32 (Taku Inlet), commercial drift gillnet fishery, 1995.

| Week | Start Date | Catch |  |  |  |  | Effort |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | Days | Boat |
|  |  | Chinook | Sockeye | Coho | Pink | Chum | Boats | Open | Days |
| District 111 catches |  |  |  |  |  |  |  |  |  |
| 25 | 18-Jun | 1,353 | 6,289 | 23 | 11 | 2,884 | 81 | 3.0 | 243 |
| 26 | 2-Jul | 988 | 8,633 | 136 | 305 | 8,831 | 77 | 3.0 | 231 |
| 27 | 9-Jul | 715 | 11,877 | 409 | 1,638 | 33,478 | 79 | 4.0 | 316 |
| 28 | 16-Jul | 774 | 18,017 | 1,060 | 3,817 | 75,108 | 94 | 4.0 | 376 |
| 29 | 23-Jul | 374 | 14,961 | 1,685 | 6,008 | 90,528 | 97 | 4.0 | 388 |
| 30 | $30-\mathrm{Jul}$ | 298 | 11,765 | 2,141 | 12,347 | 88,288 | 131 | 4.0 | 524 |
| 31 | 6-Aug | 108 | 10,699 | 2,356 | 6,971 | 23,351 | 110 | 3.0 | 330 |
| 32 | 13-Aug | 50 | 12,899 | 5,586 | 4,952 | 11,125 | 77 | 3.0 | 231 |
| 33 | 20-Aug | 0 | 3,280 | 5,117 | 4,460 | 5,585 | 77 | 3.0 | 231 |
| 34 | 27-Aug | 0 | 3,031 | 11,659 | 649 | 3,143 | 63 | 3.0 | 189 |
| 35 | 3-Sep | 0 | 1,176 | 12,483 | 88 | 2,441 | 62 | 3.0 | 186 |
| 36 | 10-Sep | 0 | 403 | 13,005 | 21 | 3,185 | 83 | 3.0 | 249 |
| 37 | 17-Sep | 0 | 135 | 4,319 | 2 | 722 | 58 | 3.0 | 174 |
| 38 | 24-Sep | 0 | 134 | 15,283 | 0 | 814 | 52 | 3.0 | 156 |
| 39 | 1-Oct | 0 | 78 | 8,364 | 0 | 615 | 70 | 3.0 | 210 |
| Total |  | 4,660 | 103,377 | 83,626 | 41,269 | 350,098 |  | 49.0 | 4,034 |

Alaskan hatchery contribution for chinook, sockeye, and coho ${ }^{\text {a }}$

| 25 | 18-Jun | 314 | 0 | 0 |
| :--- | ---: | ---: | ---: | ---: |
| 26 | 25-Jun | 200 | 0 | 0 |
| 27 | 2-Jul | 743 | 0 | 0 |
| 28 | 9-Jul | 163 | 87 | 0 |
| 29 | 16-Jul | 182 | 223 | 0 |
| 30 | 23-Jul | 250 | 418 | 131 |
| 31 | $30-J u l$ | 44 | 736 | 0 |
| 32 | 6-Aug | 5 | 650 | 73 |
| 33 | 13-Aug |  | 412 | 126 |
| 34 | 20-Aug |  | 122 | 452 |
| 35 | 27-Aug |  | 47 | 133 |
| 36 | 3-Sep |  | 16 | 4,740 |
| 37 | 10-Sep |  | 5 | 642 |
| 38 | 17-Sep |  | 5 | 6,266 |
| 39 | $24-S e p$ | 3 | 1,103 |  |
| Total |  | 1,901 | 2,726 | 13,666 |

-Continued-

| Week | Start <br> Date | Catch |  |  |  |  | Effort |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Boats | $\begin{aligned} & \text { Days } \\ & \text { Open } \end{aligned}$ | Boat <br> Days |
|  |  | Chinook | Sockeye | Coho | Pink | Chum |  |  |  |
| Catches not including Alaskan hatchery contribution: |  |  |  |  |  |  |  |  |  |
| 25 | 18-Jun | 1,039 | 6,289 | 23 |  |  |  |  |  |
| 26 | 25-Jun | 788 | 8,633 | 136 |  |  |  |  |  |
| 27 | 2-Jul | -28 | 11,877 | 409 |  |  |  |  |  |
| 28 | 9-Jul | 611 | 17,930 | 1,060 |  |  |  |  |  |
| 29 | 16-Jul | 192 | 14,738 | 1,685 |  |  |  |  |  |
| 30 | 23-Jul | 48 | 11,347 | 2,010 |  |  |  |  |  |
| 31 | 30-Jul | 64 | 9,963 | 2,356 |  |  |  |  |  |
| 32 | 6-Aug | 45 | 12,249 | 5,513 |  |  |  |  |  |
| 33 | 13-Aug | 0 | 2,868 | 4,991 |  |  |  |  |  |
| 34 | 20-Aug | 0 | 2,909 | 11,207 |  |  |  |  |  |
| 35 | 27-Aug | 0 | 1,129 | 12,350 |  |  |  |  |  |
| 36 | 3-Sep | 0 | 387 | 8,265 |  |  |  |  |  |
| 37 | 10-Sep | 0 | 130 | 3,677 |  |  |  |  |  |
| 38 | 17-Sep | 0 | 129 | 9,017 |  |  |  |  |  |
| 39 | 24-Sep | 0 | 75 | 7,261 |  |  |  |  |  |
| Total |  | 2,759 | 100,651 | 69,960 |  |  |  |  |  |
| Subdistrict 111-32 Catches (Taku Inlet) |  |  |  |  |  |  |  |  |  |
| 25 | 18-Jun | 1,069 | 5,147 | 18 | 7 | 2,062 | 66 | 3.0 | 198 |
| 26 | 25-Jun | 893 | 8,050 | 131 | 282 | 7,493 | 71 | 3.0 | 213 |
| 27 | 2-Jul | 549 | 10,262 | 336 | 1,342 | 24,413 | 76 | 3.0 | 228 |
| 28 | 9-Jul | 665 | 16,042 | 948 | 3,147 | 59,970 | 91 | 4.0 | 364 |
| 29 | 16-Jul | 159 | 10,774 | 1,212 | 3,154 | 48,326 | 81 | 3.0 | 243 |
| 30 | 23-Jul | 104 | 7,704 | 1,061 | 5,023 | 37,323 | 89 | 3.0 | 267 |
| 31 | 30-Jul | 32 | 5,959 | 1,176 | 1,407 | 6,390 | 66 | 2.0 | 132 |
| 32 | 6-Aug | 26 | 10,775 | 4,705 | 2,128 | 4,953 | 69 | 3.0 | 207 |
| 33 | 13-Aug | 0 | 2,329 | 3,288 | 1,391 | 1,627 | 57 | 3.0 | 171 |
| 34 | 20-Aug | 0 | 2,476 | 10,155 | 499 | 2,292 | 58 | 3.0 | 174 |
| 35 | 27-Aug | 0 | 1,090 | 11,921 | 82 | 2,204 | 61 | 3.0 | 183 |
| 36 | 3-Sep | 0 | 332 | 10,927 | 5 | 2,380 | 70 | 3.0 | 210 |
| 37 | 10-Sep | 0 | 126 | 3,875 | 2 | 651 | 51 | 3.0 | 153 |
| 38 | 17-Sep | 0 | 130 | 13,827 | 0 | 721 | 48 | 3.0 | 144 |
| 39 | 24-Sep | 0 | 70 | 7,246 | 0 | 538 | 58 | 3.0 | 174 |
| Total |  | 3,497 | 81,266 | 70,826 | 18,469 | 201,343 |  | 45.0 | 3,061 |

Chum Salmon are not included because of the difficulty of making an accurate estimate, the majority of the summer chum catch was of hatchery origin. Sockeye counts include Sweetheart fish plus Auke Creek Hatchery fish.

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, 1995.

| Week | Kuthai | Little Trapper |  | Mainstem | Tatsamenie |  | Total <br> Taku | Crescent | Speel | Total Wild <br> Snett. | $\begin{array}{r} \text { U.S. } \\ \text { Planted } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Wild | Planted |  | Wild | Planted |  |  |  |  |  |
| 25 | 0.186 | 0.246 | 0.000 | 0.457 | 0.053 | 0.009 | 0.951 | 0.009 | 0.040 | 0.049 | 0.000 |
| 26 | 0.163 | 0.289 | 0.007 | 0.384 | 0.054 | 0.053 | 0.949 | 0.000 | 0.051 | 0.051 | 0.000 |
| 27 | 0.068 | 0.301 | 0.007 | 0.432 | 0.102 | 0.039 | 0.949 | 0.015 | 0.036 | 0.051 | 0.000 |
| 28 | 0.052 | 0.311 | 0.024 | 0.380 | 0.115 | 0.024 | 0.906 | 0.015 | 0.074 | 0.089 | 0.005 |
| 29 | 0.025 | 0.209 | 0.009 | 0.479 | 0.159 | 0.008 | 0.888 | 0.044 | 0.052 | 0.097 | 0.015 |
| 30 | 0.010 | 0.224 | 0.006 | 0.493 | 0.143 | 0.027 | 0.902 | 0.015 | 0.048 | 0.063 | 0.035 |
| 31 | 0.000 | 0.084 | 0.005 | 0.435 | 0.241 | 0.051 | 0.817 | 0.012 | 0.102 | 0.114 | 0.069 |
| 32 | 0.000 | 0.113 | 0.012 | 0.381 | 0.265 | 0.024 | 0.795 | 0.030 | 0.125 | 0.155 | 0.050 |
| 33 | 0.000 | 0.122 | 0.002 | 0.370 | 0.213 | 0.046 | 0.754 | 0.005 | 0.115 | 0.120 | 0.126 |
| 34 | 0.000 | 0.075 | 0.000 | 0.477 | 0.188 | 0.038 | 0.778 | 0.005 | 0.176 | 0.182 | 0.040 |
| 35 | 0.000 | 0.075 | 0.000 | 0.477 | 0.188 | 0.038 | 0.778 | 0.005 | 0.176 | 0.182 | 0.040 |
| 36 | 0.000 | 0.075 | 0.000 | 0.477 | 0.188 | 0.038 | 0.778 | 0.005 | 0.176 | 0.182 | 0.040 |
| 37 | 0.000 | 0.075 | 0.000 | 0.477 | 0.188 | 0.038 | 0.778 | 0.005 | 0.176 | 0.182 | 0.040 |
| 38 | 0.000 | 0.075 | 0.000 | 0.477 | 0.188 | 0.038 | 0.778 | 0.005 | 0.176 | 0.182 | 0.040 |
| 39 | 0.000 | 0.075 | 0.000 | 0.477 | 0.188 | 0.038 | 0.778 | 0.005 | 0.176 | 0.182 | 0.040 |
| Total | 0.046 | 0.214 | 0.010 | 0.428 | 0.153 | 0.029 | 0.880 | 0.018 | 0.075 | 0.093 | 0.026 |

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, 1995. Stock composition estimates are based on SPA and otolith mark recovery.

| Week | Little Trapper |  |  | Mainstem | Tatsamenie |  | Total <br> Taku | Crescent | Speel | Total Wild Snett. | $\begin{array}{r} \text { U.S. } \\ \text { Planted } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Kuthai | Wild | Planted |  | Wild | Planted |  |  |  |  |  |
| 25 | 1,168 | 1,546 | 0 | 2,874 | 335 | 56 | 5,979 | 56 | 254 | 310 | 0 |
| 26 | 1,403 | 2,491 | 63 | 3,312 | 465 | 461 | 8,195 | 0 | 438 | 438 | 0 |
| 27 | 803 | 3,580 | 87 | 5,130 | 1,210 | 467 | 11,277 | 174 | 426 | 600 | 0 |
| 28 | 928 | 5,606 | 441 | 6,848 | 2,070 | 436 | 16,329 | 272 | 1,328 | 1,600 | 88 |
| 29 | 374 | 3,124 | 131 | 7,170 | 2,377 | 115 | 13,291 | 665 | 782 | 1,447 | 223 |
| 30 | 112 | 2,630 | 76 | 5,795 | 1,680 | 316 | 10,609 | 177 | 562 | 739 | 417 |
| 31 | 0 | 901 | 57 | 4,659 | 2,577 | 549 | 8,743 | 126 | 1,093 | 1,219 | 737 |
| 32 | 0 | 1,456 | 154 | 4,912 | 3,423 | 309 | 10,254 | 387 | 1,608 | 1,995 | 650 |
| 33 | 0 | 401 | 8 | 1,215 | 698 | 152 | 2,474 | 17 | 377 | 394 | 412 |
| 34 | 0 | 229 | 0 | 1,445 | 570 | 115 | 2,358 | 17 | 534 | 550 | 122 |
| 35 | 0 | 89 | 0 | 561 | 221 | 45 | 915 | 6 | 207 | 214 | 47 |
| 36 | 0 | 30 | 0 | 192 | 76 | 15 | 314 | 2 | 71 | 73 | 16 |
| 37 | 0 | 10 | 0 | 64 | 25 | 5 | 105 | 1 | 24 | 25 | 5 |
| 38 | 0 | 10 | 0 | 64 | 25 | 5 | 104 | 1 | 24 | 24 | 5 |
| 39 | 0 | 6 | 0 | 37 | 15 | 3 | 61 | 0 | 14 | 14 | 3 |
| Total | 4,788 | 22,109 | 1,017 | 44,278 | 15,767 | 3,049 | 91,008 | 1,901 | 7,741 | 9,642 | 2,727 |

Appendix C.4. Weekly salmon and steelhead trout catch and effort in the Canadian commercial fishery in the Taku River, 1995.

| Week | Start <br> Date | Catch |  |  |  |  |  |  | Effort |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Chinook |  | Sockeye | Coho | Pink | Chum | Steelhead | Average Permits | Days Fished | $\begin{aligned} & \text { Permit } \\ & \text { Days } \end{aligned}$ |
|  |  | Jacks | Large |  |  |  |  |  |  |  |  |
| 25 | 18-Jun | 30 | 469 | 933 | 0 | 0 | 0 | 0 | 8.00 | 2.00 | 16.00 |
| 26 | 25-Jun | 105 | 501 | 2,174 | 5 | 0 | 0 | 0 | 8.33 | 3.00 | 25.00 |
| 27 | 2-Jul | 100 | 307 | 3,111 | 38 | 2 | 0 | 0 | 9.67 | 3.00 | 29.00 |
| 28 | 9-Jul | 28 | 168 | 2,521 | 88 | 0 | 0 | 0 | 10.33 | 3.00 | 31.00 |
| 29 | 16-Jul | 23 | 74 | 3,004 | 340 | 0 | 0 | 0 | 11.33 | 3.00 | 34.00 |
| 30 | 23-Jul | 6 | 33 | 2,835 | 498 | 0 | 0 | 0 | 8.00 | 4.13 | 33.00 |
| 31 | 30-Jul | 2 | 15 | 6,781 | 1,430 | 0 | 0 | 1 | 11.75 | 4.00 | 47.00 |
| 32 | 6-Aug | 3 | 7 | 4,611 | 1,136 | 0 | 0 | 1 | 11.25 | 4.00 | 45.00 |
| 33 | 13-Aug | 1 | 0 | 2,098 | 1,342 | 0 | 0 | 1 | 11.67 | 3.00 | 35.00 |
| 34 | 20-Aug | 0 | 2 | 2,519 | 1,876 | 0 | 1 | 24 | 11.33 | 3.00 | 34.00 |
| 35 | 27-Aug | 0 | 1 | 1,212 | 2,364 | 0 | 0 | 44 | 10.00 | 3.00 | 30.00 |
| 36 | 3-Sep | 0 | 0 | 635 | 2,602 | 0 | 0 | 43 | 8.33 | 3.00 | 25.00 |
| 37 | 10-Sep | 0 | 0 | 47 | 445 | 0 | 0 | 7 | 5.25 | 4.00 | 21.00 |
| 38 | 17-Sep | 0 | 0 | 153 | 1,043 | 0 | 0 | 51 | 4.00 | 4.00 | 16.00 |
| 39 | 24-Sep | 0 | 0 | 6 | 374 | 0 | 0 | 27 | 1.50 | 4.00 | 6.00 |
| 40 | 1 -Oct | 0 | 0 | 0 | 48 | 0 | 0 | 6 | 1.00 | 1.00 | 1.00 |
| Total |  | 298 | 1,577 | 32,640 | 13,629 | 2 | 1 | 205 |  | 51.13 | 428.00 |

Appendix C.5. Weekly stock proportions of sockeye salmon harvested in the Canadian commercial fishery in the Taku River, 1995.

|  | Start |  | Little Trapper |  |  | Tatsamenie |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Week | Date | Kuthai | Wild | Planted | Mainstem | Wild | Planted |
| 25 | 18-Jun | 0.206 | 0.397 | 0.000 | 0.390 | 0.008 | 0.000 |
| 26 | 25-Jun | 0.338 | 0.415 | 0.000 | 0.203 | 0.044 | 0.000 |
| 27 | 2-Jul | 0.119 | 0.564 | 0.010 | 0.279 | 0.019 | 0.010 |
| 28 | 9-Jul | 0.000 | 0.643 | 0.020 | 0.277 | 0.060 | 0.000 |
| 29 | 16-Jul | 0.000 | 0.542 | 0.020 | 0.356 | 0.049 | 0.033 |
| 30 | 23-Jul | 0.000 | 0.531 | 0.010 | 0.379 | 0.053 | 0.026 |
| 31 | 30-Jul | 0.034 | 0.408 | 0.010 | 0.434 | 0.074 | 0.040 |
| 32 | 6-Aug | 0.000 | 0.285 | 0.010 | 0.444 | 0.206 | 0.054 |
| 33 | 13-Aug | 0.000 | 0.310 | 0.007 | 0.402 | 0.239 | 0.042 |
| 34 | 20-Aug | 0.000 | 0.310 | 0.007 | 0.402 | 0.239 | 0.042 |
| 35 | 27-Aug | 0.000 | 0.310 | 0.007 | 0.402 | 0.239 | 0.042 |
| 36 | 3-Sep | 0.000 | 0.310 | 0.007 | 0.402 | 0.239 | 0.042 |
| 37 | 10-Sep | 0.000 | 0.310 | 0.007 | 0.402 | 0.239 | 0.042 |
| 38 | 17-Sep | 0.000 | 0.310 | 0.007 | 0.402 | 0.239 | 0.042 |
| 39 | 24-Sep | 0.000 | 0.310 | 0.007 | 0.402 | 0.239 | 0.042 |
| 40 | 1-Oct | 0.000 | 0.310 | 0.007 | 0.402 | 0.239 | 0.042 |
| Total |  | 0.047 | 0.427 | 0.010 | 0.373 | 0.112 | 0.031 |

Appendix C.6. Weekly stock-specific catch of sockeye salmon in the Canadian commercial fishery in the Taku River, 1995.

|  | Start |  | Little Trapper |  |  | Tatsamenie |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Week | Date | Kuthai | Wild | Planted | Mainstem | Wild | Planted |
| 25 | 18-Jun | 192 | 370 | 0 | 364 | 7 | 0 |  |
| 26 | 25-Jun | 735 | 902 | 0 | 441 | 96 | 0 |  |
| 27 | 2-Jul | 369 | 1,754 | 31 | 868 | 59 | 30 |  |
| 28 | 9-Jul | 0 | 1,622 | 50 | 698 | 151 | 0 |  |
| 29 | 16-Jul | 1 | 1,628 | 60 | 1,069 | 146 | 100 |  |
| 30 | 23-Jul | 1 | 1,506 | 29 | 1,075 | 151 | 73 |  |
| 31 | 30-Jul | 230 | 2,767 | 68 | 2,941 | 505 | 270 |  |
| 32 | 6-Aug | 0 | 1,315 | 46 | 2,049 | 951 | 250 |  |
| 33 | 13-Aug | 0 | 651 | 15 | 843 | 501 | 88 |  |
| 34 | 20-Aug | 0 | 782 | 18 | 1,012 | 602 | 106 |  |
| 35 | 27-Aug | 0 | 376 | 9 | 487 | 289 | 51 |  |
| 36 | 3-Sep | 0 | 197 | 4 | 255 | 152 | 27 |  |
| 37 | 10-Sep | 0 | 15 | 0 | 19 | 11 | 2 |  |
| 38 | 17-Sep | 0 | 47 | 1 | 61 | 37 | 6 |  |
| 39 | 24-Sep | 0 | 2 | 0 | 2 | 1 | 0 |  |
| 40 | 1-Oct | 0 | 0 | 0 | 0 | 0 | 0 |  |
| 41 | 8-Oct | 0 | 0 | 0 | 0 | 0 | 0 |  |
| 42 | 15-Oct | 0 | 0 | 0 | 0 | 0 | 0 |  |
| 43 | 22-Oct | 0 | 0 | 0 | 0 | 0 | 0 |  |
| 44 | 29-Oct | 0 | 0 | 0 | 0 | 0 | 0 |  |
| Total |  | 1,528 | 13,934 | 331 | 12,185 | 3,659 | 1,003 |  |

Appendix C.7. Mark-recapture estimate of above border run of sockeye and coho salmon in the Taku River, 1995.

| Recovery Week | Start <br> Date | Above Border <br> Run | Canadian Harvests |  |  |  | Above <br> Border <br> Escapement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Commercial | Test |  | Aboriginal ${ }^{\text {a }}$ |  |
| Sockeye |  |  |  |  |  |  |  |
| 25-26 | 18-Jun | 25,368 | 3,107 |  | 0 |  | 22,261 |
| 27-28 | 2-JuI | 25,443 | 5,632 |  | 0 |  | 19,811 |
| 29-30 | 16-Jul | 40,291 | 5,839 |  | 0 |  | 34,452 |
| 31-32 | 30-Jul | 28,583 | 11,392 |  | 0 |  | 17,191 |
| 33-34 | 13-Aug | 17,504 | 4,617 |  | 0 |  | 12,887 |
| 35-39 | 27-Aug | 8,075 | 2,053 |  | 0 |  | 6,022 |
| M-R Estimate |  | 145,264 | 32,640 |  | 0 | 71 | 112,553 |
| 95\% C.I. |  | (137,032-153,496) |  |  |  |  |  |
| Total Estimate |  | 146,450 | 32,640 |  | 0 | 71 | 113,739 |
| Coho |  |  |  |  |  |  |  |
| 26-29 | 18-Jun | 1,460 | 471 |  |  |  | 989 |
| 30 | 25-Jun | 2,628 | 498 |  |  |  | 2,130 |
| 31 | 2-Jul | 4,582 | 1,430 |  |  |  | 3,152 |
| 32 | $9-\mathrm{Jul}$ | 2,100 | 1,136 |  |  |  | 964 |
| 33 | $16-\mathrm{Jul}$ | 5,299 | 1,342 |  |  |  | 3,957 |
| 34 | $23-\mathrm{Jul}$ | 8,764 | 1,876 |  |  |  | 6,888 |
| 35 | 30-Jul | 10,565 | 2,364 |  |  |  | 8,201 |
| 36 | 6-Aug | 10,951 | 2,602 |  |  |  | 8,349 |
| 37 | 13-Aug | 7,118 | 445 |  |  |  | 6,673 |
| 38-40 | 6-Aug | 8,271 | 1,465 |  |  |  | 6,806 |
| Through week 39 |  | 61,739 | 13,629 |  | 0 | 109 | 48,001 |
| 95\% C.I. |  | $(56,091-67,387)$ |  |  |  |  |  |
| Total Number ${ }^{\text {b }}$ |  | 69,448 |  |  |  |  | 55,710 |

a Aboriginal catch by week is not available.
55,710
b The coho estimate covered approximately $88.9 \%$ of the run (based on District 111-32 gillnet CPUE excluding hatchery contribution). The total in-river run is estimated to be 69,448 coho and the escapement is 55,710 fish.

Appendix C.8. Daily counts of adult salmon passing through Tatsamenie weir, 1995.

| Date | Chinook ${ }^{\text {a }}$ |  |  |  | Sockeye |  |  | Coho ${ }^{3}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cumulative |  |  |  | Cumulative |  |  | Cumulative |  |  |
|  | Jack | Adult | Count | Percent | Count | Count | Percent | Count | Count | Percent |
| 19-Aug | Weir Operational-..............- |  |  |  |  |  |  |  |  |  |
| 20-Allg | 0 | 0 | 0 | 0.0 | I4 | 14 | 0.2 | 0 | 0 | 0.0 |
| 21-Aug | 0 | 0 | 0 | 0.0 | 60 | 74 | 1.3 | 0 | 0 | 0.0 |
| 22-Aug | 0 | 0 | 0 | 0.0 | 67 | 141 | 2.4 | 0 | 0 | 0.0 |
| 23-Aug | 0 | 0 | 0 | 0.0 | 239 | 380 | 6.6 | 0 | 0 | 0.0 |
| 24-Aug | 0 | 0 | 0 | 0.0 | 175 | 555 | 9.6 | I | 1 | I. 6 |
| 25-Aug | 1 | 0 | 1 | 14.3 | 14.5 | 700 | 12.1 | I | 2 | 3.2 |
| 26-Aug | 0 | 0 | 1 | 14.3 | 135 | 835 | 14.4 | 0 | 2 | 3.2 |
| 27-Aug | 0 | 5 | 6 | 85.7 | 174 | 1,009 | 17.5 | 0 | 2 | 3.2 |
| 28-Aug | 0 | 0 | 6 | 85.7 | 177 | 1,186 | 20.5 | 0 | 2 | 3.2 |
| 29-Agg | 0 | 1 | 7 | 100.0 | 54 | 1,240 | 21.5 | 0 | 2 | 3.2 |
| 30-Aug | 0 | 0 | 7 | 100.0 | 65 | 1,305 | 22.6 | 0 | 2 | 3.2 |
| 31-Aug | 0 | 0 | 7 | 100.0 | 92 | 1,397 | 24.2 | 0 | 2 | 3.2 |
| 1-Sep | 0 | 0 | 7 | 100.0 | 253 | 1,650 | 28.5 | 1 | 3 | 4.8 |
| 2-Sep | 0 | 0 | 7 | 100.0 | 79 | 1,729 | 29.9 | 0 | 3 | 4.8 |
| 3-Sep | 0 | 0 | 7 | 100.0 | 1.58 | 1,887 | 32.6 | 1 | 4 | 6.5 |
| 4-Sep | 0 | 0 | 7 | 100.0 | 221 | 2,108 | 36.5 | 0 | 4 | 6.5 |
| 5-Sep | 0 | 0 | 7 | 100.0 | 96 | 2,204 | 38.1 | 0 | 4 | 6.5 |
| 6-Scp | 0 | 0 | 7 | 100.0 | 1.53 | 2,357 | 40.8 | 0 | 4 | 6.5 |
| 7-Sep | 0 | 0 | 7 | 100.0 | 231 | 2,588 | 44.8 | 0 | 4 | 6.5 |
| 8-Sep | 0 | 0 | 7 | 100.0 | 214 | 2,802 | 48.5 | 1 | 5 | 8.1 |
| 9-Sep | 0 | 0 | 7 | 100.0 | 2.51 | 3,053 | 52.8 | 0 | 5 | 8.1 |
| 10-Sep | 0 | 0 | 7 | 100.0 | 214 | 3,267 | 56.5 | 0 | 5 | 8.1 |
| 11-Sep | 0 | 0 | 7 | 100.0 | 124 | 3,391 | 58.7 | 0 | 5 | 8.1 |
| 12-Sep | 0 | 0 | 7 | 100.0 | 365 | 3,756 | 65.0 | 0 | 5 | 8.1 |
| 13-Sep | 0 | 0 | 7 | 100.0 | 37 | 3,793 | 65.6 | 0 | 5 | 8.1 |
| 14-Sep | 0 | 0 | 7 | 100.0 | 235 | 4,028 | 69.7 | 0 | 5 | 8.1 |
| 15-Scp | 0 | 0 | 7 | 100.0 | 8.5 | 4,113 | 71.2 | 0 | 5 | 8.1 |
| 16-Sep | 0 | 0 | 7 | 100.0 | 8 | 4,121 | 71.3 | 0 | 5 | 8.1 |
| 17-Sep | 0 | 0 | 7 | 100.0 | 112 | 4,233 | 73.2 | 0 | 5 | 8.1 |
| 18-Sep | 0 | 0 | 7 | 100.0 | 60 | 4,293 | 74.3 | 0 | 5 | 8.1 |
| 19-Sep | 0 | 0 | 7 | 100.0 | 78 | 4,371 | 75.6 | 0 | 5 | 8.1 |
| 20-Sep | 0 | 0 | 7 | 100.0 | 33 | 4,404 | 76.2 | 0 | 5 | 8.1 |
| 21-Sep | 0 | 0 | 7 | 100.0 | 179 | 4,583 | 79.3 | 1 | 6 | 9.7 |
| 22-Sep | 0 | 0 | 7 | 100.0 | 91 | 4,674 | 80.9 | 0 | 6 | 9.7 |
| 23-Scp | 0 | 0 | 7 | 100.0 | 139 | 4,813 | 83.3 | 7 | 13 | 21.0 |
| 24-Sep | 0 | 0 | 7 | 100.0 | 55 | 4,868 | 84.2 | 1 | 14 | 22.6 |
| $25-\mathrm{Sep}$ | 0 | 0 | 7 | 100.0 | 54 | 4,922 | 85.2 | 4 | 18 | 29.0 |
| 26-Sep | 0 | 0 | 7 | 100.0 | 102 | 5,024 | 86.9 | I | 19 | 30.6 |
| 27-Sep | 0 | 0 | 7 | 100.0 | 220 | 5,244 | 90.7 | 8 | 27 | 43.5 |
| 28-Sep | 0 | 0 | 7 | 100.0 | 78 | 5,322 | 92.1 | 2 | 29 | 46.8 |
| 29-Sep | 0 | 0 | 7 | 100.0 | 15 | 5,337 | 92.3 | 5 | 34 | 54.8 |
| 30-Sep | 0 | 0 | 7 | 100.0 | 3 | 5,340 | 92.4 | 2 | 36 | 58.1 |
| 1-Oct | 0 | 0 | 7 | 100.0 | 33 | 5,373 | 93.0 | 3 | 39 | 62.9 |
| 2-Oct | 0 | 0 | 7 | 100.0 | 0 | 5,373 | 93.0 | 0 | 39 | 62.9 |
| 3-Oct | 0 | 0 | 7 | 100.0 | 36 | 5,409 | 93.6 | 3 | 42 | 67.7 |
| 4-Oet | 0 | 0 | 7 | 100.0 | 0 | 5,409 | 93.6 | 0 | 42 | 67.7 |
| 5-Oct | 0 | 0 | 7 | 100.0 | 110 | 5,519 | 95.5 | 5 | 47 | 75.8 |
| 6-Oet | 0 | 0 | 7 | 100.0 | 40 | 5,559 | 96.2 | 3 | 50 | 80.6 |
| 7-Oct | 0 | 0 | 7 | 100.0 | 38 | 5,597 | 96.8 | 1 | 51 | 82.3 |
| 8-Oct | 0 | 0 | 7 | 100.0 | 19 | 5,616 | 97.2 | 0 | 51 | 82.3 |
| 9-Oct | 0 | 0 | 7 | 100.0 | 53 | 5,669 | 98.1 | 3 | 54 | 87.1 |
| 10-Oct | 0 | 0 | 7 | 100.0 | 111 | 5,780 | 100.0 | 8 | 62 | 100.0 |
| Counts | 1 | 6 | 7 |  | 5,780 |  |  | 62 |  |  |
| Broodstock ${ }^{\text {b }}$ |  |  |  |  | -1,393 |  |  |  |  |  |
| Spawners |  |  |  |  | 4,387 |  |  |  |  |  |

a Operation of weir did not cover entire run.
b Broodstock included 726 females and 603 males spawned and 26 female and 38 male mortalities.

Appendix C.9. Daily counts of adult sockeye salmon passing through Little Trapper Lake weir, 1995.

| Date | Cumulative |  |  |
| :---: | :---: | :---: | :---: |
|  | Count | Count | Percent |
| 27-Jul -- | -.--Weir In |  |  |
| 28-Jul | 52 | 52 | 0.48 |
| 29-Jul | 85 | 137 | 1.28 |
| 30-Jul | 14 | 151 | 1.41 |
| 31-Jul | 211 | 362 | 3.38 |
| 1-Aug | 118 | 480 | 4.48 |
| 2-Aug | 460 | 940 | 8.77 |
| 3-Aug | 1,269 | 2,209 | 20.60 |
| 4-Aug | 1,568 | 3,777 | 35.22 |
| 5-Aug | 990 | 4,767 | 44.45 |
| 6-Aug | 622 | 5,389 | 50.25 |
| 7-Aug | 196 | 5,585 | 52.08 |
| 8-Aug | 511 | 6,096 | 56.84 |
| 9-Aug | 515 | 6,611 | 61.65 |
| 10-Aug | 435 | 7,046 | 65.70 |
| 11-Aug | 135 | 7,181 | 66.96 |
| 12-Aug | 89 | 7,270 | 67.79 |
| 13-Aug | 289 | 7,559 | 70.49 |
| 14-Aug | 318 | 7,877 | 73.45 |
| 15-Aug | 195 | 8,072 | 75.27 |
| 16-Aug | 203 | 8,275 | 77.16 |
| 17-Aug | 253 | 8,528 | 79.52 |
| 18-Aug | 135 | 8,663 | 80.78 |
| 19-Aug | 160 | 8,823 | 82.27 |
| 20-Aug | 225 | 9,048 | 84.37 |
| 21-Aug | 169 | 9,217 | 85.95 |
| 22-Aug | 107 | 9,324 | 86.95 |
| 23-Aug | 48 | 9,372 | 87.39 |
| 24-Aug | 202 | 9,574 | 89.28 |
| 25-Aug | 79 | 9,653 | 90.01 |
| 26-Aug | 72 | 9,725 | 90.68 |
| 27-Aug | 80 | 9,805 | 91.43 |
| 28-Aug | 48 | 9,853 | 91.88 |
| 29-Aug | 83 | 9,936 | 92.65 |
| 30-Aug | 57 | 9,993 | 93.18 |
| 31-Aug | 93 | 10,086 | 94.05 |
| 1-Sep | 120 | 10,206 | 95.17 |
| 2-Scp | 118 | 10,324 | 96.27 |
| 3-Sep | 79 | 10,403 | 97.01 |
| 4 -Sep | 106 | 10,509 | 98.00 |
| 5-Sep | 50 | 10,559 | 98.46 |
| 6-Scp | 43 | 10,602 | 98.86 |
| 7-Sep | 43 | 10,645 | 99.26 |
| 8-Sep | 59 | 10,704 | 99.81 |
| 9-Scp | 11 | 10,715 | 99.92 |
| 10-Scp | 9 | 10,724 | 100.00 |
| Count |  | 10,724 |  |
| Additional Fish ${ }^{\text {a }}$ |  | 800 |  |
| Spawners |  | 11,524 |  |

[^4]Appendix C.10. Daily counts of adult salmon passing through the Nahlin River weir, 1995. Chinook counts represent an unknown portion of the escapement because the weir was not operated throughout the entire run.

| Date | Jack Chinook | Chinook |  |  | Sockeye |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Count | Count | Cum. | Percent | Count | Cum. | Percent |
| 6-Jun |  |  |  |  |  |  |  |
| 7-Jun |  | 6 | 6 | 0.18 |  | 0 | 0.00 |
| 8-Jun |  | 0 | 6 | 0.18 |  | 0 | 0.00 |
| 9 -Jun |  | 2 | 8 | 0.23 |  | 0 | 0.00 |
| 10-Jun |  | 7 | 15 | 0.44 |  | 0 | 0.00 |
| 11-Jun |  |  | 24 | 0.70 |  | 0 | 0.00 |
| 12-Jun |  | 5 | 29 | 0.85 |  | 0 | 0.00 |
| 13-Jun |  | 5 | 34 | 1.00 |  | 0 | 0.00 |
| 14-Jun |  | 14 | 48 | 1.41 |  | 0 | 0.00 |
| 15-Jun |  | 6 | 54 | 1.59 | 2 | 2 | 0.05 |
| 16-Jun |  | 3 | 57 | 1.67 | 0 | 2 | 0.05 |
| 17-Jun |  | 1 | 58 | 1.70 | 0 | 2 | 0.05 |
| 18-Jun |  | 18 | 76 | 2.23 |  | 6 | 0.16 |
| 19-Jun |  | 102 | 178 | 5.23 | 4 | 10 | 0.27 |
| 20-Jun |  | 78 | 256 | 7.52 | 5 | 15 | 0.40 |
| 21-Jun |  | 5 | 261 | 7.67 | 1 | 16 | 0.43 |
| 22-Jun |  | 36 | 297 | 8.72 | 7 | 23 | 0.62 |
| 23-Jun |  | 20 | 317 | 9.31 | 1 | 24 | 0.65 |
| 24-Jun |  | 1 | 318 | 9.34 | 0 | 24 | 0.65 |
| 25-Jun |  | 0 | 318 | 9.34 | 0 | 24 | 0.65 |
| 26-Jun |  | 0 | 318 | 9.34 | 13 | 37 | 1.00 |
| 27-Jun |  | 0 | 318 | 9.34 | 5 | 42 | 1.13 |
| 28-Jun |  | 3 | 321 | 9.43 | 10 | 52 | 1.40 |
| 29-Jun |  | 34 | 355 | 10.43 | 86 | 138 | 3.72 |
| 30-Jun |  | 115 | 470 | 13.80 | 127 | 265 | 7.14 |
| 1-Jul |  | 12 | 482 | 14.16 | 89 | 354 | 9.54 |
| 2-Jul |  | 20 | 502 | 14.74 | 322 | 676 | 18.22 |
| 3 -Jul |  | 27 | 529 | 15.54 | 33 | 709 | 19.11 |
| 4 -JuI |  | 9 | 538 | 15.80 | 62 | 771 | 20.78 |
| 5-Jul |  | 42 | 580 | 17.03 | 125 | 896 | 24.15 |
| 6 -Jul |  | 12 | 592 | 17.39 | 168 | 1,064 | 28.68 |
| 7-Jul |  | 43 | 635 | 18.65 | 164 | 1,228 | 33.10 |
| 8 -Jul |  | 84 | 719 | 21.12 | 248 | 1,476 | 39.78 |
| $9-\mathrm{Jul}$ |  | 144 | 863 | 25.35 | 187 | 1,663 | 44.82 |
| $10-\mathrm{Jul}$ |  | 76 | 939 | 27.58 | 144 | 1,807 | 48.71 |
| 11-Jul |  | 83 | 1,022 | 30.01 | 86 | 1,893 | 51.02 |
| 12-Jul |  | 10 | 1,032 | 30.31 | 35 | 1,928 | 51.97 |
| 13-Jul |  | 16 | 1,048 | 30.78 | 54 | 1,982 | 53.42 |
| 14-Jul |  | 11 | 1,059 | 31.10 | 37 | 2,019 | 54.42 |
| 15-Jul |  | 30 | 1,089 | 31.98 | 27 | 2,046 | 55.15 |

Appendix C.10. (page 2 of 2)


Appendix C.11. Daily counts of adult sockeye salmon passing through the Kuthai Lake weir, 1995.

| Date | Count | Cum. | Percent |
| :---: | :---: | :---: | :---: |
| 11-Jul | --- Weir installed --- |  |  |
| 12-Jul | 154 | 154 | 4.65 |
| 13-Jul | 78 | 232 | 7.01 |
| 14-JuI | 105 | 337 | 10.18 |
| 15-Jul | 231 | 568 | 17.16 |
| 16-Jul | 296 | 864 | 26.10 |
| 17-Jul | 6 | 870 | 26.28 |
| 18-Jul | 185 | 1,055 | 31.87 |
| 19-Jul | 100 | 1,155 | 34.89 |
| 20-Jul | 60 | 1,215 | 36.71 |
| 21-Jul | 93 | 1,308 | 39.52 |
| 22-Jul | 53 | 1,361 | 41.12 |
| 23-JuI | 92 | 1,453 | 43.90 |
| 24-Jul | 75 | 1,528 | 46.16 |
| 25-Jul | 91 | 1,619 | 48.91 |
| 26-Jul | 48 | 1,667 | 50.36 |
| 27-Jul | 49 | 1,716 | 51.84 |
| 28-Jul | 63 | 1,779 | 53.75 |
| 29-Jul | 6 | 1,785 | 53.93 |
| 30-Jul | 13 | 1,798 | 54.32 |
| 31-Jul | 3 | 1,801 | 54.41 |
| 1-Aug | 3 | 1,804 | 54.50 |
| 2-Aug | 0 | 1,804 | 54.50 |
| 3-Aug | 0 | 1,804 | 54.50 |
| 4-Aug | 1 | 1,805 | 54.53 |
| 5-Aug | 6 | 1,81] | 54.71 |
| 6-Aug | 64 | 1,875 | 56.65 |
| 7-Aug | 171 | 2,046 | 61.81 |
| 8-Aug | 205 | 2,251 | 68.01 |
| 9-Aug | 108 | 2,359 | 71.27 |
| 10-Aug | 46 | 2,405 | 72.66 |
| 11-Aug | 27 | 2,432 | 73.47 |
| 12-Aug | 82 | 2,514 | 75.95 |
| 13-Aug | 13 | 2,527 | 76.34 |
| 14-Aug | 0 | 2,527 | 76.34 |
| 15-Aug | 5 | 2,532 | 76.50 |
| 16-Aug | 19 | 2,551 | 77.07 |
| 17-Aug | 29 | 2,580 | 77.95 |
| 18-Aug | 3 | 2,583 | 78.04 |
| 19-Aug | 7 | 2,590 | 78.25 |
| 20-Aug | 8 | 2,598 | 78.49 |
| 21-Aug | 49 | 2,647 | 79.97 |
| 22-Aug | 354 | 3,001 | 90.66 |
| 23-Aug | 124 | 3,125 | 94.41 |
| 24-Aug | 53 | 3,178 | 96.01 |
| 25-Aug | 66 | 3,244 | 98.01 |
| 26-Aug | 18 | 3,262 | 98.55 |
| 27-Aug | 18 | 3,280 | 99.09 |
| 28-Aug | 25 | 3,305 | 99.85 |
| 29-Aug | 4 | 3,309 | 99.97 |
| 30-Aug | 1 | 3,310 | 100.00 |
| Total | 3,310 |  |  |

Appendix D.1. Salmon catches and effort in the Alaskan District 111 and Subdistrict 111-32 (Taku Inlet) commercial drift gillnet fishery, 1964-1995. Days open are for the entire district and include openings to harvest spawner chinook salmon, 1964-1975.

| Year | Catch |  |  |  |  |  | Effort |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Boat | Days |
|  | Chinook | Sockeye | Coho | Pink | S. Chum ${ }^{\text {a }}$ | F. Chum ${ }^{\text {a }}$ | Days | Open |
| District 111 Catches |  |  |  |  |  |  |  |  |
| 1964 | 2,509 | 34,140 | 29,315 | 26,593 | 4,970 | 7,883 |  | 56.00 |
| 1965 | 4,170 | 27,569 | 32,667 | 2,768 | 3,842 | 7,691 |  | 63.00 |
| 1966 | 4,829 | 33,925 | 26,065 | 23,833 | 5,015 | 30,118 |  | 64.00 |
| 1967 | 5,417 | 17,735 | 40,391 | 12,372 | 2,183 | 20,651 |  | 53.00 |
| 1968 | 4,904 | 19,501 | 39,103 | 67,365 | 5,747 | 16,143 |  | 60.00 |
| 1969 | 6,986 | 41,169 | 10,802 | 73,927 | 4,851 | 10,198 | 1,461 | 41.50 |
| 1970 | 3,357 | 50,922 | 44,960 | 197,017 | 19,593 | 90,797 | 2,688 | 53.00 |
| 1971 | 6,958 | 66,181 | 41,830 | 31,484 | 31,813 | 59,332 | 2,914 | 55.00 |
| 1972 | 10,955 | 80,404 | 49,780 | 144,339 | 67,126 | 80,831 | 3,100 | 51.00 |
| 1973 | 9,799 | 85,317 | 35,453 | 58,186 | 33,296 | 75,949 | 3,316 | 41.00 |
| 1974 | 2,908 | 38,670 | 38,667 | 57,731 | 11,263 | 75,423 | 2,237 | 29.50 |
| 1975 | 2,182 | 32,513 | 1,185 | 9,567 | 2,091 | 587 | 1,089 | 15.50 |
| 1976 | 1,757 | 61,749 | 41,729 | 14,962 | 6,027 | 75,776 | 1,939 | 25.00 |
| 1977 | 1,068 | 70,097 | 54,917 | 88,578 | 8,995 | 52,107 | 2,284 | 27.00 |
| 1978 | 1,926 | 55,398 | 31,944 | 51,385 | 9,076 | 27,178 | 2,176 | 26.00 |
| 1979 | 3,701 | 122,148 | 16,194 | 152,836 | 5,936 | 55,261 | 2,235 | 28.83 |
| 1980 | 2,251 | 123,451 | 41,677 | 296,572 | 33,627 | 159,020 | 4,080 | 30.92 |
| 1981 | 1,721 | 49,942 | 26,711 | 254,856 | 22,546 | 53,892 | 2,660 | 30.00 |
| 1982 | 3,057 | 83,625 | 29,072 | 109,297 | 14,867 | 22,741 | 2,437 | 35.50 |
| 1983 | 888 | 31,821 | 21,455 | 66,239 | 6,160 | 9,104 | 1,274 | 33.00 |
| 1984 | 1,773 | 77,233 | 33,836 | 145,971 | 45,811 | 40,930 | 2,690 | 52.50 |
| 1985 | 2,636 | 88,077 | 55,597 | 311,248 | 58,972 | 47,748 | 3,102 | 48.00 |
| 1986 | 2,584 | 73,061 | 30,512 | 16,568 | 29,909 | 28,883 | 2,102 | 32.83 |
| 1987 | 2,076 | 75,212 | 35,219 | 363,439 | 57,280 | 64,380 | 2,514 | 34.75 |
| 1988 | 1,779 | 38,923 | 44,881 | 157,831 | 80,307 | 59,271 | 2,146 | 32.00 |
| 1989 | 1,811 | 74,019 | 51,812 | 180,597 | 18,022 | 18,955 | 2,333 | 41.00 |
| 1990 | 3,480 | 126,884 | 67,530 | 153,036 | 112,336 | 33,463 | 3,202 | 38.33 |
| 1991 | 3,217 | 109,877 | 126,436 | 74,183 | 147,404 | 13,771 | 4,103 | 57.00 |
| 1992 | 2,341 | 135,411 | 172,662 | 314,445 | 97,725 | 14,802 | 4,550 | 50.00 |
| 1993 | 6,748 | 171,556 | 65,536 | 17,081 | 156,033 | 10,447 | 3,827 | 43.00 |
| 1994 | 5,047 | 105,861 | 188,501 | 401,525 | 198,002 | 16,169 | 5,082 | 66.00 |
| Averages |  |  |  |  |  |  |  |  |
| 64-94 | 3,704 | 71,045 | 49,240 | 125,027 | 41,962 | 41,274 | 2,752 | 42.39 |
| 85-94 | 3,172 | 99,888 | 83,869 | 198,995 | 95,599 | 30,789 | 3,296 | 44.29 |
| 1995 | 4,660 | 103,377 | 83,626 | 41,269 | 339,178 | 10,920 | 4,034 | 49.00 |

-Continued-

Appendix D.1. (page 2 of 2 )

| Year | Catch |  |  |  |  |  | Effort |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | Boat <br> Days | $\begin{gathered} \text { Days } \\ \text { Open } \end{gathered}$ |
|  | Chinook | Sockeye | Coho | Pink | S. Chum ${ }^{\text {a }}$ | F. Chum ${ }^{\text {a }}$ |  |  |
| Subdistrict 111-32 Catches (Taku |  |  |  |  |  |  |  |  |
| Inlet) |  |  |  |  |  |  |  |  |
| 1964 | 2,482 | 28,873 | 28,603 | 22,177 | 3,919 | 7,822 | 1,491 | 56.00 |
| 1965 | 4,146 | 23,828 | 32,382 | 2,641 | 3,604 | 7,691 | 1,332 | 60.00 |
| 1966 | 4,817 | 28,301 | 24,153 | 22,490 | 4,350 | 27,327 | 1,535 | 58.00 |
| 1967 | 5,351 | 14,537 | 39,983 | 11,619 | 1,569 | 20,463 | 1,663 | 50.00 |
| 1968 | 4,862 | 16,952 | 37,570 | 55,527 | 4,646 | 15,597 | 2,420 | 60.00 |
| 1969 | 6,874 | 38,260 | 10,131 | 66,991 | 4,233 | 9,926 | 1,413 | 42.00 |
| 1970 | 3,073 | 41,476 | 37,587 | 143,886 | 14,208 | 76,795 | 2,425 | 53.00 |
| 1971 | 6,753 | 62,459 | 38,571 | 30,765 | 31,110 | 54,696 | 2,849 | 55.00 |
| 1972 | 9,633 | 62,877 | 38,568 | 78,673 | 45,955 | 60,097 | 2,797 | 51.00 |
| 1973 | 9,525 | 80,063 | 29,770 | 55,234 | 30,817 | 61,025 | 3,135 | 41.00 |
| 1974 | 2,280 | 26,256 | 27,670 | 32,684 | 6,469 | 51,063 | 1,741 | 30.00 |
| 1975 | 1,998 | 28,201 | 429 | 8,084 | 1,639 | 31 | 986 | 15.00 |
| 1976 | 1,693 | 51,674 | 31,641 | 11,868 | 3,766 | 42,674 | 1,582 | 23.00 |
| 1977 | 754 | 47,512 | 48,403 | 67,072 | 5,436 | 43,595 | 1,879 | 27.00 |
| 1978 | 1,642 | 43,795 | 21,620 | 41,624 | 7,142 | 18,101 | 1,738 | 24.00 |
| 1979 | 3,016 | 103,043 | 12,741 | 114,324 | 4,317 | 46,142 | 2,011 | 29.00 |
| 1980 | 1,986 | 108,577 | 35,814 | 241,085 | 25,779 | 131,126 | 3,634 | 31.00 |
| 1981 | 1,325 | 39,963 | 20,936 | 98,524 | 10,407 | 40,212 | 1,740 | 22.00 |
| 1982 | 2,841 | 75,012 | 24,761 | 77,942 | 11,558 | 18,363 | 2,130 | 36.00 |
| 1983 | 689 | 25,957 | 17,665 | 40,996 | 3,171 | 7,813 | 1,065 | 31.00 |
| 1984 | 1,414 | 59,229 | 25,951 | 83,028 | 28,214 | 27,967 | 2,120 | 39.00 |
| 1985 | 2,152 | 70,160 | 45,106 | 176,710 | 35,897 | 40,530 | 2,116 | 37.00 |
| 1986 | 1,877 | 60,106 | 26,474 | 9,772 | 14,646 | 24,790 | 1,413 | 30.00 |
| 1987 | 1,534 | 54,436 | 23,342 | 200,203 | 31,992 | 28,891 | 1,517 | 30.00 |
| 1988 | 949 | 23,752 | 33,159 | 41,625 | 25,969 | 27,010 | 1,213 | 29.00 |
| 1989 | 1,606 | 68,104 | 44,034 | 141,385 | 15,254 | 15,491 | 1,909 | 36.00 |
| 1990 | 2,432 | 110,006 | 60,078 | 101,168 | 88,350 | 29,099 | 2,879 | 38.00 |
| 1991 | 2,614 | 96,006 | 118,902 | 44,347 | 97,577 | 12,279 | 3,324 | 52.00 |
| 1992 | 1,672 | 103,238 | 152,598 | 180,340 | 57,153 | 11,649 | 3,407 | 43.00 |
| 1993 | 4,413 | 144,982 | 58,062 | 8,801 | 101,356 | 7,760 | 3,372 | 43.00 |
| 1994 | 3,051 | 88,625 | 156,314 | 198,507 | 129,350 | 12,280 | 3,960 | 60.00 |
| Averages |  |  |  |  |  |  |  |  |
| 64-94 | 3,208 | 58,912 | 42,033 | 77,745 | 27,415 | 31,558 | 2,155 | 39.71 |
| 85-94 | 2,230 | 81,942 | 71,807 | 110,286 | 59,754 | 20,978 | 2,511 | 39.80 |
| 1995 | 3,497 | 81,266 | 70,826 | 18,469 | 192,557 | 8,786 | 3,061 | 45.00 |

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

Appendix D.2. Stock proportions and catches of sockeye salmon in the Alaska District 111 commercial drift gillnet fishery, 1983-1995. Data based on analysis of scale patterns, otolith marks, and incidence of brain parasites.

| Week | Kuthai | Little Trapper |  | Mainstem | Tatsamenie |  | Total Taku | Crescent | Speel | Total Wild | $\begin{array}{r} \text { U.S. } \\ \text { Planted } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Wild | Planted |  | Wild | Planted |  |  |  | Snett. |  |
| Proportions |  |  |  |  |  |  |  |  |  |  |  |
| 1983 |  |  |  |  |  |  | 0.755 |  |  | 0.245 |  |
| 1984 |  |  |  |  |  |  | 0.758 |  |  | 0.242 |  |
| 1985 |  |  |  |  |  |  | 0.838 |  |  | 0.162 |  |
| 1986 | 0.061 | 0.266 |  | 0.303 | 0.204 |  | 0.834 | 0.090 | 0.076 | 0.166 |  |
| 1987 | 0.078 | 0.234 |  | 0.376 | 0.031 |  | 0.720 | 0.157 | 0.123 | 0.280 |  |
| 1988 | 0.118 | 0.158 |  | 0.305 | 0.082 |  | 0.663 | 0.266 | 0.071 | 0.337 |  |
| 1989a | 0.077 | 0.616 |  |  | 0.156 |  | 0.848 | 0.051 | 0.100 | 0.152 |  |
| 1990 | 0.036 | 0.197 |  | 0.336 | 0.286 |  | 0.855 | 0.112 | 0.033 | 0.145 |  |
| 1991 | 0.039 | 0.297 |  | 0.373 | 0.232 |  | 0.941 | 0.059 | 0.000 | 0.059 |  |
| 1992 | 0.048 | 0.220 |  | 0.445 | 0.191 |  | 0.904 | 0.036 | 0.060 | 0.096 |  |
| 1993 | 0.062 | 0.328 |  | 0.308 | 0.123 |  | 0.822 | 0.069 | 0.109 | 0.178 |  |
| 1994 | 0.110 | 0.356 |  | 0.361 | 0.091 |  | 0.917 | 0.036 | 0.022 | 0.058 | 0.025 |
| Averages $^{\text {b }}$ | 0.069 | 0.257 |  | 0.351 | 0.155 |  | 0.821 | 0.103 | 0.062 | 0.177 | 0.025 |
| 1995 | 0.046 | 0.214 | 0.010 | 0.428 | 0.153 | 0.029 | 0.880 | 0.018 | 0.075 | 0.093 | 0.026 |
| 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 | 45,573 |  |  | 11,536 |  | 62,805 | 3,789 | 7,425 | 11,214 |  |
| 1990 | 4,539 | 24,952 |  | 42,676 | 36,332 |  | 108,499 | 14,242 | 4,143 | 18,385 |  |
| 1991 | 4,295 | 32,685 |  | 40,957 | 25,475 |  | 103,412 | 6,465 | 0 | 6,465 |  |
| 1992 | 6,543 | 29,818 |  | 60,224 | 25,853 |  | 122,438 | 4,912 | 8,060 | 12,972 |  |
| 1993 | 10,673 | 56,350 |  | 52,876 | 21,139 |  | 141,038 | 11,877 | 18,641 | 30,518 |  |
| 1994 | 11,638 | 37,644 |  | 38,179 | 9,585 |  | 97,046 | 3,859 | 2,319 | 6,178 | 2,637 |
| Averages ${ }^{\text {b }}$ | 6,584 | 28,080 |  | 37,146 | 17,354 |  | 77,707 | 8,768 | 6,338 | 14,401 | 2,637 |
| 1995 | 4,788 | 22,109 | 1,017 | 44,278 | 15,767 | 3,049 | 91,008 | 1,901 | 7,741 | 9,642 | 2,727 |

a The Trapper and Mainstem groups were combined in the 1989 analysis.
b Averages for individual stocks do not include 1989.

Appendix D.3. Proportion of wild Taku River sockeye salmon in the Alaskan District 111 commercial drift gillnet catch by week, 1983-1995." Data based on scale patterns and incidence of brain parasites.

|  | Week |  |  |  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Year | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | Total |  |
| 1983 |  | 0.996 | 0.842 | 0.819 | 0.663 | 0.527 | 0.836 | 0.534 | 0.719 | 0.759 | 0.755 |  |
| 1984 | 0.970 | 0.956 | 0.843 | 0.670 | 0.588 | 0.712 | 0.728 | 0.809 | 0.726 |  | 0.758 |  |
| 1985 | 0.999 | 0.986 | 0.928 | 0.974 | 0.868 | 0.706 | 0.737 | 0.826 | 0.801 |  | 0.838 |  |
| 1986 | 0.938 | 0.953 | 0.873 | 0.880 | 0.852 | 0.777 | 0.851 | 0.757 | 0.893 | 0.739 | 0.834 |  |
| 1987 |  | 0.982 | 0.901 | 0.884 | 0.948 | 0.414 | 0.619 | 0.689 | 0.841 | 0.731 | 0.720 |  |
| 1988 |  | 0.964 | 0.886 | 0.889 | 0.510 | 0.643 | 0.677 | 0.528 | 0.478 | 0.346 | 0.663 |  |
| 1989 | 0.943 | 0.989 | 0.979 | 0.852 | 0.835 | 0.641 | 0.681 | 0.919 | 0.676 |  | 0.848 |  |
| 1990 | 0.874 | 0.935 | 0.904 | 0.773 | 0.782 | 0.863 | 0.943 | 0.939 | 0.878 | 0.862 | 0.855 |  |
| 1991 | 0.988 | 0.979 | 0.953 | 0.979 | 0.951 | 0.933 | 0.936 | 0.890 | 0.885 | 0.875 | 0.941 |  |
| 1992 |  | 0.978 | 0.985 | 0.956 | 0.916 | 0.943 | 0.893 | 0.858 | 0.766 | 0.766 | 0.904 |  |
| 1993 |  | 0.961 | 0.901 | 0.837 | 0.856 | 0.781 | 0.790 | 0.829 | 0.738 | 0.706 | 0.822 |  |
| 1994 |  | 1.000 | 0.981 | 0.973 | 0.967 | 0.870 | 0.835 | 0.938 | 0.804 | 0.901 | 0.917 |  |
| Average |  |  |  |  |  |  |  |  |  |  |  |  |
| $83-94$ | 0.952 | 0.973 | 0.915 | 0.874 | 0.811 | 0.734 | 0.794 | 0.793 | 0.767 | 0.743 | 0.821 |  |
| 1995 | 0.942 | 0.889 | 0.903 | 0.858 | 0.872 | 0.868 | 0.761 | 0.759 | 0.705 | 0.740 | 0.841 |  |

To make this data comparable across years, it does not include returns of Tatsamenie and Trapper enhanced.

Appendix D.4. Salmon catch in the U.S. subsistence and personal use fisheries in the Taku River, 1967-1995. The subsistence fishery was open 1967 to 1976 and 1985 and the personaluse fishery was open 1989-1995.

|  | Catch |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | :---: |
| Year | Chinook | Sockeye | Coho | Pink | Chum |  |
| 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 | 2,514 | 96 | 44 | 3 |  |
| 1989 | 62 | 1,395 | 142 | 1,467 | 40 |  |
| 1990 | 57 | 1,726 | 224 | 242 | 100 |  |
| 1991 | 47 | 1,506 | 162 | 183 | 4 |  |
| 1992 | 34 | 1,972 | 143 | 162 | 0 |  |
| 1993 | 17 | 2,223 | 46 | 172 | 6 |  |
| 1994 | 36 | 2,001 | 168 | 137 | 5 |  |
| Averages |  |  |  |  |  |  |
| All | 15 | 1,068 | 83 | 166 | 13 |  |
| $85-94$ | 36 | 1,905 | 140 | 344 | 23 |  |
| 1995 | 37 | 2,058 | 202 | 83 | 12 |  |

Appendix D.5. Salmon and steelhead trout catch and effort in the Canadian commercial fishery in the Taku River, 1979-1995.

| Year | Catch |  |  |  |  |  |  | Effort |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chinook |  | Sockeye | Coho | Pink | Chum | Steelhead | Boat <br> Days | $\begin{gathered} \text { Days } \\ \text { Open } \end{gathered}$ |
|  | Jack | Large |  |  |  |  |  |  |  |
| 1979 |  | 97 | 13,578 | 6,006 | 13,661 | 15,474 | 254 | 599 | 50 |
| 1980 |  | 225 | 22,602 | 6,405 | 26,821 | 18,516 | 457 | 476 | 39 |
| 1981 |  | 159 | 10,922 | 3,607 | 10,771 | 5,591 | 108 | 243 | 31 |
| 1982 |  | 54 | 3,144 | 51 | 202 | 3 | 1 | 38 | 13 |
| 1983 | 400 | 156 | 17,056 | 8,390 | 1,874 | 1,760 | 213 | 390 | 64 |
| 1984 | 221 | 294 | 27,242 | 5,357 | 6,964 | 2,492 | 367 | 288 | 30 |
| 1985 | 24 | 326 | 14,244 | 1,770 | 3,373 | 136 | 32 | 178 | 16 |
| 1986 | 77 | 275 | 14,739 | 1,783 | 58 | 110 | 48 | 148 | 17 |
| 1987 | 106 | 127 | 13,554 | 5,599 | 6,250 | 2,270 | 223 | 280 | 26 |
| 1988 | 186 | 555 | 12,014 | 3,123 | 1,030 | 733 | 86 | 185 | 15 |
| 1989 | 139 | 895 | 18,545 | 2,876 | 695 | 42 | 24 | 271 | 25 |
| 1990 | 128 | 1,258 | 21,100 | 3,207 | 378 | 12 | 22 | 295 | 28 |
| 1991 | 432 | 1,177 | 25,067 | 3,415 | 296 | 2 | 5 | 284 | 25 |
| 1992 | 147 | 1,445 | 29,472 | 4,077 | 0 | 7 | 15 | 291 | 27 |
| 1993 | 171 | 1,619 | 33,217 | 3,033 | 16 | 15 | 11 | 363 | 34 |
| 1994 | 235 | 2,065 | 28,762 | 14,531 | 168 | 18 | 232 | 497 | 74 |
| Averages |  |  |  |  |  |  |  |  |  |
| 79-94 ${ }^{\text {a }}$ |  | 812 | 18,433 | 3,913 | 4,826 | 3,144 | 124 | 289 | 29 |
| 85-94 | 165 | 974 | 21,071 | 4,341 | 1,226 | 335 | 70 | 279 | 29 |
| 1995 | 298 | 1,577 | 32,640 | 13,629 | 2 | 1 | 205 | 428 | 51 |

Chinook averages are for large fish and jacks combined.

Appendix D.6. Sockeye salmon stock proportions and catch by stock in the Canadian commercial fishery on the Taku River, 1986-1995. Data based on scale pattern analysis.

| Year | Kuthai | Little Trapper |  | Mainstem | Tatsamenie |  | Total Wild |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Wild | Planted |  | Wild | Planted |  |  |
| Proportions |  |  |  |  |  |  |  |  |
| 1986 | 0.111 | 0.397 |  | 0.350 | 0.143 |  |  |  |
| 1987 | 0.062 | 0.201 |  | 0.649 | 0.088 |  |  |  |
| 1988 | 0.143 | 0.417 |  | 0.343 | 0.098 |  |  |  |
| $1989{ }^{\text {a }}$ | 0.053 | 0.744 |  |  | 0.203 |  |  |  |
| 1990 | 0.112 | 0.388 |  | 0.338 | 0.163 |  |  |  |
| 1991 | 0.064 | 0.308 |  | 0.452 | 0.176 |  |  |  |
| 1992 | 0.092 | 0.240 |  | 0.569 | 0.099 |  |  |  |
| 1993 | 0.126 | 0.392 |  | 0.432 | 0.049 |  |  |  |
| 1994 | 0.158 | 0.482 |  | 0.302 | 0.058 |  |  |  |
| Averages ${ }^{\text {b }}$ |  |  |  |  |  |  |  |  |
| 84-94 | 0.108 | 0.353 |  | 0.429 | 0.109 |  |  |  |
| 1995 | 0.047 | 0.427 | 0.010 | 0.373 | 0.112 | 0.031 | 0.959 | 0.041 |
| Catch |  |  |  |  |  |  |  |  |
| 1986 | 1,629 | 5,855 |  | 5,152 | 2,103 |  |  |  |
| 1987 | 834 | 2,728 |  | 8,793 | 1,199 |  |  |  |
| 1988 | 1,715 | 5,005 |  | 4,122 | 1,172 |  |  |  |
| $1989{ }^{\text {a }}$ | 990 | 13,792 |  |  | 3,763 |  |  |  |
| 1990 | 2,355 | 8,183 |  | 7,131 | 3,431 |  |  |  |
| 1991 | 1,601 | 7,721 |  | 11,327 | 4,418 |  |  |  |
| 1992 | 2,699 | 7,085 |  | 16,764 | 2,924 |  |  |  |
| 1993 | 4,192 | 13,036 |  | 14,347 | 1,641 |  |  |  |
| 1994 | 4,544 | 13,858 |  | 8,684 | 1,676 |  |  |  |
| Averages ${ }^{\text {b }}$ |  |  |  |  |  |  |  |  |
| 86-94 | 2,446 | 7,934 |  | 9,540 | 2,321 |  |  |  |
| 1995 | 1,528 | 13,934 | 331 | 12,185 | 3,659 | 1,003 | 31,306 | 1,334 |

a The Trapper and Mainstem groups were combined in the 1989 analysis.
b Averages do not include 1989.

Appendix D.7. Salmon catches in the Canadian Aboriginal fishery on the Taku River, 1980-1995.

| Year | Chinook |  | Sockeye | Coho | Pink | Chum | Steelhead |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Jack | Large |  |  |  |  |  |
| 1980 |  | 85 | 150 | 0 | 0 | 15 | 0 |
| 1981 |  |  |  |  |  |  |  |
| 1982 |  |  |  |  |  |  |  |
| 1983 |  | 9 | 0 | 0 | 0 | 0 | 0 |
| 1984 |  | 0 | 50 | 15 | 0 | 0 | 0 |
| 1985 |  | 4 | 167 | 22 | 0 | 0 | 0 |
| 1986 |  | 10 | 200 | 50 | 0 | 0 | 0 |
| 1987 |  | 0 | 96 | 113 | 0 | 0 | 0 |
| 1988 |  | 27 | 245 | 98 | 0 | 0 | 0 |
| 1989 |  | 6 | 53 | 146 | 0 | 0 | 0 |
| 1990 |  | 0 | 89 | 6 | 0 | 0 | 0 |
| 1991 |  | 0 | 150 | 20 | 0 | 0 | 0 |
| 1992 |  | 121 | 352 | 187 | 0 | 0 | 16 |
| 1993 |  | 25 | 140 | 8 | 0 | 0 | 0 |
| 1994 |  | 119 | 239 | 162 | 4 | 0 | 1 |
| Averages |  |  |  |  |  |  |  |
| 80-94 |  | 31 | 149 | 64 | 0 | 1 | 1 |
| 85-94 |  | 31 | 173 | 81 | 0 | 0 | 2 |
| 1995 |  | 70 | 71 | 109 | 0 | 7 | 4 |

Appendix D.8. Salmon and steelhead trout catch in the Canadian test fishery in the Taku River, 19871995.

| Year | Catch |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chinook | Sockeye | Coho | Pink | Chum | Steelhead |
| 1987 |  | 237 | 807 |  |  |  |
| 1988 | 72 | 708 | 422 | 52 | 222 | 14 |
| 1989 | 31 | 207 | 1,011 | 0 | 13 | 26 |
| 1990 | 48 | 285 | 472 | 0 | 0 | 20 |
| 1991 | 0 | 163 | 2,004 | 3 | 295 | 41 |
| 1992 | 0 | 38 | 1,277 | 0 | 76 | 88 |
| $1993{ }^{\text {a }}$ | 0 | 166 | 1,593 | 0 | 50 | 13 |
| 1994 | There was no Canadian test fishery in 1994. |  |  |  |  |  |
| Averages |  |  |  |  |  |  |
| 87-93 | 25 | 258 | 1,084 | 9 | 109 | 34 |
| 1995 There was no Canadian test fishery in 1995. |  |  |  |  |  |  |

Appendix D.9. Taku River sockeye salmon run size, 1984-1996. 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.


Appendix D.10. Sockeye salmon escapement estimates of Taku River and Port Snettisham sockeye stocks, 1979-1995. Spawners equals escapement to the weir minus fish collected for brood stock.

|  | Little Trapper |  | Little Tatsamenie |  | Hackett Weir | KuthaiLakeWeir | Nahlin River Weir | Crescent |  | Speel |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Escape. | Spawners | Escape. | Spawners |  |  |  | Escape. | Spawners | Escape. | Spawners |
| 1980 |  |  |  |  |  | 1,658 |  |  |  |  |  |
| 1981 |  |  |  |  |  | 2,299 |  |  |  |  |  |
| 1982 |  |  |  |  |  |  |  |  |  |  |  |
| 1983 | 7,402 ${ }^{\text {a }}$ | 7,402 |  |  |  |  |  | 19,422 | 19,422 | 10,484 | 10,484 |
| 1984 | 13,084 | 13,084 |  |  |  |  |  | 6,707 | 6,707 | 9,764 | 9,764 |
| 1985 | 14,889 ${ }^{\text {a }}$ | 14,889 | 13,093 | 13,093 | 2,309 |  |  | 7,249 | 7,249 | 7,073 | 7,006 |
| 1986 | 13,820 | 13,820 | 11,446 | 11,446 | 1,004 |  |  | 3,414 | 3,414 | 5,857 | 5,457 |
| 1987 | $12,007^{\text {a }}$ | 12,007 | 2,794 | 2,794 | 910 |  |  | 7,839 | 7,839 | 9,319 | 9,319 |
| 1988 | 10,637 | 10,637 | 2,063 | 2,063 | 516 |  | $138^{\text {b }}$ | 1,199 ${ }^{\text {c }}$ | 1,199 ${ }^{\text {c }}$ | 969 | 710 |
| 1989 | 9,606 | 9,606 | 3,039 | 3,039 |  |  |  | 1,109 ${ }^{\text {c }}$ | $775{ }^{\text {c }}$ | 12,229 | 10,114 |
| 1990 | 9,443 | 7,777 | 5,736 | 4,929 |  |  | 2,515 | 1,262 ${ }^{\text {c }}$ | $757^{\text {c }}$ | $18,064^{\text {c }}$ | 16,867 ${ }^{\text {c }}$ |
| 1991 | 22,942 | 21,001 | 8,381 | 7,585 |  |  |  | 9,208 ${ }^{\text {d }}$ | 8,666 | $299{ }^{\text {c }}$ | 299 |
| 1992 | 14,372 | 12,732 | 6,576 | 5,681 |  | 1,457 ${ }^{\text {b }}$ | $297{ }^{\text {b }}$ | 22,674 ${ }^{\text {d }}$ | 21,849 | 9,439 | 8,136 |
| 1993 | 17,432 | 16,685 | 5,028 | 4,230 |  | 6,312 ${ }^{\text {c }}$ | 2,463 |  |  |  |  |
| 1994 | 13,438 | 12,691 | 4,371 | 3,578 |  | 5,427 | 960 |  |  |  |  |
| Averages |  |  |  |  |  |  |  |  |  |  |  |
| 83-94 | 13,256 | 12,694 | 6,253 | 5,844 | 1,185 | 3,431 | 1,275 | 8,008 | 7,788 | 8,350 | 7,816 |
| 1995 | 11,524 | 11,524 | 8,000 ${ }^{\text {e }}$ | 6,607 |  | 3,310 | 3,710 |  |  | $16,208{ }^{\text {d }}$ | 14,260 |

a Weir count plus spawning ground survey.
b Weir counts are incomplete.
c Counts may be low due to uncounted fish passage past weir.
${ }^{d}$ Mark-recapture estimates.
e In 1995 the weir was moved upstream to Tatsamenie Lake, the count of 8,000 is an expansion (based on past experience) of the 5,780 fish counted there.

Appendix D.11. Aerial survey index escapement counts of large (3-ocean and older) Taku River chinook salmon, 1975-1995.

|  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Year | Kowatua | Tatsatua Dudidontu | Tseta | Nakina | Nahlin | Total <br> Index <br> Count |  |
| 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 | 0 | 21 | 1,620 | 624 | 3,305 |
| 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 | 9,786 |
| 1982 | 289 | 387 | 130 | 228 | 2,533 | 1,246 | 4,813 |
| 1983 | 171 | 236 | 117 | 179 | 968 | 391 | 2,062 |
| 1984 | 279 | 616 |  | $176^{\text {a }}$ | 1,887 | 951 | 3,909 |
| 1985 | 699 | 848 | 475 | 303 | 2,647 | 2,236 | 7,208 |
| 1986 | 548 | 886 | 413 | 193 | 3,868 | 1,612 | 7,520 |
| 1987 | 570 | 678 | 287 | 180 | 2,906 | 1,122 | 5,743 |
| 1988 | 1,010 | 1,272 | 243 | 66 | 4,500 | 1,535 | 8,626 |
| 1989 | 601 | 1,228 | 204 | 494 | 5,141 | 1,812 | 9,480 |
| 1990 | 614 | 1,068 | 820 | 172 | 7,917 | 1,658 | 12,249 |
| 1991 | 570 | 1,164 | 804 | 224 | 5,610 | 1,781 | 10,153 |
| 1992 | 782 | 1,624 | 768 | 313 | 5,750 | 1,821 | 11,058 |
| 1993 | 1,584 | 1,491 | 1,020 | 491 | 6,490 | 2,128 | 13,204 |
| 1994 | 410 | 1,106 | 573 | 614 | 4,792 | 2,418 | 9,913 |
| Averages |  |  |  |  |  |  |  |
| $75-94$ | 578 | 886 | 325 | 261 | 3,850 | 1,416 | 7,315 |
| $85-94$ | 739 | 1,137 | 561 | 305 | 4,962 | 1,812 | 9,515 |
| 1995 | 550 | 678 | 731 | 786 | 3,943 | 2,069 | 8,757 |
| 1 |  |  |  |  |  |  |  |

a Partial survey.
b Extrapolated results.

Appendix D.12. Taku River (above border) coho salmon run size, 1987-1995.

|  | Canadian Catch |  |  |  | Above Border |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Year | Commercial | Food | Test |  | Escapement | Run |
| 1987 | 5,599 | 113 | 807 | 55,457 | $61,976^{\mathrm{a}}$ |  |
| 1988 | 3,123 | 98 | 422 |  | 39,450 | $43,093^{\mathrm{b}}$ |
| 1989 | 2,876 | 146 | 1,011 |  | 56,808 | $60,841^{\mathrm{c}}$ |
| 1990 | 3,207 | 6 | 472 |  | 72,196 | $75,881^{\mathrm{d}}$ |
| 1991 | 3,415 | 20 | 2,004 | 127,484 | 132,923 |  |
| 1992 | 4,077 | 187 | 1,277 | 84,853 | $90,394^{\mathrm{e}}$ |  |
| 1993 | 3,033 | 8 | 1,593 | 109,457 | $114,091^{\mathrm{f}}$ |  |
| 1994 | 14,531 | 162 |  | 96,343 | $111,036^{\mathrm{g}}$ |  |
| Averages |  |  |  |  |  |  |
| $87-94$ | 4,983 | 93 | 1,084 | 80,256 | 86,279 |  |
| 1995 | 13,629 | 109 | 0 | 55,710 | $69,448^{\mathrm{h}}$ |  |
|  | 2.74 | 1.18 | 0.00 | 0.69 | 0.80 |  |

a Mark-recapture estimate through $9 / 20$ was 43,570 . Run through $10 / 05$ estimated using inriver test fish CPUE.
b Mark-recapture estimate through 9/18.
c Mark-recapture estimate through 10/01.
d A second method of estimating the above-border run by expanding test fishery CPUE yielded an estimate of 85,053 coho salmon.
e Mark-recapture estimate of imriver run size through $9 / 05$ of 50,249 was expanded by dividing by proportion of District 111 CPUE of wild coho (.559).
f Inriver estimate through week 37 expanded by dividing by proportion of District 111 CPUE of wild coho (.54409) through week 37.
g Inriver estimate through week 39 expanded by dividing by proportion of District 111 CPUE of wild coho (0.8884) through week 39.
h Inriver estimate through week 39 expanded by dividing by proportion of District 111 CPUE of wild coho (0.8887) through week 39.

Appendix D.13. Escapement counts of Taku River coho salmon, 1984-1995. 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 Creek Aerial | Johnson Creek $\mathrm{Ar} / \mathrm{Foot}$ |  | Flannigan Tatsamenie |  | Hacket River Weir | Dudidontu River Aerial | Upper Nahlin R. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Slough |  |  | River |  |  |  |  |
|  | Weir | Aerial |  |  |  | Aerial | Weir |  |  | Aerial | Weir |
| 1984 |  | 2,900 |  | 275 | 235 | 700 | 1,480 |  |  |  |  |  |
| 1985 |  | 560 | 740 | 150 | 1,000 | 2,320 | 201 | 1,031 |  |  |  |
| 1986 | 2,116 | 1,200 | 174 | 70 | 53 | 1,095 | 344 | 2,723 | 108 | 318 |  |
| 1987 | 1,627 | 565 | 980 | 150 | 250 | 2,100 | 173 | 1,715 | 276 | 165 |  |
| 1988 | 1,423 | 658 | 585 | 500 | 1,215 | 1,308 | 663 | 1,260 | 367 | 694 | 1,322 |
| 1989 | 1,570 | 600 | 400 | 400 | 235 | 1,670 | 712 |  | 115 | 322 |  |
| 1990 | 2,522 | 220 | 193 |  | 425 | 414 | 669 |  | 25 | 256 |  |
| 1991 |  | 475 | 399 | 120 | 1,378 | 1,348 | 1,101 |  | 458 | 176 |  |
| 1992 |  | 1,267 | 594 | 654 | 478 | 1,288 | 730 |  |  |  | 970 |
| 1993 |  | 250 | 130 | 90 | 380 | 70 | 88 |  |  |  | 326 |
| 1994 |  | 500 | 60 | 450 | 200 | 50 | 168 |  |  |  | 2,112 |
| Averages |  |  |  |  |  |  |  |  |  |  |  |
| 84-94 | 1,852 | 836 | 412 | 282 | 574 | 1,195 | 485 | 1,682 | 225 | 322 | 1,183 |
| 1995 |  | 70 | 230 | 170 | 132 | 421 | 62 |  |  |  |  |

Notes:
Weir count combined with spawning ground count. Tat 88-90, Yeh 86-87, Nahlin 92.
Incomplete weir count. Tat 85-87, 93 and Nahlin 92.
Count is an average of surveys by different observers. Flan $86,87,88,90,91$; sockeye $86,87,88,90,91$;
Fish 86, 88, 90, 91; Yehring, 87, 88, 91, 92.
Includes mark-recapture estimate. Yeh 89,90.
Poor survey conditions. Nahlin 91.
Foot survey. Yehring 92, Sockeye 92.
Surveys conducted before peak abundance on spawning grounds Flan 93, 94.

Appendix D.14. Canyon Island fish wheel salmon counts and periods of operation on the Taku River, 1983-1995.

|  | Period of | Count |  |  |  |  |  | Pink |  |
| :--- | :---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
|  | Operation | Chinook | Sockeye | Coho | Pink | Chum | even | odd |  |
| 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 |  |  |
| Averages |  |  |  |  |  |  |  |  |  |
| $84-94$ |  | 796 | 5,266 | 2,339 | 18,957 | 705 | 13,617 | 25,365 |  |
| $85-94$ |  | 862 | 5,559 | 2,485 | 18,777 | 744 | 12,190 | 25,365 |  |
| 1995 | $5 / 4-9 / 27$ | 1,535 | 6,228 | 2,535 | 1,712 | 218 |  |  |  |

Appendix E.1. Weekly salmon catch and effort in the U.S. commercial fishery in the Alsek River, 1995.


Effort is not listed by week, but is included in the season total.

Appendix E.2. Weekly salmon catch and effort in the Canadian aboriginal and sport fisheries in the Alsek River, 1995. Total catches do not include released fish.

| Week | Date | Chinook |  |  |  | Sockeye |  |  |  | Coho |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Sport | Release | Aboriginal | Total ${ }^{\text {a }}$ | Sport | Release | Aboriginal | Total ${ }^{\text {a }}$ | Sport | Release | Aboriginal | Total ${ }^{\text {a }}$ |
| 25 | 18-Jun | 32 | 6 | 0 | 32 | 0 | 1 | 0 | 0 | 0 |  |  | 0 |
| 26 | 25-Jun | 104 | 30 | 0 | 104 | 0 | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| 27 | 2-Jul | 210 | 16 | 42 | 252 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 28 | 9-Jul | 209 | 52 | 163 | 372 | 0 | 5 | 26 | 26 | 0 | 0 | 0 | 0 |
| 29 | 16-Jul | 329 | 78 | 149 | 478 | 0 | 0 | 34 | 34 | 0 | 0 | 0 | 0 |
| 30 | 23-Jul | 90 | 8 | 46 | 136 | 0 | 1 | 51 | 51 | 0 | 0 | 0 | 0 |
| 31 | 30-Jul | 34 | 5 | 72 | 106 | 0 | 1 | 134 | 134 | 0 | 0 | 0 | 0 |
| 32 | 6-Aug | 26 | 0 | 73 | 99 | 0 | 15 | 101 | 101 | 0 | 0 | 0 | 0 |
| 33 | 13-Aug | 6 | 0 | 32 | 38 | 24 | 5 | 150 | 174 | 0 | 0 | 0 | 0 |
| 34 | 20-Aug | 0 | 0 | 3 | 3 | 70 | 4 | 139 | 209 | 0 | 0 | 0 | 0 |
| 35 | 27-Aug | 2 | 0 | 0 | 2 | 130 | 6 | 611 | 741 | 0 | 0 | 0 | 0 |
| 36 | 3-Sep | 2 | 0 | 0 | 2 | 94 | 3 | 285 | 379 | 0 | 0 | 0 | 0 |
| 37 | 10-Sep | 0 | 0 | 0 | 0 | 34 | 0 | 32 | 66 | 0 | 0 | 0 | 0 |
| 38 | 17-Sep | 0 | 0 | 0 | 0 | 36 | 0 | 88 | 124 | 3 | 0 | 6 | 9 |
| 39 | 24-Sep | 0 | 0 | 0 | 0 | 78 | 11 | 54 | 132 | 6 | 1 | 0 | 6 |
| 40 | 1 -Oct | 0 | 0 | 0 | 0 | 74 | 88 | 38 | 112 | 107 | 23 | 53 | 160 |
| 41 | 8-Oct | 0 | 0 | 0 | 0 | 54 | 103 | 2 | 56 | 200 | 198 | 24 | 224 |
| 42 | 15-Oct | 0 | 0 | 0 | 0 | 88 | 74 | 0 | 88 | 211 | 118 | 0 | 211 |
| Total ${ }^{\text {b }}$ |  | 1,044 | 195 | 580 | 1,624 | 682 | 323 | 1,745 | 2,427 | 527 | 340 | 83 | 610 |

Does not include released fish.
b The total food fish catch above the Klukshu Weir was 19 chinook and 726 sockeye salmon. Village Creek food fish catch was 43 sockeye and 0 chinook salmon.

Appendix E.3. Daily counts of salmon passing through Klukshu River weir, 1995.

| Date | Chinook ${ }^{\text {a }}$ |  |  | Sockeye |  |  | Coho |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Cumulative |  |  | Cumulative |  |  | Daily | Cumulative |  |
|  | Daily | Daily | Prop. | Daily | Daily | Prop. |  | Daily | Prop. |
| 9-Jun | 0 | 0 | 0.000 | 0 | 0 | 0.000 | 0 | 0 | 0.000 |
| 10-Jun | 0 | 0 | 0.000 | 0 | 0 | 0.000 | 0 | 0 | 0.000 |
| 11-Jun | 0 | 0 | 0.000 | 0 | 0 | 0.000 | 0 | 0 | 0.000 |
| 12-Jun | 0 | 0 | 0.000 | 0 | 0 | 0.000 | 0 | 0 | 0.000 |
| 13-Jun | 0 | 0 | 0.000 | 0 | 0 | 0.000 | 0 | 0 | 0.000 |
| 14-Jun | 0 | 0 | 0.000 | 0 | 0 | 0.000 | 0 | 0 | 0.000 |
| 15-Jun | 0 | 0 | 0.000 | 0 | 0 | 0.000 | 0 | 0 | 0.000 |
| 16-Jun | 0 | 0 | 0.000 | 0 | 0 | 0.000 | 0 | 0 | 0.000 |
| 17-Jun | 0 | 0 | 0.000 | 0 | 0 | 0.000 | 0 | 0 | 0.000 |
| 18-Jun | 0 | 0 | 0.000 | 0 | 0 | 0.000 | 0 | 0 | 0.000 |
| 19-Jun | 0 | 0 | 0.000 | 0 | 0 | 0.000 | 0 | 0 | 0.000 |
| 20-Jun | 1 | 1 | 0.000 | 0 | 0 | 0.000 | 0 | 0 | 0.000 |
| 21-Jun | 0 | 1 | 0.000 | 0 | 0 | 0.000 | 0 | 0 | 0.000 |
| 22-Jun | 1 | 2 | 0.000 | 0 | 0 | 0.000 | 0 | 0 | 0.000 |
| 23-Jun | 0 | 2 | 0.000 | 0 | 0 | 0.000 | 0 | 0 | 0.000 |
| 24-Jun | 0 | 2 | 0.000 | 0 | 0 | 0.000 | 0 | 0 | 0.000 |
| 25-Jun | 0 | 2 | 0.000 | 0 | 0 | 0.000 | 0 | 0 | 0.000 |
| 26-Jun | 0 | 2 | 0.000 | 0 | 0 | 0.000 | 0 | 0 | 0.000 |
| 27-Jun | 1 | 3 | 0.001 | 0 | 0 | 0.000 | 0 | 0 | 0.000 |
| 28-Jun | 1 | 4 | 0.001 | 0 | 0 | 0.000 | 0 | 0 | 0.000 |
| 29-Jun | 3 | 7 | 0.001 | 0 | 0 | 0.000 | 0 | 0 | 0.000 |
| 30-Jun | 7 | 14 | 0.002 | 0 | 0 | 0.000 | 0 | 0 | 0.000 |
| 1-Jul | 0 | 14 | 0.002 | 0 | 0 | 0.000 | 0 | 0 | 0.000 |
| 2-Jul | 0 | 14 | 0.002 | 0 | 0 | 0.000 | 0 | 0 | 0.000 |
| 3-Jul | 3 | 17 | 0.003 | 4 | 4 | 0.000 | 0 | 0 | 0.000 |
| 4-Jul | 216 | 233 | 0.041 | 133 | 137 | 0.007 | 0 | 0 | 0.000 |
| 5-Jul | 21 | 254 | 0.045 | 4 | 141 | 0.007 | 0 | 0 | 0.000 |
| $6-\mathrm{Jul}$ | 390 | 644 | 0.113 | 113 | 254 | 0.012 | 0 | 0 | 0.000 |
| 7-Jul | 71 | 715 | 0.126 | 25 | 279 | 0.013 | 0 | 0 | 0.000 |
| 8-Jul | 192 | 907 | 0.160 | 25 | 304 | 0.015 | 0 | 0 | 0.000 |
| $9-\mathrm{Jul}$ | 27 | 934 | 0.164 | 13 | 317 | 0.015 | 0 | 0 | 0.000 |
| 10-Jul | 735 | 1,669 | 0.294 | 192 | 509 | 0.025 | 0 | 0 | 0.000 |
| 11-Jul | 903 | 2,572 | 0.453 | 106 | 615 | 0.030 | 0 | 0 | 0.000 |
| 12-Jul | 92 | 2,664 | 0.469 | 25 | 640 | 0.031 | 0 | 0 | 0.000 |
| 13-Jul | 82 | 2,746 | 0.484 | 20 | 660 | 0.032 | 0 | 0 | 0.000 |
| 14-Jul | 97 | 2,843 | 0.501 | 36 | 696 | 0.034 | 0 | 0 | 0.000 |
| 15-Jul | 40 | 2,883 | 0.508 | 23 | 719 | 0.035 | 0 | 0 | 0.000 |
| 16-Jul | 179 | 3,062 | 0.539 | 41 | 760 | 0.037 | 0 | 0 | 0.000 |
| 17-Jul | 306 | 3,368 | 0.593 | 196 | 956 | 0.046 | 0 | 0 | 0.000 |
| 18-Jul | 613 | 3,981 | 0.701 | 101 | 1,057 | 0.051 | 0 | 0 | 0.000 |
| 19-Jul | 593 | 4,574 | 0.806 | 35 | 1,092 | 0.053 | 0 | 0 | 0.000 |
| 20-Jul | 38 | 4,612 | 0.812 | 48 | 1,140 | 0.055 | 0 | 0 | 0.000 |
| 21-Jul | 80 | 4,692 | 0.826 | 92 | 1,232 | 0.060 | 0 | 0 | 0.000 |
| 22-Jul | 78 | 4,770 | 0.840 | 140 | 1,372 | 0.066 | 0 | 0 | 0.000 |
| 23-Jul | 100 | 4,870 | 0.858 | 25 | 1,397 | 0.068 | 0 | 0 | 0.000 |
| 24-Jul | 185 | 5,055 | 0.890 | 40 | 1,437 | 0.069 | 0 | 0 | 0.000 |

-Continued-

Appendix E.3. (page 2 of 3 )

| Date | Chinook ${ }^{\text {a }}$ |  |  | Sockeye |  |  | Coho |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Cumulative |  | Daily | Cumulative |  | Daily | Cumulative |  |
|  | Daily | Daily | Prop. |  | Daily | Prop. |  | Daily | Prop. |
| 25-Jul | 63 | 5,118 | 0.901 | 24 | 1,461 | 0.071 | 0 | 0 | 0.000 |
| 26-Jul | 84 | 5,202 | 0.916 | 126 | 1,587 | 0.077 | 0 | 0 | 0.000 |
| 27-Jul | 59 | 5,261 | 0.927 | 79 | 1,666 | 0.080 | 0 | 0 | 0.000 |
| 28-Jul | 38 | 5,299 | 0.933 | 90 | 1,756 | 0.085 | 0 | 0 | 0.000 |
| 29-Jul | 12 | 5,311 | 0.935 | 14 | 1,770 | 0.086 | 0 | 0 | 0.000 |
| 30-Jul | 58 | 5,369 | 0.946 | 3 | 1,773 | 0.086 | 0 | 0 | 0.000 |
| 31-Jul | 26 | 5,395 | 0.950 | 9 | 1,782 | 0.086 | 0 | 0 | 0.000 |
| 1-Aug | 20 | 5,415 | 0.954 | 2 | 1,784 | 0.086 | 0 | 0 | 0.000 |
| 2-Aug | 4 | 5,419 | 0.954 | 14 | 1,798 | 0.087 | 0 | 0 | 0.000 |
| 3-Aug | 22 | 5,441 | 0.958 | 4 | 1,802 | 0.087 | 0 | 0 | 0.000 |
| 4-Aug | 26 | 5,467 | 0.963 | 51 | 1,853 | 0.090 | 0 | 0 | 0.000 |
| 5-Aug | 5 | 5,472 | 0.964 | 22 | 1,875 | 0.091 | 0 | 0 | 0.000 |
| 6-Aug | 20 | 5,492 | 0.967 | 29 | 1,904 | 0.092 | 0 | 0 | 0.000 |
| 7-Aug | 7 | 5,499 | 0.968 | 8 | 1,912 | 0.092 | 0 | 0 | 0.000 |
| 8-Aug | 24 | 5,523 | 0.973 | 53 | 1,965 | 0.095 | 0 | 0 | 0.000 |
| 9-Aug | 5 | 5,528 | 0.974 | 35 | 2,000 | 0.097 | 0 | 0 | 0.000 |
| 10-Aug | 12 | 5,540 | 0.976 | 54 | 2,054 | 0.099 | 0 | 0 | 0.000 |
| 11-Aug | 25 | 5,565 | 0.980 | 199 | 2,253 | 0.109 | 0 | 0 | 0.000 |
| 12-Aug | 2 | 5,567 | 0.980 | 9 | 2,262 | 0.109 | 0 | 0 | 0.000 |
| 13-Aug | 6 | 5,573 | 0.982 | 4 | 2,266 | 0.109 | 0 | 0 | 0.000 |
| 14-Aug | 5 | 5,578 | 0.982 | 13 | 2,279 | 0.110 | 0 | 0 | 0.000 |
| 15-Aug | 11 | 5,589 | 0.984 | 10 | 2,289 | 0.111 | 0 | 0 | 0.000 |
| 16-Aug | 10 | 5,599 | 0.986 | 21 | 2,310 | 0.112 | 0 | 0 | 0.000 |
| 17-Aug | 5 | 5,604 | 0.987 | 16 | 2,326 | 0.112 | 0 | 0 | 0.000 |
| 18-Aug | 8 | 5,612 | 0.988 | 46 | 2,372 | 0.115 | 0 | 0 | 0.000 |
| 19-Aug | 15 | 5,627 | 0.991 | 137 | 2,509 | 0.121 | 0 | 0 | 0.000 |
| 20-Aug | 4 | 5,631 | 0.992 | 78 | 2,587 | 0.125 | 0 | 0 | 0.000 |
| 21-Aug | 4 | 5,635 | 0.992 | 14 | 2,601 | 0.126 | 0 | 0 | 0.000 |
| 22-Aug | 2 | 5,637 | 0.993 | 75 | 2,676 | 0.129 | 0 | 0 | 0.000 |
| 23-Aug | 5 | 5,642 | 0.994 | 357 | 3,033 | 0.147 | 0 | 0 | 0.000 |
| 24-Aug | 2 | 5,644 | 0.994 | 40 | 3,073 | 0.148 | 0 | 0 | 0.000 |
| 25-Aug | 2 | 5,646 | 0.994 | 199 | 3,272 | 0.158 | 0 | 0 | 0.000 |
| 26-Aug | 3 | 5,649 | 0.995 | 69 | 3,341 | 0.161 | 0 | 0 | 0.000 |
| 27-Aug | 6 | 5,655 | 0.996 | 645 | 3,986 | 0.193 | 0 | 0 | 0.000 |
| 28-Aug | 6 | 5,661 | 0.997 | 445 | 4,431 | 0.214 | 0 | 0 | 0.000 |
| 29-Aug | 1 | 5,662 | 0.997 | 1,472 | 5,903 | 0.285 | 0 | 0 | 0.000 |
| 30-Aug | 3 | 5,665 | 0.998 | 147 | 6,050 | 0.292 | 0 | 0 | 0.000 |
| 31-Aug | 1 | 5,666 | 0.998 | 2,304 | 8,354 | 0.404 | 0 | 0 | 0.000 |
| 1-Sep | 2 | 5,668 | 0.998 | 1,710 | 10,064 | 0.486 | 0 | 0 | 0.000 |
| 2-Sep | 1 | 5,669 | 0.998 | 97 | 10,161 | 0.491 | 0 | 0 | 0.000 |
| 3-Sep | 1 | 5,670 | 0.999 | 419 | 10,580 | 0.511 | 0 | 0 | 0.000 |
| 4-Sep | 0 | 5,670 | 0.999 | 192 | 10,772 | 0.520 | 0 | 0 | 0.000 |
| 5-Sep | 1 | 5,671 | 0.999 | 1,225 | 11,997 | 0.580 | 0 | 0 | 0.000 |
| 6-Sep | 2 | 5,673 | 0.999 | 1,849 | 13,846 | 0.669 | 0 | 0 | 0.000 |
| 7-Sep | 1 | 5,674 | 0.999 | 2,055 | 15,901 | 0.768 | 0 | 0 | 0.000 |
| 8-Sep | 1 | 5,675 | 0.999 | 1,989 | 17,890 | 0.864 | 0 | 0 | 0.000 |

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Appendix E.3. (page 3 of 3 )

| Date D | Chinook ${ }^{\text {a }}$ |  |  | Sockeye |  |  | Coho |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Cumulative |  | Daily | Cumulative |  | Daily | Cumulative |  |
|  | Daily | Daily | Prop. |  | Daily | Prop. |  | Daily | Prop. |
| 9-Sep | 0 | 5,675 | 0.999 | 175 | 18,065 | 0.873 | 0 | 0 | 0.000 |
| 10-Sep | 0 | 5,675 | 0.999 | 226 | 18,291 | 0.884 | 0 | 0 | 0.000 |
| 11-Sep | 1 | 5,676 | 1.000 | 238 | 18,529 | 0.895 | 0 | 0 | 0.000 |
| 12-Sep | 0 | 5,676 | 1.000 | 67 | 18,596 | 0.899 | 0 | 0 | 0.000 |
| 13-Sep | 0 | 5,676 | 1.000 | 240 | 18,836 | 0.910 | 0 | 0 | 0.000 |
| 14-Sep | 0 | 5,676 | 1.000 | 39 | 18,875 | 0.912 | 1 | 1 | 0.000 |
| 15-Sep | 0 | 5,676 | 1.000 | 26 | 18,901 | 0.913 | 0 | 1 | 0.000 |
| 16-Sep | 0 | 5,676 | 1.000 | 4 | 18,905 | 0.913 | 0 | 1 | 0.000 |
| 17-Sep | 0 | 5,676 | 1.000 | 4 | 18,909 | 0.914 | 0 | 1 | 0.000 |
| 18-Sep | 0 | 5,676 | 1.000 | 0 | 18,909 | 0.914 | 0 | 1 | 0.000 |
| 19-Sep | 0 | 5,676 | 1.000 | 2 | 18,911 | 0.914 | 0 | 1 | 0.000 |
| 20-Sep | 0 | 5,676 | 1.000 | 4 | 18,915 | 0.914 | 0 | 1 | 0.000 |
| 21-Sep | 1 | 5,677 | 1.000 | 851 | 19,766 | 0.955 | 42 | 43 | 0.012 |
| 22-Sep | 1 | 5,678 | 1.000 | 47 | 19,813 | 0.957 | 3 | 46 | 0.013 |
| 23-Sep | 0 | 5,678 | 1.000 | 0 | 19,813 | 0.957 | 0 | 46 | 0.013 |
| 24-Sep | 0 | 5,678 | 1.000 | 9 | 19,822 | 0.958 | 0 | 46 | 0.013 |
| 25-Sep | 0 | 5,678 | 1.000 | 82 | 19,904 | 0.962 | 53 | 99 | 0.027 |
| 26-Sep | 0 | 5,678 | 1.000 | 6 | 19,910 | 0.962 | 1 | 100 | 0.028 |
| 27-Sep | 0 | 5,678 | 1.000 | 5 | 19,915 | 0.962 | 2 | 102 | 0.028 |
| 28-Sep | 0 | 5,678 | 1.000 | 1 | 19,916 | 0.962 | 2 | 104 | 0.029 |
| 29-Sep | 0 | 5,678 | 1.000 | 11 | 19,927 | 0.963 | 7 | 111 | 0.031 |
| 30-Sep | 0 | 5,678 | 1.000 | 1 | 19,928 | 0.963 | 0 | 111 | 0.031 |
| 1-Oct | 0 | 5,678 | 1.000 | 1 | 19,929 | 0.963 | 0 | 111 | 0.031 |
| 2-Oct | 0 | 5,678 | 1.000 | 7 | 19,936 | 0.963 | 26 | 137 | 0.038 |
| 3-Oct | 0 | 5,678 | 1.000 | 45 | 19,981 | 0.965 | 754 | 891 | 0.247 |
| 4-Oct | 0 | 5,678 | 1.000 | 28 | 20,009 | 0.967 | 806 | 1,697 | 0.470 |
| 5-Oct | 0 | 5,678 | 1.000 | 36 | 20,045 | 0.969 | 166 | 1,863 | 0.515 |
| 6-Oct | 0 | 5,678 | 1.000 | 135 | 20,180 | 0.975 | 972 | 2,835 | 0.784 |
| 7 -Oct | 0 | 5,678 | 1.000 | 79 | 20,259 | 0.979 | 173 | 3,008 | 0.832 |
| 8-Oct | 0 | 5,678 | 1.000 | 7 | 20,266 | 0.979 | 17 | 3,025 | 0.837 |
| 9 -Oct | 0 | 5,678 | 1.000 | 12 | 20,278 | 0.980 | 51 | 3,076 | 0.851 |
| 10-Oct | 0 | 5,678 | 1.000 | 14 | 20,292 | 0.980 | 32 | 3,108 | 0.860 |
| 11-Oct | 0 | 5,678 | 1.000 | 13 | 20,305 | 0.981 | 32 | 3,140 | 0.869 |
| 12-Oct | 0 | 5,678 | 1.000 | 2 | 20,307 | 0.981 | 19 | 3,159 | 0.874 |
| 13-Oct | 0 | 5,678 | 1.000 | 30 | 20,337 | 0.983 | 37 | 3,196 | 0.884 |
| 14-Oct | 0 | 5,678 | 1.000 | 1 | 20,338 | 0.983 | 1 | 3,197 | 0.885 |
| 15-Oct | 0 | 5,678 | 1.000 | 3 | 20,341 | 0.983 | 4 | 3,201 | 0.886 |
| 16-Oct | 0 | 5,678 | 1.000 | 5 | 20,346 | 0.983 | 13 | 3,214 | 0.889 |
| 17 -Oct ${ }^{\text {b }}$ | 0 | 5,678 | 1.000 | 350 | 20,696 | 1.000 | 400 | 3,614 | 1.000 |
| Totals |  | 5,678 |  |  | 20,696 |  |  | 3,614 |  |
| Adjustments |  |  |  |  |  |  |  |  |  |
| Brood stock |  | 24 |  |  | 0 |  |  |  |  |
| Catch above weir |  | 260 |  |  | 879 |  |  | 50 |  |
| Total Escapement |  | 5,394 |  |  | 19,817 |  |  | 3,564 |  |

[^5]Appendix E.4. Salmon catch and effort in the U.S. commercial fishery in the Alsek River, 1964-1995.

| Year | Catch |  |  |  |  | Effort |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Boat <br> Days | Days <br> Open |
|  | Chinook | Sockeye | Coho | Pink | Chum |  |  |
| 1961 | 2,120 | 23,339 | 7,679 | 84 | 86 | 1,436 | 80.0 |
| 1962 | 2,276 | 14,475 | 8,362 | 93 | 133 |  | 76.0 |
| 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 | 792 | 42.0 |
| 1981 | 779 | 23,641 | 10,232 | 65 | 816 | 585 | 40.0 |
| 1982 | 532 | 27,423 | 6,534 | 6 | 358 | 555 | 33.0 |
| 1983 | 94 | 18,293 | 5,253 | 20 | 432 | 479 | 38.0 |
| 1984 | 60 | 14,326 | 7,868 | 24 | 1,610 | 429 | 33.0 |
| 1985 | 213 | 5,940 | 5,490 | 3 | 427 | 279 | 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 | 367 | 38.0 |
| 1990 | 78 | 17,013 | 1,437 | 0 | 495 | 374 | 38.0 |
| 1991 | 103 | 17,542 | 5,956 | 0 | 103 | 530 | 49.0 |
| 1992 | 301 | 19,298 | 3,116 | 1 | 120 | 404 | 46.0 |
| 1993 | 300 | 20,043 | 1,215 | 0 | 49 | 383 | 40.0 |
| 1994 | 805 | 19,639 | 4,182 | 0 | 32 | 416 | 61.0 |
| Averages |  |  |  |  |  |  |  |
| 61-94 | 858 | 21,290 | 6,091 | 52 | 396 | 637 | 52.4 |
| 85-94 | 308 | 15,546 | 3,622 | 3 | 555 | 398 | 41.4 |
| 1995 | 670 | 33,112 | 14,184 | 13 | 347 | 926 | 53.5 |

Appendix E.5. Salmon catch in the U.S. subsistence and personal use fisheries in the Alsek River, 1976-1995. ${ }^{\text {a }}$

|  | Catch |  |  |
| :--- | ---: | ---: | ---: |
| Year | Chinook | Sockeye | Coho |
| 1976 | 13 | 51 | 5 |
| 1977 | 18 | 113 | 0 |
| 1978 |  |  |  |
| 1979 | 80 | 35 | 70 |
| 1980 | 57 | 41 | 62 |
| 1981 | 32 | 50 | 74 |
| 1982 | 87 | 75 | 50 |
| 1983 | 31 | 25 | 50 |
| 1984 |  |  |  |
| 1985 | 16 | 95 | 0 |
| 1986 | 22 | 241 | 45 |
| 1987 | 27 | 173 | 31 |
| 1988 | 13 | 148 | 9 |
| 1989 | 20 | 131 | 34 |
| 1990 | 85 | 144 | 12 |
| 1991 | 38 | 104 | 0 |
| 1992 | 15 | 37 | 44 |
| 1993 | 38 | 96 | 28 |
| 1994 | 60 | 47 | 20 |
| Averages |  |  |  |
| $76-94$ | 38 | 94 | 31 |
| $85-94$ | 33 | 122 | 22 |
| 1995 | 51 | 167 | 53 |
| Reported catches on returned fishing permits. |  |  |  |
|  |  |  |  |

Appendix E.6. Salmon catches in the Canadian aboriginal and sport fisheries in the Alsek River, 19761995.

| Year | Chinook |  |  | Sockeye |  |  | Coho |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Aboriginal | Sport | Total | Aboriginal | Sport | Total | Aboriginal | Sport | Total |
| 1976 | 150 | 200 | 350 | 4,000 | 600 | 4,600 | 0 | 100 | 100 |
| 1977 | 350 | 300 | 650 | 10,000 | 500 | 10,500 | 0 | 200 | 200 |
| 1978 | 350 | 300 | 650 | 8,000 | 500 | 8,500 | 0 | 200 | 200 |
| 1979 | 1,300 | 650 | 1,950 | 7,000 | 750 | 7,750 | 0 | 100 | 100 |
| 1980 | 150 | 200 | 350 | 800 | 600 | 1,400 | 0 | 200 | 200 |
| 1981 | 150 | 315 | 465 | 2,000 | 808 | 2,808 | 0 | 109 | 109 |
| 1982 | 400 | 224 | 624 | 5,000 | 755 | 5,755 | 0 | 109 | 109 |
| 1983 | 300 | 312 | 612 | 2,550 | 732 | 3,282 | 0 | 16 | 16 |
| 1984 | 100 | 475 | 575 | 2,600 | 289 | 2,889 | 0 | 20 | 20 |
| 1985 | 175 | 250 | 425 | 1,361 | 100 | 1,461 | 50 | 100 | 150 |
| 1986 | 102 | 165 | 267 | 1,914 | 307 | 2,221 | 0 | 9 | 9 |
| 1987 | 125 | 367 | 492 | 1,158 | 383 | 1,541 | 0 | 49 | 49 |
| 1988 | 43 | 249 | 292 | 1,604 | 322 | 1,926 | 0 | 192 | 192 |
| 1989 | 234 | 272 | 506 | 1,851 | 319 | 2,170 | 0 | 227 | 227 |
| 1990 | 202 | 555 | 757 | 2,314 | 392 | 2,706 | 0 | 75 | 75 |
| 1991 | 509 | 388 | 897 | 2,111 | 303 | 2,414 | 0 | 227 | 227 |
| 1992 | 148 | 103 | 251 | 2,592 | 582 | 3,174 | 0 | 213 | 213 |
| 1993 | 152 | 171 | 323 | 2,361 | 329 | 2,690 | 0 | 37 | 37 |
| 1994 | 289 | 197 | 486 | 1,745 | 261 | 2,006 | 8 | 69 | 77 |
| Averages |  |  |  |  |  |  |  |  |  |
| 76-94 | 275 | 300 | 575 | 3,208 | 465 | 3,673 | 3 | 119 | 122 |
| 85-94 | 198 | 272 | 470 | 1,901 | 330 | 2,231 | 6 | 120 | 126 |
| 1995 | 580 | 1,044 | 1,624 | 1,745 | 682 | 2,427 | 83 | 527 | 610 |

Appendix E.7. Klukshu River weir counts of chinook, sockeye, and coho salmon, 1976-1995. The escapement count equals the weir count minus the aboriginal fishery catch and brood stock taken.

|  | Chinook $^{\mathrm{a}}$ |  | Sockeye |  |  |  | Coho $^{\mathrm{b}}$ |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Year | Count | Escape. $^{\mathrm{c}}$ | Early $^{\mathrm{d}}$ | Late | Total | Escape. ${ }^{\mathrm{c}}$ | Count | Escape. |  |
| 1976 | 1,278 | 1,153 | 181 | 11,510 | 11,691 | 7,941 | 1,572 |  |  |
| 1977 | 3,144 | 2,894 | 8,931 | 17,860 | 26,791 | 15,441 | 2,758 |  |  |
| 1978 | 2,976 | 2,676 | 2,508 | 24,359 | 26,867 | 19,017 | 30 |  |  |
| 1979 | 4,404 | 2,454 | 977 | 11,334 | 12,311 | 7,051 | 175 |  |  |
| 1980 | 2,637 | 2,487 | 1,008 | 10,742 | 11,750 | 10,850 | 704 |  |  |
| 1981 | 2,113 | 1,963 | 997 | 19,351 | 20,348 | 18,448 | 1,170 |  |  |
| 1982 | 2,369 | 1,969 | 7,758 | 25,941 | 33,699 | 28,899 | 189 |  |  |
| 1983 | 2,537 | 2,237 | 6,047 | 14,445 | 20,492 | 18,017 | 303 |  |  |
| 1984 | 1,672 | 1,572 | 2,769 | 9,958 | 12,727 | 10,227 | 1,402 |  |  |
| 1985 | 1,458 | 1,283 | 539 | 18,081 | 18,620 | 17,259 | 350 |  |  |
| 1986 | 2,709 | 2,607 | 416 | 24,434 | 24,850 | 22,936 | 71 |  |  |
| 1987 | 2,616 | 2,491 | 3,269 | 7,235 | 10,504 | 9,346 | 202 |  |  |
| 1988 | 2,037 | 1,994 | 585 | 8,756 | 9,341 | 7,737 | 2,774 |  |  |
| 1989 | 2,456 | 2,289 | 3,400 | 20,142 | 23,542 | 21,636 | 2,219 |  |  |
| 1990 | 1,915 | 1,742 | 1,316 | 24,679 | 25,995 | 24,607 | 315 |  |  |
| 1991 | 2,489 | 2,248 | 1,924 | 17,053 | 18,977 | 17,645 | 8,540 | 8,478 |  |
| 1992 | 1,367 | 1,242 | 11,339 | 8,428 | 19,767 | 18,269 | 1,145 | 1,145 |  |
| 1993 | 3,302 | 3,220 | 5,369 | 11,371 | 16,740 | 14,921 | 788 | 788 |  |
| 1994 | 3,727 | 3,628 | 3,247 | 11,791 | 15,038 | 13,892 | 1,232 | 1,232 |  |
| Averages |  |  |  |  |  |  |  |  |  |
| $76-94$ | 2,485 | 2,218 | 3,294 | 15,656 | 18,950 | 16,007 | 1,365 |  |  |
| $85-94$ | 2,408 | 2,274 | 3,140 | 15,197 | 18,337 | 16,825 | 1,764 |  |  |
| 1995 | 5,678 | 5,394 | 2,289 | 18,407 | 20,696 | 19,817 | 3,614 | 3,564 |  |

Counts include jack chinook salmon.
b Weir was removed prior to the end of the coho run.
c The chinook and sockeye escapements into Klukshu Lake are calculated from the weir count minus fish harvested above the weir site minus brood stock taken. The remainder of the food fishery harvest occurred below the weir at Village Creek, and Blanchard and Takhanne Rivers.
d Includes sockeye counts up to and including August 15.

Appendix E.8. Alsek River sockeye counts from U.S. and Canadian aerial surveys and from the electronic counter at Village Creek, 1985-1995.

| Year | U.S. Aerial Surveys ${ }^{\text {a }}$ |  |  |  | Canadian Aerial Surveys ${ }^{\text {b }}$ |  | Village Creek Counter |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Basin | Cabin | Muddy | Tanis | Tatshenshini | Neskataheen |  |
|  | Creek | Creek | Creek | River | River | 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 | $433{ }^{\text {c }}$ |
| 1989 | 320 |  |  | 680 | 1,689 | 1,700 | 9,569 |
| 1990 | 275 | 300 |  | 3,500 |  |  | 7,500 ${ }^{\text {d }}$ |
| 1991 |  |  |  | 800 |  |  | 5,670 ${ }^{\text {c }}$ |
| 1992 | 1,000 | 10 |  | 350 |  |  | 11,485 ${ }^{\text {f }}$ |
| 1993 | 4,800 |  |  | 900 |  |  | 3,135 ${ }^{5}$ |
| 1994 | 250 |  |  | 600 | 366 |  | 4,007 ${ }^{\text {h }}$ |
| Averages |  |  |  |  |  |  |  |
| 85-94 | 1,133 | 177 | 300 | 1,408 | 756 | 969 | 5,018 |
| 1995 | 2,700 |  |  | 350 |  |  | 4,041 |

a Surveys not made every year at each tributary.
${ }^{b}$ Includes several streams from Lo-Fog to Goat Creek.
c Incomplete count due to machine malfunction.
d Estimated count based on absolute electronic records $(5,313)$ and the total number of non-operational days.
e Estimated count based on absolute electronic records $(3,981)$ and the total number of non-operational days.
f Counts were estimated during the non-operational days by averaging the counts recorded three days before and three days after the malfunction.
$g$ Estimated count based on absolute electronic records $(2,101)$ and the total number of non-operational days.
h Estimated count based on absolute electronic records $(3,921)$ and the total number of non-operational days.

Appendix E.9. Aerial survey index counts of Alsek chinook salmon escapements, 1984-1995.

| Year | Blanchard <br> River | Takhanne <br> River | Goat <br> Creek |
| :--- | ---: | ---: | ---: |
| 1984 | 304 | 158 | 28 |
| 1985 | 232 | 184 |  |
| 1986 | 556 | 358 | 142 |
| 1987 | 624 | 295 | 85 |
| 1988 | 437 | 169 | 54 |
| 1989 | $a$ | 158 | 34 |
| 1990 | $a$ | 325 | 32 |
| 1991 | 121 | 86 | 63 |
| 1992 | 86 | 77 | 16 |
| 1993 | 326 | 351 | 50 |
| 1994 | 349 | 342 | 67 |
| Averages |  |  |  |
| $84-94$ | 337 | 228 | 57 |
| 1995 | 338 | 260 | $5^{\text {b }}$ |

Not surveyed due to poor visibility.
${ }^{b}$ Late survey date which missed the peak of spawning.

Appendix E.10. Aerial survey counts of coho salmon from U.S. lower Alsek River tributaries, 19841995.03/10/97 11:51:56 AM

| Year | Combined U.S. <br> Tributary Counts |
| :--- | ---: |
| 1985 | 450 |
| 1986 | 1,100 |
| 1987 | 100 |
| 1988 | 1,900 |
| 1989 | 1,990 |
| 1990 | 1,600 |
| 1991 | $500^{\mathrm{a}}$ |
| 1992 | $1,010^{\mathrm{a}}$ |
| 1993 | $800^{\mathrm{a}}$ |
| 1994 | $975^{\mathrm{a}}$ |
| Averages |  |
| $85-94$ | 1,043 |
| 1995 | 1,050 |
| a Few |  |

Few systems surveyed.


[^0]:    ${ }^{\text {a }}$ The Canadian preseason forecast includes an estimated non-terminal marine harvest which is not accounted for in the total run size in this report.

[^1]:    ${ }^{\text {a }}$ U.S. harvest estimate differs from Joint Interception Committee estimate because no estimates are made for catches other than the listed fisheries.

[^2]:    Alaskit hatchery pink salmon contributions are not available.

[^3]:    All Tahltan includes thermally marked fish.

[^4]:    a On 2, 8, and 11 August holes in the weir allowed fish to pass, an estimated 800 additional sockeye passed on these dates.

[^5]:    a Jack chinook included in the counts.
    b Estimate of fish holding below weir during removal.

