# PACIFIC SALMON COMMISSION <br> TRANSBOUNDARY TECHNICAL COMMITTEE REPORT <br> FINAL ESTIMATES OF TRANSBOUNDARY RIVER SALMON PRODUCTION, HARVEST AND ESCAPEMENT AND A REVIEW OF JOINT ENHANCEMENT ACTIVITIES IN 2019 

## REPORT TCTR (21) -03

By<br>The Transboundary Technical Committee

For
The Pacific Salmon Commission

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## ACRONYMS

| ADF\&G | Alaska Department of Fish and Game |
| :--- | :--- |
| AC | Allowable Catch |
| AF | Aboriginal Fishery |
| BLC | Base Level Catch |
| CAFN | Champagne Aishihik First Nation |
| CCPH | Cumulative Catch per Hour |
| CPUE | Catch per unit effort |
| CWT | Coded Wire Tag |
| CYI | Canyon Island |
| DFO | Department of Fisheries and Oceans (Canada) |
| DIPAC | Douglas Island Pink and Chum (Private Hatchery) |
| ESSR | Excess Salmon to Spawning Requirement (surplus fishery license) |
| FBD | Fish per boat day |
| GSI | Genetic Stock Identification |
| IHNV | Infectious Hematopoietic Necrosis (a virus which infects sockeye salmon) |
| LCM | Latent Class Model |
| MEF | Mid Eye Fork (fish length measurement) |
| MR | Mark-Recapture |
| MSY | Maximum Sustained Yield |
| POH | Post-Orbital-Hypural (fish length measurement) |
| PSC | Pacific Salmon Commission |
| PST | Pacific Salmon Treaty |
| SCMM | Stikine Chinook Management Model |
| SHA | Special Harvest Area |
| SMM | Stikine Management Model |
| SPA | Scale Pattern Analysis |
| SW | Statistical Week |
| TAC | Total Allowable Catch |
| TMR | Thermal Mark Recovery |
| TRTFN | Taku River Tlingit First Nation |
| TBR | Transboundary River |
| TTC | Transboundary Technical Committee |
| YSC | Yukon Salmon Committee |
|  |  |

## CALENDAR OF STATISTICAL WEEKS

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

## EXECUTIVE SUMMARY

Final estimates of harvests and escapements of Pacific salmon returning to the transboundary Stikine, Taku, and Alsek rivers in 2019 are presented and compared with historical patterns. Average, unless defined otherwise, refers to the most recent 10-year average (2009-2018). Relevant information pertaining to the management of U.S. and Canadian fisheries is presented and the use of inseason management models is discussed. Results from TBR sockeye salmon, Oncorhynchus nerka, enhancement projects are also reviewed.

## Stikine River

The postseason estimate of the 2019 Stikine River sockeye salmon terminal run was 89,400 fish, of which approximately 29,200 fish were harvested in various fisheries including assessment/test fisheries. An estimated 60,200 Stikine River fish escaped to spawn; 3,600 fish were removed for brood stock. The terminal run was below average and the harvest was below average (even when Tuya Lake fish were excluded). The Tahltan Lake sockeye salmon total weir count of 37,000 fish was above the goal range of 18,000 to 30,000 fish. The estimated spawning escapement of 23,200 Stikine River mainstem sockeye salmon was within the goal range of 20,000 to 40,000 fish. The estimated U.S. commercial harvest of Stikine River sockeye salmon in Districts 106 and 108, including the Stikine River subsistence fishery, was 13,000 fish. The sockeye salmon harvest in the Canadian inriver commercial fishery was 10,800 fish and the AF harvest was 5,400 fish. There was no inriver test fishery in 2019. Weekly inseason run projections from the SMM ranged from 121,500 to 140,800 sockeye salmon; final inseason model prediction was 123,000 fish, with a TAC of 65,000 fish. The postseason terminal run estimate was 89,400 fish. The estimated Stikine River sockeye salmon AC for the U.S. was 18,400 fish (53\% of TAC) and Canada's estimated AC was 16,300 fish (47\% of TAC); Canada harvested $100 \%$ and the U.S. harvested $71 \%$ of their respective TACs.

The estimated 2019 Stikine River large Chinook salmon terminal run was 14,280 fish. The above border run was 14,150 fish and spawning escapement was 13,820 fish; below the escapement goal target of 17,400 fish and the escapement goal range 14,000 to 28,000 fish. The run was one of the lowest on record and the harvests were well below average. The Little Tahltan River large Chinook salmon escapement of 540 fish was well below the Canadian escapement target of 3,300 fish and below the lower bound of the Canadian target range of 2,700 to 5,300 fish. The estimated incidental U.S. total harvest of Stikine River Chinook salmon was 133 large fish.

The 2019 run size of Stikine River coho salmon cannot be quantified. The Canadian inriver commercial fishery harvest was 5,200 coho salmon. The U.S. mixed stock coho salmon harvest in District 106 was 59,300 fish ( $16 \%$ Alaska hatchery) and District 108 was 9,500 fish ( $27 \%$ Alaska hatchery).

## Taku River

The estimate of the 2019 Taku River sockeye salmon terminal run is 166,400 fish; 162,900 wild fish and 3,600 enhanced fish. The U.S. harvested 67,000 wild fish, Canada harvested 21,100 wild fish, and the estimated above border spawning escapement was 74,900 wild sockeye salmon. The terminal run size and wild fish escapement are not comparable to historical averages, but escapement was above the interim goal range of 55,000 to 62,000 fish. The U.S. and Canada harvested an estimated $79 \%$ and $100 \%$ of their respective ACs calculated using an $80 \% / 20 \%$ U.S./Canada harvest sharing split based on enhanced fish production.

The estimated 2019 Taku River large Chinook salmon terminal run was 11,800 fish. The above border run was 11,570 fish and the spawning escapement was 11,560 fish; both below the escapement point goal of 25,500 fish and escapement goal range 19,000 to 36,000 fish. The run was the second lowest on record and the harvests were well below average. The total harvest of large Chinook salmon in the Canadian commercial fishery in the Taku River was 0 fish; due to the nonretention license requirement. The estimated incidental U.S. total harvest of Taku River large Chinook salmon was 230 large fish.

The above border run estimate of Taku River coho salmon in 2019 is 95,000 fish, which was average. The Canadian inriver commercial fishery harvest was 12,100 coho salmon. After all Canadian harvests are subtracted from the above border run the above border spawning escapement is estimated at 82,800 coho salmon, slightly below the upper end of the escapement goal range of 50,000 to 90,000 fish. The U.S. harvest of 23,200 coho salmon in the traditional District 111 drift gillnet mixed stock fishery was below average. Alaskan hatcheries contributed an estimated 8,200 fish, or 35\% of the District 111 harvest. The estimated U.S. total harvest of Taku River above border coho salmon was 7,900 fish. The U.S. and Canada harvested an estimated $28 \%$ and $82 \%$ of their respective ACs.

## Alsek River

The 2019 Alsek River harvest of 9,800 sockeye salmon in the U.S. commercial fishery was below average. The Canadian inriver recreational fishery reported a harvest of 5 sockeye salmon, while the Aboriginal food fishery harvested approximately 650 sockeye salmon. The Klukshu River count of 19,100 sockeye salmon was above average and the escapement of 18,700 fish was well above the escapement goal range of 7,500 to 11,000 fish.

The 1,590 Chinook salmon counted into the Klukshu River was above average and the estimated escapement (1,570 fish) was above the escapement goal range of 800 to 1,200 Chinook salmon. The U.S. Dry Bay harvest of 79 Chinook salmon was below average. There were 5 Chinook salmon harvested in the Canadian inriver recreational fishery, and an estimated 32 fish in the Aboriginal food fishery.

Current stock assessment programs prevent an accurate comparison of the Alsek River coho salmon run with historical runs. There was minimal effort during the U.S. Dry Bay coho salmon fishery and harvest figures are negligible. The Canadian recreational fishery harvested 7 coho salmon, and Aboriginal fisheries harvested no coho salmon. The Klukshu River enumeration program does not provide a complete enumeration of coho salmon into this system since it is removed before the run is complete.

## Enhancement

In 2019, eggs and milt were collected from sockeye salmon at Tahltan, Tatsamenie and Trapper lakes. An estimated 4.4 million eggs were collected at Tahltan Lake, 2.6 million eggs at Tatsamenie Lake and 429,000 eggs at Trapper Lake. Low initial survival coupled with lower than average fecundity means less eggs are available than originally estimated. Canadian technical staff revised the Tahltan Lake egg-take goal to 4.5 million sockeye salmon eggs based on actual escapement into Tahltan Lake, expected wild smolt production and stocking guidelines limiting enhanced production to less than $50 \%$ of the smolt leaving the lake. No egg take occurred at King Salmon Lake due to high return numbers exceeding TRTFN enhancement mandates.

In 2019, outplants of brood year 2018 sockeye salmon fry were as follows: 1.8 million fry into Tahltan Lake; 1.39 million fry were released directly to Tatsamenie Lake and 371 thousand fry were reared in net pens before being released into the lake.

Adult sockeye salmon otoliths were processed inseason by the ADF\&G otolith lab to estimate weekly contribution of fish from U.S./Canada TBR fry planting programs to District 106, 108, and 111 drift gillnet fisheries and to Canadian lower commercial and test fisheries in the Stikine and Taku rivers. Postseason estimates of stocked fish to Alaskan harvests were 3,700 Stikine River fish to District 106 and 108, and 1,300 Taku River fish to District 111. Postseason estimates of stocked fish to Canadian fisheries included 7,700 fish to Stikine River fisheries and 430 fish to Taku River fisheries.

## INTRODUCTION

This report presents estimates of the 2019 harvest and escapement data for Pacific salmon runs to the transboundary Stikine, Taku, and Alsek rivers and describes management actions taken during the season. Harvest and effort data are presented by week, for each river for both U.S. and Canadian fisheries. Spawning escapement data for most species are reported from weir counts or other escapement monitoring techniques. Joint enhancement activities on the Stikine and Taku rivers are also summarized.

The TTC met prior to the season to update joint management, stock assessment and enhancement plans and determine preseason forecasts and outlooks for run strengths and initial TAC estimates for the various species and rivers. The results of this meeting are summarized in: PSC TTC, TCTR (19)-3 Salmon Management and Enhancement Plans for the Stikine, Taku and Alsek Rivers, 2019.

Run reconstruction analyses are conducted on the sockeye salmon Oncorhynchus nerka and Chinook salmon $O$. tshawytscha runs to the Stikine and Taku rivers and to the Taku River for coho salmon $O$. kisutch for the purpose of evaluating the stocks and the fisheries managed for these stocks. No estimates of marine harvest are made for Alaskan fisheries outside of District 106 and 108 for Stikine River stocks, District 111 for Taku River stocks and Subdistrict 182-30 \& 31 for Alsek River stocks.

## STIKINE RIVER

Stikine River salmon are harvested by U.S. commercial drift gillnet and troll fisheries as well as sport and subsistence fisheries in Alaskan Districts 106 and 108, by Canadian commercial gillnet and assessment/test fisheries located in the lower and upper Stikine River, and by a Canadian AF in the upper portion of the river (Figure 1). In addition, Canadian terminal area fisheries are occasionally operated in the lower Tuya River and/or at Tahltan Lake when escapements are estimated to include excess salmon to spawning requirements (ESSR). A recreational fishery also exists in the Canadian section of the Stikine River drainage. In 1995, a U.S. personal use fishery was established in the lower Stikine River; no harvests were reported in this fishery in 1995 through 2000. Approximately 30 sockeye salmon were harvested in 2001, and the personal use fishery on the Stikine River was not open in 2002 and 2003. A U.S. subsistence fishery was opened in 2004 for sockeye salmon and in 2005 for Chinook and coho salmon.

In 1993, the U.S. spring experimental troll fishery near Wrangell was expanded to include two new areas in portions of District 106 and 108 to target hatchery Chinook salmon. In 1998 an additional area was included in a portion of District 108. The three areas in District 108 and one area in District 106 have remained unchanged and have opened in the absence of District 108 directed Stikine River Chinook salmon fisheries.

In May 2014, a landslide occurred near the mouth of the Tahltan River. The landslide deposited approximately $8,000 \mathrm{~m}^{3}$ of debris into the river which may have restricted access to Tahltan River Chinook and sockeye salmon spawning sites during high flows (until about mid-July 2014). In March 2015 select boulders at the landslide were demolished
using an industrial expansion compound set into drill holes within the boulders. The resulting fragments were displaced downstream by manual labor and by the erosional effects of the spring freshet. The exercise resulted in an increase in the channel width, ridding the site of a "pinch point" where it was observed that salmon struggled in their attempts to ascend the river in 2014. Radio telemetry studies in 2015 and 2016 showed that the landslide was not a significant barrier to Chinook salmon, however Tahltan River water levels were well below average during the Chinook salmon migration. In winter 2017/2018 significant work was completed at the landslide to improve fish passage by the blasting of large instream debris. On site monitoring in 2018 under extremely low water conditions indicated that Chinook and sockeye salmon passage was not delayed significantly. Sockeye and Chinook salmon passage was again assessed with radio telemetry in 2019. Results of the 2019 telemetry project are pending and will be provided in the forthcoming Pacific Salmon Commission Northern Endowment Fund project report.


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

## Harvest Regulations and the Joint Management Model

Fishing arrangements in place for salmon originating from the Canadian portion of the Stikine River watershed are provided in Annex IV, Chapter 1 of the PST and can be found at: http://www.psc.org/pubs/treaty.pdf. These arrangements include: directed fisheries for Chinook salmon; continuation of a U.S. subsistence fishery on Chinook, sockeye, and coho salmon stocks within the U.S. section of the Stikine River; continuation of coho salmon harvest shares; and, a sockeye salmon harvest sharing arrangement based on the estimated production of enhanced fish.

The TTC meets prior to the season to update joint management and enhancement plans, develop run forecasts, and determine new parameters for input into the inseason Chinook and sockeye salmon run projection models. The Chinook salmon model is referred to as the SCMM and serves as a key management tool governing weekly fishing regimes for Stikine River Chinook salmon. The SCMM is complemented inseason with a concurrent MR study and other inriver assessment methods. The sockeye salmon model is referred to as the SMM. The SMM was complemented inseason with concurrent inriver run size estimates based on fishery performance against historical fishery performance and run size estimates.

## Chinook Salmon

The SCMM model described above is based on the linear regression (correlation) between weekly cumulative CPUE of large Chinook salmon at the tagging site, located near the mouth of the Stikine River, and inriver run size based on annual inseason MR studies conducted from 1996 to 2018. The CPUE and run size data sets (CPUE vs. run size) are significantly correlated, although there are statistical challenges with the SCMM at low CPUE levels such as those seen in 2019 as they lie outside of the established relationship. Generalized inseason model estimates were generated commencing in SW 20 but were primarily for information purposes as there were no directed inriver commercial fisheries (Table 1). Traditional MR estimates based on the cumulative ratio of tagged-to-untagged fish observed in the inriver commercial fishery were unavailable due to low catch rates during the first event and no retention in the commercial fisheries (second event). The SCMM was the only available indication of run strength during the Chinook salmon reporting period. In order to abide by Annex IV, Chapter 1, Paragraph 3(a)(3)(vii), which obliges the Parties to apportion their overall TAC by historical weekly run timing, weekly fishery openings were announced based on weekly guideline harvests.

The preseason run size estimate of 8,250 large Chinook salmon was below the threshold run size limit of 28,100 fish (Table 1); hence, there were no directed Chinook salmon fisheries in the U.S. and Canada. The threshold number is the sum of the midpoint escapement goal ( 21,000 fish $)+$ the Canadian BLC ( 2,300 fish $)+$ the U.S. BLC $(3,400$ fish) + the inriver assessment/test fishery harvest ( 1,400 fish). In conjunction with the AC associated with the directed fishery, both U.S. and Canada are permitted a base level catch harvested as bycatch taken during the targeted sockeye salmon net fisheries and Chinook salmon taken in traditional recreational fisheries. In response to conservation concerns for

Chinook salmon in 2019, the Canadian directed sockeye salmon fishery opening was delayed by one week (to SW 26) to avoid Chinook salmon bycatch, and once the sockeye salmon fishery opened, fishermen were required to release all Chinook salmon bycatch.

Table 1. Stikine River large Chinook salmon run size based on the Stikine Chinook Management Model and MR estimates, and other methods, and weekly inseason harvest estimates from the District 108 gillnet, sport, troll, and subsistence fisheries and the inriver assessment/test, Canadian gillnet, and sport fisheries, 2019.

|  | Terminal Run |  |
| :---: | :---: | :---: |
| SW | Estimate | Method |
| 19 | 8,250 | Preseason |
| 20 | 8,250 | Preseason |
| 21 | $<14,000$ | SCMM |
| 22 | $<14,000$ | SCMM |
| 23 | $<14,000$ | SCMM |
| 24 | $<14,000$ | SCMM |
| 25 | $<14,000$ | SCMM |
| 26 | $<14,000$ | SCMM |
| 27 | $<14,000$ | SCMM |
| 28 | $<14,000$ | SCMM |
| 29 | $<14,000$ | SCMM |

The preseason forecast for the Stikine River large Chinook salmon terminal run was approximately 8,250 large Chinook salmon (Table 1), which indicated a run size characterized as well below average. Joint Canadian and U.S. inseason predictions of terminal run size were all less than 14,000 large Chinook salmon (Table 1). Project biologists used the daily catch and effort data transmitted from the Kakwan Point tagging site to make weekly run projections based on the SCMM model. Joint weekly run size estimates were calculated on Wednesday or Thursday of the current week. Given the very low run strength and paucity of spaghetti tags recovered inseason, managers used the preseason forecast during SW 19-20 and used only the SCMM to generate a directional estimate (i.e. $<14,000$ ) weekly through the remainder of the Chinook salmon reporting period. Point estimates were not statistically defensible due to the inseason model data lying outside of the established relationship to CPUE and run size as determined by the MR. The first inseason estimate was generated in SW 21.

## Sockeye Salmon

The preseason forecast for the Stikine River sockeye salmon run was approximately 90,000 fish (Table 2) and was characterized as below average. The forecast included approximately 29,000 Tahltan wild sockeye salmon, 36,000 Tahltan fish enhanced, and 24,000 mainstem sockeye salmon. The final returns of Tuya implants are expected to be less than 1,000 fish and not included in the forecast. The preseason forecast was used for management purposes from SW 25 to 27 and the SMM was used beginning in SW 28.

Starting in SW 28, weekly inputs of the harvest, effort, and stock composition were entered into the SMM to provide weekly forecasts of run size and TAC. Specific inputs include proportion Tahltan/Tuya from egg diameters, proportion Tuya enhanced from thermal mark analyses of otoliths in the Canadian lower river assessment/test (when in operation) and commercial fisheries; the upper river harvest in the AF and upper river commercial fishery; the catch, effort and assumed stock composition in Subdistrict 106-41 (Sumner Strait), Subdistrict 106-30 (Clarence Strait), and District 108.

The SMM provides inseason projections of the Stikine River sockeye salmon run, including the Tahltan stock (wild and enhanced combined), the stocked Tuya stock, and the mainstem stocks. The SMM predicts run size for each week of the fisheries using linear regression of historical stock specific harvest data and cumulative CPUE. It breaks the stock proportions in District 106 and 108 harvests, using historical postseason scale pattern analysis (SPA), into triggers of run size for Tahltan and Mainstem; the averages used each week depended upon whether the run was judged to be below average ( $0-40,000$ fish), average ( $40,000-80,000$ fish), or above average ( $+80,000$ fish). The SMM for 2019 was based on CPUE data from 1994 to 2017 from the Alaska District 106 fishery and the Canadian commercial fishery in the lower river and from the lower Stikine River test fishery from 1986 to 2004. The enhanced Tuya and Tahltan stock proportions are adjusted inseason based on the analysis of otolith samples taken in Districts 106 and 108 harvests.

Generally, the SMM has used the Canadian Lower River Commercial (LRCF) fishery CPUE to estimate inriver run size. In 2019 the upper commercial fishing zone (Flood fishery) was not opened for harvest; in years that it is opened, the harvest and effort from this area are excluded from the CPUE and not used in the model estimate. The annual weekly CPUE values were adjusted in order to make the current year data comparable with historical CPUE. For example, during 1979-1994 and 2000-2004, 2010-2016, only one net per license was permitted, while in 1996-1999 and 2005-2009 two nets per license were allowed. Only one net was permitted in the 2019 fishing season.

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

Table 2. Weekly forecasts of run size, total allowable harvest for Stikine River sockeye salmon, and cumulative Stikine River harvest as estimated inseason by the Stikine Management Model and other methods, 2019.

|  | Terminal |  | TAC |  |  | Cumulative Harvest |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SW | Estimate | Method | Total | U.S. | Canada | U.S. | Canada |
| Model runs U.S. |  |  |  |  |  |  |  |
| 25 |  | Preseason Forecast |  |  |  | 242 |  |
| 26 |  | Preseason Forecast |  |  |  | 2,244 | 1,806 |
| 27 |  | Preseason Forecast |  |  |  | 5,675 | 4,071 |
| 28 | 121,454 | SMM | 65,654 | 34,796 | 30,857 | 7,608 | 7,530 |
| 29 | 121,437 | SMM | 65,637 | 34,787 | 30,849 | 9,473 | 9,943 |
| 30 | 140,763 | SMM | 84,963 | 45,030 | 39,933 | 9,815 |  |
| Postseason Estimate |  |  | 34,568 | 18,321 | 16,247 | 12,996 | 10,772 |

Harvest is commercial fisheries

Table 3. Stikine River sockeye salmon terminal run reconstruction and harvest shares for, 2019.

|  | All Tahltan | Mainstem |  | Total Stikine | Tahltan |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Tuya |  | EnhancedTahltan | WildTahltan |
| Total Count ${ }^{\text {a }}$ | 36,999 | 23,174 | 0 | 60,173 | 20,438 | 16,561 |
| Observed weir count | 36,999 |  |  |  |  |  |
| estimated expansion at weir | 0 |  |  |  | 0 | 0 |
| Broodstock | 3,579 |  |  |  | 1,283 | 2,296 |
| Excess ${ }^{\text {c }}$ |  |  | 0 |  |  |  |
| Tahltan weir Biological Samples | 212 |  |  | 212 | 117 | 95 |
| ESSR Harvest ${ }^{\text {b }}$ | 0 |  |  | 0 |  |  |
| Natural Spawning | 33,208 |  |  |  | 19,037 | 14,171 |
| Canadian Harvest |  |  |  |  |  |  |
| Aboriginal | 5,293 | 108 | 0 | 5,401 | 3,017 | 2,276 |
| Upper Commercial | 39 | 0 | 0 | 39 | 0 | 39 |
| Lower Commercial | 8,513 | 2,259 | 0 | 10,772 | 4,749 | 3,764 |
| Total | 13,846 | 2,367 | 0 | 16,212 | 7,766 | 6,080 |
| \% Harvest | 64.0\% | 31.5\% | 0.0\% | 55.5\% | 19.6\% | 18.5\% |
| Test Fishery Removals | 0 | 0 | 0 | 0 | 0 | 0 |
| Tuya Test | 0 | 0 | 0 | 0 | 0 | 0 |
| All above border removals/harvest | 13,846 | 2,367 | 0 | 16,212 | 7,766 | 6,080 |
| (plus biological samples) | 14,058 | 2,367 | 0 | 16,424 |  |  |
| Above Border Run | 50,845 | 25,541 | 0 | 76,386 | 28,203 | 22,641 |
| U.S. Harvest ${ }^{\text {a }}$ |  |  |  |  |  |  |
| 106-41\&42 | 3,176 | 1,422 | 20 | 4,617 | 1,399 | 1,777 |
| 106-30 | 140 | 709 | 21 | 869 | 13 | 127 |
| 108 | 3,220 | 2,396 | 18 | 5,634 | 1,616 | 1,604 |
| Subsistence | 1,248 | 627 | 0 | 1,875 | 696 | 552 |
| Total | 7,784 | 5,154 | 58 | 12,996 | 3,724 | 4,060 |
| \% Harvest | 36.0\% | 68.5\% | 100.0\% | 44.5\% | 32.4\% | 40.0\% |
| Test FisheryRemovals | 0 | 0 | 0 | 0 | 0 | 0 |
| Terminal Run | 58,628 | 30,695 | 58 | 89,381 | 31,928 | 26,701 |
| Escapement Goal | 24,000 | 30,000 | 0 |  |  |  |
| Terminal Excessd |  |  | 24 |  |  |  |
| Total TAC | 34,628 | 0 | 34 | 34,663 |  |  |
| Total Harvest ${ }^{\text {e }}$ | 21,629 | 7,520 | 58 | 29,208 |  |  |
| Canada TAC | 16,275 | 0 | 17 | 16,293 |  |  |
| Actual Harvest ${ }^{\text {fg }}$ | 13,846 | 2,367 | 0 | 16,212 |  |  |
| \% of total TAC | 85\% |  | 0\% | 100\% |  |  |
| U.S. TAC | 18,353 | 0 | 17 | 18,370 |  |  |
| Actual Harvest ${ }^{\text {fg }}$ | 7,784 | 5,154 | 58 | 12,996 |  |  |
| \% of total TAC | 42\% |  | 339\% | 71\% |  |  |
| ${ }^{\text {a }}$ Total count of fish pass the traditional fisheries. |  |  |  |  |  |  |
| ${ }^{\mathrm{b}}$ Harvest allowed in terminal areas under the Excess Salmon to Spawning Requirement license. |  |  |  |  |  |  |
| ${ }^{\text {c }}$ Fish returning to the Tuya system are not able to access the lake where they originated due to velocity barriers. |  |  |  |  |  |  |
| ${ }^{\mathrm{d}}$ The number of Tuya fish that should be passed through traditional fisheries in order to harvest the Tuya stock at the same rate as the Tahltan stock to ensure adequate spawning escapement for Tahltan fish. |  |  |  |  |  |  |
| ${ }^{\mathrm{e}}$ Includes traditional, ESSR, and test fishery Harvestes. |  |  |  |  |  |  |
| ${ }^{\mathrm{g}}$ U.S. harvest estimate differs from Joint Interception Committee estimate because no estimates are made for Harvestes other than in the listed fisheries. |  |  |  |  |  |  |

## U.S. Fisheries

The Stikine River Chinook salmon preseason forecast of 8,250 fish was insufficient to allow for directed fisheries. In District 108, restrictions implemented in the gillnet fishery to reduce harvests of Stikine River Chinook salmon included a two-week delay of the initial opening with area and mesh restrictions implemented through SW 29. Due to recent and expected poor performance of Chinook salmon runs throughout SE Alaska, restrictions in
the District 106 fishery were implemented as well. The District 106 opening was delayed one week and a six-inch maximum mesh restriction was in place for the first three openings.

The Stikine River sockeye salmon preseason forecast indicated a below average terminal run size of 90,000 fish, with a resulting U.S. AC of 22,260 fish (Table 2). Preseason forecasts were the primary basis of management during SWs 25 through 27. Inseason estimates of terminal run sizes were first produced on a weekly basis beginning in SW 27 and were used from SW 28 through SW 30. Inseason abundance estimates were variable and ranged between 121,500 and 140,800 sockeye salmon (Table 2). The postseason Stikine River sockeye salmon run estimate of 89,400 fish resulted in an U.S. AC of 18,370 sockeye salmon. The total U.S. harvest was estimated to be 13,000 fish, based on GSI analysis (Table 3).

The 2019 District 106 drift gillnet fishery was open for 45 days from June 16 through October 8. Total fishing time was below average ( 47 days). Weekly participation was below average during the sockeye salmon management period from SW 25 through SW 31. Effort during the pink salmon management period (SWs 32 through 35) was below average for the first week and then it was above average for the remainder of the period. Effort during the coho salmon management period (SWs 36 through 41) started above average for the first week, but then fell below average for the remaining weeks of the season. The number of permits ranged between 80 permits fished in SW 36 to 2 permits fished in SW 41. Total season effort of 2,217 boat days was below the average of 2,752 boat days.

Total salmon harvest in the District 106 drift gillnet fishery was below average and included 1,073 Chinook, 23,844 sockeye, 59,304 coho, 424,495 pink, and 113,161 chum salmon. Chinook, sockeye, coho, and chum salmon harvests were below average, while the pink salmon harvests were above average. An estimated 465 Chinook salmon (43\%) of the District 106 harvest were of Alaska hatchery origin. An estimated 5,500 Stikine River sockeye salmon were harvested in District 106, approximately 23\% of the harvest (Table 3). An estimated 9,652 coho salmon ( $16 \%$ ) of the District 106 harvest were of Alaska hatchery origin.

Stikine River sockeye salmon harvests in the two fishing areas of District 106 were markedly different. In the Sumner Strait fishery (Subdistrict 106-41), 14,344 sockeye salmon were harvested, of which 4,600 fish were estimated to be Stikine River sockeye salmon and contributed $32 \%$ of the total sockeye salmon harvest in that subdistrict. In the Clarence Strait fishery (Subdistrict 106-30), 9,500 sockeye salmon were harvested, of which an estimated 900 fish were estimated to be Stikine River sockeye salmon, which contributed $9 \%$ of the total sockeye salmon harvest in that subdistrict (Table 3).

The District 108 drift gillnet fishery was opened for a total of 39 days starting June 23. Total fishing time was below average ( 47 days), excluding years with directed Chinook salmon fishing, and closed concurrently with District 106 on October 8. Participation in District 108 was below average most weeks, except for SW 32. The total season effort of 775 boat days was well below average ( 1,724 boat days).

Total salmon harvest in the District 108 drift gillnet fishery was well below average and included 4,253 Chinook, 6,591 sockeye, 9,478 coho, 10,884 pink, and 50,653 chum salmon. Harvests of all five species were below their respective averages. Large Chinook salmon through SW 29 totaled 2,447 fish, of which 112 were identified as above border Stikine River origin through GSI. Of the sockeye salmon harvest, an estimated 5,600 Stikine River sockeye salmon were harvested, which contributed 85\% of the District 108 sockeye salmon harvest. An estimated 2,565 fish (27\%) of the District 108 coho salmon harvest were of Alaska hatchery origin.
U.S. harvest of large Stikine River Chinook salmon in all District 108 fisheries were minimal and well below the U.S. BLC. The District 108 drift gillnet fishery estimated harvest of large Stikine River Chinook salmon was 112 fish. The District 108 Spring Troll fishery was closed for 2019. Commercial trolling opened in District 108 for the Summer Troll fishery on July 1 with nonretention of Chinook salmon in effect. The District 108 sport fishery implemented nonretention of Chinook salmon from April 1 through July 15. A small area inside District 108, adjacent to City Creek in Petersburg, was open for the retention of Chinook salmon from June 15 through July 31 to target Alaska hatchery Chinook salmon in this location. Harvest of Stikine River Chinook salmon in the sport fishery was estimated to be 2 fish. Cumulative U.S. District 108 base level fishery harvest by all gear groups through SW 29 was estimated to be 133 fish, well below the U.S. BLC of 3,400 large Stikine River Chinook salmon.

In 2019, U.S. subsistence fisheries targeting sockeye and coho salmon occurred on the Stikine River. The directed subsistence Chinook salmon fishery was not opened. Subsistence fishing was restricted to federally qualified users, required a permit issued by the U.S. Forest Service, and was limited to the U.S./Canadian border to marine waters at the mouth of the Stikine River. Fishing in "clearwater" tributaries, side channels, or at stock assessment sites was also prohibited. Annual guideline harvest levels were 600 sockeye and 400 coho salmon. Allowable gear for the fishery included dipnets, spears, gaffs, rod and reel, beach seine, and gillnets not exceeding 15 fathoms in length with mesh size no larger than $51 / 2$ inches. A total of 19 large Chinook salmon were harvested incidentally during the subsistence sockeye salmon fishery through SW 29. Subsistence fishing was allowed from June 21 through July 20 to target sockeye salmon and from August 4 through October 1 to target coho salmon. In 2019, a total of 117 permits were issued and the estimated harvests included 19 large Chinook, 1,875 sockeye, and 71 coho salmon.

District 106 opened at 12:00 noon on Sunday, June 18, for an initial 2-day period with a six-inch maximum gillnet mesh restriction in place. On the grounds surveys indicated low sockeye salmon abundance and no additional fishing time occurred. Effort was comprised of 5 boats in Clarence Strait (106-30) and 27 boats in Sumner Strait (106-41). An estimated 242 Stikine River sockeye salmon were harvested in the District 106 drift gillnet fishery in SW 25.

In SW 26 (June 23-June 29), Districts 106 and 108 opened for an initial 2-day period with a six-inch maximum gillnet mesh restriction in place. Additionally, an expanded area off
the Stikine River delta in District 108 was closed. On the grounds surveys indicated sockeye salmon abundance in District 106 well below the level to warrant additional fishing time. Sockeye salmon harvest rates in District 108 were above average; however, additional time did not occur due to Stikine River Chinook salmon conservation. Effort was 17 boats in Clarence Strait (106-30), 23 boats in Sumner Strait (106-41), and 12 boats in District 108. An estimated 744 Stikine River sockeye salmon were harvested in the District 106 drift gillnet fishery in SW 26.

Districts 106 and 108 opened for an initial 3 days in SW 27 (June 30-July 6) with a sixinch mesh restriction in both districts. On the grounds surveys indicated sockeye salmon abundance in both districts well below the level to allow for additional time. There was Stikine sockeye salmon AC available for the U.S., but the opening was limited to three days due to Chinook salmon conservation concerns. An estimated 3,430 Stikine River sockeye salmon were harvested this week. Effort included 27 boats in Sumner Strait (10641), 15 boats in Clarence Strait (106-30), and 35 boats in District 108.

During SW 28 (July 7-July 13), Districts 106 and 108 were opened for an initial 2 days. The first inseason forecast of Stikine River sockeye salmon terminal run size generated this week was 121,500 fish, which resulted in a U.S. AC of 34,800 fish and was considerably above the preseason forecasts (Table 2). However, on the grounds surveys indicated sockeye salmon abundance in both districts well below the level to allow for additional time. The U.S. cumulative harvest of Stikine River sockeye salmon through SW 28 was estimated to be 7,608 fish. Effort was below average and included 14 boats in Clarence Strait (106-30), 28 boats in Sumner Strait (106-41), and 28 boats in District 108.

Districts 106 and 108 were opened for a total 2 days during SW 29 (July 14-July 20). Opening time for District 106 was limited to 2 days for SWs 29 through 31 due to McDonald Lake sockeye salmon concerns. Time was limited to two days in District 108 due to Stikine River mainstem sockeye salmon concerns. Effort remained below average with 21 boats in Clarence Strait (106-30), 27 boats in Sumner Strait (106-41), and 20 boats in District 108. Harvest rates of sockeye salmon in District 106 remained below average; however, harvest rates improved to near average for fishermen targeting sockeye salmon this week in District 108. Although there was very little change in the overall SMM run size assessment this week, the estimated run size for the Tahltan component increased, while the mainstem component decreased. The resultant U.S. AC remained at 34,800 fish (Table 2). An estimated 1,865 Stikine River sockeye salmon were harvested in SW 29 with a cumulative harvest of 9,473 fish.

District 106 opened for 2 days during SW 30 (July 21-July 27). District 108 was closed SWs 30 and 31 due to the preseason forecast and historical timing of Stikine River mainstem sockeye salmon. Run size estimates and the corresponding U.S. AC produced by the SMM increased in SW 30 with a projected run size of 140,800 fish, which resulted in a U.S. AC of 45,000 fish (Table 2). However, the mainstem component continued to decrease. This was the last week of inseason run projections. Sockeye salmon harvest rates continued to be below average this week. Effort remained below average with 26 boats in Clarence Strait (106-30) and 21 boats in Sumner Strait (106-41).

District 106 opened for a total of two days during SW 31 (July 28-August 3). District 108 remained closed. Sockeye salmon harvest and harvest rates increased slightly this week, but remained well below average. Effort remained below average with 28 boats fishing in Clarence Strait (106-30) and 20 boats in Sumner Strait (106-41). This was the last week of sockeye salmon management in District 106. Management actions to conserve sockeye salmon in District 108 continued through SW34 with large area restrictions adjacent to the Stikine River delta.

During SWs 32 through 35 (August 6-August 31), both Districts 106 and 108 were managed based on pink salmon abundance. That portion of Section 6-D in District 106 along the Etolin Island shoreline was closed to gillnet fishing from SW 32 through SW 35 by regulation. Both districts opened for three days in SW 32, then four for SWs 33 and 34, then back to three days in SW 35. Effort in District 106 was below average in SW 32, and then increased to above average for the remainder of the pink salmon management period. Inversely, effort in District 108 was above average for SW32, and then fell to below average for the remainder of the period.

Beginning in SW 36 (September 1-September 7), management emphasis transitioned to coho salmon management that focuses on wild coho salmon abundance. Before coho salmon management period, 33,310 coho salmon, approximately $56 \%$ of the total District 106 harvest, had been harvested. The hatchery contribution was approximately 2,642 fish in District 106 prior to SW 35 and was comprised primarily of releases from Neck Lake. During the coho salmon management period, coho salmon harvests were below average in District 106 with an estimated harvest of 7,010 hatchery fish and 19,184 wild coho salmon. Harvest of wild coho salmon in District 108 was also below average with an estimated harvest of 6,823 fish for the season. Both districts were open for three days for during most weeks except for SWs 37 and 41 when open time was two days each week (Table 15). The 2019 drift gillnet season concluded at noon on Tuesday, October 8, in both districts.

## Canadian Fisheries

Harvests from the combined Canadian commercial, Aboriginal gillnet and recreational fisheries in the Stikine River in 2019 included 333 large Chinook, 237 nonlarge Chinook, 16,212 sockeye, 5,228 coho, 480 chum, and 40 pink salmon. The harvest of large and nonlarge Chinook salmon was well below average due to the low return and the retention restrictions in place in most fisheries. The sockeye salmon harvest was also well below average, while the harvest of coho salmon was close to average. The estimate of the total contribution of sockeye salmon from the Canada/U.S. fry-stocking program to the combined Canadian Aboriginal and commercial fisheries was 7,726 fish, comprising 48\% of the harvest.

No assessment or test fisheries were conducted on the lower Stikine River in 2019. The Chinook salmon assessment fishery was not implemented in response to the poor preseason forecast of Chinook salmon and the decision to maximize the number of fish returning to the spawning grounds. The sockeye salmon assessment/test fishery was forgone in consideration of the poor Chinook salmon forecast, but primarily due to mainstem sockeye
salmon concerns. Typically the sockeye salmon assessment/test fishery provides inseason catch, stock ID, and effort data for input, if necessary, into the SMM to estimate the inriver run size; and, assists with determination of migratory timing and stock composition of the sockeye salmon run for use in the postseason estimates of the inriver sockeye salmon run. The coho salmon test fishery has not been conducted for a number of years.

## Lower Stikine River Commercial Fishery

The Canadian commercial fishery on the lower Stikine River harvested 10,772 sockeye, 5,228 coho, 40 pink, and 480 chum salmon. A total of 376 large Chinook, 272 nonlarge Chinook, 120 pink, and 222 chum salmon, as well as 185 steelhead, were released in 2019. There was no directed Chinook salmon fishery, and all Chinook salmon caught incidentally in the directed sockeye and coho salmon fisheries (SWs 26-29 and 35-36) were released. Additional conservation measures were taken in sockeye salmon fishery. As a result of this precautionary approach, fishery impacts on Chinook salmon were minimal. The harvests of sockeye and coho salmon were well below average and average, respectively.

As noted, there was no fishing effort directed at Chinook salmon in 2019. Sockeye salmon were targeted for a total of 71 licence days, well below the average of 304 licence days. The coho salmon fishery effort amounted to 109 licence days, close to the average of 114 licence days.

The stock composition of the lower river sockeye salmon harvest was 4,759 enhanced Tahltan fish, which accounted for $44 \%$ of the sockeye salmon harvest; 3,764 wild Tahltan sockeye salmon accounting for $35 \%$ of the harvest; 2,259 mainstem fish accounting for $21 \%$ of the harvest. There were no enhanced Tuya sockeye salmon harvested in 2019 (Table 3).

Typically, weekly Chinook and sockeye salmon guideline harvests, based on SCMM, SMM and MR forecasts of the TAC apportioned by average run timing and domestic and international allocation agreements, are developed each week to guide management decisions during the Chinook and sockeye salmon seasons. For 2019, weekly inseason run projections for Chinook salmon were not made, as assessment information was largely absent. The poor run size meant low catches at Kakwan Point, resulting in not only a less effective SCMM, but a low number of tags applied for the MR project. Fishery conservation measures resulted in minimal tag recovery, compounding the effect on inseason MR estimates. In most years, after SW 25, for the purpose of managing the lower river catch, 800 large Chinook salmon are allocated to the upper Stikine River fisheries. The allocation consists of 100, 20, and 680 large Chinook salmon in the recreational, upper commercial and Aboriginal fisheries (AF) respectively. In 2019, as in 2018, the allocation of Chinook salmon to the respective fisheries was not made as restrictions were put in place to eliminate the harvest of Chinook salmon in all fisheries, specifically, the release of all Chinook salmon caught. A total of 7,000 sockeye salmon was allocated to the upper Stikine River commercial and AF. The balance of the sockeye salmon TAC was allocated to the lower Stikine River commercial fishery. Particular attention was directed at the inriver run and escapement projections of the various sockeye salmon stock groupings. From SW 26
through SW 29, management emphasis was on the Tahltan sockeye salmon stock; after this, the focus was on mainstem sockeye salmon. The coho salmon management regime began on SW 35.

The preseason forecast of 8,300 large Chinook salmon was far below the threshold of 24,500 fish that would trigger a directed fishery. In response to the poor forecast, Canada made the decision to implement restrictions/modifications to the management of the directed sockeye salmon fishery in the lower Stikine River. If Chinook salmon escapement had not been a concern in 2019, the directed sockeye fishery would have opened on 16 June (SW 25) but in response to the Chinook salmon situation, the sockeye salmon fishery did not commence until 25 June (SW 26) to allow for the majority of the Chinook salmon return to pass through the lower Stikine River. Additionally, licence holders were required to release all incidentally caught Chinook salmon. Openings in SW 26 were restricted to the daylight period to in order to implement a requirement to pick set nets at least once every 30 minutes. The maximum mesh size was kept at $14.0 \mathrm{~cm}(\sim 5.5$ inches) until the start of the coho salmon management period (SW 35) to further reduce interceptions and avoid gilling large Chinook salmon.

Annex IV, Chapter 1, paragraph 4 of the PST prescribes that either Party takes corrective action in the event that a Party exceeds its catch allocation in any three of five consecutive years. In 2018, as in 2017, fisheries management actions based on bilaterally agreed to inseason run size information resulted in Canada exceeding its sockeye salmon allocation for the third time in the previous five years. In response, Canada reviewed its management actions for 2017 and in 2018 in relation to the stock assessment information available during the fishing season. It was found that the preseason forecast was significantly higher than the postseason run estimate, resulting in early season fishing opportunity (SW26-27) that led Canada to exceed its weekly guidelines. Once inseason information became available, run projections dropped significantly but still exceeded the postseason run estimate which further exacerbated Canada's ability to manage within its AC. Through the review, it was found that inseason run projections exceeded the postseason run estimates by approximately $40 \%$ for both the Tahltan and mainstem sockeye salmon management components in 2017 and 2018.

In an attempt to align the Canadian harvest with its allocation in 2019, Canada was to implement the following measures based on anticipated fishing conditions (water levels) and effort (11 licences) being similar to 2017-2018:

- preseason forecast adjusted to reflect the recent observed smolt to adult survival rates (2 years) for Tahltan sockeye salmon - used to inform management in SW2627;
- for SW28-34, inseason run projections were to be reduced by $40 \%$ to reflect the tendency for the inseason models to project high during recently observed fishing conditions on the lower Stikine River;
(Note: some of the catch figures listed in the following narrative may not match the final catch records listed in the tables. This is due to slight changes in the catches as a result of a postseason check of the catch slips, updated stock composition information, and assessment of Chinook salmon large versus nonlarge size ratios.)

In SW 26 (23-29 June), the fishery opened (delayed by eight days) for sockeye salmon, which was centered on the Tahltan stock group and was expected to remain so until SW 29. Fishers were permitted one net only and the commercial fishing area remained the same as recent years, which was from the Canada/U.S. border upstream to a location near the mouth of the Porcupine River. The area included the lower 10 km reach of the Iskut River. The use of set nets was permitted as along as net checks occurred no less than every 30 minutes. In order to facilitate this, openings were restricted to daylight periods only. The overall Canadian sockeye salmon AC of 19,800 fish was comprised entirely of Tahltan Lake sockeye salmon based on the preseason run size expectations of 66,000 Tahltan Lake fish, 24,000 mainstem sockeye salmon, and less than 1,000 Tuya fish (these were the final returns from the Tuya enhancement program and were not factored into the total forecast or management).

The initial opening was for an 18 -hour period, beginning at 0500 hrs on Tuesday June 25. The guideline catch for sockeye salmon was 1,600 fish. Based on room in the guideline harvest and in keeping with the Paragraph 4 measures noted above, the decision was made to extend the fishery for another 18 hour period, again starting in the early morning. Catch rates for the week were almost double the average and resulted in a harvest of 1,806 sockeye salmon, including $\sim 1,500$ Tahltan Lake sockeye salmon. A total of 170 large Chinook salmon were caught and subsequently released. The sockeye salmon harvest was comprised of $85 \%$ Tahltan and $15 \%$ mainstem stocks. The Tahltan sockeye salmon fbd was 128 versus an average of 62 fbd .

The following week, SW 27 (30 June - 6 July), the fishery started at noon with a 48-hour opening. The guideline harvest was 3,100 Tahltan Lake sockeye salmon, as per the preseason forecast. Based on room in the guideline, the opening was extended 24 hours. Set net restrictions were lifted for day three due to low encounter rates on Chinook salmon. The final harvests for the week consisted of 2,265 sockeye salmon, including $\sim 2,200$ Tahltan Lake origin fish. A total of 84 large Chinook salmon were released. The weekly sockeye salmon harvest was comprised of $95 \%$ Tahltan and $5 \%$ mainstem sockeye salmon. The Tahltan sockeye salmon fbd was 98 , below the average of 122 .

The SW 28 (7-13 July) fishery was posted for an initial 48-hour period; using the preseason forecast the guideline harvest was $\sim 2,900$ sockeye salmon. Catch rates on Tahltan sockeye salmon were above average for day one and the fishery was extended 24 hours. The harvest for the week consisted of 3,459 sockeye salmon, including ~3,000 Tahltan Lake sockeye salmon. The stock composition was $87 \%$ Tahltan and $13 \%$ mainstem sockeye salmon. The week's Tahltan Lake sockeye salmon fbd of 111 approximated the average ( 115 fbd ). Week 28 marks the historical peak of the Tahltan Lake sockeye salmon through the fishery. The run size generated from the SMM in SW 28 was 87,400 sockeye salmon. This included 40,100 Tahltan Lake origin fish, which was well below the preseason forecast.

In SW 29 (14-20 July) the fishery was posted for an initial 24-hour opening. The fishery was not extended due to concerns for the mainstem sockeye salmon stock. The week's effort yielded a harvest 2,393 sockeye salmon of which $\sim 1,800$ fish were Tahltan origin. The Tahltan sockeye salmon CPUE was 179 fbd , about double the average of 81 fbd . The weekly sockeye salmon harvest was comprised of $75 \%$ Tahltan and $25 \%$ mainstem fish. The SW 28 run size estimate suggested a run size of approximately 88,900 sockeye salmon. The Tahltan Lake component was estimated at 42,700 fish; still below the preseason forecast but consistent with inseason information to date.

SW 29 marked the end of the 2019 sockeye salmon management regime. Due to the preseason forecast of mainstem sockeye and the resulting lack of AC, the fishery was not opened for SWs 30-34. By the end of SW 29, Canada had harvested a total of $\sim 8,500$ Tahltan sockeye salmon ( $\sim 3,600$ wild and $\sim 4,800$ enhanced) in the lower commercial fishery. The FSC was ongoing and the harvest was $\sim 3,500$ fish. The harvest of mainstem sockeye salmon to date was $\sim 1,500$ fish.

In SW 35 (25-31 August), the fishery was opened for an initial 72 hours with the management objective focused on coho salmon abundance. A total of 10 licences were fished. The guideline harvest on coho salmon was 5,000 fish for the season with the intention of spreading the harvest over SW 35 and 36. After two days of fishing, the fishery was extended for an additional 48 hours. The coho salmon CPUE for the week was 32 fbd , close to the average of 36 fbd . The harvest was 1,381 coho and 202 sockeye salmon.

In SW 36 (1-7 September), the fishery was opened for an initial 96 -hour period. An average of 8.5 licences fished each day. After two days the fishery was projected to be within the 5,000 directed coho salmon target and an additional 48 hours of fishing time was provided, resulting in a weekly harvest of 3,487 coho and 177 sockeye salmon.

The season total coho salmon harvest was 5,228 fish. In most years a small number of coho salmon are harvested during the sockeye salmon fishery and these fish do not count toward the 5,000 fish allocation as prescribed in the PST. However in 2019 , due to the early closure of sockeye salmon fishery, all coho salmon were taken in the course of the directed fishery, and therefore counted against the 5,000 fish allocation.

## Upper Stikine River Commercial Fishery

A small commercial fishery has existed near Telegraph Creek, B.C., on the upper Stikine River since 1975. As per the lower Stikine commercial fishery, retention of Chinook salmon was not permitted in 2019. The fishing effort this year amounted to one boat day, which occurred in SW 31 (28 July-3 August). A total of 40 sockeye were caught, which was below average. No Chinook salmon were encountered. Generally, fishery openings were based on the lower Stikine commercial fishery openings, lagged one week.

## Aboriginal Fishery

The upper Stikine Aboriginal fishery, which is also located near Telegraph Creek, harvested 333 large Chinook, 237 nonlarge Chinook and 5,401 sockeye salmon in 2019. Effort was below average, as were the harvests of both large Chinook and sockeye salmon. The sockeye catch was largely comprised of the Tahltan Lake run. Typically, about $90 \%$ of the sockeye salmon catch takes place prior to August.

## Recreational Fishery

The Stikine River salmon recreational fishery targets primarily Chinook salmon and most activity takes place at the mouth of the Tahltan River. Some fishing occurs in the upper reaches of the Tahltan River and in select tributaries of the Iskut River, including the Verrett and Craig rivers. There was no harvest of Chinook salmon in the recreational fishery in 2019. Restrictions were in place starting April 01 that did not permit the retention of Chinook salmon of any size in the waters of the Stikine River. Additionally, the Tahltan River was closed to recreational salmon fishing effective June 01 through August 31. Access to fishing sites near the mouth of the Tahltan River was restricted by the Tahltan Central Government Chief and Council in order to reduce potential impacts on Little Tahltan River bound Chinook salmon.

## Escapement

## Sockeye Salmon

A total of 36,999 sockeye salmon were counted into Tahltan Lake from July 7 (weir in) to September 10 (weir out). The total Tahltan Lake sockeye salmon escapement estimate of 36,787 fish is above the average escapement count of 26,352 fish and exceeds the escapement goal range of 18,000 to 30,000 fish. Of the total counted through the weir, an estimated 19,037 fish. A total of 3,579 sockeye salmon were collected for broodstock and 212 fish (males only) were collected for stock identification purposes at the weir resulting in a total natural spawning escapement of 33,208 sockeye salmon to Tahltan Lake.

The spawning escapements for the mainstem stock group is calculated using stock identification, assessment/test fishery (not conducted in 2019), and inriver commercial harvest data. The mainstem sockeye salmon escapement estimate was 23,174 fish, which is similar to the average escapement of 13,278 fish, but below the target escapement of 30,000 fish, and within the escapement goal range of 20,000 to 40,000 fish.

Aerial survey counts of mainstem sockeye salmon were well above average at most index sites which was expected given that there was no mainstem directed fishery prosecuted in 2019.

In 2019 a radiotag telemetry project was undertaken to assess fish passage at the Tahltan River landslide and Decheeka Falls locations. A total of 207 tags were applied to sockeye salmon at a location approxiamtely 16 km below the Tahltan and Stikine Rivers confluence.

## Chinook Salmon

In order to assess inriver Chinook salmon abundance in 2019, a MR study was conducted. Inseason MR estimates for large chinook salmon, however, were not calculated in 2019 due to the low number of marks deployed, and Chinook salmon retention not being permitted in inriver fisheries. The postseason Stikine River spawning escapement estimate of 13,817 large Chinook salmon is based on tag recoveries from Chinook salmon released in directed sockeye salmon commercial fisheries, the Aboriginal fisheries, and the Little Tahltan video weir observations. This is below the average escapement of 15,360 large fish, and just below the escapement goal range of 14,000 to 28,000 large Chinook salmon.

The 2019 Chinook salmon escapement enumerated at the Little Tahltan River weir was 536 large fish and 1,002 nonlarge fish. This escapement of large Chinook salmon in the Little Tahltan River was below the average of 914 fish and well below the lower end of the Canadian escapement target range of 2,700 to 5,300 fish. This was the thirteenth consecutive year that the Canadian escapement target range was not reached.

The Little Tahltan River weir count represented approximately 4\% of the total Stikine River large Chinook salmon escapement which is below the average weir count contribution of $6 \%$. Note that this average has declined significantly over the history of the project and has ranged from $1 \%$ to $34 \%$ of the estimated escapement.

The Chinook salmon aerial surveys took place on July 26 and 29, under favorable weather conditions. Water turbidity had a negative impact on visibility at several index sites including the Verrett River, Christina Creek, and the Tahltan River. Little Tahltan River and Beatty Creek had excellent viewing conditions; Little Tahltan counts were well below average and Beatty Creek counts were close to the 5 -year average.

In 2019, a radio tag telemetry project was undertaken to assess fish passage at the Tahltan River landslide and Decheeka Falls locations. A total of 56 tags were applied to Chinook salmon at a location approximately 16 km below the Tahltan and Stikine Rivers confluence.

Stikine River Chinook salmon DNA baseline samples were collected in 2019 in late July and early August via helicopter reconnaissance and foot surveys. Collection locations included Verrett River, Tuya River, Beatty Creek, Little Tahltan River, and Johnny Tashoots Creek.

## Coho Salmon

The annual coho salmon aerial survey was conducted on November 10 under moderate to good viewing conditions. The total count of coho salmon observed at six index sites was 398 fish, which was below average. The lower than average counts may have been a reflection of the later survey date in 2019 , since inclement weather delayed the survey by about 5 days. The in season weekly CPUE of coho salmon from the lower Stikine River Canadian commercial fishery was average.

## Sockeye Salmon Run Reconstruction

The postseason estimate of the Stikine River sockeye salmon terminal run was 89,381 fish. Of this, approximately 58,628 fish were of Tahltan Lake origin (wild \& enhanced), 58 fish were of Tuya Lake origin (enhanced fry from Tahltan broodstock stocked into Tuya Lake), and 30,695 fish were of mainstem origin (Table 3). These estimates are based on postseason data, including otolith recovery and GSI analysis in the U.S. Districts 106 and 108 harvests, harvest data from the inriver Canadian commercial, Aboriginal, and test fisheries, and escapement data. Inriver stock composition data are from inseason egg diameter and inseason and postseason otolith analysis. Due to the reduced fishing period in the LRCF, the estimated proportion of the Stikine River above border run was based on the average stock composition of the LRCF; 0.666 Tahltan and 0.334 mainstem. The 2019 terminal run was well below average, but very close to the preseason forecast of 90,000 fish.

## TAKU RIVER

Taku River salmon are harvested by U.S. commercial drift gillnet and troll fisheries as well as sport and inriver personal use fisheries in Alaskan District 111. In Canada, a commercial gillnet fishery extends from the international border upstream for approximately 18 km , with Aboriginal and recreational fisheries also harvesting Taku River salmon (Figure 2).


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

## Harvest Sharing and Joint Management Models

Fishing arrangements in place for salmon originating from the Canadian portion of the Taku River watershed are provided in Annex IV, Chapter 1 of the PST and can be found at: http://www.psc.org/pubs/treaty.pdf. These arrangements include directed fisheries and harvest shares based on run size for Taku River Chinook salmon and coho salmon stocks and directed fisheries for sockeye salmon with harvest sharing arrangements based on the production of enhanced fish.

The TTC met prior to the season to update joint management and enhancement plans, develop run size forecasts, and determine new parameters for input into the inseason Chinook, sockeye, and coho salmon run size projection models.

## Chinook Salmon

A bilateral review of the escapement goal for Taku River large Chinook salmon completed in early 2009 resulted in a revised escapement goal range of 19,000 to 36,000 fish.

Weekly Chinook salmon run size and AC projections based on historical run timing, are used to guide the management of U.S. and Canada fisheries. These are determined by a formula based on the preseason Taku River Chinook salmon run forecast early in the season, and revised inseason based on the inseason run projection estimates generated from the Canyon Island MR project.

Table 4. Taku River large Chinook salmon run size based on CPUE (methods similar to the Stikine Chinook Salmon Management Model), and other methods, and weekly inseason harvest estimates from the District 111 commercial drift gillnet and sport fisheries and the Canadian gillnet and recreational fisheries, 2019.

|  | Terminal Run |  |
| :---: | :---: | :---: |
| SW | Estimate | SW |
| 19 | 9,050 | 19 |
| 20 | 9,050 | 20 |
| 21 | $<19,000$ | 21 |
| 22 | $<19,000$ | 22 |
| 23 | $<19,000$ | 23 |
| 24 | $<19,000$ | 24 |
| 25 | $<19,000$ | 25 |
| 26 | $<19,000$ | 26 |
| 27 | $<19,000$ | 27 |
| 28 | $<19,000$ | 28 |
| 29 | $<19,000$ | 29 |

The 2019 preseason terminal run forecast of 9,050 Taku River large Chinook salmon provided no AC for directed fisheries for either country. The Taku River Chinook salmon forecast model was reduced to account for model error over the past 5 years. An additional
consideration for reducing the model forecast was the general poor performance of Chinook salmon stocks in recent years throughout northern British Columbia and Alaska. This 2019 forecast is the second lowest Chinook salmon forecast on record, and far below the average terminal run size of 21,000 fish.

No Chinook salmon inriver assessment fishery was conducted because of the low preseason forecast, however drifted tangle nets were used near the confluence of the Wright River to spaghetti and radio tag fish to allow for a spawning grounds MR estimate and potentially give some sense of inseason run abundance based on catch rates. Traditional inseason MR estimates based on the cumulative ratio of tagged-to-untagged fish observed in the inriver commercial fishery were unavailable due to low catch rates during the first event and no Chinook salmon retention permitted in directed commercial fisheries (second event). With no reliable way of estimating inseason run size, both countries managed their early season sockeye salmon fisheries based off the preseason Chinook salmon forecast.

## Sockeye Salmon

On an interim basis for 2019, the Panel recommended that sockeye salmon inseason run abundance estimates and escapement goal be adjusted downwards by $22 \%$ to account for tagged fish that dropout from the MR program. Dropouts are fish tagged in event 1 that do not become available for recapture in event 2 . The interim $22 \%$ dropout rate was determined from radiotelemetry studies conducted in 1984, 2015, 2017, and 2018. This resulted in a 2019 interim Taku River sockeye salmon escapement goal of 55,000 to 62,000 fish with a management target of 59,000 fish.

Sockeye salmon weekly inriver abundance estimates are generated from the joint MR program using the Canyon Island fish wheels as event 1 and the Canadian inriver fishery as event 2 . The weekly inriver run estimate is combined with historical migratory timing and fishery harvest data to project the Taku River sockeye salmon terminal run size and TAC. Otolith analysis of the U.S. and Canadian harvests are used to project the enhanced component of the run which determines the Parties respective ACs.

The 2019 preseason terminal run forecast of 154,000 Taku River wild sockeye salmon was below the recent 10 -year average of 180,000 fish. This was a stock-recruitment model forecast that was adjusted using the recent 10 -year model error (23\%). Note that this forecast was based on traditional run sizes and produced prior to the Transboundary Panel decision to adjust the 2019 assessment and interim escapement goal for tagged fish dropout. If the preseason forecast was also adjusted downwards by the equivalent $22 \%$ for comparative purposes, the preseason forecast would be 120,000 fish.

Approximately 2,500 enhanced fish from Tatsamenie Lake were forecasted, well below the average Tatsamenie enhanced run size of 9,000 fish. Based on the treaty arrangement, an enhanced run of $1-5,000$ fish requires the TAC to be split $80 \%$ to the U.S and $20 \%$ to Canada with management based on weekly estimates of the TAC of wild fish. The 2019 interim escapement target of 59,000 wild sockeye salmon could only be compared to the

2019 adjusted forecast of 120,000 sockeye salmon, which resulted in a preseason TAC of 61,000 fish; $80 \%$ or 48,800 fish to the US, and $20 \%$ or 12,200 fish to Canada.

Table 5. Weekly inseason projections of Taku River sockeye salmon terminal run size, total allowable harvest, and cumulative harvest for 2019.

|  | Terminal |  |  | TAC |  |  |  | Canada |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SW | Estimate | Method | Total | U.S. | Canada | Surplus AC | U.S. | Canada |
| 25 | 120,120 | Preseason | 61,120 | 48,900 | 12,200 |  |  |  |
| 26 | 120,120 | Preseason | 61,120 | 48,900 | 12,200 |  |  |  |
| 27 | 120,120 | Preseason | 61,120 | 48,900 | 12,200 |  |  |  |
| 28 | 76,900 |  | 17,900 | 14,320 | 3,580 |  | 6,330 | 2,020 |
| 29 | 107,700 |  | 48,700 | 38,960 | 9,740 |  | 17,470 | 4,517 |
| 30 | 154,100 |  | 95,100 | 76,080 | 19,020 |  | 29,175 | 8,940 |
| 31 | 169,600 |  | 110,600 | 88,480 | 22,120 |  | 40,352 | 14,736 |
| 32 | 156,500 |  | 97,500 | 78,000 | 19,500 |  | 41,075 | 16,958 |
| 33 | 153,300 |  | 94,300 | 75,440 | 18,860 |  | 41,127 | 19,588 |
| 34 | 150,500 |  | 91,500 | 73,200 | 18,300 |  | 41,397 | 20,745 |
| Postseason |  |  |  |  |  |  |  |  |
|  | 166,429 |  | 107,429 | 85,943 | 21,486 |  | 68,226 | 21,481 |

Table 6. Taku River sockeye salmon terminal run reconstruction and harvest shares, 2019.
U.S. harvest estimate differs from Joint Interception Committee estimate because no estimates are made for harvest other than the listed fisheries. Total escapement includes a small number of non-Taku River enhanced fish

|  | Taku |  |  | Non-Taku Enhanced |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Wild | Enhanced | US | Stikine |
| Escapement | 76,722 | 74,854 | 1,868 |  |  |
| Canadian Harvest |  |  |  |  |  |
| Commercial | 21,376 | 20,952 | 423 | 9 | 11 |
| Aboriginal Fishery | 105 | 103 | 2 |  |  |
| Total | 21,481 | 21,055 | 426 |  |  |
| Test Fishery removals | 0 | 0 | 0 |  |  |
| Above Border Run estimate | 98,203 | 95,909 | 2,294 |  |  |
| U.S. Harvest |  |  |  |  |  |
| District 111 Gillnet | 66,518 | 65,281 | 1,237 | 17,683 | 160 |
| Personal Use | 1,708 | 1,673 | 35 |  |  |
| Total | 68,226 | 66,953 | 1,273 |  |  |
| Test Fishery harvest | 0 |  |  |  |  |
| Terminal Run | 166,429 | 162,863 | 3,566 |  |  |
| Management Objective | 59,000 | 59,000 |  |  |  |
| TAC | 107,429 | 103,863 |  |  |  |
| Canada |  |  |  |  |  |
| Harvest Share | 20\% | 20\% |  |  |  |
| Canada AC | 21,486 | 20,773 |  |  |  |
| Surplus Allowable | 14,717 | 13,137 |  |  |  |
| Canada AC + Surplus | 36,203 | 33,909 |  |  |  |
| Actual harvest | 21,481 | 21,055 |  |  |  |
| U.S. |  |  |  |  |  |
| Harvest Share | 80\% | 80\% |  |  |  |
| US AC | 85,943 | 83,090 |  |  |  |
| Actual harvest | 68,226 | 66,953 |  |  |  |
|  | 0.79 | 0.81 |  |  |  |

## Coho Salmon

In early 2015, an escapement goal range of 50,000 to 90,000 Taku River coho salmon with a 70,000 fish point goal was adopted. The management intent for both Parties in 2019 was to manage their fisheries to achieve the respective ACs based on harvest sharing dictated by Paragraph 3(b)(iii) of Annex IV, Chapter 1 of the PST.

Inseason run estimates are generated using MR methodology. Tags are applied in event 1 from Canyon Island fish wheels or set gillnets. Event 2 consists of fish inspected in the inriver commercial or assessment fisheries upstream of the U.S./Canada border. Weekly inriver run abundance estimates are projected to terminal run estimates based on average run timing past Canyon Island.

The 2019 preseason terminal run forecast of 73,000 Taku River coho salmon was below the average terminal run of 116,000 fish. The 2019 forecast was generated using the relationship between the CPUE in smolt tagging and the total run estimates seen over the past twenty years.

Table 7. Weekly inseason projections of terminal run size, allowable harvest, and cumulative harvest by country of Taku River coho salmon for 2019.

|  | Terminal |  | AC |  |  | Cumulative Harvest |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SW |  | Method |  | U.S. | Canada |  | U.S. |
| 32 | 73,000 | Preseason | 0 | 5,000 |  | Canada |  |
| 33 | 59,635 |  | 0 | 5,000 |  | 2,000 | 3,877 |
| 34 | 80,305 |  | 5,152 | 5,152 |  | 4,000 | 4,863 |
| 35 | 77,179 |  | 2,178 | 5,000 |  | 4,100 | 7,256 |
| 36 | 91,195 |  | 10,597 | 10,597 |  | 5,000 | 9,460 |
| 37 | 102,469 |  | 17,222 | 15,247 |  | 5,500 | 11,013 |
| 38 | 99,214 |  | 14,607 | 14,607 |  | 7,800 | 11,475 |
| 39 | 96,822 |  | 13,411 | 13,411 |  | 9,500 | 12,013 |
| 40 | 98,443 |  | 14,221 | 14,221 |  | 9,800 | 12,145 |
| 41 | 105,090 |  | 19,581 | 15,509 |  | 10,300 | 12,145 |
| Postseason | 102,957 |  | 15,221 | 15,025 | 5,234 | 12,252 |  |

Table 8. Taku River coho salmon terminal run reconstruction and harvest shares, 2019.
Harvest shares of Canadian-origin Taku River coho salmon in excess to the escapement point goal are shared between the U.S. District 111 drift gillnet fishery and the Canadian inriver fisheries
Estimates do not include spawning escapements below the U.S./Canada border.


Harvest shares are based on D111 gillnet fisheries and the Canadian inriver fisheries
(excluding test fisheries).

| Management Objective | 70,000 |
| :--- | :---: |
| Harvest share run size | 100,245 |
| TAC | 30,245 |

Canada
Canada AC $\quad 15,025$
Harvest 12,252
U.S.

| US AC | 15,221 |
| :--- | :---: |
| Harvest | 5,234 |

## U.S. Fisheries

The traditional District 111 commercial drift gillnet salmon fishery was open for a total of 62 days from June 16 through October 11, 2019. The harvest totaled 1,201 Chinook, 95,400 sockeye, 23,200 coho, 69,100 pink, and 246,000 chum salmon. Harvests of all species were below average. The traditional fishery does not include harvests from the Speel Arm Special Harvest Area (SHA) inside Port Snettisham. This hatchery access fishery first opened in SW 32 and closed in SW 37 resulting in an additional harvest of 9,600 sockeye salmon and minor harvests of other salmon species.

The 2019 season was the twentieth year of adult sockeye salmon returns to the Snettisham Hatchery inside Port Snettisham. These fish contributed to the traditional harvests in Taku

Inlet, Stephens Passage, and the entrance of Port Snettisham, the latter being open from SW 32-41. This was the fifth year of full production for DIPAC's revitalized enhanced coho salmon program and the proportion of these fish in the traditional District 111 gillnet coho salmon harvest was significant. Hatchery stocks contributed substantially to the harvests of sockeye, coho, and chum salmon and more minimally to the harvest of Chinook salmon.

In 2018, the Alaska Board of Fisheries adopted a regulation increasing the sockeye salmon possession and annual limits for the U.S. Taku River personal use fishery to 10 fish for a household of one person and 20 fish for a household of two or more persons. The estimated personal use harvest of Taku River sockeye salmon in 2019 is 1,500 fish.

Management actions in the District 111 commercial drift gillnet fishery due to Chinook salmon conservation concerns occurred in the first five directed sockeye salmon openings with two-day openings in Taku Inlet in SWs 25 through 28, significant area closures including most of Taku Inlet and waters extending further south and west in SWs 25 and 26, a closure north of Point Cooper in SW 27, north of the latitude of Jaw Point in SW 28, and north and east of a line from Jaw Point to Annex Creek in SW 29. A six-inch maximum mesh size restriction and night closures ( 10 p.m. to 4 a.m.) were in place throughout the district in SWs 25 through 27. Commercial spring troll fisheries throughout the region were limited to select outer coastal areas, near hatchery facilities/release sites, in THAs, and in areas that have been identified as having low proportional harvest of wild SEAK/Yakutat Chinook salmon. Nonretention of Chinook salmon in the sport fishery was in effect in northern inside waters from April 1 through June 14. The personal use sockeye salmon fishery on the U.S. side of the Taku River was also delayed by more than two weeks starting on July 15. The 2019 District 111 drift gillnet Chinook salmon harvest in the SWs 25-29 TBR accounting period was 936 fish of which $49 \%$ were large fish. Postseason GSI analysis indicates that $27.4 \%$ of the District 111 drift gillnet large Chinook salmon harvest (124 fish) was of Taku River origin through SW 29. The Juneau area sport harvest of Taku River large Chinook salmon was estimated at 94 fish during the same period based on GSI analysis. The MR estimate of Taku River spawning escapement is approximately 11,560 large Chinook salmon.

The traditional District 111 sockeye salmon harvest of 95,400 fish was $97 \%$ of average with generally average to above average weekly CPUE from SWs 27 through 31. Snettisham Hatchery sockeye salmon returns began to contribute to the traditional fishery in SW 26 and otolith sampling occurred through SW 35 in Taku Inlet and through SW 34 in Stephens Passage. Of the total traditional District 111 sockeye salmon harvest, 76\% occurred in and around Taku Inlet (average is 69\%), 20\% occurred in Stephens Passage south of Circle Point (average is 23\%) and 3\% occurred in Port Snettisham (average is $7 \%$ ). The contributions of Taku River wild, Taku River enhanced, Port Snettisham enhanced, and other sockeye salmon stocks were derived from estimates based inseason on otolith analysis and postseason from estimates based on GSI and otolith analyses. The postseason GSI based stock composition of the harvest of sockeye salmon in the traditional District 111 (with the exception of the entrance to Port Snettisham, stat area 111-34, which does not get adequately sampled) drift gillnet fishery is 65,300 (71\%) Taku River wild,

1,240 (1\%) enhanced Tatsamenie and King Salmon lakes, 17,700 (19\%) Snettisham Hatchery fish, and 7,800 (8\%) domestic wild fish.

Opportunity to target returning Snettisham Hatchery sockeye salmon inside Port Snettisham began in SW 32 with the entrance of Port Snettisham (111-34) opened for four days starting on August 5 and the Speel Arm SHA (111-33) opened for a 24 -hour period starting on August 8 due to a large pulse of Speel Lake wild sockeye salmon through the weir and another sizeable group of fish observed in the stream below the weir. The minimum mesh size restriction south of Circle Point, in place since SW 28 to conserve Speel and Crescent Lake wild sockeye salmon, was removed for a 24 -hour period starting July 31 in SW 31. The Speel Arm SHA was opened for a four-day period in SW 33 with escapement through the weir slowing significantly during this week. The Speel Arm SHA remained open continuously from August 18 through September 13 and a total of 9,605 sockeye salmon were harvested from the SHA with most of the harvest occurring in SWs 33 and 34.

Coho salmon stocks harvested in District 111 include returns to the Taku River, Port Snettisham, Stephens Passage, and local Juneau area streams, as well as Alaskan hatchery release sites. The 2019 preseason terminal run forecast of 73,000 Taku River coho salmon was below the average terminal run of 116,000 fish. The traditional District 111 coho salmon harvest of 23,200 fish was $64 \%$ of average and was comprised of a large proportion of hatchery fish. Hatchery coho salmon, mainly returning to DIPAC release sites in Gastineau Channel, first appeared in the District 111 harvest in SW 32 and made up as much as $100 \%$ of the weekly harvest in SWs 39 and 40. CWT analyses indicate hatchery coho salmon contributed approximately 8,200 fish or $35 \%$ of the 2019 District 111 drift gillnet harvest.

Management of the District 111 drift gillnet fishery is based on Taku River wild sockeye salmon abundance in SWs 25-33 and on Taku River wild coho salmon abundance in SWs 34-42. The 2019 fishery began by regulation in SW 25. Management actions were limited to imposing restrictions in time, area, and gear. Because there is no bilaterally agreed forecast for Taku River sockeye salmon, early season management of the District 111 fishery is based on fishery CPUE and Canyon Island fish wheel catches. As the fishing season progresses, sufficient data is acquired to estimate the inriver run size from the inriver MR program and to use that estimate in conjunction with historical migratory timing and fishery harvest data to project the season's Taku River sockeye salmon terminal run size. In the first week of sockeye salmon management starting June 16, Taku Inlet and Stephens Passage were opened with restrictions in time, area, and gear due to Chinook salmon conservation concerns. The opening was limited to two days with a six-inch maximum mesh size restriction, night closures in effect from 10 p.m. to 4 a.m., and an area restriction closing waters in Taku Inlet north of Point Greely and west of a line of longitude running mid-inlet from the latitude of Point Greely to a point where it intersects with the Admiralty Island shoreline south of Grand Island. Effort was approximately $126 \%$ of average for the week with 35 boats fishing. The sockeye salmon harvest was $15 \%$, and the CPUE was $12 \%$ of average. The total Chinook salmon harvest was 83 fish with 27 fish
estimated as Taku River origin large fish based on inseason CWT analysis and ASL sampling.

District 111 was again opened for two days in SW 26 with the same restrictions throughout the district as the previous opening to minimize Chinook salmon interception. The two-day opening was largely for Chinook salmon conservation but also reflected concerns over early Taku River sockeye salmon stocks, particularly the Kuthai Lake stock. The two days of fishing in the district was approximately $74 \%$ of average for the week. Forty-one boats, $84 \%$ of average, harvested 133 Chinook salmon of which an estimated 86 fish were Taku River large fish based on inseason CWT analysis and ASL sampling. The sockeye salmon harvest and CPUE were $36 \%$ and $57 \%$ of average, respectively. TBR enhanced sockeye salmon of equal parts King Salmon and Tahltan lakes origin made up $2.5 \%$ while Snettisham Hatchery origin fish represented less than $1 \%$ of the Taku Inlet harvest based on otolith analysis.

District 111 was again opened for two days in SW 27 with no additional time granted. Chinook salmon conservation measures were slightly reduced this week with open waters extended north to the latitude of Point Cooper. However, the maximum mesh size restriction and night closures remained in place throughout the opening. The two days fishing was open in the district was $69 \%$ of average. Effort increased from the previous week to 59 boats, $84 \%$ of average. Three hundred four Chinook salmon were harvested this week, of which an estimated 122 fish were Taku River large fish based on inseason CWT analysis and ASL sampling. Sockeye salmon harvest and CPUE increased from the previous week to $56 \%$ and $94 \%$ of average, respectively. Otolith analysis revealed that less than $1 \%$ of the sockeye salmon harvest from Taku Inlet were of Snettisham Hatchery origin. TBR enhanced sockeye salmon of predominantly Tahltan Lake, but also King Salmon Lake, origins made up $2.5 \%$ of the Taku Inlet harvest. A Taku River sockeye salmon run size estimate was not produced this week, but Canyon Island fish wheel sockeye salmon hourly catch rates were average to above average.

The opening for SW 28 was again two days in Taku Inlet but three days were announced in Stephens Passage. The maximum mesh size restriction and night closures were rescinded for this opening and the northern line was moved up to Jaw Point. A six-inch minimum mesh size restriction was implemented south of Circle Point in Stephens Passage, which would stay in place until SW 31, to minimize harvest of Port Snettisham wild sockeye salmon returns while still allowing opportunity to target enhanced chum salmon. The three days fishing was open in the district was $103 \%$ of average. Ninety-nine boats, $96 \%$ of average, harvested 272 Chinook salmon, of which an estimated 34 fish were Taku River large fish based on inseason CWT analysis and ASL sampling. Sockeye salmon harvest and CPUE were $88 \%$ and $92 \%$ of their respective averages. Otolith analysis revealed that $4 \%$ of the sockeye salmon harvest from Taku Inlet, and $15 \%$ from Stephens Passage, were of Snettisham Hatchery origin. TBR enhanced sockeye salmon of King Salmon, Tahltan, and Tatsamenie lakes origin made up $1 \%$ of the Taku Inlet harvest. The first bilateral Taku River sockeye salmon run size estimate was produced this week and projected an inriver run of 52,100 fish using BTSPAS.

Fishing time for SW 29 was set initially at three days in both Taku Inlet and Stephens Passage with Taku River sockeye salmon run size indicators both in District 111 and inriver showing increased abundance. The Jaw Point line in upper Taku Inlet was modified slightly to allow a little more area on the west side but remained as a Chinook salmon conservation measure. A one-day extension in Stephens Passage, with the minimum mesh size restriction, was granted for a total of an above-average four days of fishing in the district. The three days of fishing in Taku Inlet was the first above-average weekly period of the season there. Effort decreased from the previous week with 87 boats making landings, $70 \%$ of average. One hundred forty-four Chinook salmon were harvested this week, of which an estimated zero fish were Taku River large fish based on inseason CWT analysis and ASL sampling. The sockeye salmon harvest for the opening was $121 \%$ of average while CPUE was $118 \%$ of average. Otolith analysis revealed that $16 \%$ of the sockeye salmon harvest from Taku Inlet, and $40 \%$ from Stephens Passage, were of Snettisham Hatchery origin. TBR enhanced sockeye salmon of Tatsamenie and King Salmon lakes origin made up $1 \%$ of the harvest in Taku Inlet. The weekly Taku River sockeye salmon inriver run size projection increased from the previous week to 60,800 fish.

Fishing time for SW 30 was a repeat of the previous week with an initial three days in Taku Inlet and Stephens Passage followed by a one-day extension in Stephens Passage for a total of four days of fishing in the district, $125 \%$ of average for the week. The upper line in Taku Inlet was relaxed to the normal line just off the river flats. Effort increased from the previous week to 96 boats, $78 \%$ of average for the week. Sockeye salmon harvest was $153 \%$ of average while CPUE was $149 \%$ of average, and the 27,600 fish harvested this week was the highest weekly harvest of the season. Otolith analysis revealed that $26 \%$ of the sockeye salmon harvested in Taku Inlet, and $23 \%$ from Stephens Passage, were of Snettisham Hatchery origin. TBR enhanced sockeye salmon of Tatsamenie Lake origin made up $1 \%$ and $2 \%$ of the harvest in Taku Inlet and Stephens Passage, respectively. This was the only opening of the season where TBR enhanced fish were represented in Stephens Passage. The weekly Taku River sockeye salmon inriver run size projection increased significantly from the previous week to 96,100 fish.

Fishing time for SW 31 was again initially three days in Taku Inlet and Stephens Passage. With an increasing Taku River sockeye salmon run size projection, and both District 111 and inriver fisheries showing solid abundance, Stephens Passage was extended for an additional day for an above average total of four days of fishing for the week. The minimum mesh size restriction south of Circle Point was removed for the one-day extension in Stephens Passage to allow some targeting of Snettisham Hatchery sockeye salmon transiting the area as well as the smaller-sized, latter portion of the enhanced chum returns. Effort increased from the previous week to 108 boats, $111 \%$ of average and the highest weekly effort of the season. Sockeye salmon harvest and CPUE were $142 \%$ and $116 \%$ of their respective averages. Otolith analysis revealed that $6 \%$ of the sockeye salmon harvested in Taku Inlet, and 25\% from Stephens Passage, were of Snettisham Hatchery origin. TBR enhanced sockeye salmon of Tatsamenie Lake origin made up $1 \%$ of the harvest in Taku Inlet. The weekly Taku River sockeye salmon inriver run size projection increased from the previous week to 106,800 fish.

Fishing time for SW 32 was again initially three days in Taku Inlet and Stephens Passage. The minimum mesh size restriction south of Circle Point was kept in place initially, but with escapement of sockeye salmon into Speel Lake ramping up throughout the week, the mesh restriction was removed after the first day along with area being extended into the entrance of Port Snettisham for the remaining two days of the original opening. Continued passage of fish through the Speel Lake weir and observed buildup of fish in the creek below the weir resulted in additional time and area extensions totaling to five days of fishing in Stephens Passage, four days in the entrance of Port Snettisham, and one day in the Speel Arm SHA for the week. The total fishing time of five days in the district was above average. Effort fell drastically from the previous week to 56 boats, $75 \%$ of average. Traditional (not including the Speel Arm SHA) sockeye salmon harvest and CPUE were $58 \%$ and $55 \%$ of their respective averages. Otolith analysis indicated that $27 \%$ of the sockeye salmon harvest from Taku Inlet was of Snettisham Hatchery origin. TBR enhanced sockeye salmon of Tatsamenie Lake origin made up $2.5 \%$ of the harvest in Taku Inlet. The weekly Taku River sockeye salmon inriver run size projection remained similar to the previous week at 104,000 fish.

Fishing time for SW 33 was initially three days throughout the district for the fifth consecutive opening. Unlike previous openings, this opening included the entrance to Port Snettisham and the Speel Arm SHA to target Snettisham Hatchery sockeye salmon. Stephens Passage, the entrance of Port Snettisham, and the Speel Arm SHA were extended an additional day for four days of fishing there. Sockeye salmon escapement through the Speel Lake weir slowed significantly, likely due to the hot and dry weather, so the SHA did not open until further notice during this week. The total fishing time of four days in the district was above average. Effort again fell significantly from the previous opening to 23 boats, $33 \%$ of the average for the week. Sockeye salmon harvest and CPUE in the traditional fishery were $61 \%$ and $178 \%$ of their respective averages. Otolith analysis indicated that $35 \%$ of the sockeye salmon harvest from Taku Inlet were of Snettisham Hatchery origin. TBR enhanced sockeye salmon of Tatsamenie Lake origin made up 3.5\% of the harvest in Taku Inlet which was the highest weekly proportion of TBR enhanced fish for the season. The weekly Taku River sockeye salmon inriver run size again remained like the previous week at 105,200 fish, and with approximately $90 \%$ of the run historically through Canyon Island at this juncture in the season, it appeared that the upper end of the interim spawning objective goal range would be exceeded. This was the last week of the sockeye salmon management period in District 111 with coho salmon management starting in SW 34. The first Taku River coho salmon inriver run estimate was produced this week and expanded by average run timing with harvest from fisheries applied, projected a terminal run of 59,600 fish.

The fall commercial drift gillnet season in District 111 occurred over eight weeks, beginning on August 19 in SW 34, and ending on October 11 in SW 41. During this time, management in District 111 switched from being driven by Taku River sockeye to coho salmon abundance. Both the forecast and initial run size estimates for Taku River coho salmon were well below average, resulting in conservative early openings in District 111, and then inriver abundance increased significantly in SW 36 allowing ample AC for both countries and much more liberal openings.

Fishing time for SW 34 was set for two days in Taku Inlet and three days in Stephens Passage and the entrance to Port Snettisham. The additional day in the southern portion of the district allowed further targeting of Snettisham Hatchery sockeye salmon with minimal impact on Taku River coho salmon returns. The Speel Arm SHA was opened until further notice this week and would remain open until September 13. A well below average 19 boats made landings in the traditional fishery for the week. The sockeye salmon harvest was $37 \%$ of average, while CPUE was $82 \%$ of average. Otolith analysis indicated that $53 \%$ of the sockeye salmon harvest from Taku Inlet, and $80 \%$ from Stephens Passage, were of Snettisham Hatchery origin while TBR enhanced sockeye salmon of Tatsamenie Lake origin made up $1 \%$ of the Taku Inlet harvest. The coho salmon harvest and CPUE were $73 \%$ and $155 \%$ of average, respectively. CWT analysis indicated that $31 \%$ of the coho salmon harvest for the week was comprised of Alaska hatchery fish. The coho salmon hatchery contribution in the District 111 gillnet harvest this season was once again comprised nearly entirely of DIPAC fish returning to Gastineau Channel. The second Taku River coho salmon inriver run estimate, expanded by average run timing with harvest applied, projected a terminal run of 80,300 fish, a significant increase from the previous week but also general agreement that the estimate was biased high.

Fishing time for SW 35 was set at two days throughout the district with no extension granted due to declining effort throughout the opening and an overall consensus from the fleet that fishing was dropping off. This week's opening was delayed until Monday, August 26 to reduce conflict with the annual Golden North Salmon Derby that was postponed from the previous week due to the marine weather forecast. A total of 22 boats made landings throughout the opening, $52 \%$ of average, with all but a few boats fishing in and around Taku Inlet. Otolith analysis indicated that $38 \%$ and $2 \%$ of the sockeye salmon harvest from Taku Inlet were of Snettisham Hatchery and Tatsamenie Lake origins, respectively. This was the last week of sockeye salmon otolith sampling for the season in District 111. Coho salmon harvest and CPUE were respectively $57 \%$ and $176 \%$ of average. CWT analysis indicated that $43 \%$ of the coho salmon harvest for the week was comprised of Alaska hatchery fish. The projected terminal run estimate for Taku River coho salmon decreased from the previous week to 77,200 fish.

Fishing time for SW 36 was initially set at one day in Taku Inlet and two days in Stephens Passage and the entrance of Port Snettisham. An extension granted an additional day in the southern portion due to above average coho salmon catch rates there. A total of 20 boats, $50 \%$ of average, made landings with coho salmon harvest and CPUE at $28 \%$ and $67 \%$ of average, respectively. CWT analysis indicated that $38 \%$ of the coho salmon harvest for the week was comprised of Alaska hatchery fish. The weekly projected terminal run estimate for Taku River coho salmon increased from the previous week to 91,200 fish, resulting in the first substantial U.S. AC of the season under the new harvest sharing agreement.

Fishing time for SW 37 was initially set at two days throughout the district, but with high catch rates spread all around, the fishery was extended for two more days for a total of four days of fishing. Effort increased slightly from the previous week to 25 boats, $71 \%$ of average, and the turnaround in coho salmon fishing brought out a few boats that were likely
ready to call it a season the week before. Coho salmon harvest was $125 \%$ of average while CPUE was $169 \%$ of average, and the 7,000 fish harvested was the highest weekly harvest of the season. CWT analysis indicated that $52 \%$ of the coho salmon harvest was comprised of Alaska hatchery fish. The weekly Taku River coho salmon terminal run projection increased from the previous week to 102,500 fish. The Speel Arm SHA closed for the season on September 13 without receiving any effort during this week.

Fishing time for SW 38 was increased initially to four days throughout the district with an initial day provided for a total of five days due to good catch rates throughout the initial opening. Effort remained similar to the previous week with 26 boats fishing, right at average. Coho salmon harvest was $89 \%$ of average while CPUE was $60 \%$ of average. CWT analysis indicated that Alaska hatchery fish contributed $36 \%$ to the weekly coho salmon harvest. The weekly Taku River coho salmon terminal run projection fell slightly from the previous week to 99,200 fish.

Fishing time for SWs 39 through 41 remained at five days for each opening. Effort dropped from eight boats in SW 39to zero boats in SW 41. Coho salmon harvest and catch rates were well below average each week and the cumulative harvest in these weeks was approximately 400 fish. CWT analysis showed a $100 \%$ contribution from Alaska hatchery fish for SWs 39 and 40. The weekly Taku River coho salmon terminal run projections remained just under 100,000 fish in SWs 39 and 40 and increased to 105,100 fish in SW 41. District 111 closed for the season at noon on Friday, October 11.

The 2019 District 111 fall chum salmon harvest in SWs $34-39$ was $42 \%$ of the fall fishing period average. Escapement numbers for Taku River chum salmon are unknown; however, the number of chum salmon caught by the fish wheels throughout the season at Canyon Island can be used as an index of escapement. The 2019 fish wheel catch of 118 chum salmon (Fish Wheel 1 and 2 only) was $68 \%$ of average. Comparisons to historical data are not as straightforward for the 2018 and 2019 seasons as fish wheel operation times were altered significantly in efforts to address the sockeye salmon dropout rate in the MR project. This resulted in the fish wheels not spinning 24 hours a day as they had in the past. However, chum salmon returning to the Taku River were obviously at lower than average abundance.

The District 111 traditional drift gillnet pink salmon harvest of approximately 69,000 fish was $47 \%$ of average. Escapement numbers for Taku River pink salmon are unknown; however, the number of pink salmon caught by the fish wheels at Canyon Island can be used as an index of escapement. The 2019 total of 16,971 pink salmon caught in the fish wheels (Fish Wheel 1 and 2 only) was $92 \%$ of the 2017 parent-year catch and $112 \%$ of the 1999-2017 odd-year average. The pink salmon escapement to the Taku River is characterized as average with the same caveats in comparing Canyon Island fish wheel catches in recent seasons to historical catches as mentioned in the chum salmon section.

Several other fisheries in the Juneau area harvested transboundary Taku River salmon stocks in 2019. Several Chinook salmon stocks are known to contribute to the Juneau area sport fishery, including wild fish from the Chilkat River, as well as hatchery stocks, but the
major contributor of large, wild fish is the Taku River. Of the Chinook salmon harvested in the sport fishery, 94 fish were estimated to be of Taku River origin through SW 29 based on postseason GSI analysis. Personal use permits were used to harvest an estimated 1,500 Taku River sockeye salmon along with an estimated incidental harvest of 10 Taku River large Chinook salmon. The District 111 Amalga Harbor SHA common property purse seine fishery targeting returning DIPAC enhanced summer chum salmon, northwest of Juneau, did not occur this summer as all the returns here were needed for cost recovery purposes. Some portion of the incidental sockeye salmon harvest from these fisheries, when they occur, is assumed to be of Taku River origin, but the magnitude of the contribution is unknown. GSI analysis of the 2013 and 2014 harvests averaged 35\% Taku River origin.

## Canadian Fisheries

The Taku River commercial fishery harvest was 21,395 sockeye and 12,145 coho salmon in 2019. No Chinook salmon were retained. Sockeye salmon originating from Taku fry plants contributed an estimated 423 fish to the harvest, comprising $2.0 \%$ of the total commercial sockeye salmon harvest. As a result of a poor preseason run forecast and lack of inseason information, there was no directed commercial Chinook salmon fishery in 2019 and all incidental catches in commercial fisheries were released. In addition, the Chinook salmon assessment fishery did not occur in 2019. Catches of sockeye and coho salmon were slightly below and above average respectively. There were 60 days of fishing which was about average. The seasonal fishing effort of 226 boat days however was below average. As is typical, both set and drift gillnets were used, with the majority of the catch taken in drift gillnets. The maximum allowable mesh size was 14.0 cm ( 5.5 inches) for the early part of the season to minimize the incidental catch of Chinook salmon. This was subsequently increased to 20.4 cm ( 8.0 inches).

In addition to the commercial fishery harvest, 5 nonlarge Chinook, 10 large Chinook, 105 sockeye, and 1074 coho salmon were harvested in the Aboriginal fishery. All of the Chinook salmon was harvested from the Nakina River. On average, 80 large Chinook, 14 nonlarge Chinook, 142 sockeye and 121 coho salmon are harvested annually in the Aboriginal fishery.

As a result of the preseason forecast being well below the goal range, retention of Chinook salmon of any size was not permitted in the recreational fishery effective April 1, 2019. Complete recreational harvest figures are not available but the catches of other salmon species are thought to have been negligible.

Typically, the inseason management of Taku River Chinook salmon depends on abundance estimates generated from the joint MR program in the lower Taku River with tags being applied below the border and recoveries being made in the Canadian assessment and/or commercial fisheries. In recent years, when the preseason forecast or inseason projections have indicated no AC, the commercial fishery has operated in an assessment mode and served as the test fishery identified in the PST agreement. In 2019, as in the previous two years, the preseason forecast did not warrant an assessment fishery and the Panel did not recommend it as a result. As such, the preseason forecast was used to make necessary
adjustments in the other fisheries with the intention of eliminating the harvest of Chinook salmon.

Due to the poor large Chinook salmon forecast (coupled with ongoing Kuthai Lake sockeye salmon concerns), the start of the directed commercial fishery for sockeye salmon was delayed by 16 days. The first opening was noon Tuesday, July 2 (SW27) and this was held to a maximum of 48 hours. Additional measures were also implemented based on Chinook salmon considerations. As per the 2019 Taku River commercial conditions of licence, the harvest of Chinook salmon was not permitted. In addition, the use of set nets was not permitted for the first commercial opening (SW27) to allow for the release of Chinook salmon. A maximum mesh size restriction of 140 mm (approximately 5.5 inches) was in effect through SW29 (ending July 20).

The preseason forecast of 153,500 wild Taku sockeye salmon with an enhanced run size forecast of 2,500 fish provided Canada with a $20 \%$ share of the TAC, with management based on weekly estimates of the TAC of wild fish. Subtracting the interim management target of 59,000 wild sockeye salmon from the forecast resulted in an overall preseason TAC of 94,500 fish; $20 \%$ of that was approximately 18,900 fish. In addition to its share of the TAC, Canada was entitled to harvest any projected escapement in excess of spawning objectives and broodstock needs apportioned by run timing.

The preseason forecast for the total (wild plus enhanced) terminal run of Tatsamenie fish was 8,500 fish, which was well below the average of approximately 21,100 fish. The eggtake goal for the 2019 season was based on a target of $50 \%$ of the escapement up to a maximum of 3.0 million eggs. During SWs 31-33 (July 28-August 17), management attention focused on Tatsamenie sockeye salmon to ensure an adequate number of sockeye salmon escaped to Tatsamenie Lake to support wild production and egg-take objectives.

As in past years, guideline harvests were developed each week for both sockeye and coho salmon fisheries to guide management decisions so that: a) the catch was consistent with conservation and Treaty objectives; and b) management was responsive to changes in projections of abundance (i.e., abundance-based management).

Fishing periods were set with a view to achieving weekly guideline harvests. Extensions to weekly fishing periods were considered if it appeared that the weekly guidelines would not be achieved. For both drift and set gillnets, net length was restricted to a maximum of 36.6 m ( 120 ft .); mesh sizes were restricted to between 100 mm ( 4 inches) and 204 mm ( 8 inches) except for the period prior to July 21 (SW 30) when the maximum permissible was 140 mm ( 5.5 inches) to reduce the bycatch of Chinook salmon.

The following summarizes the fishery management on a weekly basis and generally captures catch estimates and stock assessment information made inseason. As such the catch figures may not match the values listed in appendix tables. This is due to slight changes resulting from postseason review of catch slips, and updated stock composition information. Sockeye salmon catches and run projections are for wild fish; CPUE data is for wild and enhanced fish combined. Guideline harvests presented in Table 8 are based on
run projections made the previous week; additionally, those identified in the verbiage were generally based on the previous week's run projection. Values in Table 8 may differ from what is presented in appendix tables as they reflect inseason information. Guidelines identified in Table. 8 were set using a 20:80 harvest split for the entire sockeye salmon management period, as enhanced run projections did not exceed 5,000 fish at any point during the season.

The management plan indicated that the sockeye salmon fishery would be delayed over two weeks and commence at noon Tuesday, July 2 (SW27) restricted to a maximum of a 48 -hour period due to the poor large Chinook salmon forecast and ongoing escapement concerns for Kuthai Lake sockeye salmon. Additional modifications were made to address Chinook salmon management concerns. For 2019, as per the Taku River commercial conditions of licence, the harvest of Chinook salmon was not permitted. In addition, for the first commercial opening, fishing gear was restricted to drift nets (i.e. set nets were not permitted) in order to allow for the release of Chinook salmon. A maximum mesh size restriction of 140 mm (approximately 5.5 inches) was in effect through SW29 (ending July 20).

As per the preseason forecast, the weekly guideline for the first week of the fishery was 1,378 wild fish. As noted, for conservation reasons, the opening occurred on a Tuesday rather than the standard Sunday; furthermore it was for a 24 -hour period rather than the more usual 48-hours. As it turned out, fishing effort was very low, comprising only two licences. Given this, and a minimal bycatch of Chinook salmon, an extension of 24 -hours was provided. The two-day opening resulted in a catch of 585 sockeye salmon, well below the weekly average of 1,155 fish. A total of 24 large Chinook salmon were encountered and subsequently released.

Table 9. Inseason run size projections, Canadian available harvest, and actual harvest of wild Taku River sockeye salmon, 2019.

| Stat <br> Week | Terminal Run | TAC | Inriver Run | Cdn <br> Available Harvest | Weekly Guideline | Weekly Actual | Cum. Guideline | Cum. Actual |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 24 | 153,520 | 94,520 |  | 18,904 | 494 | 0 | 494 | 0 |
| 25 | 153,520 | 94,520 |  | 18,904 | 868 | 0 | 1,362 | 0 |
| 26 | 153,520 | 94,520 |  | 18,904 | 1,119 | 0 | 2,481 | 0 |
| 27 | 153,520 | 94,520 |  | 18,904 | 1,378 | 585 | 3,859 | 585 |
| 28 | 153,520 | 94,520 |  | 18,904 | 1,927 | 1,435 | 5,785 | 2,020 |
| 29 | 96,534 | 37,534 | 84,784 | 25,784 | 3,041 | 2,437 | 10,932 | 4,457 |
| 30 | 130,955 | 71,955 | 84,984 | 25,984 | 4,031 | 4,290 | 15,048 | 8,747 |
| 31 | 177,351 | 118,351 | 120,580 | 61,580 | 8,567 | 5,796 | 44,229 | 14,543 |
| 32 | 176,509 | 117,509 | 114,657 | 55,657 | 6,817 | 2,222 | 46,791 | 16,765 |
| 33 | 163,485 | 104,485 | 111,961 | 52,961 | 3,241 | 2,630 | 47,766 | 19,395 |

Note: Run sizes reflect either the preseason forecast or the projection from the preceding week. Weekly guidelines are based on available harvest (inriver run less escapement target) apportioned by run timing.

The fishery opened on two days in statistical week 28 (July 7-13). The weekly guideline, still based on the preseason forecast, was 1,927 wild fish. The fishing effort (four licences)
was double that of the previous week, but this was still well below average. Based on above average catch rates on day one ( 148 versus 76 fbd ) the opening was extended by 24 hours. The weekly catch was 1,435 wild sockeye salmon. A total of 34 large Chinook salmon were released. A Tulsequah River jökulhlaup began late in the opening and resulted in poor fishing conditions. The weekly sockeye salmon CPUE of 103 fbd was above the average for SW 28 of 74 fbd . The first inseason run projection was made after the close of the fishery. It projected only a terminal run of 96,534 fish, well below the preseason forecast.

An opening of two days was posted for SW 29 (July 14-20). Although the terminal run forecast was low, the inriver run projection was 84,784 fish which, when apportioned by run timing, corresponded to an available harvest of 3,041 fish, using the escapement target of 59,000 fish. Water levels had receded post-jökulhlaup, and were now below average. The catch for day one was a respectable 1,039 sockeye and a 24 -hour extension was provided. The CPUE for SW 29 (114 fbd) was above the average of 99 fbd . The weekly catch was 2,437 wild sockeye salmon. Weekly effort averaged 5.5 licences, below the average of 7.8 . The terminal run projection made after closing was 130,955 fish, was a marked improvement on the estimate generated the previous week, but still below the preseason forecast.

The fishery in statistical week 30 (July 21-27) was opened on three days. The weekly guideline using the inriver run projection of 84,984 was 4,031 fish. Taking into consideration below average effort ( 5.0 versus a weekly average of 8.5 ) and an apparent abundance of fish, the opening was extended for two additional 24 -hour periods. River levels were below average. The weekly CPUE ( 177 fbd ) was above the average of 133 fbd). The weekly catch was 4,290 fish. The number of licenses that fished in SW 30 was 5.0, below the average of 8.5 licenses. After day three of the fishery, a run projection of 177,351 fish was made which was now above the preseason forecast. The inriver run projection was 120,580 fish.

For SW 31 (July 28-August 3), the weekly guideline was 8,567 sockeye salmon based on the inriver run outlook from SW 30. The initial opening was three days; very high catch rates were observed and the fishery extended by 24 hours. Effort was again below average ( 6.8 versus 8.4 licenses). The weekly catch was 5,796 fish. Water levels were considerably below average. The terminal run projection was 176,509 fish, very close to the SW 30 projection.

The fishery was again opened on three days in statistical week 32 (August 4-10). Based on an inriver run projection of 114,657 fish, the weekly guideline was 6,817 fish. Water levels climbed back to average values over the course of the opening. The weekly CPUE was 131 fbd, compared to an average of 112 fbd . The weekly catch was 2,222 sockeye salmon; the number of licenses fished was 5.7 versus an average of 8.7 licenses. The terminal run projection made after closing, 163,485 sockeye salmon, relatively consistent with recent weeks as well as the preseason forecast.

Statistical week 33 (August 11-17) started with a weekly guideline harvest of 3,241 fish and an opening of 3 days. The effort was 7.0 licences, compared to a weekly average of
8.3 licenses. The fishery was again held to 3 days. The weekly catch of 2,630 fish was similar to that of week 32, as was the CPUE ( 126 fbd versus an average of 86 fbd ). Water levels were back down to well below average.

Statistical week 33 marked the end of the directed sockeye salmon fishery. A terminal run projection made the following week (i.e. after the first week of the directed coho salmon fishery) was 147,284 wild fish. The projected inriver run was 102,788 fish. Subtracting the actual harvest of wild fish to date ( 20,426 fish) plus potential harvest in the coho fishery ( $<1,000$ fish) projected an escapement of approximately 81,000 wild sockeye salmon, which was above the interim target range of 55,000 to 62,000 fish.

The postseason harvest estimate of enhanced Taku River sockeye salmon was 423 fish which included 95 fish from King Salmon Lake and 328 fish from Tatsamenie Lake. A small number ( 20 fish) of non-Taku enhanced-origin sockeye salmon were also harvested.

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

Based on the terminal run forecast of Taku River coho salmon in 2019 of 73,000 fish, a Canadian harvest of 5,000 fish was permitted starting in SW34 for assessment purposes. Canada was also permitted a directed harvest of all inriver coho salmon in excess of 75,000 fish (the sum of the MSY point goal of 70,000 fish and the 5,000 fish allocated for assessment purposes).

Statistical week 34 (August 18-24) was opened for two days based on the preseason forecast, and extended 24 hours. Coho salmon catch rates for the week ( 78 fbd ) were above average ( 55 fbd ) as were sockeye salmon catch rates ( 61 fbd versus 54 fbd ). Fishing conditions were excellent, with water levels dropping to record low (as identified at Canyon Island) by closing. The number of licenses was below average ( 6.6 licenses compared to the SW 34 average of 7.2). A total of 1,478 coho salmon were landed plus 1,157 sockeye salmon. The MR estimate after day three indicated that 24,176 fish had crossed the border; this projected to an inriver run of 68,904 fish, slightly below the preseason forecast.

Statistical week 35 (August 25-31) was opened for two days and extended for two additional 24-hour periods. Coho salmon catch rates for the week were below average ( 43 fbd compared to average of 65 fbd$)$. Water levels were near average, and 5.8 licenses fished for the week. A total of 996 coho salmon and 461 sockeye salmon were caught. The MR estimate after day three indicated that 32,885 fish had crossed the border; this projected to an inriver run of 68,624 fish, very similar to the previous week's projection.

Statistical week 36 (September 1-7) was opened on three days, and extended by one day. Coho salmon catch rates for the week were above average ( 94 fbd versus 74 fbd ). Water levels fluctuated from below average to average. Three (3.0) licenses fished for the week which was below the average of 5.8 licenses. A total of 2,393 coho salmon and 125 sockeye salmon were caught. The MR estimate made at closing, 48,760 coho salmon, generated an
inriver run projection of 82,713 fish which was in excess of both the preseason forecast and the number of fish required for directed fishing.

Statistical week 37 (September 8-14) also opened on three days. The opening was extended for two days, with only 2.8 licences fishing. As in SW 34, the river dropped to very low levels over the course of the fishery. Coho salmon catch rates were above average ( 157 fbd versus 64 fbd ). The inriver run projection made after day three ( 94,610 coho salmon) showed another increase over the previous weeks estimate. A total of 2,204 coho salmon and 45 sockeye salmon were caught.

Statistical week 38 (September 15-21) was posted for four days and extended one day. A weekly average of 2.6 licenses fished, above the average of 1.6 licenses. A total of 1,553 coho salmon and 4 sockeye salmon were caught. These were the final sockeye salmon catches of the season. Coho salmon CPUE was 119 fbd vs an average of 72 fbd . Water levels were below average for most of the opening but a flood started mid-week. The inriver run estimate made after closing was 73,610 coho salmon, which projected to 89,708 fish.

The fishery continued for three more weeks, with one licence fishing. This matched the average effort for SW 39 and exceeded the average for statistical weeks 40 and 41. The flood ebbed over the course of the SW 39 fishery and water levels were once again below average by closing. They were relatively stable in SW 40; measurements were not taken in SW 41 as the Canyon Island field operations had terminated.

Statistical week 39 (September 22-28) was opened for five days. A total of 462 coho were caught. The CPUE was 116 fbd , which was well above the average of 68 fbd . The inriver run estimate made after closing was 81,022 coho salmon, which projected to 86,661 fish.

The opening for statistical week 40 (September 29-October 5) was also open for five days. The CPUE of 108 fbd matched the average and the catch was 538 coho salmon. The inriver run estimate made after closing was 88,643 coho salmon, no projection was as the run as reflected by Canyon Island catches is typically complete by this time.

The final week of fishing, statistical week 41 (October 6-12) was opened on three days and extended to the end of the week. A total of 132 coho salmon were caught; CPUE was 22 fbd . Comparisons with average are not informative as fishing is typically complete by this time. A final inseason run estimate was made, amounting to 94,790 fish. The fishery was again opened the following week, for a total of three days; however, there was no fishing activity. Totals of 12,145 and 94 coho salmon had been caught in the commercial and Aboriginal fisheries respectively. Of the commercial catch 2,399 fish were from the directed sockeye fishery, i.e. prior to SW 34. Subtracting the total harvest of 12,239 fish indicated an escapement of 82,551 coho salmon. This is above the MSY point goal of 70,000 fish and close to the upper end of the goal range of 50,000 to 90,000 fish.

## Escapement

## Sockeye Salmon

Spawning escapement is estimated by subtracting the inriver harvest from the above border run size estimate. The above border run size of sockeye salmon into the Canadian portion of the Taku River drainage is estimated from a joint Canada/U.S. MR program that has been operated annually since 1984. The postseason estimate of the above border run in 2019 is 98,203 fish; subtracting the inriver harvest of 21,481 Taku fish ( 21,376 commercial and 105 Aboriginal harvest) results in a spawning ground escapement estimate of 76,722 fish. The Taku River wild spawning escapement was above the 2019 interim escapement goal range of 55,000 to 62,000 wild sockeye salmon. The Canyon Island catch in the fish wheels was 3,545 sockeye salmon.

Escapement projects conducted by Canada provide information on the abundance of discrete lake spawning stocks within the watershed. Traditional counting weirs were operated by DFO at Little Trapper and Tatsamenie lakes, and video counting weirs were operated by the TRTFN at Kuthai and King Salmon lakes.

The sockeye salmon count through the Kuthai Lake video weir was 605 fish in 2019; below the average of 754 fish and $390 \%$ of the primary brood year (2014) escapement estimate of 155 fish. Since 2016, TRTFN has been implementing small ongoing fish passage improvement projects on the Silver Salmon River, results will be available in a future report.

The King Salmon Lake video weir count of 4,294 fish was above the average of 2,915 fish and $173 \%$ of the primary brood year (2015) escapement estimate of 1,683 fish. A significant beaver dam near the lake was breached by field crews in early summer. A TRTFN planned egg take was not conducted in 2019.

The Little Trapper Lake traditional weir count was 6,382 sockeye salmon was average and slightly below the 2014 primary brood year count of 6,607 fish. Run timing was typical and there were 444 fish removed for broodstock.

The Tatsamenie Lake traditional weir count was 3,092 sockeye salmon well below the average of 10,795 fish but above the 2014 primary brood year count of 2,105 fish. The run started about ten days late with two peaks, one on August 28 and another September 22. Based on thermal mark data $48 \%$ of the run was enhanced fish. There were a total of 1,561 removals which included 1,415 fish for broodstock, and 146 holding mortalities. An additional 223 fish were held for broodstock but released unspawned.

## Chinook Salmon

Spawning escapement of Chinook salmon in the Canadian portion of the Taku River drainage was estimated from the joint Canada/U.S. MR program. Spaghetti and radio tag application took place from April 30 through June 30 using a drift gillnet to capture fish in the lower river near the Wright River just downstream of the U.S./Canada border. Fish
wheels were also used from May 15 through July 23 to capture and spaghetti tag fish. Catches in the drift gillnet accounted for $75 \%$ of all tags applied to large Chinook salmon, though fish wheel catch comprised $55 \%$ of the total tags applied to all sizes of fish. There was no inseason event 2 component in 2019 since no assessment fishery or directed fishing for Chinook salmon was permitted due to the low preseason forecast. Also, Chinook salmon were required to be released in the inriver commercial sockeye salmon fishery because of low abundance. Spawning ground sampling and spaghetti tag recovery occurred in July through September on the Nakina, Tatsatua, Kowatua, Nahlin, and Dudidontu rivers, as well as Tseta Creek. The sonar weir was operated from May 28-July 27 on the lower Nahlin River enumerated 4,403 large Chinook salmon passing upriver.

The 2019 postseason Chinook salmon escapement estimate of 11,560 large fish was generated from the joint Canada/U.S. MR program with the lower river drift gillnet and fish wheels as Event 1. Tags out in event 1 were reduced based on the dropout rate ( $\sim 12 \%$ ) observed from the 2019 Chinook salmon telemetry project. Event 2 recapture combined the relevant spawning ground samples (Nakina, Tatsatua, Kowatua, Nahlin, and Dudidontu rivers, and Tseta Creek). This estimate is well below the average escapement of 17,770 large fish, and the escapement goal range of 19,000 to 36,000 large Chinook salmon.

Aerial surveys of large Chinook salmon to the five escapement index areas were; Nakina 1,070 fish; Kowatua 361 fish; Tatsamenie 330 fish; Dudidontu 949 fish; and Nahlin 282 fish; all sites were below average except for the above average count at Dudidontu. Viewing conditions were excellent with very low and clear water for all surveys and the total peak count of 2,992 large Chinook salmon expands to 15,558 large fish using the published expansion factor of 5.2.

## Coho Salmon

Spawning escapement of coho salmon in the Canadian portion of the Taku River drainage was estimated from the joint Canada/U.S. MR program. Tag application occurred at the CYI fishwheels from July 4 (SW 27) until October 4 (SW 40), augmented by gillnetting from September 29 to October 1 and October 4 and 5. The tag recovery effort consisted of Canadian commercial fisheries throughout the period augmented by a test fishery from October 5-9 (SW 40 and 41). The test fishery was a live release set gillnet program operated by DFO / TRTFN that caught and released 22 coho salmon.

The postseason inriver MR estimate is 95,011 fish. The inriver harvest was 12,252 fish ( 12,145 commercial and 107 Aboriginal fish) the spawning escapement estimate is 82,759 fish. This is an average escapement $(82,200$ fish) and within the biological escapement goal range of 50,000-90,000 fish.

## Pink Salmon

There is no program to estimate the escapement of Taku River pink salmon; however, the Canyon Island fish wheels were used as an index of escapement. A total of 16,971 pink salmon were captured in 2019. This is above the recent odd-year average.

## Chum Salmon

Chum salmon escapement numbers to the Taku River are unknown; however, the numbers of fall chum captured by the fish wheels at Canyon Island were used as an index of escapement. A total of 118 chum salmon were captured in 2019; below average.

## Sockeye Salmon Run Reconstruction

An estimated 65,281 wild and 1,237 enhanced Taku River sockeye salmon were harvested in the traditional U.S. District 111 drift gillnet fishery. This estimate was made by postseason GSI and otolith analysis. An additional 1,673 wild and 51 enhanced sockeye salmon were estimated to have been taken in the U.S. inriver personal use fishery. The estimated total U.S. harvest of Taku River sockeye salmon is 66,953 wild and 1,273 enhanced fish (Table 4).

In the Canadian commercial fishery, the postseason harvest estimate of Taku River sockeye salmon is 20,952 wild, 328 enhanced Tatsamenie Lake, and 95 enhanced King Salmon Lake fish. Also harvested were 11 Stikine River enhanced fish, and 9 U.S. enhanced fish; total Canadian commercial harvest was 21,395 fish (21,376 Taku fish and 19 non-Taku enhanced fish). An estimated 103 wild and 2 enhanced sockeye salmon were taken in the Canadian Aboriginal fishery. Therefore, the estimated Canadian treaty harvest of Taku River sockeye salmon is 21,055 wild and 426 enhanced fish (Table 4).

The postseason estimate of the above border run size of sockeye salmon, based on the joint Canada/U.S. MR program is 98,203 fish. Deducting the Canadian inriver harvest noted above from the above border run estimate results in an estimated escapement of 76,722 fish; 74,854 wild fish. The escapement of Taku River sockeye salmon originating from the fry planting program was estimated to be 1,868 fish from broodstock otoliths collected at Tatsamenie and King Salmon lakes. The terminal run of Taku River sockeye salmon is estimated at 162,863 wild fish and 3,566 enhanced fish. Based on the interim 2019 escapement target of 59,000 wild fish, the wild TAC was 103,863 fish and combining wild and enhanced terminal run the TAC was 107,429. The harvest sharing agreement based on total terminal enhanced run was $80 \%$ U.S. and $20 \%$ Canada.


#### Abstract

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


## Harvest Regulations \& Management Objectives

Although harvest sharing of Alsek River salmon stocks between Canada and the U.S. has not yet been specified, Annex IV does call for the development and implementation of cooperative abundance-based management plans and programs for Alsek River Chinook and sockeye salmon. In February 2013, the bilateral TTC and bilateral TBR Panel agreed to the revised biological escapement goals for Alsek River Chinook and sockeye salmon. These were Alsek River Chinook salmon MSY target of 4,700 fish (escapement goal range 3,500-5,300 fish), Klukshu River Chinook salmon MSY target of 1,000 fish (escapement goal range of 800-1,200 fish), Alsek River sockeye salmon MSY target of 29,700 fish (escapement goal range of 24,000-33,500 fish), and Klukshu River sockeye salmon MSY target of 9,700 fish (escapement goal range 7,500-11,000 fish). Since 1976 the principle escapement monitoring tool for Chinook and sockeye salmon stocks on the Alsek River is the Klukshu River salmon counts, a project operated by DFO in cooperation with the CAFN. MR programs to estimate the total inriver abundance and the portion of escapement contributed by Klukshu River stocks operated from 1997 to 2005 for Chinook salmon, and from 2000 to 2005 for sockeye salmon. Currently, total Alsek River run estimates for sockeye salmon are generated using Dry Bay commercial sample GSI analysis to expand the Klukshu River counts.


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

## Preseason Forecasts

The preseason forecast for Klukshu River Chinook salmon escapement in 2019 was 8601,100 fish. These forecasts are below the average of approximately 1,400 fish and bracket the escapement goal range of $800-1,200$ Chinook salmon. Two models were used in forecasting; a sibling model ( 860 fish) and a stock recruit model ( 1,100 fish). The sibling model uses 2018 returns of age 4 (BY 2014) and age 5 (BY 2013) Chinook salmon to predict the returns of age 5 (BY 2014) and age 6 (BY 2013) in 2019 using the relationships observed between age classes over the past 10-years corrected with the 5 -year average (2014-2018) model error. The stock recruit model forecast is based on 23 years of Klukshu

River Chinook salmon production data and was discounted using the 5 -year average (2014-2018) model error (49\%).

The 2019 Alsek River sockeye salmon run was expected to be approximately 45,000 fish; this was well below the average run size estimate of approximately 79,400 sockeye salmon. The outlook for 2019 was based on a predicted run of 10,300 Klukshu River sockeye salmon, well below the average of approximately 14,700 fish, but near the upper end of the Klukshu River escapement goal of 7,500 to 11,000 sockeye salmon. The forecast was derived from the latest Klukshu River stock-recruitment based on MR results (2000-2004) and run size estimates using GSI (2005-2006, 2011) data and a Klukshu River contribution to the total run of 23\% (Eggers et al. 2011). The principal contributing brood year was 2014 (Klukshu River escapement of 12,148 sockeye salmon).

Information from coho salmon partial escapement counts at the Klukshu River in 2015 ( 1,800 fish) and 2016 ( 2,100 fish) suggested the 2019 run would be above the recent average of approximately 2,000 coho salmon.

Table 10. Klukshu River harvest and escapement for the Chinook and sockeye salmon and Alsek River harvest for Chinook and sockeye salmon for 2019.

|  | Chinook | Sockeye |
| :--- | ---: | ---: |
| Klukshu River $^{\mathrm{a}}$ |  |  |
| Weir count | 1,589 | 19,073 |
| Harvest at/above weir | 16 | 324 |
| Escapement $\quad 1,573$ | 18,749 |  |
| Harvest $^{\mathrm{b}}$ |  |  |
| U.S. Commercial | 79 | 9,787 |
| U.S. Subsistence/P.U. | 20 | 279 |
| U.S. Test |  |  |
| Canadian Aboriginal | 32 | 648 |
| Canadian Recreational | 5 | 5 |
|  |  |  |
| Alsek River |  | 82,536 |
| Above border run |  |  |

Total escapement
<Above border run above - U.S. harvest>
a Klukshu River salmon stocks represent an assumed large and variable portion of the total Alsek River salmon escapement.
b U.S. harvest estimate differs from Joint Interception Committee estimate because no estimates are made for harvest other than the listed fisheries.

## U.S. Fisheries

The preseason forecast for Klukshu River Chinook salmon escapement in 2019 was 8601,100 fish. These forecasts are below the average of approximately 1,400 fish, but within the escapement goal range of $800-1,200$ Chinook salmon. Two models were used in forecasting; a sibling model (860 fish) and a stock recruit model ( 1,100 fish). The sibling model uses 2018 returns of age 4 (BY 2014) and age 5 (BY 2013) Chinook salmon to predict the returns of age 5 (BY 2014) and age 6 (BY 2013) in 2019 using the relationships observed between age classes over the past 10-years corrected with the 5 -year average (2014-2018) model error. The stock recruit model forecast is based on 23 years of Klukshu Chinook salmon production data and was discounted using the 5-year average (2014-2018) model error (49\%).

As a Chinook salmon conservation measure, the 2019 Alsek River commercial set gillnet fishery was delayed by two weeks. The fishery opened for 24-hours on Sunday, June 16 (SW 25). Traditionally, inseason management decisions were made by monitoring fishery performance data and comparing it to historical CPUE for a given opening to adjust time and area openings. The sockeye salmon directed fishery was extended for all statistical weeks except SW 25 and SW 30 and extensions were 12-hour or 24 -hour; 24-hour extensions were given after SW 30 due to low fishing effort. Chinook and sockeye salmon harvests were both below the historical and 5-year average throughout the duration of the directed sockeye salmon fishery. The total number of individual permits fished during the season was 12 , which was below the average of 16 permits. Peak sockeye salmon harvest occurred during SW 28 with 10 permits harvesting 2,739 fish. Effort decline after SW 30 and by SW 33 coho salmon management strategies were in place. Coho salmon are targeted starting in mid-August and effort typically drops during the fall due to or lack of pilots and aircrafts to transport the product to town. Fishing times remained at three days per week throughout the duration of the coho salmon season. The commercial fishing season closed on October 10.

The 2019 Dry Bay commercial set gillnet fishery harvested 79 Chinook and 9,787 sockeye salmon and 1 coho salmon (Table 10). There was no chum or pink salmon harvested. A test fishery for Chinook salmon was conducted in the Alaska portion of the Alsek River in 2005-2008 and from 2011-2012. Test fishing ceased in 2014.

## Canadian Fisheries

Due to low returns in recent years and 2019 preseason forecasts for Klukshu River Chinook and sockeye salmon that were below average yet within escapement goals, 2019 Alsek River fisheries were approached with caution by all parties. As Chinook and Sockeye salmon began returning in numbers above those expected and eventually above the upper bounds of escapement goals and management targets, fishery opportunities were incrementally increased.

Aboriginal fishery harvest opportunities were permitted throughout the season and were subject to conservation requirements. The Tatshenshini River recreational fishery was
closed to all salmon angling (including live release) prior to August 15. On August 15, the recreational fishery was opened with Chinook salmon limits set at 1 daily and 1 in possession, sockeye salmon non-retention only, and coho salmon limits at 2 daily and 4 in possession. On September 5, sockeye salmon limits were increased to 2 daily and 4 in possession, and on September 26 coho salmon limits were increased to 4 daily and 12 in possession.

An estimated 5 Chinook, 5 sockeye, and 10 coho salmon were harvested in the recreational fishery, and additional estimated 3 coho salmon were released. Additional coho salmon harvest may have occurred as fishing may have taken place after monitoring had ceased, and mandatory catch reporting is not complete. The estimate of Aboriginal fishery harvest (based on the past relationship between the Klukshu count and Aboriginal fishery harvest) is 32 Chinook, 648 sockeye, and 0 coho salmon.

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

The 2019 Integrated Fisheries Management Plan, developed by DFO in collaboration CAFN and the YSSC, is based on the escapement objectives described in the Harvest Regulations \& Management Objectives section above. Decision guidelines are agreed to for salmon fisheries management on the Alsek-Tatshenshini Rivers. For Chinook and early run sockeye salmon management, the Klukshu River counts were reviewed in mid-July to determine if changes to management were warranted. Run projections for Chinook salmon were positive, resulting in opening of the recreational fishery on August 15 and allowing retention of Chinook salmon. Run projections for early run sockeye remained uncertain, so non-retention was implemented when the fishery opened on August 15. The status of the sockeye salmon run was reviewed again in late August and due to strong returns, the escapement goal was exceeded and the CAFN Basic Needs Level was forecast to be exceeded as well. This resulted in an increase in bag limits for sockeye salmon in the recreational fishery on September 5.

The center of Aboriginal fishing activity in the Alsek River drainage occurs at the CAFN village of Klukshu, on the Haines Road, about 60 km south of Haines Junction. Salmon are harvested by means of gaff, small gillnets, sport rods, and traditional fish traps as the fish migrate up the Klukshu River and into Klukshu Lake. The fishing plan for the Aboriginal fishery in the Klukshu River and adjacent areas allowed for fishing by any means (as established in the communal license) 7 days a week. Conservation thresholds that might invoke restrictions in the Aboriginal fishery were projected Klukshu River counts of < 800 Chinook, < 1,500 early, and < 7,500 total sockeye salmon. Fishing also occurs on Village Creek and in the headwaters of the Tatshenshini River and tributaries thereof (Goat Creek,

Stanley Creek, Parton River, and the Blanchard River). The plan did not restrict the fishery other than to reserve harvests of Chinook salmon at Goat Creek, Stanley Creek, and the Parton River for elders only.

The majority of the recreational fishing effort in the Alsek River drainage occurs in the Tatshenshini River, at and just downstream of the mouth of the Klukshu River in the vicinity of the abandoned settlement of Dalton Post. Conservation thresholds that had the potential to invoke lifting of restrictions in the recreational fishery were projected Klukshu River counts significantly greater than 1,000 Chinook, 4,500 early run sockeye salmon and 10,500 early / late run combined sockeye salmon.

A mandatory Yukon Salmon Conservation Catch Card (YSCCC), introduced by the YSSC in 1999, was required by all recreational salmon fishers in 2019. The purpose of the YSCCC is to improve harvest estimates and to serve as a statistical base to ascertain the importance of salmon to the Yukon recreational fishery. Anglers are required to report their catch via email or mail by the late fall. Information requested includes the number, sex, size, date and location of salmon caught and released.

Since 2001, CAFN has imposed a fishing area closure from the Klukshu River bridge crossing upstream to the assessment site to allow for better staging opportunities for salmon in the vicinity of the Klukshu/Tatshenshini rivers confluence.

## Escapement

Alsek River drainagewide abundance programs are being investigated for Chinook and sockeye salmon stocks as part of the development of abundance-based management regimes and to accurately assess whether the current escapement goals are appropriate and if so, are being achieved. Currently, there are no programs in place to estimate the drainagewide coho salmon escapement.

The most reliable long-term comparative escapement index for Alsek River drainage salmon stocks are the Klukshu River counts. Escapements for 2019 are shown in Table 10. A large and annually variable proportion of the drainagewide escapement of each species is enumerated at Klukshu River, where video enumeration systems have been implemented since 2016. Video enumeration has been implemented on Village Creek since 2014. These video enumeration projects allow salmon passage 24 hours per day and alleviate concerns over impeding and/or handling salmon during periods of low abundance. Since 2018, a very successful snorkel survey of the lower Takhanne River has enumerated Chinook salmon. In 2019, a trial season of sonar enumeration of large (>659 mm MEF) Chinook salmon into the Blanchard River was successfully implemented.

## Sockeye Salmon

In 2019, the Klukshu River sockeye salmon count was 19,073 fish and the escapement estimate was 18,749 fish (Table 10), well above the escapement goal range of 7,500 to 11,000 fish. The count of 4,127 early run fish (count through August 15) was above the average of 2,616 fish as was the count of 14,946 late run fish compared to an average of

8,411 fish. The sockeye salmon count at Village Creek was 1,497 fish; this was well above average.

## Chinook Salmon

In 2019, the Klukshu River Chinook salmon count was 1,589 fish and the escapement estimate was 1,573 fish (Table 8). This escapement estimate is above the escapement goal range of 800 to 1,200 Klukshu Chinook salmon. The 2019 Takhanne River peak snorkel survey count was 150 Chinook salmon. The 2019 Blanchard River trial sonar count of large (>659 mm MEF) Chinook salmon was 1,400 fish.

## Coho Salmon

The Klukshu River coho salmon count prior to project end was 2,180 fish. As in past years, this does not serve as a reliable run strength indicator as the project ends during the coho salmon run to the Klukshu River. This number is slightly above the recent average of 1,977 fish.

## ENHANCEMENT ACTIVITIES

## Egg Collection

In 2019, sockeye salmon eggs were collected at Tahltan Lake on the Stikine River and Tatsamenie and Trapper lakes on the Taku River. A planned sockeye salmon egg take at King Salmon Lake did not occur due to high adult return numbers exceeding TRTFN enhancement guidelines.

## Tahltan Lake

In 2019, Tahltan Fisheries were contracted to perform the egg take. The egg-take goal was set at 5.0 million eggs in the approved Stikine River Enhancement Plan. Canadian technical staff lowered the egg-take goal to 4.5 million eggs due to treaty stocking guidelines not to exceed a $1: 1$ ratio of enhanced to wild smolt out-migrating from the lake. Escapement into the lake was 36,621 sockeye salmon. Broodstock were collected from August 28 through September 24th. This produced an estimate of 4.5 million sockeye salmon eggs for delivery to Snettisham Hatchery in Alaska (based on an estimated fecundity of 2,800 eggs per female). Three of the 10 lots were delayed due to weather ( 2 two-day delays and 1 one-day delay). Green to eye egg survival was $80.1 \%$ compared to the historical average of $85.6 \%$. Actual fecundity was 2,737 eggs per female. 3,523,952 eggs are available after picking.

## Tatsamenie Lake

In 2019, Metla Environmental Ltd was contracted to collect eggs at Tatsamenie Lake. Broodstock was captured near the assessment weir at the outlet of Tatsamenie Lake and held until ripe. Escapement through the weir was below average at 3,902 sockeye salmon. The egg-take goal was set at 3.0 million eggs in the approved Taku Enhancement Production Plan. A total of 685 females were spawned from September 17 through October

13th. Two of the 6 egg shipments were delivered the following day. An estimated 2.6 million sockeye salmon eggs were delivered to Snettisham Hatchery. Average egg survival to 100 CTU was estimated at $69.3 \%$ which is well below the historic average of $87.9 \%$. Assumed fecundity was 3,800 eggs per female. Actual fecundity through the first 3 lots has been 3,400 eggs per female.

## Little Trapper Lake

In 2019, Metla Environmental Ltd was funded through the Northern Fund to collect 500,000 sockeye salmon eggs at Little Trapper Lake. The resulting fry will be used to evaluate passage of subsequently returning adults at the barrier location between Little Trapper and Trapper Lake that is to be modified as part of the development of an enhancement program. Escapement into the lake was 6,382 sockeye salmon. An estimated 429,000 eggs were collected from September 4 through $6^{\text {th }}$. Neither of the two lots were delayed to the hatchery. Green to eye egg survival is estimated at $68.6 \%$ compared to the historical average of $77.5 \%$. Actual fecundity was 3,127 eggs, which is below the assumed fecundity of 3,300 eggs per female. There are 278,802 eggs available after picking. Egg takes completed in 2016 and 2017 are expected to result in sockeye salmon returns for passage evaluation in 2020 through 2022.

## King Salmon Lake

In 2019, there were no eggs collected at King Salmon Lake. Escapement into the lake was 4,292 sockeye salmon, which is well above the average of 2,588 fish. Taking eggs in high return years is not in line with TRTFN mandates on enhancement. In 2020, Taku River Tlingit Fisheries will monitor fish passage and make improvements as necessary. Additional egg takes are planned for 2021 and 2022.

## Incubation, Thermal Marking, and Fry Plants

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

In 2019 , brood year 2018 fry were transported to the appropriate systems from May $16^{\text {th }}$ to June14 ${ }^{\text {th }}$. There were no IHNV losses of the 2018 brood year. Egg incubation and thermalmarking at Snettisham Hatchery went smoothly.

## Tahltan Lake

In 2019, a total of 1.9 million sockeye salmon fry were stocked back into Tahltan Lake. These fish were from eggs collected in Tahltan Lake in the fall of 2018. Approximately 1.6 million sockeye salmon smolt left the lake in the spring of 2019 , with an estimated $70 \%$ of them from enhancement efforts. Escapement in 2017 was 19,200 sockeye salmon so good wild production was expected but did not materialize.

## Tuya Lake

Since 2014, fry planting into Tuya Lake has been discontinued due to Canadian domestic concerns.

## Tatsamenie Lake

In 2019, a total of 1.76 million sockeye salmon fry were stocked in Tatsamenie Lake. These fry were from eggs collected at Tatsamenie Lake in the fall of 2017. Approximately 1.39 million sockeye salmon fry were released directly into the lake on May 19 ${ }^{\text {th }}$. In 2019, two in lake rearing strategies were implemented. A group of 200,000 fry were flown into the lake on May $25^{\text {th }}$ and released on June $25^{\text {th }}$. A second group was flown into the lake on June $10^{\text {th }}$ and released on July $5^{\text {th }}$. Both groups were released at approximately 2 grams. Approximately 1.69 million smolt left the lake with 582 thousand from enhanced efforts and 1.09 million from wild production. Full evaluation of the success of extended rearing will not be available until these fish return as adults.

## Trapper Lake

In 2019, no fry were flown into Trapper Lake because no eggs were collected in 2018.

## Sockeye Supplementation Evaluation Surveys

## Acoustic, Trawl, Beach Seine and Limnological Sampling

Standard limnological surveys were conducted at Tatsamenie and Tahltan lakes. No surveys were conducted on Tuya or Trapper lakes. No hydroacoustic surveys were conducted in 2017.

## Thermal Mark Laboratories

## ADF\&G Thermal Mark Laboratory

During the 2019 season, the ADF\&G Thermal Mark Lab processed 10,652 sockeye salmon otoliths collected by ADF\&G and DFO staff as part of the U.S./Canada fry-stocking evaluation program. These collections came from commercial and test fisheries in both U.S. and Canadian waters on the Taku and Stikine Rivers over a 13-week period. The laboratory provided estimates on hatchery contributions for 58 distinct sample collections. Estimates of the percentage of hatchery fish contributed to commercial fishery catches were provided to ADF\&G and DFO fishery managers 24 to 48 hours after samples arrived at the lab.

Postseason estimates of stocked fish to Alaskan harvests were 3,700 Stikine River fish to District 106 and 108, and 1,300 Taku River fish to District 111. Postseason estimates of stocked fish to Canadian fisheries included 7,700 fish to Stikine River fisheries and 430 fish to the Taku River fisheries.

## Canadian Thermal Mark Laboratory

Subsamples of juvenile and adult otolith samples collected at the study lakes during the 2019 season are being analyzed at the DFO thermal mark lab in Whitehorse.

## APPENDICES

## Standards

Large Chinook salmon are MEF length $\geq 660 \mathrm{~mm}$
Unless otherwise stated Chinook salmon are large
Test fisheries for Chinook salmon became commercial assessment/test fisheries starting in 2004
Data not available to estimate harvests of Alaska Hatchery pink and chum salmon
All harvest of Tahltan and Tatsamenie lake sockeye salmon, unless otherwise noted, include both wild and hatchery fish.
Bold numbers are incomplete or interpolated numbers
Italicized numbers are used when the GSI estimates do not meet acceptable levels of precision and accuracy agreed upon by the TTC (April 2013): to estimate the proportion of mixtures within $10 \%$ of the true mixture $90 \%$ of the time.

Appendix A. 1. Weekly harvest estimates of Chinook salmon in the US gillnet, troll, recreational, and subsistence fisheries in District 108, 2019.

| SW | Subsistence--Stikine |  | D108 sport |  |  | D108 gillnet |  |  |  | D108 troll |  |  | US total large Stikine harvest |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Large | Nonlarge | Large total | Large non-Stikine | Large Stikine | Nonlarge | Large total | Large non-Stikine | Large Stikine | Large total | Large non-Stikine | Large Stikine |  |
| 18 |  |  | 0 | 0 | 0 |  |  |  |  |  |  |  | 0 |
| 19 |  |  | 0 | 0 | 0 |  |  |  | 0 |  |  |  | 0 |
| 20 |  |  | 0 | 0 | 0 |  |  |  | 0 |  |  |  | 0 |
| 21 |  |  | 0 | 0 | 0 |  |  |  | 0 |  |  |  | 0 |
| 22 |  |  | 0 | 0 | 0 |  |  |  | 0 |  |  |  | 0 |
| 23 |  |  | 0 | 0 | 0 |  |  |  | 0 |  |  |  | 0 |
| 24 |  |  | 31 | 0 | 31 |  |  |  | 0 |  |  |  | 31 |
| 25 | 3 | 3 | 88 | 13 | 74 |  |  |  | 0 |  |  |  | 77 |
| 26 | 2 | 15 | 38 | 0 | 38 | 54 | 85 | 27 | 58 |  |  |  | 98 |
| 27 | 3 | 21 | 23 | 6 | 17 | 1,097 | 1,512 | 1,824 | -312 |  |  |  | -292 |
| 28 | 9 | 12 | 0 | 0 | 0 | 279 | 513 | 664 | -151 |  |  |  | -142 |
| 29 | 2 | 1 | 8 | 51 | -43 | 199 | 337 | 0 | 337 |  |  |  | 296 |
| Total | 19 | 52 | 188 | 71 | 117 | 1,629 | 2,447 | 2,515 | -68 | 0 | 0 | 0 | 68 |

Appendix A. 2. Weekly harvest of Chinook salmon in the Canadian commercial, Telegraph Aboriginal, and recreational fishery in the Stikine River, 2019.

| SW | LRCF |  |  |  | URCF |  | Aboriginal Telegraph |  | Tahltan sport fishery |  |  | Canada <br> Large fish <br> Harvest |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Large |  | Nonlarge |  | Large | Nonlarge | Large | Nonlarge |  |  |  |  |
|  | Harvested | Released | Harvested | Released | Harvested | Harvested | Harvested | Harvested | Retained | Released | Total |  |
| 19 |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 20 |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 21 |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 22 |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 23 |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 24 |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 25 |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 26 |  | 170 |  | 114 |  |  | 25 | 7 |  |  |  | 25 |
| 27 |  | 84 |  | 72 |  |  | 51 | 31 |  |  |  | 51 |
| 28 |  | 87 |  | 69 |  |  | 155 | 88 |  |  |  | 155 |
| 29 |  | 34 |  | 17 |  |  | 78 | 64 |  |  |  | 78 |
| 30 |  |  |  |  |  |  | 18 | 35 |  |  |  | 18 |
| 31 |  |  |  |  |  |  | 6 | 11 |  |  |  | 6 |
| 32 |  |  |  |  |  |  | 0 | 1 |  |  |  | 0 |
| 33 |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 34 |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 35 |  | 0 |  | 0 |  |  |  |  |  |  |  | 0 |
| 36 |  | 1 |  | 0 |  |  |  |  |  |  |  | 0 |
| 37 |  |  |  |  |  |  |  |  |  |  |  | 0 |
| Total | 0 | 376 |  | 272 |  |  | 333 | 237 | 0 | 0 | 0 | 333 |


| SW | Drift |  | Set |  | Commercial license |  | Total catch |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Large | Nonlarge | Large | Nonlarge | Large | Nonlarge | Large | Nonlarge |
| 19 |  |  |  |  |  |  | 0 | 0 |
| 20 |  |  |  |  |  |  | 0 | 0 |
| 21 |  |  |  |  |  |  | 0 | 0 |
| 22 |  |  |  |  |  |  | 0 | 0 |
| 23 |  |  |  |  |  |  | 0 | 0 |
| 24 |  |  |  |  |  |  | 0 | 0 |
| 25 |  |  |  |  |  |  | 0 | 0 |
| 26 |  |  |  |  |  |  | 0 | 0 |
| 27 |  |  |  |  |  |  | 0 | 0 |
| 28 |  |  |  |  |  |  | 0 | 0 |
| 29 |  |  |  |  |  |  | 0 | 0 |
| 30 |  |  |  |  |  |  | 0 | 0 |
| 31 |  |  |  |  |  |  | 0 | 0 |
| 32 |  |  |  |  |  |  | 0 | 0 |
| 33 |  |  |  |  |  |  | 0 | 0 |
| 34 |  |  |  |  |  |  | 0 | 0 |
| 35 |  |  |  |  |  |  | 0 | 0 |
| 36 |  |  |  |  |  |  | 0 | 0 |
| 37 |  |  |  |  |  |  | 0 | 0 |
| 38 |  |  |  |  |  |  | 0 | 0 |
| 39 |  |  |  |  |  |  | 0 | 0 |
| 40 |  |  |  |  |  |  | 0 | 0 |
| 41 |  |  |  |  |  |  | 0 | 0 |
| 42 |  |  |  |  |  |  | 0 | 0 |
| Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Appendix A. 4. Weekly harvest of sockeye salmon in the Alaskan District 106 and 108 fisheries, 2019.

| SW | Subsistence | D106 Total | D106-30 | D106-41/4. D108 |  |
| :--- | :---: | :---: | :---: | :---: | ---: |
| $22-24$ | 87 | 0 |  |  |  |
| 25 | 306 | 309 | 3 | 306 |  |
| 26 | 776 | 1,028 | 114 | 914 | 1,329 |
| 27 | 519 | 3,157 | 346 | 2,811 | 2,001 |
| 28 | 142 | 2,933 | 621 | 2,312 | 1,219 |
| 29 | 32 | 3,399 | 1,458 | 1,941 | 1,232 |
| 30 | 0 | 3,045 | 1,528 | 1,517 | 0 |
| 31 | 12 | 3,284 | 2,166 | 1,118 | 0 |
| 32 | 1 | 2,522 | 1,005 | 1,517 | 566 |
| 33 | 0 | 2,417 | 1,179 | 1,238 | 156 |
| 34 | 0 | 1,380 | 853 | 527 | 69 |
| 35 | 0 | 266 | 175 | 91 | 15 |
| 36 | 0 | 86 | 40 | 46 | 1 |
| 37 | 0 | 18 | 12 | 6 | 3 |
| 38 | 0 | 0 | 0 | 0 | 0 |
| 39 |  | 0 | 0 | 0 | 0 |
| 40 | 0 | 0 | 0 | 0 |  |
| 41 |  | 0,844 | 9,500 | 14,344 | 6,591 |
| Total |  |  |  |  | 0 |

Appendix A. 5. Weekly stock proportions of sockeye salmon harvested in the Alaskan D106 commercial drift gillnet fishery, 2019.

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

| SW | Other | All Tahltan | Tuya | Mainstem | Total | Tahltan Enhance | WildTahltan |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 25 | 0.218 | 0.619 | 0.008 | 0.155 | 0.782 | 0.183 | 0.437 |
| 26 | 0.276 | 0.566 | 0.007 | 0.151 | 0.724 | 0.164 | 0.401 |
| 27 | 0.473 | 0.443 | 0.002 | 0.082 | 0.527 | 0.214 | 0.229 |
| 28 | 0.678 | 0.211 | 0.002 | 0.109 | 0.322 | 0.097 | 0.114 |
| 29 | 0.766 | 0.117 | 0.003 | 0.114 | 0.234 | 0.053 | 0.063 |
| 30 | 0.888 | 0.016 | 0.001 | 0.096 | 0.112 | 0.009 | 0.007 |
| 31 | 0.918 | 0.015 | 0.001 | 0.066 | 0.082 | 0.002 | 0.013 |
| 32 | 0.916 | 0.008 | 0.001 | 0.075 | 0.084 | 0.003 | 0.005 |
| 33 | 0.930 | 0.002 | 0.001 | 0.067 | 0.070 | 0.001 | 0.001 |
| 34 | 0.940 | 0.003 | 0.001 | 0.057 | 0.060 | 0.001 | 0.001 |
| 35 | 0.938 | 0.004 | 0.001 | 0.057 | 0.062 | 0.002 | 0.002 |
| 36 | 0.936 | 0.003 | 0.001 | 0.060 | 0.064 | 0.001 | 0.002 |
| 37 | 0.938 | 0.004 | 0.001 | 0.057 | 0.062 | 0.002 | 0.002 |
| 38 |  |  |  |  |  |  |  |
| 39 |  |  |  |  |  |  |  |
| Total | 0.770 | 0.139 | 0.002 | 0.089 | 0.230 |  | 0 |
| 25 | 67 | 191 | 2 | 48 | 242 | 56 | 135 |
| 26 | 284 | 582 | 8 | 155 | 744 | 169 | 413 |
| 27 | 1,494 | 1,399 | 5 | 260 | 1,663 | 676 | 722 |
| 28 | 1,988 | 619 | 5 | 321 | 945 | 284 | 335 |
| 29 | 2,605 | 396 | 11 | 387 | 794 | 181 | 215 |
| 30 | 2,703 | 49 | 2 | 292 | 342 | 27 | 21 |
| 31 | 3,015 | 50 | 2 | 217 | 269 | 6 | 44 |
| 32 | 2,310 | 21 | 2 | 190 | 212 | 8 | 12 |
| 33 | 2,247 | 5 | 2 | 163 | 170 | 2 | 0 |
| 34 | 1,297 | 4 | 1 | 78 | 83 | 2 | 0 |
| 35 | 250 | 1 | 0 | 15 | 16 | 0 | 0 |
| 36 | 80 | 0 | 0 | 5 | 6 | 0 | 0 |
| 37 | 17 | 0 | 0 | 1 | 1 | 0 | 0 |
| 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 18,357 | 3,316 | 40 | 2,130 | 5,487 | 1,412 | 1,904 |
|  |  |  |  |  |  | 0 | 0 |

Appendix A. 6. Weekly stock proportions of sockeye salmon harvested in the Alaskan Subdistrict 106-41/42 (Sumner Strait) commercial drift gillnet fishery, 2019.

| Estimates based on mean GSI; see Appendix G. 1 for GSI details. |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Stikine |  |  |  |  |  |
| SW | Other | All Tahltan | Tuya | Mainstem | Total | Tahltan Enhance | WildTahltan |
| 25 | 0.213 | 0.625 | 0.008 | 0.155 | 0.787 | 0.184 | 0.440 |
| 26 | 0.213 | 0.625 | 0.008 | 0.155 | 0.787 | 0.184 | 0.440 |
| 27 | 0.435 | 0.486 | 0.001 | 0.078 | 0.565 | 0.240 | 0.246 |
| 28 | 0.650 | 0.242 | 0.001 | 0.108 | 0.350 | 0.121 | 0.121 |
| 29 | 0.685 | 0.193 | 0.001 | 0.120 | 0.315 | 0.093 | 0.101 |
| 30 | 0.854 | 0.030 | 0.001 | 0.115 | 0.146 | 0.017 | 0.013 |
| 31 | 0.896 | 0.041 | 0.001 | 0.062 | 0.104 | 0.004 | 0.037 |
| 32 | 0.884 | 0.012 | 0.001 | 0.102 | 0.116 | 0.005 | 0.007 |
| 33 | 0.929 | 0.002 | 0.001 | 0.068 | 0.071 | 0.001 | 0.001 |
| 34 | 0.929 | 0.002 | $\mathbf{0 . 0 0 1}$ | $\mathbf{0 . 0 6 8}$ | 0.071 | $\mathbf{0 . 0 0 1}$ | $\mathbf{0 . 0 0 1}$ |
| 35 | 0.929 | 0.002 | $\mathbf{0 . 0 0 1}$ | $\mathbf{0 . 0 6 8}$ | 0.071 | $\mathbf{0 . 0 0 1}$ | $\mathbf{0 . 0 0 1}$ |
| 36 | 0.929 | 0.002 | $\mathbf{0 . 0 0 1}$ | $\mathbf{0 . 0 6 8}$ | 0.071 | $\mathbf{0 . 0 0 1}$ | $\mathbf{0 . 0 0 1}$ |
| 37 | 0.929 | 0.002 | $\mathbf{0 . 0 0 1}$ | $\mathbf{0 . 0 6 8}$ | 0.071 | $\mathbf{0 . 0 0 1}$ | $\mathbf{0 . 0 0 1}$ |
| 38 | 0.929 | 0.002 | $\mathbf{0 . 0 0 1}$ | $\mathbf{0 . 0 6 8}$ | 0.071 | $\mathbf{0 . 0 0 1}$ | $\mathbf{0 . 0 0 1}$ |
| 39 | 0.929 | 0.002 | $\mathbf{0 . 0 0 1}$ | $\mathbf{0 . 0 6 8}$ | 0.071 | $\mathbf{0 . 0 0 1}$ | $\mathbf{0 . 0 0 1}$ |
| Total | 0.678 | 0.221 | 0.001 | 0.099 | 0.322 | 0.098 | 0.124 |
| 25 | 65 | 191 | 2 | 47 | 241 | 56 | 135 |
| 26 | 195 | 571 | 7 | 142 | 719 | 168 | 402 |
| 27 | 1,223 | 1,365 | 3 | 220 | 1,588 | 674 | 691 |
| 28 | 1,502 | 559 | 2 | 249 | 810 | 280 | 279 |
| 29 | 1,331 | 375 | 2 | 234 | 610 | 180 | 195 |
| 30 | 1,296 | 46 | 1 | 175 | 221 | 26 | 19 |
| 31 | 1,001 | 46 | 1 | 70 | 117 | 4 | 42 |
| 32 | 1,342 | 19 | 1 | 155 | 175 | 8 | 11 |
| 33 | 1,150 | 3 | 1 | 84 | 88 | 1 | 0 |
| 34 | 490 | 1 | 0 | 36 | 37 | 0 | 0 |
| 35 | 85 | 0 | 0 | 6 | 6 | 0 | 1 |
| 36 | 43 | 0 | 0 | 3 | 3 | 0 | 0 |
| 37 | 6 | 0 | 0 | 0 | 0 | 0 | 0 |
| 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 9,727 | 3,176 | 20 | 1,422 | 4,617 | 1,399 | 1,777 |
|  |  |  |  |  |  | 0 |  |

Appendix A. 7. Weekly stock proportions of sockeye salmon harvested in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift gillnet fishery, 2019.

Estimates based on mean GSI; see Appendix G. 2 for GSI details.
Stikine

| SW | Other | All Tahltan | Tuya | Mainstem | Total | Tahltan Enhance | WildTahltan |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 25 | 0.783 | 0.096 | 0.006 | 0.115 | 0.217 | 0.006 | 0.090 |
| 26 | 0.783 | 0.096 | 0.006 | 0.115 | 0.217 | 0.006 | 0.090 |
| 27 | 0.783 | 0.096 | 0.006 | 0.115 | 0.217 | 0.006 | 0.090 |
| 28 | 0.783 | 0.096 | 0.006 | 0.115 | 0.217 | 0.006 | 0.090 |
| 29 | 0.874 | 0.014 | 0.006 | 0.105 | 0.126 | 0.001 | 0.014 |
| 30 | 0.921 | 0.002 | 0.001 | 0.076 | 0.079 | 0.001 | 0.001 |
| 31 | 0.930 | 0.002 | 0.001 | 0.068 | 0.070 | 0.001 | 0.001 |
| 32 | 0.963 | 0.002 | 0.001 | 0.034 | 0.037 | 0.001 | 0.001 |
| 33 | 0.931 | 0.002 | 0.001 | 0.067 | 0.069 | 0.001 | 0.001 |
| 34 | 0.947 | 0.003 | 0.001 | 0.050 | 0.053 | 0.001 | 0.002 |
| 35 | 0.943 | 0.004 | 0.001 | 0.051 | 0.057 | 0.002 | 0.002 |
| 36 | 0.943 | 0.004 | $\mathbf{0 . 0 0 1}$ | $\mathbf{0 . 0 5 1}$ | 0.057 | $\mathbf{0 . 0 0 2}$ | $\mathbf{0 . 0 0 2}$ |
| 37 | 0.943 | 0.004 | $\mathbf{0 . 0 0 1}$ | $\mathbf{0 . 0 5 1}$ | 0.057 | $\mathbf{0 . 0 0 2}$ | $\mathbf{0 . 0 0 2}$ |
| 38 | 0.943 | 0.004 | $\mathbf{0 . 0 0 1}$ | $\mathbf{0 . 0 5 1}$ | 0.057 | $\mathbf{0 . 0 0 2}$ | $\mathbf{0 . 0 0 2}$ |
| 39 | 0.943 | 0.004 | $\mathbf{0 . 0 0 1}$ | $\mathbf{0 . 0 5 1}$ | 0.057 | $\mathbf{0 . 0 0 2}$ | $\mathbf{0 . 0 0 2}$ |
| Total | 0.908 | 0.015 | 0.002 | 0.075 | 0.092 | 0.001 | 0.013 |
| 25 | 2 | 0 | 0 | 0 | 1 | 0 | 0 |
| 26 | 89 | 11 | 1 | 13 | 25 | 1 | 10 |
| 27 | 271 | 33 | 2 | 40 | 75 | 2 | 31 |
| 28 | 486 | 60 | 4 | 71 | 135 | 4 | 56 |
| 29 | 1,275 | 21 | 9 | 153 | 183 | 1 | 0 |
| 30 | 1,407 | 3 | 1 | 117 | 121 | 1 | 20 |
| 31 | 2,014 | 4 | 1 | 147 | 152 | 1 | 2 |
| 32 | 968 | 2 | 1 | 34 | 37 | 1 | 3 |
| 33 | 1,097 | 2 | 1 | 79 | 82 | 1 | 1 |
| 34 | 807 | 3 | 1 | 42 | 46 | 1 | 1 |
| 35 | 165 | 1 | 0 | 9 | 10 | 0 | 1 |
| 36 | 38 | 0 | 0 | 2 | 2 | 0 | 0 |
| 37 | 11 | 0 | 0 | 1 | 1 | 0 | 0 |
| 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 8,631 | 140 | 21 | 709 | 869 | 13 | 127 |
|  |  |  |  |  |  |  | 0 |

Appendix A. 8. Weekly stock proportions sockeye salmon harvested in the Alaskan District 108 commercial drift gillnet fishery, 2019.

| Estimates based on mean GSI; see Appendix G. 3 for GSI details. |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Stikine |  |  |  |  |  |
| SW | Other | All Tahltan | Tuya | Mainstem | Total | Tahltan Enhance | WildTahltan |
| 25 |  |  |  |  |  |  |  |
| 26 | 0.053 | 0.740 | 0.001 | 0.206 | 0.947 | 0.386 | 0.354 |
| 27 | 0.117 | 0.531 | 0.002 | 0.351 | 0.883 | 0.288 | 0.243 |
| 28 | 0.189 | 0.471 | 0.001 | 0.338 | 0.811 | 0.213 | 0.258 |
| 29 | 0.130 | 0.448 | 0.003 | 0.419 | 0.870 | 0.202 | 0.246 |
| 30 | 1.000 | 0.000 |  |  | 0.000 |  |  |
| 31 | 1.000 | 0.000 |  |  | 0.000 |  |  |
| 32 | 0.363 | 0.074 | 0.008 | 0.555 | 0.637 | 0.029 | 0.045 |
| 33 | 0.230 | 0.026 | 0.012 | 0.731 | 0.770 | 0.012 | 0.014 |
| 34 | 0.230 | 0.026 | $\mathbf{0 . 0 1 2}$ | $\mathbf{0 . 7 3 1}$ | 0.770 | $\mathbf{0 . 0 1 2}$ | $\mathbf{0 . 0 1 4}$ |
| 35 | 0.230 | 0.026 | $\mathbf{0 . 0 1 2}$ | $\mathbf{0 . 7 3 1}$ | 0.770 | $\mathbf{0 . 0 1 2}$ | $\mathbf{0 . 0 1 4}$ |
| 36 | 0.230 | 0.026 | $\mathbf{0 . 0 1 2}$ | $\mathbf{0 . 7 3 1}$ | 0.770 | $\mathbf{0 . 0 1 2}$ | $\mathbf{0 . 0 1 4}$ |
| 37 | 0.230 | 0.026 | $\mathbf{0 . 0 1 2}$ | $\mathbf{0 . 7 3 1}$ | 0.770 | $\mathbf{0 . 0 1 2}$ | $\mathbf{0 . 0 1 4}$ |
| 38 | 0.230 | 0.026 | $\mathbf{0 . 0 1 2}$ | $\mathbf{0 . 7 3 1}$ | 0.770 | $\mathbf{0 . 0 1 2}$ | $\mathbf{0 . 0 1 4}$ |
| 39 | 0.230 | 0.026 | $\mathbf{0 . 0 1 2}$ | $\mathbf{0 . 7 3 1}$ | 0.770 | $\mathbf{0 . 0 1 2}$ | $\mathbf{0 . 0 1 4}$ |
| Total | 0.145 | 0.489 | 0.003 | 0.364 | 0.855 | 0.245 | 0.243 |
| 25 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 26 | 70 | 983 | 2 | 274 | 1,259 | 513 | 471 |
| 27 | 234 | 1,062 | 3 | 702 | 1,767 | 575 | 487 |
| 28 | 231 | 574 | 1 | 413 | 988 | 260 | 315 |
| 29 | 161 | 552 | 4 | 516 | 1,071 | 249 | 302 |
| 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 31 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 32 | 205 | 42 | 5 | 314 | 361 | 16 | 26 |
| 33 | 36 | 4 | 2 | 114 | 120 | 2 | 2 |
| 34 | 16 | 2 | 1 | 50 | 53 | 1 | 1 |
| 35 | 3 | 0 | 0 | 11 | 12 | 0 | 0 |
| 36 | 0 | 0 | 0 | 1 | 1 | 0 | 0 |
| 37 | 1 | 0 | 0 | 2 | 2 | 0 | 0 |
| 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 33 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 957 | 3,220 | 18 | 2,396 | 5,634 | 1,616 | 1,604 |
|  |  |  |  |  |  |  |  |

Appendix A. 9. Weekly sockeye salmon harvest and effort in the Canadian commercial and assessment fisheries in the lower Stikine River, 2019.

| SW | LRCF |  |  |  | URCF | Telegraph Aboriginal | Drift Net Test |  | Set Net Test |  | Commercial License/assessment | Test <br> Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Harvest | Permits | Days | Permit days |  |  | harvest | \# drifts | harvest | hours |  |  |
| 19 |  |  |  | 0.0 |  |  |  |  |  |  |  | 0 |
| 20 |  |  |  | 0.0 |  |  |  |  |  |  |  | 0 |
| 21 |  |  |  | 0.0 |  |  |  |  |  |  |  | 0 |
| 22 |  |  |  | 0.0 |  |  |  |  |  |  |  | 0 |
| 23 |  |  |  | 0.0 |  |  |  |  |  |  |  | 0 |
| 24 |  |  |  | 0.0 |  |  |  |  |  |  |  | 0 |
| 25 |  |  |  | 0.0 |  |  |  |  |  |  |  | 0 |
| 26 | 1,806 | 8.0 | 1.5 | 12.0 |  | 6 |  |  |  |  |  | 0 |
| 27 | 2,265 | 7.3 | 3.0 | 21.9 |  | 123 |  |  |  |  |  | 0 |
| 28 | 3,459 | 9.0 | 3.0 | 27.0 |  | 749 |  |  |  |  |  | 0 |
| 29 | 2,413 | 10.0 | 1.0 | 10.0 |  | 2,569 |  |  |  |  |  | 0 |
| 30 |  |  |  | 0.0 |  | 1,492 |  |  |  |  |  | 0 |
| 31 |  |  |  | 0.0 | 40 | 459 |  |  |  |  |  | 0 |
| 32 |  |  |  | 0.0 |  | 3 |  |  |  |  |  | 0 |
| 33 |  |  |  | 0.0 |  |  |  |  |  |  |  | 0 |
| 34 |  |  |  | 0.0 |  |  |  |  |  |  |  | 0 |
| 35 | 535 | 8.6 | 5.0 | 43.0 |  |  |  |  |  |  |  | 0 |
| 36 | 294 | 11.0 | 6.0 | 66.0 |  |  |  |  |  |  |  | 0 |
| 37 |  |  |  | 0.0 |  |  |  |  |  |  |  | 0 |
| 38 |  |  |  |  |  |  |  |  |  |  |  | 0 |
| 39 |  |  |  |  |  |  |  |  |  |  |  | 0 |
| Total | 10,772 | 54 | 19.5 | 179.9 | 40 | 5,401 | 0 | 0 | 0 | 0 | 0 | 0 |

Appendix A. 10. Weekly sockeye salmon stock proportions and harvest by stock in the Canadian commercial fishery in the lower Stikine River, 2019.
Weekly proportions are based on GSI and otolith marks


Appendix A. 11. Harvest by stock and week for sockeye salmon in the Canadian upper river commercial and Aboriginal fisheries in the Stikine River, 2019.

|  | Stock |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| SW | All Tahltan | Tuya | Mainste | ildTahlt | anEnh |
| Proportion by stock for upper river fisheries |  |  |  |  |  |
| 24 |  |  | 0.000 |  |  |
| 25 | 1.000 |  | 1.000 |  |  |
| 26 | 1.000 |  | 1.000 |  |  |
| 27 | 0.980 |  | 0.020 | 0.531 | 0.449 |
| 28 | 0.980 |  | 0.020 | 0.448 | 0.532 |
| 29 | 0.980 |  | 0.020 | 0.454 | 0.526 |
| 30 | 0.980 |  | 0.020 | 0.369 | 0.611 |
| 31 | 0.980 |  | 0.020 | 0.326 | 0.654 |
| 32 | 1.000 |  | 0.000 | 1.000 | 0.000 |
| 33 | 1.000 |  |  | 1.000 |  |
| 34 | 1.000 |  |  | 1.000 |  |
| Total |  |  |  |  |  |
| Harvest by stock for upper river commercial fishery |  |  |  |  |  |
| 27 | 0 | 0 | 0 | 0 | 0 |
| 28 | 0 | 0 | 0 | 0 | 0 |
| 29 | 0 | 0 | 0 | 0 | 0 |
| 30 | 0 | 0 | 0 | 0 | 0 |
| 31 | 39 | 0 | 0 | 0 | 0 |
| 32 | 0 | 0 | 0 | 40 | 0 |
| Total | 39 | 0 | 0 | 40 | 0 |
| Harvest by stock for Telegraph aboriginal fishery |  |  |  | 0 | 0 |
| 24 | 0 | 0 | 0 | 0 | 0 |
| 25 | 0 | 0 | 0 | 0 | 0 |
| 26 | 6 | 0 | 0 | 6 | 0 |
| 27 | 121 | 0 | 2 | 65 | 55 |
| 28 | 734 | 0 | 15 | 336 | 398 |
| 29 | 2,518 | 0 | 51 | 1,166 | 1,351 |
| 30 | 1,462 | 0 | 30 | 551 | 912 |
| 31 | 450 | 0 | 9 | 150 | 300 |
| 32 | 3 | 0 | 0 | 3 | 0 |
| 33 | 0 | 0 | 0 | 0 | 0 |
| 34 | 0 | 0 | 0 | 0 | 0 |
| 35 | 0 | 0 | 0 | 0 | 0 |
| Total | 5,293 | 0 | 108 | 2,276 | 3,017 |

Appendix A. 12. Weekly harvest, CPUE, and migratory timing of Tahltan, Tuya, and mainstem sockeye salmon stocks in the Stikine River test fishery, 2019.

No test fishery in 2019.

Appendix A. 13. Weekly coho salmon harvest in the Alaskan District 106 and 108 fisheries, 2019.

| SW | D106 |  |  |  |  | D108 |  |  | Subsistence harvest |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Hatchery | Wild | Total | 106-41/42 | 106-30 | Hatchery | Wild | Total |  |
| 25 |  | 191 | 191 | 184 | 7 |  |  | 0 | 0 |
| 26 | 41 | 335 | 376 | 184 | 192 | 0 | 9 | 9 | 0 |
| 27 | 175 | 879 | 1,054 | 838 | 216 | 0 | 41 | 41 | 0 |
| 28 | 305 | 1,132 | 1,437 | 1,099 | 338 | 0 | 37 | 37 | 1 |
| 29 | 347 | 1,379 | 1,726 | 1,034 | 692 | 0 | 76 | 76 | 0 |
| 30 | 0 | 1,056 | 1,056 | 635 | 421 | 0 | 0 | 0 | 0 |
| 31 | 192 | 1,844 | 2,036 | 1,040 | 996 | 0 | 0 | 0 | 0 |
| 32 | 337 | 1,575 | 1,912 | 1,063 | 849 | 13 | 584 | 597 | 6 |
| 33 | 191 | 7,238 | 7,429 | 5,041 | 2,388 | 12 | 1,061 | 1,073 | 12 |
| 34 | 186 | 6,841 | 7,027 | 4,574 | 2,453 | 234 | 1,629 | 1,863 | 0 |
| 35 | 868 | 7,998 | 8,866 | 6,733 | 2,133 | 0 | 1,297 | 1,297 | 0 |
| 36 | 1,065 | 6,639 | 7,704 | 4,636 | 3,068 | 22 | 527 | 549 | 6 |
| 37 | 1,264 | 7,221 | 8,485 | 4,178 | 4,307 | 801 | 991 | 1,792 | 7 |
| 38 | 2,738 | 3,124 | 5,862 | 2,774 | 2,992 | 1,419 | 144 | 1,563 | 18 |
| 39 | 1,310 | 1,433 | 2,743 | 1,684 | 1,059 | 0 | 423 | 423 | 21 |
| 40 | 560 | 736 | 1,296 | 576 | 720 | 64 | 94 | 158 |  |
| 41 | 73 | 31 | 104 | 104 | 0 | 0 |  | 0 |  |
| Total | 9,652 | 49,652 | 59,304 | 36,377 | 22,831 | 2,565 | 6,913 | 9,478 | 71 |

Appendix A. 14. Weekly harvest of coho salmon in the Canadian lower river commercial fishery and test fisheries 2019.

| SW | LRCF | Test |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Drift | Set | Additional |  |
| 19 |  |  |  |  |  |
| 20 |  |  |  |  |  |
| 21 |  |  |  |  |  |
| 22 |  |  |  |  |  |
| 23 |  |  |  |  |  |
| 24 |  |  |  |  |  |
| 25 |  |  |  |  |  |
| 26 |  |  |  |  | 0 |
| 27 |  |  |  |  | 0 |
| 28 |  |  |  |  | 0 |
| 29 |  |  |  |  | 0 |
| 30 |  |  |  |  | 0 |
| 31 |  |  |  |  | 0 |
| 32 |  |  |  |  | 0 |
| 33 |  |  |  |  | 0 |
| 34 |  |  |  |  | 0 |
| 35 | 1,381 |  |  |  | 1,381 |
| 36 | 3,847 |  |  |  | 3,847 |
| 37 |  |  |  |  | 0 |
| 38 |  |  |  |  |  |
| 39 |  |  |  |  |  |
| 40 |  |  |  |  |  |
| 41 |  |  |  |  |  |
| 42 |  |  |  |  |  |
| Total | 5,228 | 0 | 0 | 0 | 5,228 |

Appendix A. 15. Weekly salmon effort in the Alaskan District 106 and 108 fisheries, 2019.

| SW | Start <br> Date | D106 |  |  | 106-41/42 |  |  | 106-30 |  |  | D108 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Permit |  |  | Permit |  |  | Permit |  |  | Permit |
|  |  | Permits | Days | Days | Permits | Days | Days | Permits | Days | Days | Permits | Days | Days |
| 25 | 16-Jun | 32 | 2.0 | 64 | 27 | 2.0 | 54 | 5 | 2.0 | 10 |  |  |  |
| 26 | 23-Jun | 40 | 2.0 | 80 | 23 | 2.0 | 46 | 17 | 2.0 | 34 | 12 | 2.0 | 24 |
| 27 | 30-Jun | 42 | 3.0 | 126 | 27 | 3.0 | 81 | 15 | 3.0 | 45 | 35 | 3.0 | 105 |
| 28 | 7-Jul | 42 | 2.0 | 84 | 28 | 2.0 | 56 | 14 | 2.0 | 28 | 28 | 2.0 | 56 |
| 29 | 14-Jul | 47 | 2.0 | 94 | 27 | 2.0 | 54 | 21 | 2.0 | 42 | 20 | 2.0 | 40 |
| 30 | 21-Jul | 47 | 2.0 | 94 | 21 | 2.0 | 42 | 26 | 2.0 | 52 |  |  |  |
| 31 | 28-Jul | 48 | 2.0 | 96 | 20 | 2.0 | 40 | 28 | 2.0 | 56 |  |  |  |
| 32 | 4-Aug | 63 | 3.0 | 189 | 28 | 3.0 | 84 | 36 | 3.0 | 108 | 51 | 3.0 | 153 |
| 33 | 11-Aug | 74 | 4.0 | 296 | 30 | 4.0 | 120 | 45 | 4.0 | 180 | 30 | 4.0 | 120 |
| 34 | 18-Aug | 65 | 4.0 | 260 | 33 | 4.0 | 132 | 33 | 4.0 | 132 | 30 | 4.0 | 120 |
| 35 | 25-Aug | 75 | 3.0 | 225 | 42 | 3.0 | 126 | 34 | 3.0 | 102 | 13 | 3.0 | 39 |
| 36 | 1-Sep | 80 | 3.0 | 240 | 38 | 3.0 | 114 | 43 | 3.0 | 129 | 9 | 3.0 | 27 |
| 37 | 8-Sep | 70 | 2.0 | 140 | 38 | 2.0 | 76 | 33 | 2.0 | 66 | 14 | 2.0 | 28 |
| 38 | 15-Sep | 46 | 3.0 | 138 | 21 | 3.0 | 63 | 26 | 3.0 | 78 | 13 | 3.0 | 39 |
| 39 | 22-Sep | 13 | 3.0 | 39 | 6 | 3.0 | 18 | 7 | 3.0 | 21 | 6 | 3.0 | 18 |
| 40 | 29-Sep | 16 | 3.0 | 48 | 6 | 3.0 | 18 | 10 | 3.0 | 30 | 2 | 3.0 | 6 |
| 41 | 6-Oct | 2 | 2.0 | 4 | 2 | 2.0 | 4 | 0 | 2.0 | 0 | 0 | 2.0 | 0 |
| Total |  |  | 45 | 2,217 |  | 45 | 1,128 |  | 45 | 1,113 |  | 39 | 775 |


| Appendix A. 16. Weekly salmon 2019. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Commercial license Test fishery |  |  |  | LRCF |  |  | URCF |  |  | Telegraph Aboriginal |  |  | Test |  |
| SW | Start <br> Date | Permits | Days | Permit <br> Days | Permits | Days | Permit <br> Days | Permits | Days | Permit <br> Days | Permits | Days | Permit <br> Days | \# Drifts | Set hours |
| 19 | 5-May |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 20 | 12-May |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21 | 19-May |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 22 | 26-May |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 23 | 2-Jun |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 24 | 9-Jun |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25 | 16-Jun |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 26 | 23-Jun |  |  |  | 8.0 | 1.5 | 12 |  |  |  | 1.8 | 6.0 | 11 |  |  |
| 27 | 30-Jun |  |  |  | 7.3 | 3.0 | 22 |  | 1.0 | 0 | 5.7 | 5.0 | 29 |  |  |
| 28 | 7-Jul |  |  |  | 9.0 | 3.0 | 27 |  | 2.0 | 0 | 14.4 | 7.0 | 101 |  |  |
| 29 | 14-Jul |  |  |  | 10.0 | 1.0 | 10 |  | 2.0 | 0 | 22.3 | 7.0 | 156 |  |  |
| 30 | 21-Jul |  |  |  |  |  | 0 |  | 0.0 | 0 | 22.7 | 7.0 | 159 |  |  |
| 31 | 28-Jul |  |  |  |  |  | 0 | 1.0 | 1.0 | 1 | 5.1 | 7.0 | 36 |  |  |
| 32 | 4-Aug |  |  |  |  |  | 0 |  | 1.0 | 0 | 1.0 | 1.0 | 1 |  |  |
| 33 | 11-Aug |  |  |  |  |  | 0 |  |  |  |  |  |  |  |  |
| 34 | 18-Aug |  |  |  |  |  | 0 |  |  |  |  |  |  |  |  |
| 35 | 25-Aug |  |  |  | 8.6 | 5.0 | 43 |  |  |  |  |  |  |  |  |
| 36 | 1-Sep |  |  |  | 11.0 | 6.0 | 66 |  |  |  |  |  |  |  |  |
| 37 | 8 -Sep |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 38 | 15-Sep |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 39 | 22-Sep |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 40 | 29-Sep |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 41 | 6 -Oct |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 42 | 13-Oct |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Total |  |  | 0.0 | 0.0 |  | 19.5 | 180.0 |  | 7.0 | 1.0 |  | 40.0 | 492.6 | 0.0 | 0.0 |

Appendix A. 17. Daily counts of adult sockeye salmon passing through Tahltan Lake weir, 2019.

| Date | Count ${ }^{\text {a }}$ | Cumulative |  | Date | Count | Cumulative |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Count | Percent |  |  | Count | Percent |
| 7-Jul | weir in |  |  | 13-Aug | 399 | 35,188 | 95.1\% |
| 8-Jul | 0 | 0 | 0.0\% | 14-Aug | 129 | 35,317 | 95.5\% |
| $9-\mathrm{Jul}$ | 0 | 0 | 0.0\% | 15-Aug | 404 | 35,721 | 96.5\% |
| 10-Jul | 0 | 0 | 0.0\% | 16-Aug | 48 | 35,769 | 96.7\% |
| 11-Jul | 0 | 0 | 0.0\% | 17-Aug | 55 | 35,824 | 96.8\% |
| 12-Jul | 0 | 0 | 0.0\% | 18-Aug | 468 | 36,292 | 98.1\% |
| 13-Jul | 13 | 13 | 0.0\% | 19-Aug | 19 | 36,311 | 98.1\% |
| 14-Jul | 16 | 29 | 0.1\% | 20-Aug | 7 | 36,318 | 98.2\% |
| 15-Jul | 7 | 36 | 0.1\% | 21-Aug | 136 | 36,454 | 98.5\% |
| 16-Jul | 73 | 109 | 0.3\% | 22-Aug | 23 | 36,477 | 98.6\% |
| 17-Jul | 1 | 110 | 0.3\% | 23-Aug | 13 | 36,490 | 98.6\% |
| 18-Jul | 0 | 110 | 0.3\% | 24-Aug | 40 | 36,530 | 98.7\% |
| 19-Jul | 14 | 124 | 0.3\% | 25-Aug | 32 | 36,562 | 98.8\% |
| 20-Jul | 0 | 124 | 0.3\% | 26-Aug | 20 | 36,582 | 98.9\% |
| 21-Jul | 1,808 | 1,932 | 5.2\% | 27-Aug | 7 | 36,589 | 98.9\% |
| 22-Jul | 948 | 2,880 | 7.8\% | 28-Aug | 122 | 36,711 | 99.2\% |
| 23-Jul | 1,735 | 4,615 | 12.5\% | 29-Aug | 27 | 36,738 | 99.3\% |
| 24-Jul | 1,257 | 5,872 | 15.9\% | 30-Aug | 56 | 36,794 | 99.4\% |
| 25-Jul | 1,398 | 7,270 | 19.6\% | 31-Aug | 90 | 36,884 | 99.7\% |
| 26-Jul | 3,091 | 10,361 | 28.0\% | 1-Sep | 12 | 36,896 | 99.7\% |
| 27-Jul | 3,570 | 13,931 | 37.7\% | 2-Sep | 96 | 36,992 | 100.0\% |
| 28-Jul | 1,943 | 15,874 | 42.9\% | 3-Sep | 0 | 36,992 | 100.0\% |
| 29-Jul | 1,473 | 17,347 | 46.9\% | 4-Sep | 1 | 36,993 | 100.0\% |
| 30-Jul | 2,299 | 19,646 | 53.1\% | 5-Sep | 6 | 36,999 | 100.0\% |
| 31-Jul | 1,128 | 20,774 | 56.1\% | 6-Sep | 0 | 36,999 | 100.0\% |
| 1-Aug | 1,113 | 21,887 | 59.2\% | 7-Sep | 0 | 36,999 | 100.0\% |
| 2-Aug | 714 | 22,601 | 61.1\% | 8-Sep | 0 | 36,999 | 100.0\% |
| 3-Aug | 353 | 22,954 | 62.0\% | 9-Sep | 0 | 36,999 | 100.0\% |
| 4-Aug | 1,223 | 24,177 | 65.3\% | 10-Sep | weir out |  |  |
| 5-Aug | 1,319 | 25,496 | 68.9\% | 11-Sep |  |  |  |
| 6-Aug | 1,463 | 26,959 | 72.9\% | 12-Sep |  |  |  |
| 7-Aug | 1,442 | 28,401 | 76.8\% | 13-Sep |  |  |  |
| 8-Aug | 1,814 | 30,215 | 81.7\% | 14-Sep |  |  |  |
| 9-Aug | 1,000 | 31,215 | 84.4\% | 15-Sep |  |  |  |
| 10-Aug | 392 | 31,607 | 85.4\% | 16-Sep |  |  |  |
| 11-Aug | 1,455 | 33,062 | 89.4\% | 17-Sep |  |  |  |
| 12-Aug | 1,727 | 34,789 | 94.0\% | 18-Sep |  |  |  |
|  |  |  |  | \% enhanced | Hatchery ${ }^{\text {a }}$ | Wild | Total |
| Total Counted |  |  |  |  | 20,438 | 16,561 | 36,999 |
| Fish removed for broodstock |  |  |  | 0.359 | 1,283 | 2,296 | 3,579 |
| Fish removed for otolith samples |  |  |  | 0.552 | 117 | 95 | 212 |
| Total Spawners |  |  |  |  | 19,037 | 14,171 |  |

Appendix A. 18. Daily counts of sockeye salmon smolt migrating through Tahltan Lake smolt weir, 2019.

| Date | Count | Cumulative |  | Date | Count | Cumulative |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Count | Percent |  |  | Count | Percent |
| 4-May | Wier in |  |  |  |  |  |  |
| 5-May | 0 | 0 | 0.00\% |  |  |  |  |
| 6-May | 0 | 0 | 0.00\% | 2-Jun | 6,919 | 1,587,123 | 99.21\% |
| 7-May | 0 | 0 | 0.00\% | 3-Jun | 2,447 | 1,589,570 | 99.37\% |
| 8-May | 0 | 0 | 0.00\% | 4-Jun | 4,386 | 1,593,956 | 99.64\% |
| 9-May | 0 | 0 | 0.00\% | 5-Jun | 951 | 1,594,907 | 99.70\% |
| 10-May | 0 | 0 | 0.00\% | 6-Jun | 2,030 | 1,596,937 | 99.83\% |
| 11-May | 0 | 0 | 0.00\% | 7-Jun | 316 | 1,597,253 | 99.85\% |
| 12-May | 0 | 0 | 0.00\% | 8-Jun | 2,016 | 1,599,269 | 99.97\% |
| 13-May | 0 | 0 | 0.00\% | $9-\mathrm{Jun}$ | 183 | 1,599,452 | 99.98\% |
| 14-May | 40 | 40 | 0.00\% | 10-Jun | 149 | 1,599,601 | 99.99\% |
| 15-May | 18 | 58 | 0.00\% | 11-Jun | 92 | 1,599,693 | 100.00\% |
| 16-May | 48 | 106 | 0.01\% | 12-Jun | 2 | 1,599,695 | 100.00\% |
| 17-May | 10 | 116 | 0.01\% |  |  |  |  |
| 18-May | 64,197 | 64,313 | 4.02\% |  |  |  |  |
| 19-May | 195 | 64,508 | 4.03\% |  |  |  |  |
| 20-May | 12,332 | 76,840 | 4.80\% |  |  |  |  |
| 21-May | 58,414 | 135,254 | 8.45\% |  |  |  |  |
| 22-May | 493,676 | 628,930 | 39.32\% |  |  |  |  |
| 23-May | 240,875 | 869,805 | 54.37\% | enhanced | wild |  |  |
| 24-May | 61,476 | 931,281 | 58.22\% | 0.715 | 0.285 |  |  |
| 25-May | 321,185 | 1,252,466 | 78.29\% |  |  |  |  |
| 26-May | 98,747 | 1,351,213 | 84.47\% |  |  |  |  |
| 27-May | 102,747 | 1,453,960 | 90.89\% |  |  |  |  |
| 28-May | 45,077 | 1,499,037 | 93.71\% |  |  |  |  |
| 29-May | 32,326 | 1,531,363 | 95.73\% |  |  |  |  |
| 30-May | 15,605 | 1,546,968 | 96.70\% |  |  |  |  |
| 31-May | 15,359 | 1,562,327 | 97.66\% | Wild | 456,083 |  |  |
| 1-Jun | 17,877 | 1,580,204 | 98.78\% | Hatchery | 1,143,612 |  |  |
| Total |  |  |  |  | 1,599,695 |  |  |

Appendix A. 19. Daily counts of adult Chinook salmon passing through Little Tahltan weir, 2019.

| Date | Large Chinook |  |  | nonlarge Chinook |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Count | Cumulative |  | Count | Cumulative |  |
|  |  | Count | Percent |  | Count | Percent |
| 23-Jun | weir in |  |  | 0 | 0 | 0.00\% |
| 24-Jun | 0 | 0 | 0.00\% | 0 | 0 | 0.00\% |
| 25-Jun | 0 | 0 | 0.00\% | 1 | 1 | 0.10\% |
| 26-Jun | 0 | 0 | 0.00\% | 0 | 1 | 0.10\% |
| 27-Jun | 0 | 0 | 0.00\% | 0 | 1 | 0.10\% |
| 28-Jun | 0 | 0 | 0.00\% | 0 | 1 | 0.10\% |
| 29-Jun | 3 | 3 | 0.56\% | 2 | 3 | 0.30\% |
| 30-Jun | 2 | 5 | 0.93\% | 11 | 14 | 1.40\% |
| 1-Jul | 0 | 5 | 0.93\% | 3 | 17 | 1.70\% |
| 2-Jul | 1 | 6 | 1.12\% | 2 | 19 | 1.90\% |
| 3-Jul | 1 | 7 | 1.31\% | 5 | 24 | 2.40\% |
| 4-Jul | 0 | 7 | 1.31\% | 1 | 25 | 2.50\% |
| 5-Jul | 0 | 7 | 1.31\% | 2 | 27 | 2.69\% |
| 6-Jul | 0 | 7 | 1.31\% | 3 | 30 | 2.99\% |
| 7-Jul | 1 | 8 | 1.49\% | 1 | 31 | 3.09\% |
| 8-Jul | 1 | 9 | 1.68\% | 2 | 33 | 3.29\% |
| 9-Jul | 3 | 12 | 2.24\% | 5 | 38 | 3.79\% |
| 10-Jul | 5 | 17 | 3.17\% | 9 | 47 | 4.69\% |
| 11-Jul | 0 | 17 | 3.17\% | 1 | 48 | 4.79\% |
| 12-Jul | 8 | 25 | 4.66\% | 8 | 56 | 5.59\% |
| 13-Jul | 1 | 26 | 4.85\% | 5 | 61 | 6.09\% |
| 14-Jul | 3 | 29 | 5.41\% | 4 | 65 | 6.49\% |
| 15-Jul | 22 | 51 | 9.51\% | 24 | 89 | 8.88\% |
| 16-Jul | 8 | 59 | 11.01\% | 9 | 98 | 9.78\% |
| 17-Jul | 36 | 95 | 17.72\% | 19 | 117 | 11.68\% |
| 18-Jul | 67 | 162 | 30.22\% | 21 | 138 | 13.77\% |
| 19-Jul | 28 | 190 | 35.45\% | 15 | 153 | 15.27\% |
| 20-Jul | 25 | 215 | 40.11\% | 26 | 179 | 17.86\% |
| 21-Jul | 16 | 231 | 43.10\% | 16 | 195 | 19.46\% |
| 22-Jul | 2 | 233 | 43.47\% | 15 | 210 | 20.96\% |
| 23-Jul | 15 | 248 | 46.27\% | 22 | 232 | 23.15\% |
| 24-Jul | 36 | 284 | 52.99\% | 53 | 285 | 28.44\% |
| 25-Jul | 12 | 296 | 55.22\% | 33 | 318 | 31.74\% |
| 26-Jul | 15 | 311 | 58.02\% | 32 | 350 | 34.93\% |
| 27-Jul | 11 | 322 | 60.07\% | 38 | 388 | 38.72\% |
| 28-Jul | 8 | 330 | 61.57\% | 24 | 412 | 41.12\% |
| 29-Jul | 7 | 337 | 62.87\% | 24 | 436 | 43.51\% |
| 30-Jul | 6 | 343 | 63.99\% | 36 | 472 | 47.11\% |
| 31-Jul | 34 | 377 | 70.34\% | 52 | 524 | 52.30\% |
| 1-Aug | 15 | 392 | 73.13\% | 81 | 605 | 60.38\% |
| 2-Aug | 16 | 408 | 76.12\% | 65 | 670 | 66.87\% |
| 3-Aug | 17 | 425 | 79.29\% | 31 | 701 | 69.96\% |
| 4-Aug | 16 | 441 | 82.28\% | 63 | 764 | 76.25\% |
| 5-Aug | 12 | 453 | 84.51\% | 61 | 825 | 82.34\% |
| 6-Aug | 26 | 479 | 89.37\% | 84 | 909 | 90.72\% |
| 7-Aug | 11 | 490 | 91.42\% | 22 | 931 | 92.91\% |
| 8-Aug | 16 | 506 | 94.40\% | 0 | 931 | 92.91\% |
| 9-Aug | 9 | 515 | 96.08\% | 9 | 940 | 93.81\% |
| 10-Aug | 10 | 525 | 97.95\% | 24 | 964 | 96.21\% |
| 11-Aug | 11 | 536 | 100.00\% | 38 | 1,002 | 100.00\% |
| 12-Aug | eir out |  |  |  |  |  |
| Total Counted |  | 536 |  | 1,002 |  |  |
| Broodstock |  | 0 |  | 0 |  |  |
| Escapement |  | 536 |  |  | 1,002 |  |

Appendix B. 1. Historic salmon harvest and effort in the Alaskan District 106 commercial gillnet fishery, 1960-2019.

| Year | Harvest |  |  |  |  | Boats | $\begin{aligned} & \text { Days } \\ & \text { Open } \end{aligned}$ | Effort <br> Permit <br> Days |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Chinook | Sockeye | Coho | Pink | Chum |  |  |  |
| 1960 | 46 | 10,354 | 336 | 1,246 | 502 |  |  |  |
| 1961 | 416 | 20,614 | 14,934 | 124,236 | 64,479 |  |  |  |
| 1962 | 1,308 | 47,033 | 42,276 | 256,620 | 59,119 |  |  |  |
| 1963 | 1,560 | 80,767 | 52,103 | 514,596 | 90,103 |  |  |  |
| 1964 | 2,082 | 76,541 | 64,654 | 443,086 | 44,218 |  |  |  |
| 1965 | 1,802 | 87,749 | 75,728 | 625,848 | 27,658 |  |  |  |
| 1966 | 1,665 | 89,847 | 62,823 | 400,932 | 40,756 |  |  |  |
| 1967 | 1,318 | 86,385 | 17,670 | 91,609 | 26,370 |  |  |  |
| 1968 | 1,316 | 64,671 | 67,151 | 169,107 | 61,366 |  |  |  |
| 1969 | 877 | 70,484 | 10,305 | 198,785 | 10,930 | 127 | 31.0 | 2,111 |
| 1970 | 782 | 42,809 | 35,188 | 95,173 | 32,245 | 113 | 41.0 | 1,863 |
| 1971 | 1,336 | 53,262 | 48,085 | 528,737 | 37,682 | 166 | 50.0 | 2,773 |
| 1972 | 2,548 | 101,958 | 92,283 | 89,510 | 72,389 | 204 | 42.0 | 3,320 |
| 1973 | 1,961 | 72,025 | 38,447 | 304,536 | 87,704 | 245 | 26.0 | 3,299 |
| 1974 | 1,929 | 57,498 | 45,595 | 104,596 | 50,402 | 272 | 28.0 | 2,178 |
| 1975 | 2,587 | 32,099 | 30,962 | 203,031 | 24,047 | 168 | 17.0 | 1,648 |
| 1976 | 386 | 15,493 | 19,126 | 139,641 | 6,868 | 135 | 22.0 | 827 |
| 1977 | 671 | 67,394 | 8,389 | 422,955 | 13,311 | 168 | 28.0 | 1,381 |
| 1978 | 2,682 | 41,574 | 55,578 | 224,715 | 16,545 | 158 | 26.5 | 1,509 |
| 1979 | 2,720 | 66,373 | 31,454 | 648,212 | 35,507 | 238 | 25.0 | 2,702 |
| 1980 | 580 | 107,422 | 16,666 | 45,662 | 26,291 | 169 | 25.0 | 1,324 |
| 1981 | 1,565 | 182,001 | 22,614 | 437,573 | 34,296 | 221 | 26.0 | 2,925 |
| 1982 | 1,648 | 193,801 | 31,584 | 25,533 | 18,646 | 174 | 23.0 | 1,699 |
| 1983 | 567 | 48,842 | 62,442 | 208,290 | 20,144 | 140 | 32.0 | 1,452 |
| 1984 | 892 | 91,653 | 41,359 | 343,255 | 70,303 | 152 | 32.0 | 1,814 |
| 1985 | 1,687 | 264,987 | 91,188 | 584,953 | 69,673 | 186 | 32.0 | 2,672 |
| 1986 | 1,704 | 145,709 | 194,912 | 308,484 | 82,289 | 237 | 32.0 | 3,509 |
| 1987 | 836 | 136,427 | 34,534 | 243,482 | 42,025 | 199 | 20.0 | 1,766 |
| 1988 | 1,104 | 92,529 | 13,103 | 69,559 | 69,620 | 196 | 19.0 | 1,494 |
| 1989 | 1,544 | 192,734 | 92,385 | 1,101,194 | 67,351 | 185 | 34.0 | 3,221 |
| 1990 | 2,108 | 185,805 | 164,235 | 319,186 | 73,232 | 219 | 34.0 | 3,501 |
| 1991 | 2,055 | 144,104 | 198,160 | 133,566 | 124,630 | 213 | 39.0 | 3,620 |
| 1992 | 1,355 | 203,155 | 298,935 | 94,248 | 140,468 | 206 | 40.0 | 4,229 |
| 1993 | 992 | 205,955 | 231,038 | 537,960 | 134,601 | 239 | 38.0 | 4,352 |
| 1994 | 754 | 211,048 | 267,862 | 179,994 | 176,026 | 230 | 43.0 | 4,467 |
| 1995 | 951 | 207,298 | 170,561 | 448,163 | 300,078 | 187 | 34.0 | 3,656 |
| 1996 | 644 | 311,100 | 223,640 | 188,035 | 283,290 | 212 | 46.0 | 5,289 |
| 1997 | 1,075 | 168,518 | 77,550 | 789,051 | 186,456 | 202 | 39.0 | 3,667 |
| 1998 | 518 | 113,435 | 273,197 | 502,655 | 332,022 | 184 | 43.0 | 4,397 |
| 1999 | 518 | 104,835 | 203,301 | 491,179 | 448,409 | 199 | 49.0 | 4,854 |
| 2000 | 1,220 | 90,076 | 96,207 | 156,619 | 199,836 | 168 | 33.0 | 2,408 |
| 2001 | 1,138 | 164,013 | 188,465 | 825,447 | 283,462 | 183 | 50.0 | 3,853 |
| 2002 | 446 | 56,135 | 226,560 | 82,951 | 112,541 | 154 | 47.0 | 2,683 |
| 2003 | 422 | 116,904 | 212,057 | 470,697 | 300,253 | 157 | 59.0 | 3,803 |
| 2004 | 2,735 | 116,259 | 138,631 | 245,237 | 110,574 | 151 | 55.0 | 2,735 |
| 2005 | 1,572 | 110,192 | 114,440 | 461,187 | 198,564 | 152 | 53.0 | 2,963 |
| 2006 | 1,948 | 91,980 | 69,015 | 149,907 | 268,436 | 143 | 45.0 | 2,035 |
| 2007 | 2,144 | 92,481 | 80,573 | 383,355 | 297,998 | 153 | 49.0 | 2,740 |
| 2008 | 1,619 | 30,533 | 116,074 | 90,217 | 102,156 | 144 | 46.0 | 2,195 |
| 2009 | 2,138 | 111,984 | 144,569 | 143,589 | 287,707 | 170 | 45.0 | 3,252 |
| 2010 | 2,473 | 112,450 | 225,550 | 309,795 | 97,948 | 180 | 47.0 | 3,161 |
| 2011 | 3,008 | 146,069 | 117,860 | 337,169 | 158,096 | 164 | 41.0 | 2,647 |
| 2012 | 1,853 | 45,466 | 121,418 | 129,646 | 104,307 | 133 | 40.0 | 1,929 |
| 2013 | 2,202 | 49,223 | 160,659 | 474,551 | 94,260 | 146 | 62.0 | 3,276 |
| 2014 | 2,092 | 58,430 | 286,815 | 415,392 | 106,243 | 143 | 58.0 | 3,280 |
| 2015 | 2,723 | 121,921 | 112,561 | 224,816 | 232,390 | 130 | 47.0 | 2,402 |
| 2016 | 2,094 | 106,649 | 122,101 | 358,309 | 130,236 | 138 | 47.0 | 2,642 |
| 2017 | 1,521 | 45,005 | 49,382 | 302,033 | 234,349 | 149 | 41.0 | 2,263 |
| 2018 | 3,247 | 25,203 | 112,000 | 348,277 | 176,392 | 151 | 41.0 | 2,663 |
| 2019 | 1,073 | 23,844 | 59,304 | 424,495 | 113,161 | 132 | 45.0 | 2,217 |
| 60-18 | 1,520 | 104,869 | 105,378 | 314,379 | 118,607 | 177 | 38 | 2,809 |
| 09-18 | 2,335 | 82,240 | 145,292 | 304,358 | 162,193 | 150 | 47 | 2,752 |

Appendix B. 2 Historic salmon harvest and effort in the Alaskan District 108 commercial gillnet fishery, 1962-2019.

| Year | commercial gillnet fishery, 1962-2019. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Harvest |  |  |  |  | Boats | $\begin{aligned} & \text { Days } \\ & \text { Open } \end{aligned}$ | Effort <br> Permit <br> Days |
|  | Chinook | Sockeye | Coho | Pink | Chum |  |  |  |
| 1962 | 618 | 4,430 | 3,921 | 2,889 | 2,035 |  |  |  |
| 1963 | 1,431 | 9,979 | 11,612 | 10,198 | 11,024 |  |  |  |
| 1964 | 2,911 | 20,299 | 29,388 | 114,555 | 10,771 |  |  |  |
| 1965 | 3,106 | 21,419 | 8,301 | 4,729 | 2,480 |  |  |  |
| 1966 | 4,516 | 36,710 | 16,493 | 61,908 | 17,730 |  |  |  |
| 1967 | 6,372 | 29,226 | 6,747 | 4,713 | 5,955 |  |  |  |
| 1968 | 4,604 | 14,594 | 36,407 | 91,028 | 14,537 |  |  |  |
| 1969 | 5,021 | 19,211 | 5,791 | 11,962 | 2,318 | 85 | 55 | 1,084 |
| 1970 | 3,199 | 15,121 | 18,529 | 20,523 | 12,304 | 94 | 54 | 1,222 |
| 1971 | 3,717 | 18,143 | 14,876 | 22,216 | 4,665 | 85 | 57 | 1,061 |
| 1972 | 9,342 | 51,725 | 38,440 | 17,197 | 17,442 | 146 | 64 | 2,094 |
| 1973 | 9,254 | 21,393 | 5,837 | 6,585 | 6,680 | 155 | 39 | 1,519 |
| 1974 | 8,199 | 2,428 | 16,021 | 4,188 | 2,107 | 140 | 31 | 1,240 |
| 1975 | 1,529 | 0 | 0 | 0 | 1 | 58 | 8 | 257 |
| 1976 | 1,123 | 18 | 6,074 | 722 | 124 | 70 | 20 | 372 |
| 1977 | 1,443 | 48,385 | 14,424 | 16,318 | 4,233 | 106 | 23 | 742 |
| 1978 | 531 | 56 | 32,650 | 1,157 | 1,001 | 112 | 12 | 565 |
| 1979 | 91 | 2,158 | 234 | 13,478 | 1,064 | 25 | 5 | 94 |
| 1980 | 631 | 14,053 | 2,946 | 7,224 | 6,910 | 62 | 22 | 327 |
| 1981 | 283 | 8,833 | 1,403 | 1,466 | 3,594 | 53 | 11 | 217 |
| 1982 | 1,052 | 7,136 | 20,003 | 16,174 | 734 | 96 | 21 | 494 |
| 1983 | 47 | 178 | 15,369 | 4,171 | 675 | 45 | 17 | 260 |
| 1984 | 14 | 1,290 | 5,141 | 4,960 | 1,892 | 15 | 16 | 88 |
| 1985 | 20 | 1,060 | 1,926 | 5,325 | 1,892 | 17 | 13 | 45 |
| 1986 | 102 | 4,185 | 7,439 | 4,901 | 5,928 | 48 | 25 | 216 |
| 1987 | 149 | 1,620 | 1,015 | 3,331 | 949 | 25 | 13 | 81 |
| 1988 | 206 | 1,246 | 12 | 144 | 3,109 | 21 | 8 | 60 |
| 1989 | 310 | 10,083 | 4,261 | 27,640 | 3,375 | 46 | 29 | 223 |
| 1990 | 557 | 11,574 | 8,218 | 13,822 | 9,382 | 55 | 34 | 359 |
| 1991 | 1,366 | 17,987 | 15,629 | 6,406 | 5,977 | 117 | 49 | 636 |
| 1992 | 967 | 52,717 | 22,127 | 66,742 | 15,458 | 135 | 51 | 1,247 |
| 1993 | 1,628 | 76,874 | 14,307 | 39,661 | 22,504 | 157 | 48 | 1,569 |
| 1994 | 1,996 | 97,224 | 44,891 | 35,405 | 27,658 | 179 | 58 | 2,198 |
| 1995 | 1,702 | 76,756 | 17,834 | 37,788 | 54,296 | 158 | 50 | 1,768 |
| 1996 | 1,717 | 154,150 | 19,059 | 37,651 | 135,623 | 190 | 57 | 2,393 |
| 1997 | 2,566 | 93,039 | 2,140 | 65,745 | 38,913 | 173 | 44 | 1,808 |
| 1998 | 460 | 22,031 | 19,206 | 39,246 | 41,057 | 119 | 45 | 947 |
| 1999 | 1,049 | 36,601 | 28,437 | 48,552 | 117,196 | 150 | 54 | 1,675 |
| 2000 | 1,671 | 15,833 | 5,651 | 9,497 | 40,337 | 100 | 35 | 606 |
| 2001 | 7 | 610 | 10,731 | 11,012 | 5,397 | 59 | 34 | 377 |
| 2002 | 25 | 208 | 21,131 | 4,578 | 2,017 | 42 | 30 | 323 |
| 2003 | 312 | 42,158 | 38,795 | 76,113 | 51,701 | 100 | 56 | 1,270 |
| 2004 | 7,410 | 103,392 | 26,617 | 20,439 | 37,996 | 124 | 53 | 1,830 |
| 2005 | 26,970 | 99,465 | 42,203 | 106,395 | 150,121 | 161 | 78 | 4,239 |
| 2006 | 30,033 | 61,298 | 34,430 | 56,810 | 343,827 | 160 | 64 | 3,437 |
| 2007 | 17,463 | 70,580 | 19,880 | 39,872 | 177,573 | 147 | 56 | 2,586 |
| 2008 | 14,599 | 35,679 | 34,479 | 18,105 | 81,876 | 171 | 58 | 2,895 |
| 2009 | 2,830 | 36,680 | 30,860 | 27,010 | 190,800 | 151 | 47 | 1,932 |
| 2010 | 2,359 | 32,737 | 42,772 | 58,610 | 51,005 | 146 | 45 | 1,382 |
| 2011 | 5,321 | 51,478 | 20,720 | 65,022 | 142,526 | 150 | 41 | 1,671 |
| 2012 | 8,027 | 21,997 | 20,100 | 16,374 | 240,569 | 128 | 43 | 1,642 |
| 2013 | 10,817 | 20,609 | 43,669 | 116,026 | 103,365 | 127 | 60 | 2,334 |
| 2014 | 8,023 | 19,808 | 30,184 | 33,830 | 84,771 | 107 | 62 | 1,501 |
| 2015 | 13,845 | 22,896 | 30,153 | 35,926 | 166,009 | 124 | 50 | 1,992 |
| 2016 | 10,024 | 70,143 | 22,146 | 35,250 | 200,653 | 141 | 58 | 2,342 |
| 2017 | 3,817 | 14,282 | 13,592 | 49,027 | 177,119 | 122 | 43 | 1,382 |
| 2018 | 2,649 | 5,731 | 8,823 | 15,643 | 133,812 | 103 | 40 | 1,064 |
| 2019 | 4,253 | 6,591 | 9,478 | 10,884 | 50,653 | 263 | 39 | 775 |
| 60-18 | 4,387 | 30,342 | 17,790 | 29,233 | 52,545 | 106 | 40 | 1,233 |
| 09-18 | 6,771 | 29,636 | 26,302 | 45,272 | 149,063 | 130 | 49 | 1,724 |

Appendix B. 3. District 108 total Chinook salmon estimates in the US gillnet, troll, recreational, and subsistence fisheries, 2005-2019.

| Year | Subsistence |  | Sport |  | Drift Gillnet |  |  | Troll |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Large | nonlarge | Large | Large non-Stikine | Large | Large non-Stikine | nonlarge | Large | Large non-Stikine |
| 2005 | 15 | 8 | 3,242 | 240 | 23,932 | 1,690 | 2,636 | 5,014 | 684 |
| 2006 | 37 | 17 | 4,058 | 1,028 | 26,864 | 4,717 | 2,951 | 2,915 | 1,021 |
| 2007 | 28 | 15 | 3,881 | 608 | 14,421 | 4,716 | 2,787 | 2,459 | 646 |
| 2008 | 26 | 6 | 1,984 | 632 | 12,682 | 5,667 | 1,673 | 1,742 | 131 |
| 2009 | 31 | 19 | 907 | 146 | 1,901 | 1,264 | 601 | 312 | 519 |
| 2010 | 53 | 18 | 1,072 | 107 | 1,107 | 759 | 978 | 946 | 519 |
| 2011 | 61 | 20 | 1,273 | 210 | 2,801 | 1,690 | 1,831 | 631 | 168 |
| 2012 | 46 | 20 | 1,396 | 286 | 4,884 | 2,869 | 2,825 | 859 | 353 |
| 2013 | 41 | 36 | 1,297 | 125 | 6,676 | 4,503 | 3,733 | 680 | 246 |
| 2014 | 44 | 28 | 1,968 | 352 | 4,753 | 4,616 | 2,704 | 1,585 | 908 |
| 2015 | 34 | 19 | 1,739 | 693 | 8,020 | 8,361 | 4,640 | 684 | 340 |
| 2016 | 20 | 26 | 1,442 | 227 | 4,824 | 4,126 | 4,232 | 1,028 | 460 |
| 2017 | 14 | 43 | 656 | 406 | 2,221 | 2,149 | 1,107 | 115 | 80 |
| 2018 | 22 | 66 | 12 | 0 | 852 | 738 | 1,313 | 0 | 0 |
| 2019 | 19 | 52 | 186 | 70 | 2,447 | 2,515 | 1,629 | 0 | 0 |
| Averages 09-18 | 37 | 30 | 1,176 | 255 | 3,804 | 3,108 | 2,396 | 684 | 359 |

Appendix B. 4. Annual estimates of Stikine River large Chinook salmon in the U.S. gillnet, troll, recreational, and subsistence and estimates of Stikine River bound Chinook salmon in District 108, 2005-2019.
GSI used for sport and gillnet. Troll is based on GSI 2005-2008 and CWT 2009-present.
For detailed GSI stock comp estimates see Appendix G. 5.

|  |  | D108 Large Stikine Chinook |  | Total Large |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Year | Subsistence | Sport | Gillnet | Troll | Stikine Chinook |
| 2010 |  | 0.546 | 0.215 |  |  |
| 2011 |  | 0.509 | 0.346 |  |  |
| 2012 |  | 0.423 | 0.248 |  |  |
| 2013 |  | 0.490 | 0.068 |  |  |
| 2014 |  | 0.354 | 0.043 |  |  |
| 2015 |  | 0.449 | 0.047 |  |  |
| 2016 |  | 0.304 | 0.220 |  |  |
| 2017 | 0.212 | 0.008 |  |  |  |
| 2018 |  | CWT estimate | 0.006 |  |  |
| 2019 | 0.012 | 0.046 |  |  |  |
| Average |  |  |  |  |  |
| $10-17$ |  | 0.411 | 0.149 |  | 10,885 |
| 2005 | 15 | 3,665 | 21,233 | 2,969 | 7,335 |
| 2006 | 37 | 3,346 | 17,259 | 1,418 | 1,350 |
| 2007 | 36 | 2,218 | 7,057 | 1,574 | 1,303 |
| 2008 | 26 | 1,453 | 4,905 | 951 |  |
| 2009 | 31 | 887 | 244 | 188 |  |
| 2010 | 53 | 586 | 238 | 427 |  |
| 2011 | 61 | 648 | 970 | 463 | 2,353 |
| 2012 | 46 | 591 | 1,209 | 506 | 1,566 |
| 2013 | 41 | 636 | 455 | 434 | 1,622 |
| 2014 | 44 | 697 | 204 | 677 | 1,500 |
| 2015 | 34 | 781 | 379 | 306 | 1,707 |
| 2016 | 20 | 438 | 1,060 | 190 | 207 |
| 2017 | 14 | 139 | 19 | 35 | 76 |
| 2018 | 22 | 12 | 5 | 36 | 133 |
| 2019 | 19 | 2 | 112 | 0 |  |

Appendix B. 5. Chinook salmon harvest in the Alaskan District 106 and 108 test fisheries, 1984-2019.

| Table only includes years when test fisheries were operated. |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Large Chinook |  |  |  |
| Year | Total 106 | $106-41 / 42$ | $106-30$ | 108 |
| 1984 | 13 | 13 |  | 37 |
| 1985 | 16 | 16 | 33 |  |
| 1986 | 47 | 23 | 24 | 79 |
| 1987 | 25 | 24 | 1 | 30 |
| 1988 | 21 | 11 | 10 | 65 |
| 1989 | 15 | 11 | 4 | 15 |
| 1990 | 13 | 13 |  | 19 |
| 1991 |  |  | 21 |  |
| 1992 |  |  | 26 |  |
| 1993 |  |  | 30 |  |
| 1994 | 0 |  |  |  |
| --- |  |  |  |  |
| 1998 |  |  | 0 |  |
| 1999 |  |  | 29 |  |
| 2000 |  |  | 21 |  |
| -- |  |  |  |  |
| 2009 |  |  | 113 |  |

Appendix B. 6. Chinook salmon harvest in the Canadian commercial and recreational fisheries in the Stikine River, 1979-2019.

| Year | LRCF |  |  |  | URCF |  | Aboriginal Telegraph |  | Tahltan sport fishery |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Large |  | Nonlarge |  | $\frac{\text { Large }}{\text { Harvested }}$ | Nonlarge <br> Harvested | $\frac{\text { Large }}{\text { Harvested }}$ | Nonlarge <br> Harvested | Retained | Released | $\frac{\text { Large }}{\text { Harvested }}$ | Nonlarge <br> Harvested |
|  | Harvested | Released | Harvested | Released |  |  |  |  |  |  |  |  |
| 1972 |  |  |  |  |  |  |  |  |  |  | 0 | 0 |
| 1973 |  |  |  |  |  |  | 200 |  |  |  | 200 | 0 |
| 1974 |  |  |  |  |  |  | 100 |  |  |  | 100 | 0 |
| 1975 |  |  |  |  | 178 |  | 1,024 |  |  |  | 1,202 | 0 |
| 1976 |  |  |  |  | 236 |  | 924 |  |  |  | 1,160 | 0 |
| 1977 |  |  |  |  | 62 |  | 100 |  |  |  | 162 | 0 |
| 1978 |  |  |  |  | 100 |  | 400 |  |  |  | 500 | 0 |
| $1979{ }^{\text {b }}$ | 712 |  | 63 |  |  |  | 850 |  | 74 | 10 | 1,636 | 73 |
| 1980 | 1,488 |  |  |  | 156 |  | 587 |  | 136 | 18 | 2,367 | 18 |
| 1981 | 664 |  |  |  | 154 |  | 586 |  | 213 | 28 | 1,617 | 28 |
| 1982 | 1,693 |  |  |  | 76 |  | 618 |  | 181 | 24 | 2,568 | 24 |
| 1983 | 492 |  | 430 |  | 75 |  | 851 | 215 | 38 | 5 | 1,456 | 650 |
| $1984{ }^{\text {c }}$ |  |  |  |  |  |  | 643 | 59 | 83 | 11 | 726 | 70 |
| 1985 | 256 |  | 91 |  | 62 |  | 793 | 94 | 92 | 12 | 1,203 | 197 |
| 1986 | 806 |  | 365 |  | 104 | 41 | 1,026 | 569 | 93 | 12 | 2,029 | 987 |
| 1987 | 909 |  | 242 |  | 109 | 19 | 1,183 | 183 | 138 | 18 | 2,339 | 462 |
| 1988 | 1,007 |  | 201 |  | 175 | 46 | 1,178 | 197 | 204 | 27 | 2,564 | 471 |
| 1989 | 1,537 |  | 157 |  | 54 | 17 | 1,078 | 115 | 132 | 18 | 2,801 | 307 |
| 1990 | 1,569 |  | 680 |  | 48 | 20 | 633 | 259 | 129 | 17 | 2,379 | 976 |
| 1991 | 641 |  | 318 |  | 117 | 32 | 753 | 310 | 129 | 17 | 1,640 | 677 |
| 1992 | 873 |  | 89 |  | 56 | 19 | 911 | 131 | 181 | 24 | 2,021 | 263 |
| 1993 | 830 |  | 164 |  | 44 | 2 | 929 | 142 | 386 | 52 | 2,189 | 360 |
| 1994 | 1,016 |  | 158 |  | 76 | 1 | 698 | 191 | 218 | 29 | 2,008 | 379 |
| 1995 | 1,067 |  | 599 |  | 9 | 17 | 570 | 244 | 107 | 14 | 1,753 | 874 |
| 1996 | 1,708 |  | 221 |  | 41 | 44 | 722 | 156 | 162 | 22 | 2,633 | 443 |
| 1997 | 3,283 |  | 186 |  | 45 | 6 | 1,155 | 94 | 188 | 25 | 4,671 | 311 |
| 1998 | 1,614 |  | 328 |  | 12 | 0 | 538 | 95 | 165 | 22 | 2,329 | 445 |
| 1999 | 2,127 |  | 789 |  | 24 | 12 | 765 | 463 | 166 | 22 | 3,082 | 1,286 |
| 2000 | 1,970 |  | 240 |  | 7 | 2 | 1,109 | 386 | 226 | 30 | 3,312 | 658 |
| 2001 | 826 |  | 59 |  | 0 | 0 | 665 | 44 | 190 | 12 | 1,681 | 115 |
| 2002 | 433 |  | 209 |  | 2 | 3 | 927 | 366 | 420 | 46 | 1,782 | 624 |
| 2003 | 695 |  | 672 |  | 19 | 12 | 682 | 373 | 167 | 46 | 1,563 | 1,103 |
| 2004 | 2,481 |  | 2,070 |  | 0 | 1 | 1,425 | 497 | 91 | 18 | 3,997 | 2,586 |
| 2005 | 19,070 |  | 1,181 |  | 28 | 1 | 800 | 94 | 118 |  | 20,016 | 1,276 |
| 2006 | 15,098 |  | 1,955 |  | 22 | 1 | 616 | 122 | 40 |  | 15,776 | 2,078 |
| 2007 | 10,131 |  | 1,469 |  | 10 | 25 | 364 | 233 | 0 |  | 10,505 | 1,727 |
| 2008 | 7,051 |  | 908 |  | 40 | 9 | 769 | 150 | 46 |  | 7,906 | 1,067 |
| 2009 | 1,587 | 339 | 498 | 153 | 11 | 26 | 496 | 136 | 20 |  | 2,114 | 660 |
| 2010 | 1,209 | 64 | 698 | 56 | 16 | 48 | 512 | 232 | 50 |  | 1,787 | 978 |
| 2011 | 1,737 | 58 | 1,260 | 100 | 2 | 14 | 515 | 218 | 53 | 23 | 2,307 | 1,515 |
| 2012 | 4,054 | 10 | 1,043 | 53 | 6 | 0 | 513 | 170 | 64 |  | 4,637 | 1,213 |
| 2013 | 1,086 | 1 | 815 | 37 | 8 | 0 | 809 | 508 | 50 |  | 1,953 | 1,323 |
| 2014 | 896 | 15 | 511 | 8 | 0 | 0 | 1,020 | 103 | 50 | 0 | 1,966 | 614 |
| 2015 | 3,134 | 0 | 1,339 | 0 | 1 | 0 | 1,022 | 198 | 76 | 25 | 4,233 | 1,562 |
| 2016 | 2,116 | 0 | 655 | 0 | 0 | 0 | 615 | 139 | 0 | 0 | 2,731 | 794 |
| 2017 | 312 | 258 | 610 | 9 | 0 | 0 | 281 | 178 | 0 | 0 | 593 | 788 |
| 2018 | 0 | 476 | 0 | 636 | 0 | 0 | 165 | 456 | 0 | 0 | 165 | 456 |
| 2019 | 0 | 376 | 0 | 272 | 0 | 0 | 333 | 237 | 0 | 0 | 333 | 237 |
| Averages |  |  |  |  |  |  |  |  |  |  |  |  |
| 85-18 | 2,739 |  | 611 |  | 34 | 13 | 772 | 231 | 122 |  | 3,667 | 870 |
| 09-18 | 1,613 | 122 | 743 | 105 | 4 | 9 | 595 | 234 | 36 |  | 2,249 | 990 |

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

| Year | $1985-2019$ |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Drift |  | Set |  | Additional drift |  | Commercial license |  | Tuya |  | Total Fish |  |
|  | Large | Nonlarge | Large | Nonlarge | Large | Nonlarge | Large | Nonlarge | Large | Nonlarge | Large | Nonlarge |
| 1985 |  |  |  |  |  |  |  |  |  |  | 0 | 0 |
| 1986 | 27 | 12 |  |  |  |  |  |  |  |  | 27 | 12 |
| 1987 | 128 |  | 61 |  |  |  |  |  |  |  | 189 | 0 |
| 1988 | 168 | 14 | 101 | 15 |  |  |  |  |  |  | 269 | 29 |
| 1989 | 116 | 4 | 101 | 20 |  |  |  |  |  |  | 217 | 24 |
| 1990 | 167 | 6 | 64 | 12 |  |  |  |  |  |  | 231 | 18 |
| 1991 | 90 | 1 | 77 | 15 |  |  |  |  |  |  | 167 | 16 |
| 1992 | 135 | 27 | 62 | 21 | 417 | 134 |  |  |  |  | 614 | 182 |
| 1993 | 94 | 11 | 85 | 11 | 389 | 65 |  |  |  |  | 568 | 87 |
| 1994 | 43 | 4 | 74 | 34 | 178 | 40 |  |  |  |  | 295 | 78 |
| 1995 | 18 | 13 | 61 | 35 | 169 | 136 |  |  |  |  | 248 | 184 |
| 1996 | 42 | 5 | 64 | 40 | 192 | 31 |  |  |  |  | 298 | 76 |
| 1997 | 30 | 7 |  |  |  |  |  |  |  |  | 30 | 7 |
| 1998 | 25 | 11 |  |  |  |  |  |  |  |  | 25 | 11 |
| 1999 | 53 | 43 | 49 | 16 | 751 | 38 |  |  |  |  | 853 | 97 |
| 2000 | 59 | 4 | 87 | 0 | 787 | 14 |  |  |  |  | 933 | 18 |
| 2001 | 128 | 3 | 56 | 7 | 1,652 | 49 |  |  |  |  | 1,836 | 59 |
| 2002 | 63 | 50 | 48 | 56 | 1,545 | 217 |  |  |  |  | 1,656 | 323 |
| 2003 | 64 | 62 | 14 | 91 | 1,225 | 617 |  |  |  |  | 1,303 | 770 |
| 2004 | 29 | 41 | 22 | 39 | 0 | 0 |  |  |  |  | 51 | 80 |
| 2005 | 14 | 8 | 19 | 13 | 0 | 0 |  |  |  |  | 33 | 21 |
| 2006 | 0 | 0 | 0 | 0 | 0 | 0 |  |  |  |  | 0 | 0 |
| 2007 | 2 | 0 | 3 | 0 | 0 | 0 |  |  |  |  | 5 | 0 |
| 2008 | 7 | 2 | 6 | 8 | 0 | 0 |  |  | 13 |  | 26 | 10 |
| 2009 | 3 | 0 | 0 | 0 | 0 | 0 |  |  | 29 |  | 32 | 0 |
| 2010 | 2 | 0 | 3 | 1 | 0 | 0 | 1,364 | 140 | 8 | 8 | 1,377 | 149 |
| 2011 | 22 | 28 | 0 | 1 | 0 | 0 | 799 | 219 | 13 | 6 | 834 | 254 |
| 2012 | 54 | 31 | 8 | 8 | 0 | 0 | 467 | 49 | 44 | 5 | 573 | 93 |
| 2013 | 6 | 4 | 4 | 8 | 0 | 0 | 1,406 | 268 | 1 | 19 | 1,417 | 299 |
| 2014 | 18 | 12 | 5 | 6 | 0 | 0 | 1,319 | 127 | 19 | 5 | 1,361 | 150 |
| 2015 | 22 | 23 | 3 | 36 | 0 | 0 | 0 | 0 |  |  | 25 | 59 |
| 2016 | 16 | 12 | 5 | 4 | 0 | 0 | 483 | 39 |  |  | 504 | 55 |
| 2017 | 7 | 13 | 3 | 10 | 0 | 0 | 0 | 0 |  |  | 10 | 23 |
| 2018 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |  | 0 | 0 |
| 2019 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |  | 0 | 0 |
| Averages |  |  |  |  |  |  |  |  |  |  |  |  |
| 85-18 | 50 | 14 | 36 | 17 | 292 | 54 |  |  |  |  | 485 | 97 |
| 09-18 | 15 | 12 | 3 | 7 | 0 | 0 |  |  |  |  | 613 | 108 |

Appendix B. 8. Index counts of Stikine River large Chinook salmon escapements, 19792019.


Appendix B. 9. General stock proportions and harvest of sockeye salmon in the Alaskan commercial gillnet fishery; District $106 \& 108,1982-2019$.

| Estimates based on SPA 1982-2011; GSI 2012 to present. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
| Year | Other | Total Stikine | Other | Total Stikine | Other | Total Stikine | Other | Total Stikine |
| 1982 | 0.806 | 0.194 |  |  |  |  |  |  |
| 1983 | 0.884 | 0.116 |  |  |  |  |  |  |
| 1984 | 0.926 | 0.074 |  |  |  |  |  |  |
| 1985 | 0.898 | 0.102 | 0.881 | 0.119 | 0.930 | 0.070 | 0.064 | 0.936 |
| 1986 | 0.982 | 0.018 | 0.970 | 0.030 | 0.998 | 0.002 | 0.223 | 0.777 |
| 1987 | 0.983 | 0.017 | 0.982 | 0.018 | 0.984 | 0.016 | 0.125 | 0.875 |
| 1988 | 0.980 | 0.020 | 0.980 | 0.020 | 0.979 | 0.021 | 0.251 | 0.749 |
| 1989 | 0.968 | 0.032 | 0.956 | 0.044 | 0.984 | 0.016 | 0.171 | 0.829 |
| 1990 | 0.979 | 0.021 | 0.974 | 0.026 | 0.985 | 0.015 | 0.523 | 0.477 |
| 1991 | 0.876 | 0.124 | 0.837 | 0.163 | 0.940 | 0.060 | 0.291 | 0.709 |
| 1992 | 0.828 | 0.172 | 0.823 | 0.177 | 0.841 | 0.159 | 0.214 | 0.786 |
| 1993 | 0.738 | 0.262 | 0.696 | 0.304 | 0.808 | 0.192 | 0.345 | 0.655 |
| 1994 | 0.833 | 0.167 | 0.802 | 0.198 | 0.925 | 0.075 | 0.534 | 0.466 |
| 1995 | 0.876 | 0.124 | 0.851 | 0.149 | 0.921 | 0.079 | 0.339 | 0.661 |
| 1996 | 0.799 | 0.201 | 0.724 | 0.276 | 0.990 | 0.010 | 0.184 | 0.816 |
| 1997 | 0.847 | 0.153 | 0.807 | 0.193 | 0.944 | 0.056 | 0.188 | 0.812 |
| 1998 | 0.905 | 0.095 | 0.887 | 0.113 | 0.947 | 0.053 | 0.223 | 0.777 |
| 1999 | 0.763 | 0.237 | 0.719 | 0.281 | 0.867 | 0.133 | 0.180 | 0.820 |
| 2000 | 0.876 | 0.124 | 0.833 | 0.167 | 0.954 | 0.046 | 0.331 | 0.669 |
| 2001 | 0.857 | 0.143 | 0.829 | 0.171 | 0.901 | 0.099 | 0.874 | 0.126 |
| 2002 | 0.856 | 0.144 | 0.831 | 0.169 | 0.915 | 0.085 | 0.995 | 0.005 |
| 2003 | 0.838 | 0.162 | 0.796 | 0.204 | 0.971 | 0.029 | 0.345 | 0.655 |
| 2004 | 0.721 | 0.279 | 0.641 | 0.359 | 0.948 | 0.053 | 0.131 | 0.869 |
| 2005 | 0.791 | 0.209 | 0.744 | 0.256 | 0.939 | 0.061 | 0.306 | 0.694 |
| 2006 | 0.726 | 0.274 | 0.602 | 0.398 | 0.941 | 0.059 | 0.197 | 0.803 |
| 2007 | 0.591 | 0.409 | 0.493 | 0.507 | 0.943 | 0.057 | 0.312 | 0.688 |
| 2008 | 0.445 | 0.555 | 0.328 | 0.672 | 0.691 | 0.309 | 0.199 | 0.801 |
| 2009 | 0.618 | 0.382 | 0.540 | 0.460 | 0.832 | 0.168 | 0.183 | 0.817 |
| 2010 | 0.877 | 0.123 | 0.792 | 0.208 | 0.970 | 0.030 | 0.233 | 0.767 |
| 2011 | 0.790 | 0.211 | 0.691 | 0.309 | 0.956 | 0.044 | 0.197 | 0.803 |
| 2012 | 0.809 | 0.191 | 0.728 | 0.272 | 0.961 | 0.039 | 0.150 | 0.850 |
| 2013 | 0.754 | 0.246 | 0.655 | 0.345 | 0.939 | 0.061 | 0.254 | 0.746 |
| 2014 | 0.885 | 0.115 | 0.815 | 0.185 | 0.976 | 0.024 | 0.210 | 0.790 |
| 2015 | 0.885 | 0.115 | 0.817 | 0.183 | 0.979 | 0.021 | 0.297 | 0.703 |
| 2016 | 0.797 | 0.203 | 0.718 | 0.282 | 0.966 | 0.034 | 0.150 | 0.850 |
| 2017 | 0.782 | 0.218 | 0.681 | 0.319 | 0.957 | 0.043 | 0.153 | 0.847 |
| 2018 | 0.881 | 0.119 | 0.834 | 0.166 | 0.946 | 0.054 | 0.264 | 0.736 |
| 2019 | 0.770 | 0.230 | 0.678 | 0.322 | 0.908 | 0.092 | 0.145 | 0.855 |
| Averages |  |  |  |  |  |  |  |  |
| 83-18 | 0.828 | 0.172 | 0.772 | 0.228 | 0.933 | 0.067 | 0.283 | 0.717 |
| 09-18 | 0.808 | 0.192 | 0.727 | 0.273 | 0.948 | 0.052 | 0.209 | 0.791 |
| 1982 | 156,130 | 37,671 |  |  |  |  |  |  |
| 1983 | 43,192 | 5,650 |  |  |  |  |  |  |
| 1984 | 84,902 | 6,751 |  |  |  |  |  |  |
| 1985 | 237,929 | 27,058 | 151,525 | 20,563 | 86,404 | 6,495 | 68 | 992 |
| 1986 | 143,022 | 2,687 | 82,676 | 2,571 | 60,346 | 116 | 933 | 3,252 |
| 1987 | 134,083 | 2,344 | 77,752 | 1,413 | 56,331 | 931 | 203 | 1,418 |
| 1988 | 90,652 | 1,877 | 56,202 | 1,135 | 34,450 | 742 | 313 | 933 |
| 1989 | 186,562 | 6,172 | 103,099 | 4,787 | 83,463 | 1,385 | 1,725 | 8,358 |
| 1990 | 181,904 | 3,901 | 102,210 | 2,712 | 79,694 | 1,189 | 6,055 | 5,519 |
| 1991 | 126,240 | 17,864 | 74,767 | 14,588 | 51,473 | 3,277 | 5,233 | 12,754 |
| 1992 | 168,184 | 34,971 | 120,641 | 25,967 | 47,543 | 9,004 | 11,300 | 41,417 |
| 1993 | 151,918 | 54,037 | 90,421 | 39,438 | 61,497 | 14,599 | 26,500 | 50,374 |
| 1994 | 175,801 | 35,247 | 126,312 | 31,214 | 49,489 | 4,033 | 51,965 | 45,259 |
| 1995 | 181,619 | 25,679 | 113,848 | 19,865 | 67,771 | 5,814 | 26,015 | 50,741 |
| 1996 | 248,492 | 62,608 | 162,016 | 61,768 | 86,476 | 840 | 28,373 | 125,777 |
| 1997 | 142,766 | 25,752 | 95,719 | 22,956 | 47,047 | 2,796 | 17,533 | 75,506 |
| 1998 | 102,701 | 10,734 | 70,140 | 8,912 | 32,561 | 1,822 | 4,917 | 17,114 |
| 1999 | 80,026 | 24,809 | 52,717 | 20,608 | 27,313 | 4,197 | 6,578 | 30,023 |
| 2000 | 78,931 | 11,145 | 48,202 | 9,661 | 30,729 | 1,484 | 5,245 | 10,588 |
| 2001 | 140,590 | 23,423 | 82,215 | 17,004 | 58,375 | 6,419 | 533 | 77 |
| 2002 | 48,060 | 8,075 | 32,415 | 6,615 | 15,645 | 1,460 | 207 | 1 |
| 2003 | 97,984 | 18,920 | 70,483 | 18,112 | 27,501 | 808 | 14,526 | 27,632 |
| 2004 | 83,793 | 32,467 | 55,055 | 30,874 | 28,738 | 1,593 | 13,511 | 89,882 |
| 2005 | 87,144 | 23,048 | 62,221 | 21,426 | 24,923 | 1,622 | 30,403 | 69,062 |
| 2006 | 66,791 | 25,189 | 35,144 | 23,215 | 31,647 | 1,975 | 12,061 | 49,237 |
| 2007 | 54,625 | 37,855 | 35,691 | 36,720 | 18,934 | 1,136 | 22,027 | 48,554 |
| 2008 | 13,590 | 16,943 | 6,766 | 13,886 | 6,824 | 3,057 | 7,108 | 28,571 |
| 2009 | 69,179 | 42,805 | 44,431 | 37,795 | 24,749 | 5,009 | 6,712 | 29,968 |
| 2010 | 98,563 | 13,887 | 46,831 | 12,274 | 51,732 | 1,613 | 7,631 | 25,106 |
| 2011 | 115,324 | 30,765 | 63,576 | 28,380 | 51,748 | 2,385 | 10,127 | 41,351 |
| 2012 | 36,761 | 8,705 | 21,665 | 8,090 | 15,096 | 615 | 3,301 | 18,693 |
| 2013 | 37,109 | 12,114 | 21,030 | 11,070 | 16,079 | 1,044 | 5,243 | 15,366 |
| 2014 | 51,720 | 6,710 | 26,791 | 6,087 | 24,929 | 623 | 4,162 | 15,643 |
| 2015 | 107,892 | 14,028 | 57,830 | 12,947 | 50,063 | 1,080 | 6,809 | 16,087 |
| 2016 | 84,955 | 21,694 | 52,395 | 20,559 | 32,560 | 1,135 | 10,521 | 59,622 |
| 2017 | 35,216 | 9,789 | 19,372 | 9,072 | 15,844 | 717 | 2,189 | 12,093 |
| 2018 | 22,203 | 3,000 | 12,244 | 2,431 | 9,959 | 569 | 1,514 | 4,217 |
| 2019 | 18,357 | 5,487 | 9,727 | 4,617 | 8,631 | 869 | 957 | 5,634 |
| Averages |  |  |  |  |  |  |  |  |
| 83-18 | 107,204 | 20,172 | 66,894 | 17,786 | 41,410 | 2,694 | 10,339 | 30,329 |
| 09-18 | 65,892 | 16,350 | 36,616 | 14,871 | 29,276 | 1,479 | 5,821 | 23,815 |

Appendix B. 10. Stikine River stock proportions and harvest of sockeye salmon in the
Alaskan commercial gillnet fishery; Districts 106 \& 108, 1982-2019.

| Estimates based on SPA 1982-2011; GSI 2012 to present. |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | D106 |  |  | 106-41/42 |  |  | D106-30 |  |  | D108 |  |
| Year | All Tahltan | Mainstem | Tuya | All Tahltan | Mainstem | Tuya | All Tahltan | Mainstem | Tuya | All Tahltan | Mainstem | Tuya |
| 1982 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1983 | 0.103 | 0.013 |  |  |  |  |  |  |  |  |  |  |
| 1984 | 0.029 | 0.044 |  |  |  |  |  |  |  |  |  |  |
| 1985 | 0.091 | 0.011 |  | 0.109 | 0.010 |  | 0.056 | 0.013 |  | 0.292 | 0.644 |  |
| 1986 | 0.014 | 0.004 |  | 0.024 | 0.006 |  | 0.000 | 0.002 |  | 0.094 | 0.683 |  |
| 1987 | 0.010 | 0.007 |  | 0.015 | 0.003 |  | 0.004 | 0.012 |  | 0.438 | 0.437 |  |
| 1988 | 0.020 | 0.001 |  | 0.019 | 0.001 |  | 0.021 | 0.000 |  | 0.178 | 0.571 |  |
| 1989 | 0.006 | 0.026 |  | 0.009 | 0.036 |  | 0.002 | 0.015 |  | 0.034 | 0.795 |  |
| 1990 | 0.005 | 0.016 |  | 0.008 | 0.018 |  | 0.001 | 0.013 |  | 0.111 | 0.366 |  |
| 1991 | 0.100 | 0.024 |  | 0.129 | 0.034 |  | 0.052 | 0.008 |  | 0.395 | 0.314 |  |
| 1992 | 0.070 | 0.102 |  | 0.088 | 0.089 |  | 0.022 | 0.138 |  | 0.258 | 0.528 |  |
| 1993 | 0.098 | 0.164 |  | 0.134 | 0.169 |  | 0.036 | 0.156 |  | 0.256 | 0.399 |  |
| 1994 | 0.142 | 0.025 |  | 0.166 | 0.032 |  | 0.069 | 0.006 |  | 0.362 | 0.103 |  |
| 1995 | 0.081 | 0.043 | 0.001 | 0.099 | 0.048 | 0.001 | 0.047 | 0.032 | 0.000 | 0.455 | 0.200 | 0.006 |
| 1996 | 0.166 | 0.007 | 0.028 | 0.228 | 0.009 | 0.039 | 0.008 | 0.001 | 0.001 | 0.622 | 0.125 | 0.069 |
| 1997 | 0.058 | 0.016 | 0.079 | 0.079 | 0.014 | 0.101 | 0.009 | 0.021 | 0.026 | 0.362 | 0.189 | 0.261 |
| 1998 | 0.015 | 0.000 | 0.080 | 0.017 | 0.000 | 0.096 | 0.010 | 0.000 | 0.043 | 0.189 | 0.343 | 0.244 |
| 1999 | 0.057 | 0.118 | 0.061 | 0.074 | 0.128 | 0.079 | 0.018 | 0.095 | 0.020 | 0.414 | 0.205 | 0.201 |
| 2000 | 0.020 | 0.019 | 0.085 | 0.028 | 0.023 | 0.116 | 0.007 | 0.012 | 0.027 | 0.132 | 0.275 | 0.261 |
| 2001 | 0.039 | 0.025 | 0.079 | 0.032 | 0.028 | 0.112 | 0.049 | 0.021 | 0.029 | 0.000 | 0.121 | 0.005 |
| 2002 | 0.037 | 0.035 | 0.072 | 0.049 | 0.034 | 0.087 | 0.009 | 0.037 | 0.039 | 0.000 | 0.005 | 0.000 |
| 2003 | 0.075 | 0.035 | 0.053 | 0.097 | 0.040 | 0.068 | 0.005 | 0.019 | 0.005 | 0.179 | 0.414 | 0.062 |
| 2004 | 0.241 | 0.018 | 0.020 | 0.315 | 0.018 | 0.026 | 0.031 | 0.017 | 0.005 | 0.613 | 0.239 | 0.018 |
| 2005 | 0.182 | 0.027 | 0.000 | 0.227 | 0.029 | 0.000 | 0.041 | 0.020 | 0.000 | 0.437 | 0.257 | 0.000 |
| 2006 | 0.203 | 0.016 | 0.056 | 0.304 | 0.016 | 0.078 | 0.027 | 0.015 | 0.017 | 0.588 | 0.135 | 0.081 |
| 2007 | 0.322 | 0.005 | 0.082 | 0.403 | 0.005 | 0.099 | 0.028 | 0.007 | 0.021 | 0.474 | 0.067 | 0.147 |
| 2008 | 0.165 | 0.152 | 0.238 | 0.168 | 0.169 | 0.336 | 0.158 | 0.118 | 0.033 | 0.352 | 0.159 | 0.291 |
| 2009 | 0.215 | 0.077 | 0.090 | 0.287 | 0.068 | 0.104 | 0.016 | 0.103 | 0.050 | 0.360 | 0.232 | 0.225 |
| 2010 | 0.047 | 0.026 | 0.051 | 0.084 | 0.036 | 0.088 | 0.005 | 0.015 | 0.011 | 0.356 | 0.234 | 0.178 |
| 2011 | 0.094 | 0.050 | 0.066 | 0.146 | 0.065 | 0.098 | 0.005 | 0.025 | 0.013 | 0.445 | 0.216 | 0.142 |
| 2012 | 0.046 | 0.072 | 0.073 | 0.070 | 0.091 | 0.111 | 0.002 | 0.034 | 0.003 | 0.171 | 0.475 | 0.204 |
| 2013 | 0.068 | 0.118 | 0.060 | 0.099 | 0.156 | 0.089 | 0.008 | 0.047 | 0.007 | 0.180 | 0.440 | 0.125 |
| 2014 | 0.053 | 0.031 | 0.031 | 0.090 | 0.043 | 0.053 | 0.006 | 0.015 | 0.003 | 0.335 | 0.315 | 0.140 |
| 2015 | 0.038 | 0.030 | 0.046 | 0.064 | 0.041 | 0.077 | 0.002 | 0.015 | 0.004 | 0.294 | 0.276 | 0.132 |
| 2016 | 0.119 | 0.044 | 0.040 | 0.172 | 0.052 | 0.058 | 0.006 | 0.027 | 0.001 | 0.583 | 0.145 | 0.123 |
| 2017 | 0.154 | 0.043 | 0.020 | 0.237 | 0.053 | 0.029 | 0.013 | 0.027 | 0.004 | 0.465 | 0.331 | 0.051 |
| 2018 | 0.055 | 0.058 | 0.006 | 0.089 | 0.068 | 0.009 | 0.007 | 0.045 | 0.001 | 0.322 | 0.397 | 0.018 |
| 2019 | 0.139 | 0.089 | 0.002 | 0.221 | 0.099 | 0.001 | 0.015 | 0.075 | 0.002 | 0.489 | 0.364 | 0.003 |
| Averages |  |  |  |  |  |  |  |  |  |  |  |  |
| 83-17 | 0.091 | 0.041 | 0.061 | 0.123 | 0.047 | 0.085 | 0.023 | 0.033 | 0.016 | 0.316 | 0.310 | 0.129 |
| 08-17 | 0.100 | 0.064 | 0.072 | 0.142 | 0.077 | 0.104 | 0.022 | 0.043 | 0.013 | 0.354 | 0.282 | 0.161 |
| 1982 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1983 | 5,020 | 631 |  |  |  |  |  |  |  |  |  |  |
| 1984 | 2,673 | 4,078 |  |  |  |  |  |  |  |  |  |  |
| 1985 | 24,045 | 3,013 |  | 18,801 | 1,762 |  | 5,244 | 1,251 |  | 310 | 683 |  |
| 1986 | 2,081 | 606 |  | 2,070 | 501 |  | 11 | 105 |  | 393 | 2,858 |  |
| 1987 | 1,376 | 968 |  | 1,155 | 258 |  | 221 | 710 |  | 710 | 708 |  |
| 1988 | 1,813 | 64 |  | 1,071 | 64 |  | 742 | 0 |  | 222 | 711 |  |
| 1989 | 1,111 | 5,061 |  | 957 | 3,830 |  | 154 | 1,231 |  | 341 | 8,017 |  |
| 1990 | 915 | 2,986 |  | 801 | 1,911 |  | 114 | 1,075 |  | 1,280 | 4,239 |  |
| 1991 | 14,364 | 3,501 |  | 11,541 | 3,048 |  | 2,823 | 453 |  | 7,112 | 5,642 |  |
| 1992 | 14,187 | 20,784 |  | 12,961 | 13,005 |  | 1,226 | 7,778 |  | 13,599 | 27,818 |  |
| 1993 | 20,204 | 33,833 |  | 17,446 | 21,992 |  | 2,758 | 11,841 |  | 19,688 | 30,686 |  |
| 1994 | 29,876 | 5,371 |  | 26,164 | 5,050 |  | 3,712 | 321 |  | 35,222 | 10,037 |  |
| 1995 | 16,715 | 8,839 | 125 | 13,292 | 6,448 | 125 | 3,423 | 2,391 | 0 | 34,950 | 15,330 | 461 |
| 1996 | 51,598 | 2,189 | 8,821 | 50,924 | 2,113 | 8,731 | 674 | 76 | 90 | 95,837 | 19,319 | 10,621 |
| 1997 | 9,764 | 2,756 | 13,232 | 9,327 | 1,692 | 11,937 | 437 | 1,064 | 1,295 | 33,644 | 17,574 | 24,288 |
| 1998 | 1,678 | 36 | 9,020 | 1,326 | 31 | 7,555 | 352 | 5 | 1,465 | 4,170 | 7,561 | 5,383 |
| 1999 | 5,986 | 12,399 | 6,424 | 5,421 | 9,405 | 5,782 | 563 | 2,993 | 641 | 15,156 | 7,497 | 7,371 |
| 2000 | 1,827 | 1,706 | 7,612 | 1,617 | 1,317 | 6,727 | 210 | 389 | 885 | 2,097 | 4,353 | 4,138 |
| 2001 | 6,339 | 4,119 | 12,965 | 3,164 | 2,777 | 11,063 | 3,175 | 1,342 | 1,902 | 0 | 74 | 3 |
| 2002 | 2,055 | 1,962 | 4,058 | 1,896 | 1,325 | 3,394 | 159 | 637 | 664 | 0 | 1 | 0 |
| 2003 | 8,736 | 4,039 | 6,145 | 8,595 | 3,501 | 6,016 | 141 | 538 | 129 | 7,562 | 17,455 | 2,615 |
| 2004 | 28,027 | 2,058 | 2,382 | 27,098 | 1,532 | 2,244 | 929 | 526 | 138 | 63,347 | 24,666 | 1,869 |
| 2005 | 20,080 | 2,968 | 0 | 18,979 | 2,447 | 0 | 1,101 | 521 | 0 | 43,467 | 25,595 | 0 |
| 2006 | 18,640 | 1,427 | 5,122 | 17,729 | 933 | 4,553 | 911 | 494 | 569 | 36,021 | 8,272 | 4,944 |
| 2007 | 29,759 | 484 | 7,612 | 29,196 | 342 | 7,182 | 563 | 142 | 430 | 33,439 | 4,716 | 10,398 |
| 2008 | 5,031 | 4,651 | 7,261 | 3,467 | 3,483 | 6,936 | 1,564 | 1,168 | 325 | 12,547 | 5,659 | 10,365 |
| 2009 | 24,085 | 8,640 | 10,080 | 23,623 | 5,583 | 8,589 | 462 | 3,057 | 1,491 | 13,188 | 8,508 | 8,271 |
| 2010 | 5,231 | 2,882 | 5,775 | 4,959 | 2,105 | 5,210 | 272 | 776 | 565 | 11,645 | 7,651 | 5,811 |
| 2011 | 13,750 | 7,323 | 9,693 | 13,454 | 5,954 | 8,972 | 296 | 1,368 | 721 | 22,916 | 11,127 | 7,307 |
| 2012 | 2,108 | 3,259 | 3,338 | 2,079 | 2,718 | 3,292 | 29 | 541 | 46 | 3,760 | 10,443 | 4,492 |
| 2013 | 3,326 | 5,810 | 2,978 | 3,192 | 5,013 | 2,866 | 134 | 797 | 112 | 3,720 | 9,065 | 2,582 |
| 2014 | 3,103 | 1,792 | 1,815 | 2,954 | 1,399 | 1,734 | 149 | 394 | 80 | 6,631 | 6,231 | 2,781 |
| 2015 | 4,676 | 3,699 | 5,652 | 4,562 | 2,925 | 5,460 | 114 | 773 | 193 | 6,728 | 6,326 | 3,033 |
| 2016 | 12,733 | 4,673 | 4,287 | 12,532 | 3,765 | 4,262 | 202 | 908 | 26 | 40,868 | 10,148 | 8,605 |
| 2017 | 6,943 | 1,953 | 893 | 6,732 | 1,511 | 830 | 211 | 443 | 63 | 6,637 | 4,730 | 727 |
| 2018 | 1,380 | 1,473 | 148 | 1,301 | 994 | 136 | 78 | 479 | 12 | 1,843 | 2,272 | 102 |
| 2019 | 3,316 | 2,130 | 40 | 3,176 | 1,422 | 20 | 140 | 709 | 21 | 3,220 | 2,396 | 18 |
| Averages |  |  |  |  |  |  |  |  |  |  |  |  |
| 83-17 | 11,424 | 4,873 | 5,882 | 10,881 | 3,629 | 5,368 | 1,002 | 1,397 | 514 | 17,491 | 9,809 | 5,481 |
| 08-17 | 8,099 | 4,468 | 5,177 | 7,755 | 3,446 | 4,815 | 343 | 1,022 | 362 | 12,864 | 7,989 | 5,397 |

Appendix B. 11. Tahltan sockeye salmon stock proportions and harvest of in the Alaskan commercial gillnet fishery; Districts 106 \& 108, 1994-2019.

| Year | D106 |  |  | D106-41/42 |  |  | D106-30 |  |  | D108 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All Tahltan | TahltanEnhance | WildTahltan | All Tahltan | TahltanEnhance | WildTahltan | All Tahltan | TahltanEnhance | WildTahltan | All Tahltan | TahltanEnhance | WildTahltan |
| 1994 | 0.142 | 0.033 | 0.108 | 0.166 | 0.040 | 0.127 | 0.069 | 0.015 | 0.055 | 0.362 | 0.116 | 0.246 |
| 1995 | 0.081 | 0.036 | 0.044 | 0.099 | 0.051 | 0.049 | 0.047 | 0.010 | 0.036 | 0.455 | 0.257 | 0.198 |
| 1996 | 0.166 | 0.019 | 0.147 | 0.228 | 0.025 | 0.203 | 0.008 | 0.002 | 0.006 | 0.622 | 0.070 | 0.552 |
| 1997 | 0.058 | 0.021 | 0.037 | 0.079 | 0.023 | 0.056 | 0.009 | 0.015 | -0.006 | 0.362 | 0.102 | 0.260 |
| 1998 | 0.015 | 0.002 | 0.013 | 0.017 | 0.003 | 0.014 | 0.010 | 0.000 | 0.010 | 0.189 | 0.008 | 0.182 |
| 1999 | 0.057 | 0.003 | 0.054 | 0.074 | 0.004 | 0.070 | 0.018 | 0.001 | 0.017 | 0.414 | 0.024 | 0.390 |
| 2000 | 0.020 | 0.003 | 0.017 | 0.028 | 0.004 | 0.024 | 0.007 | 0.000 | 0.007 | 0.132 | 0.032 | 0.100 |
| 2001 | 0.039 | 0.010 | 0.029 | 0.032 | 0.015 | 0.017 | 0.049 | 0.002 | 0.047 | 0.000 | 0.000 | 0.000 |
| 2002 | 0.037 | 0.012 | 0.024 | 0.049 | 0.017 | 0.031 | 0.009 | 0.000 | 0.009 | 0.000 | 0.000 | 0.000 |
| 2003 | 0.075 | 0.036 | 0.039 | 0.097 | 0.047 | 0.050 | 0.005 | 0.001 | 0.004 | 0.179 | 0.087 | 0.092 |
| 2004 | 0.241 | 0.097 | 0.144 | 0.315 | 0.125 | 0.191 | 0.031 | 0.020 | 0.011 | 0.613 | 0.252 | 0.361 |
| 2005 | 0.182 | 0.094 | 0.088 | 0.227 | 0.123 | 0.104 | 0.041 | 0.002 | 0.039 | 0.437 | 0.258 | 0.179 |
| 2006 | 0.203 | 0.113 | 0.090 | 0.304 | 0.174 | 0.130 | 0.027 | 0.007 | 0.020 | 0.588 | 0.331 | 0.257 |
| 2007 | 0.322 | 0.200 | 0.122 | 0.403 | 0.251 | 0.152 | 0.028 | 0.015 | 0.013 | 0.474 | 0.324 | 0.150 |
| 2008 | 0.165 | 0.073 | 0.091 | 0.168 | 0.106 | 0.062 | 0.158 | 0.004 | 0.154 | 0.352 | 0.165 | 0.186 |
| 2009 | 0.215 | 0.063 | 0.152 | 0.287 | 0.084 | 0.203 | 0.016 | 0.004 | 0.012 | 0.360 | 0.097 | 0.262 |
| 2010 | 0.047 | 0.019 | 0.027 | 0.084 | 0.034 | 0.049 | 0.005 | 0.002 | 0.003 | 0.356 | 0.143 | 0.213 |
| 2011 | 0.094 | 0.051 | 0.043 | 0.146 | 0.079 | 0.067 | 0.005 | 0.003 | 0.003 | 0.445 | 0.191 | 0.254 |
| 2012 | 0.046 | 0.019 | 0.028 | 0.070 | 0.028 | 0.042 | 0.002 | 0.002 | 0.000 | 0.171 | 0.062 | 0.109 |
| 2013 | 0.068 | 0.032 | 0.035 | 0.099 | 0.048 | 0.051 | 0.008 | 0.002 | 0.006 | 0.180 | 0.093 | 0.088 |
| 2014 | 0.053 | 0.027 | 0.027 | 0.090 | 0.044 | 0.046 | 0.006 | 0.004 | 0.002 | 0.335 | 0.176 | 0.159 |
| 2015 | 0.038 | 0.016 | 0.023 | 0.064 | 0.026 | 0.038 | 0.002 | 0.001 | 0.001 | 0.294 | 0.130 | 0.164 |
| 2016 | 0.119 | 0.042 | 0.078 | 0.172 | 0.060 | 0.111 | 0.006 | 0.002 | 0.004 | 0.583 | 0.190 | 0.392 |
| 2017 | 0.154 | 0.053 | 0.101 | 0.237 | 0.081 | 0.156 | 0.013 | 0.006 | 0.007 | 0.465 | 0.174 | 0.291 |
| 2018 | 0.055 | 0.028 | 0.026 | 0.089 | 0.048 | 0.041 | 0.007 | 0.001 | 0.006 | 0.322 | 0.154 | 0.167 |
| 2019 | 0.139 | 0.059 | 0.080 | 0.221 | 0.098 | 0.124 | 0.015 | 0.001 | 0.013 | 0.489 | 0.245 | 0.243 |
| Averages |  |  |  |  |  |  |  |  |  |  |  |  |
| 94-18 | 0.108 | 0.044 | 0.064 | 0.145 | 0.062 | 0.083 | 0.023 | 0.005 | 0.019 | 0.348 | 0.137 | 0.210 |
| 09-18 | 0.089 | 0.035 | 0.054 | 0.134 | 0.053 | 0.080 | 0.007 | 0.003 | 0.004 | 0.351 | 0.141 | 0.210 |
| 1994 | 29,876 | 7,019 | 22,857 | 26,164 | 6,230 | 19,934 | 3,712 | 789 | 2,923 | 35,222 | 11,286 | 23,936 |
| 1995 | 16,715 | 7,533 | 9,182 | 13,292 | 6,778 | 6,514 | 3,423 | 755 | 2,668 | 34,950 | 19,726 | 15,224 |
| 1996 | 51,598 | 5,772 | 45,826 | 50,924 | 5,584 | 45,340 | 674 | 188 | 486 | 95,837 | 10,796 | 85,041 |
| 1997 | 9,764 | 3,483 | 6,281 | 9,327 | 2,733 | 6,594 | 437 | 750 | -313 | 33,644 | 9,500 | 24,144 |
| 1998 | 1,678 | 201 | 1,477 | 1,326 | 201 | 1,125 | 352 | 0 | 352 | 4,170 | 170 | 4,000 |
| 1999 | 5,986 | 288 | 5,698 | 5,421 | 266 | 5,155 | 563 | 22 | 541 | 15,156 | 877 | 14,279 |
| 2000 | 1,827 | 254 | 1,573 | 1,617 | 254 | 1,363 | 210 | 0 | 210 | 2,097 | 506 | 1,591 |
| 2001 | 6,339 | 1,592 | 4,747 | 3,164 | 1,441 | 1,723 | 3,175 | 151 | 3,024 | 0 | 0 | 0 |
| 2002 | 2,055 | 680 | 1,375 | 1,896 | 680 | 1,216 | 159 | 0 | 159 | 0 | 0 | 0 |
| 2003 | 8,736 | 4,186 | 4,550 | 8,595 | 4,161 | 4,434 | 141 | 25 | 116 | 7,562 | 3,666 | 3,896 |
| 2004 | 28,027 | 11,306 | 16,721 | 27,098 | 10,713 | 16,385 | 929 | 593 | 336 | 63,347 | 26,073 | 37,274 |
| 2005 | 20,080 | 10,356 | 9,724 | 18,979 | 10,292 | 8,687 | 1,101 | 64 | 1,037 | 43,467 | 25,614 | 17,853 |
| 2006 | 18,640 | 10,363 | 8,277 | 17,729 | 10,126 | 7,603 | 911 | 237 | 674 | 36,021 | 20,259 | 15,762 |
| 2007 | 29,759 | 18,506 | 11,253 | 29,196 | 18,198 | 10,998 | 563 | 308 | 255 | 33,439 | 22,867 | 10,572 |
| 2008 | 5,031 | 2,240 | 2,791 | 3,467 | 2,196 | 1,271 | 1,564 | 44 | 1,520 | 12,547 | 5,899 | 6,648 |
| 2009 | 24,085 | 7,053 | 17,032 | 23,623 | 6,938 | 16,685 | 462 | 115 | 346 | 13,188 | 3,560 | 9,628 |
| 2010 | 5,231 | 2,140 | 3,091 | 4,959 | 2,035 | 2,924 | 272 | 105 | 167 | 11,645 | 4,665 | 6,980 |
| 2011 | 13,750 | 7,449 | 6,301 | 13,454 | 7,300 | 6,155 | 296 | 150 | 146 | 22,916 | 9,834 | 13,083 |
| 2012 | 2,108 | 852 | 1,256 | 2,079 | 824 | 1,255 | 29 | 28 | 1 | 3,760 | 1,372 | 2,388 |
| 2013 | 3,326 | 1,583 | 1,743 | 3,192 | 1,551 | 1,640 | 134 | 32 | 102 | 3,720 | 1,909 | 1,811 |
| 2014 | 3,103 | 1,553 | 1,550 | 2,954 | 1,446 | 1,508 | 149 | 107 | 42 | 6,631 | 3,484 | 3,147 |
| 2015 | 4,676 | 1,920 | 2,756 | 4,562 | 1,862 | 2,700 | 114 | 58 | 56 | 6,728 | 2,968 | 3,760 |
| 2016 | 12,733 | 4,452 | 8,282 | 12,532 | 4,401 | 8,131 | 202 | 51 | 151 | 40,868 | 13,355 | 27,514 |
| 2017 | 6,943 | 2,398 | 4,545 | 6,732 | 2,301 | 4,431 | 211 | 97 | 114 | 6,637 | 2,485 | 4,153 |
| 2018 | 1,380 | 716 | 664 | 1,301 | 704 | 598 | 78 | 12 | 66 | 1,843 | 885 | 958 |
| 2019 | 3,316 | 1,412 | 1,904 | 3,176 | 1,399 | 1,777 | 140 | 13 | 127 | 3,220 | 1,616 | 1,604 |
| Averages |  |  |  |  |  |  |  |  |  |  |  |  |
| 94-18 | 12,538 | 4,556 | 7,982 | 11,743 | 4,369 | 7,375 | 794 | 187 | 607 | 21,416 | 8,070 | 13,346 |
| 09-18 | 7,734 | 3,012 | 4,722 | 7,539 | 2,936 | 4,603 | 195 | 75 | 119 | 11,794 | 4,452 | 7,342 |

Appendix B. 12. Stikine River sockeye salmon harvest in the U.S. Subsistence fishery, 2004-2019.

| Stocks were proportioned based on using inriver stock comps |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Stikine |  |  |  |  |  |  | TahltanEnhance | WildTahltan |
| Year | All Tahltan | Mainstem | Tuya | Total | All Tahltan | Mainstem | Tuya |  |  |
| 2004 | 0.664 | 0.311 | 0.026 | 243 | 161 | 75 | 6 | 65 | 96 |
| 2005 | 0.662 | 0.318 | 0.020 | 252 | 167 | 80 | 5 | 77 | 90 |
| 2006 | 0.672 | 0.185 | 0.144 | 390 | 262 | 72 | 56 | 146 | 116 |
| 2007 | 0.541 | 0.294 | 0.165 | 244 | 132 | 72 | 40 | 67 | 65 |
| 2008 | 0.385 | 0.289 | 0.326 | 428 | 165 | 124 | 139 | 80 | 85 |
| 2009 | 0.541 | 0.215 | 0.244 | 723 | 391 | 156 | 176 | 101 | 290 |
| 2010 | 0.417 | 0.294 | 0.289 | 1,653 | 689 | 485 | 479 | 184 | 505 |
| 2011 | 0.467 | 0.328 | 0.205 | 1,741 | 814 | 571 | 356 | 309 | 505 |
| 2012 | 0.246 | 0.492 | 0.262 | 1,302 | 320 | 641 | 341 | 113 | 207 |
| 2013 | 0.346 | 0.489 | 0.166 | 1,655 | 572 | 809 | 274 | 231 | 341 |
| 2014 | 0.523 | 0.223 | 0.255 | 1,527 | 798 | 340 | 389 | 381 | 418 |
| 2015 | 0.435 | 0.286 | 0.279 | 1,844 | 803 | 527 | 515 | 277 | 525 |
| 2016 | 0.611 | 0.245 | 0.144 | 2,126 | 1,298 | 521 | 307 | 383 | 916 |
| 2017 | 0.647 | 0.254 | 0.099 | 1,727 | 1,118 | 439 | 170 | 429 | 689 |
| 2018 | 0.609 | 0.357 | 0.034 | 1,732 | 1,056 | 618 | 58 | 671 | 385 |
| 2019 | 0.666 | 0.334 | 0.000 | 1,875 | 1,248 | 627 | 0 | 696 | 552 |

Appendix B. 13. Stock proportions of sockeye salmon in the Alaskan District 106 and 108 test fisheries, 1984-2019.

| Year | Alaska | Canada | Stikine |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | All Tahltar | Tuya | Mainstem | Total | 11tanEnhat | WildTahltan |
| Sub-district 106-41 (Sumner Strait) Proportions |  |  |  |  |  |  |  |  |
| 1984 | 0.658 | 0.269 | 0.029 |  | 0.044 | 0.074 |  |  |
| 1985 | 0.480 | 0.401 | 0.109 |  | 0.010 | 0.119 |  |  |
| 1986 | 0.834 | 0.149 | 0.008 |  | 0.009 | 0.017 |  |  |
| 1987 | 0.816 | 0.166 | 0.015 |  | 0.003 | 0.018 |  |  |
| 1988 | 0.868 | 0.098 | 0.034 |  | 0.000 | 0.034 |  |  |
| 1989 | 0.624 | 0.304 | 0.017 |  | 0.056 | 0.072 |  |  |
| 1990 | 0.548 | 0.416 | 0.014 |  | 0.022 | 0.035 |  |  |
| ---- |  |  |  |  |  |  |  |  |
| 1994 | 0.500 | 0.250 | 0.250 |  | 0.000 | 0.250 | 0.083 | 0.167 |
| Sub-district 106-41 (Sumner Strait) harvest |  |  |  |  |  |  |  |  |
| 1984 | 901 | 368 | 40 |  | 61 | 101 |  |  |
| 1985 | 2,085 | 1,741 | 475 |  | 44 | 519 |  |  |
| 1986 | 819 | 146 | 8 |  | 9 | 17 |  |  |
| 1987 | 2,169 | 442 | 39 |  | 9 | 47 |  |  |
| 1988 | 886 | 100 | 35 |  | 0 | 35 |  |  |
| 1989 | 1,274 | 621 | 34 |  | 114 | 148 |  |  |
| 1990 | 1,237 | 939 | 31 |  | 49 | 80 |  |  |
| ---- |  |  |  |  |  |  |  |  |
| 1994 | 6 | 3 | 3 |  | 0 | 3 |  |  |
| Sub-district 106-30 (Clarence Strait) Proportions |  |  |  |  |  |  |  |  |
| 1986 | 0.726 | 0.272 | 0.000 |  | 0.002 | 0.002 |  |  |
| 1987 | 0.844 | 0.140 | 0.004 |  | 0.012 | 0.016 |  |  |
| 1988 | 0.746 | 0.254 | 0.000 |  | 0.000 | 0.000 |  |  |
| 1989 | 0.514 | 0.486 | 0.000 |  | 0.000 | 0.000 |  |  |
| Subdistrict 106-30 (Clarence Strait) harvest |  |  |  |  |  |  |  |  |
| 1986 | 263 | 99 | 0 |  | 1 | 1 |  |  |
| 1987 | 758 | 126 | 3 |  | 11 | 15 |  |  |
| 1988 | 12 | 4 | 0 |  | 0 | 0 |  |  |
| 1989 | 19 | 18 | 0 |  | 0 | 0 |  |  |
| District 106 Proportions |  |  |  |  |  |  |  |  |
| 1984 | 0.658 | 0.269 | 0.029 |  | 0.044 | 0.074 |  |  |
| 1985 | 0.480 | 0.401 | 0.109 |  | 0.010 | 0.119 |  |  |
| 1986 | 0.805 | 0.182 | 0.006 |  | 0.007 | 0.013 |  |  |
| 1987 | 0.823 | 0.160 | 0.012 |  | 0.006 | 0.017 |  |  |
| 1988 | 0.867 | 0.100 | 0.033 |  | 0.000 | 0.033 |  |  |
| 1989 | 0.622 | 0.307 | 0.016 |  | 0.055 | 0.071 |  |  |
| 1990 | 0.548 | 0.416 | 0.014 |  | 0.022 | 0.035 |  |  |
| ---- |  |  |  |  |  |  |  |  |
| 1994 | 0.500 | 0.250 | 0.250 |  | 0.000 | 0.250 | 0.000 | 0.250 |
| District 106 harvest |  |  |  |  |  |  |  |  |
| 1984 | 901 | 368 | 40 |  | 61 | 101 |  |  |
| 1985 | 2,085 | 1,741 | 475 |  | 44 | 519 |  |  |
| 1986 | 1,082 | 245 | 8 |  | 9 | 17 |  |  |
| 1987 | 2,928 | 568 | 42 |  | 20 | 62 |  |  |
| 1988 | 898 | 104 | 35 |  | 0 | 35 |  |  |
| 1989 | 1,293 | 639 | 34 |  | 114 | 148 |  |  |
| 1990 | 1,237 | 939 | 31 |  | 49 | 80 |  |  |
| ---- |  |  |  |  |  |  |  |  |
| 1994 | 6 | 3 | 3 |  | 0 | 3 | 0 | 3 |
| District 108 Proportions |  |  |  |  |  |  |  |  |
| 1985 | 0.064 | 0.000 | 0.292 |  | 0.644 | 0.936 |  |  |
| 1986 | 0.134 | 0.044 | 0.486 |  | 0.336 | 0.822 |  |  |
| 1987 | 0.125 | 0.000 | 0.438 |  | 0.437 | 0.875 |  |  |
| 1988 | 0.205 | 0.049 | 0.132 |  | 0.614 | 0.746 |  |  |
| 1989 | 0.132 | 0.084 | 0.072 |  | 0.712 | 0.784 |  |  |
| 1990 | 0.417 | 0.172 | 0.094 |  | 0.318 | 0.411 |  |  |
| 1991 | 0.128 | 0.128 | 0.494 |  | 0.251 | 0.745 |  |  |
| 1992 | 0.149 | 0.076 | 0.333 |  | 0.442 | 0.774 |  |  |
| 1993 | 0.168 | 0.109 | 0.475 |  | 0.248 | 0.719 |  |  |
| ---- |  |  |  |  |  |  |  |  |
| 1998 | 0.064 | 0.041 | 0.353 | 0.438 | 0.104 | 0.895 | 0.016 | 0.336 |
| 1999 | 0.162 | 0.019 | 0.481 | 0.298 | 0.041 | 0.820 | 0.028 | 0.453 |
| 2000 | 0.110 | 0.116 | 0.302 | 0.321 | 0.150 | 0.774 | 0.062 | 0.240 |
| District 108 harvest |  |  |  |  |  |  |  |  |
| 1985 | 81 | 0 | 367 |  | 810 | 1,177 |  |  |
| 1986 | 76 | 25 | 274 |  | 190 | 464 |  |  |
| 1987 | 36 | 0 | 127 |  | 127 | 254 |  |  |
| 1988 | 93 | 22 | 59 |  | 277 | 336 |  |  |
| 1989 | 137 | 87 | 75 |  | 739 | 814 |  |  |
| 1990 | 361 | 149 | 81 |  | 275 | 356 |  |  |
| 1991 | 114 | 114 | 441 |  | 224 | 665 |  |  |
| 1992 | 194 | 99 | 432 |  | 574 | 1,006 |  |  |
| 1993 | 51 | 33 | 144 |  | 75 | 219 |  |  |
| ---- |  |  |  |  |  |  |  |  |
| 1998 | 224 | 145 | 1,238 | 1,538 | 365 | 3,141 | 57 | 1,181 |
| 1999 | 776 | 89 | 2,309 | 1,430 | 197 | 3,936 | 135 | 2,174 |
| 2000 | 516 | 544 | 1,416 | 1,505 | 705 | 3,626 | 291 | 1,125 |

## Appendix B. 14. All harvest in of sockeye salmon in Canadian commercial and

 assessment fisheries, 1972-2019.| All Tuya Area fish considered to be Tuya fish. |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Commercial/FN |  |  |  | Test |  |  |  |  | Tahltan Area |  | Tuya Area |  |
| Year | LRCF | URCF | Telegraphıtal Canadian aboriginal eaty harve |  | Drift Net | Set Net | Additional Drifts | Tuya Assesment | Test total | ESSR | Oto samples | ESSR | Oto samples |
| 1972 |  |  | 4,373 | 4,373 |  |  |  |  |  |  |  |  |  |
| 1973 |  |  | 3,670 | 3,670 |  |  |  |  |  |  |  |  |  |
| 1974 |  |  | 3,500 | 3,500 |  |  |  |  |  |  |  |  |  |
| 1975 |  | 270 | 1,982 | 2,252 |  |  |  |  |  |  |  |  |  |
| 1976 |  | 733 | 2,911 | 3,644 |  |  |  |  |  |  |  |  |  |
| 1977 |  | 1,975 | 4,335 | 6,310 |  |  |  |  |  |  |  |  |  |
| 1978 |  | 1,500 | 3,500 | 5,000 |  |  |  |  |  |  |  |  |  |
| 1979a | 10,534 |  | 3,000 | 13,534 |  |  |  |  |  |  |  |  |  |
| 1980 | 18,119 | 700 | 2,100 | 20,919 |  |  |  |  |  |  |  |  |  |
| 1981 | 21,551 | 769 | 4,697 | 27,017 |  |  |  |  |  |  |  |  |  |
| 1982 | 15,397 | 195 | 4,948 | 20,540 |  |  |  |  |  |  |  |  |  |
| 1983 | 15,857 | 614 | 4,649 | 21,120 |  |  |  |  |  |  |  |  |  |
| 1984 |  |  | 5,327 | 5,327 |  |  |  |  |  |  |  |  |  |
| 1985 | 17,093 | 1,084 | 7,287 | 25,464 |  | 1,340 |  |  | 1,340 |  |  |  |  |
| 1986 | 12,411 | 815 | 4,208 | 17,434 | 412 |  |  |  | 412 |  |  |  |  |
| 1987 | 6,138 | 498 | 2,979 | 9,615 | 385 | 1,283 |  |  | 1,668 |  |  |  |  |
| 1988 | 12,766 | 348 | 2,177 | 15,291 | 325 | 922 |  |  | 1,247 |  |  |  |  |
| 1989 | 17,179 | 493 | 2,360 | 20,032 | 364 | 1,243 |  |  | 1,607 |  |  |  |  |
| 1990 | 14,530 | 472 | 3,022 | 18,024 | 447 | 1,493 |  |  | 1,940 |  |  |  |  |
| 1991 | 17,563 | 761 | 4,439 | 22,763 | 503 | 1,872 |  |  | 2,375 |  |  |  |  |
| 1992 | 21,031 | 822 | 4,431 | 26,284 | 393 | 1,971 | 594 |  | 2,958 |  |  |  |  |
| 1993 | 38,464 | 1,692 | 7,041 | 47,197 | 440 | 1,384 | 1,925 |  | 3,749 | 1,752 |  | 0 |  |
| 1994 | 38,462 | 2,466 | 4,167 | 45,095 | 179 | 414 | 840 |  | 1,433 | 6,852 |  | 0 |  |
| 1995 | 45,622 | 2,355 | 5,490 | 53,467 | 297 | 850 | 1,423 |  | 2,570 | 10,740 |  | 0 |  |
| 1996 | 66,262 | 1,101 | 6,918 | 74,281 | 262 | 338 | 712 |  | 1,312 | 14,339 |  | 216 |  |
| 1997 | 56,995 | 2,199 | 6,365 | 65,559 | 245 |  |  |  | 245 |  | 378 | 2,015 |  |
| 1998 | 37,310 | 907 | 5,586 | 43,803 | 190 |  |  |  | 190 |  | 390 | 6,103 |  |
| 1999 | 32,556 | 625 | 4,874 | 38,055 | 410 | 803 | 4,683 |  | 5,896 |  | 429 | 2,822 |  |
| 2000 | 20,472 | 889 | 6,107 | 27,468 | 374 | 1,015 | 989 |  | 2,378 |  | 406 | 1,283 |  |
| 2001 | 19,872 | 487 | 5,241 | 25,600 | 967 | 2,223 | 91 |  | 3,281 |  | 50 | 0 | 410 |
| 2002 | 10,420 | 484 | 6,390 | 17,294 | 744 | 3,540 | 128 |  | 4,412 |  | 400 | 0 | 501 |
| 2003 | 51,735 | 454 | 6,595 | 58,784 | 997 | 2,173 | 186 |  | 3,356 |  | 400 | 7,031 | 0 |
| 2004 | 77,530 | 626 | 6,862 | 85,018 | 420 | 918 | 0 |  | 1,338 |  | 420 | 1,675 | 0 |
| 2005 | 79,952 | 605 | 5,333 | 85,890 | 339 | 1,312 | 0 |  | 1,651 |  | 400 | 0 | 148 |
| 2006 | 95,791 | 520 | 5,094 | 101,405 | 299 | 629 | 0 |  | 928 |  | 400 | 0 | 0 |
| 2007 | 56,913 | 912 | 2,188 | 60,013 | 435 | 673 | 0 |  | 1,108 |  | 200 | 0 | 151 |
| 2008 | 28,636 | 505 | 4,510 | 33,651 | 241 | 870 | 0 | 1,955 | 3,066 |  | 100 |  | 280 |
| 2009 | 39,409 | 2,476 | 5,148 | 47,033 | 250 | 1,092 | 0 | 2,144 | 3,486 |  | 349 |  | 214 |
| 2010 | 42,049 | 1,215 | 7,276 | 50,540 | 304 | 1,450 | 3 | 2,792 | 4,549 |  | 158 |  | 224 |
| 2011 | 47,575 | 972 | 6,893 | 55,440 | 590 | 2,525 | 21 | 2,878 | 6,014 |  | 340 |  | 153 |
| 2012 | 25,939 | 468 | 4,000 | 30,407 | 638 | 1,139 | 19 | 2,306 | 4,102 |  | 224 |  | 189 |
| 2013 | 24,290 | 876 | 7,528 | 32,694 | 294 | 1,008 | 24 | 2,144 | 3,470 |  | 0 |  | 207 |
| 2014 | 30,487 | 548 | 9,951 | 40,986 | 362 | 1,410 | 15 | 883 | 2,670 |  | 400 |  | 0 |
| 2015 | 51,660 | 202 | 8,184 | 60,046 | 468 | 1,397 | 0 |  | 1,865 |  | 0 |  |  |
| 2016 | 75,739 | 333 | 10,644 | 86,716 | 460 | 1,287 | 13 |  | 1,760 |  | 173 |  |  |
| 2017 | 32,849 | 322 | 8,578 | 41,749 | 276 | 1,632 | 0 |  | 1,908 |  | 0 |  |  |
| 2018 | 16,915 | 407 | 5,415 | 22,737 | 205 | 1,107 | 0 |  | 1,312 |  | 207 |  |  |
| 2019 | 10,772 | 40 | 5,401 | 16,213 | 0 | 0 | 0 |  | 0 |  | 212 |  |  |
| Avera |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 85-19 | 37,136 | 881 | 5,685 | 43,701 | 410 | 1,333 |  |  | 2,400 |  |  |  |  |
| 09-18 | 38,691 | 782 | 7,362 | 46,835 | 385 | 1,405 |  |  | 3,114 |  |  |  |  |

Appendix B. 15. Sockeye salmon stock proportions and harvest by stock in the Canadian commercial and assessment fishery in the Stikine River, 1979-2019.

| Year | All Tahltan | $\begin{gathered} \hline \text { LRCF } \\ \hline \text { Mainstem } \\ \hline \end{gathered}$ | Tuya | All Tahltan | URCFMainstem | Tuya | Telegraph Aboriginal |  |  | $\xrightarrow[\text { LRTF }]{\text { LIC }}$ |  |  | Tuya Assessment |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | All Tahtan | Mainstem | Tuya | AllTahlan | Mainstem | Tuya | All Tahlan | Mainstem | Tuya |
| 1972 |  |  |  |  |  |  | 0.900 | 0.100 |  |  |  |  |  |  |  |
| 1973 |  |  |  |  |  |  | 0.900 | 0.100 |  |  |  |  |  |  |  |
| 1974 |  |  |  |  |  |  | 0.900 | 0.100 |  |  |  |  |  |  |  |
| 1975 |  |  |  | 0.900 | 0.100 |  | 0.900 | 0.100 |  |  |  |  |  |  |  |
| 1976 |  |  |  | 0.900 | 0.100 |  | 0.900 | 0.100 |  |  |  |  |  |  |  |
| 1977 |  |  |  | 0.900 | 0.100 |  | 0.900 | 0.100 |  |  |  |  |  |  |  |
| 1978 |  |  |  | 0.900 | 0.100 |  | 0.900 | 0.100 |  |  |  |  |  |  |  |
| 1979 | 0.433 | 0.567 |  |  |  |  | 0.900 | 0.100 |  |  |  |  |  |  |  |
| 1980 | 0.309 | 0.691 |  | 0.900 | 0.100 |  | 0.900 | 0.100 |  |  |  |  |  |  |  |
| 1981 | 0.476 | 0.524 |  | 0.900 | 0.100 |  | 0.900 | 0.100 |  |  |  |  |  |  |  |
| 1982 | 0.624 | 0.376 |  | 0.900 | 0.100 |  | 0.900 | 0.100 |  |  |  |  |  |  |  |
| 1983 | 0.422 | 0.578 |  | 0.900 | 0.100 |  | 0.900 | 0.100 |  |  |  |  |  |  |  |
| 1984 |  |  |  |  |  |  | 0.900 | 0.100 |  |  |  |  |  |  |  |
| 1985 | 0.623 | 0.377 |  | 0.900 | 0.100 |  | 0.900 | 0.100 |  | 0.372 | 0.628 |  |  |  |  |
| 1986 | 0.489 | 0.511 |  | 0.900 | 0.100 |  | 0.900 | 0.100 |  | 0.352 | 0.648 |  |  |  |  |
| 1987 | 0.225 | 0.775 |  | 0.900 | 0.100 |  | 0.900 | 0.100 |  | 0.273 | 0.727 |  |  |  |  |
| 1988 | 0.161 | 0.839 |  | 0.900 | 0.100 |  | 0.900 | 0.100 |  | 0.282 | 0.718 |  |  |  |  |
| 1989 | 0.164 | 0.836 |  | 0.900 | 0.100 |  | 0.900 | 0.100 |  | 0.258 | 0.742 |  |  |  |  |
| 1990 | 0.346 | 0.654 |  | 0.900 | 0.100 |  | 0.900 | 0.100 |  | 0.454 | 0.546 |  |  |  |  |
| 1991 | 0.634 | 0.366 |  | 0.900 | 0.100 |  | 0.900 | 0.100 |  | 0.608 | 0.392 |  |  |  |  |
| 1992 | 0.482 | 0.518 |  | 0.900 | 0.100 |  | 0.900 | 0.100 |  | 0.646 | 0.354 |  |  |  |  |
| 1993 | 0.537 | 0.463 |  | 0.900 | 0.100 |  | 0.900 | 0.100 |  | 0.583 | 0.417 |  |  |  |  |
| 1994 | 0.616 | 0.384 |  | 0.900 | 0.100 |  | 0.900 | 0.100 |  | 0.857 | 0.143 |  |  |  |  |
| 1995 | 0.676 | 0.304 | 0.020 | 0.900 | 0.075 | 0.025 | 0.900 | 0.075 | 0.025 | 0.803 | 0.189 | 0.008 |  |  |  |
| 1996 | 0.537 | 0.350 | 0.113 | 0.858 | 0.005 | 0.136 | 0.839 | 0.021 | 0.141 | 0.667 | 0.245 | 0.088 |  |  |  |
| 1997 | 0.356 | 0.372 | 0.272 | 0.524 | 0.097 | 0.379 | 0.521 | 0.101 | 0.378 | 0.396 | 0.384 | 0.220 |  |  |  |
| 1998 | 0.335 | 0.313 | 0.352 | 0.400 | 0.030 | 0.570 | 0.421 | 0.023 | 0.555 | 0.368 | 0.363 | 0.268 |  |  |  |
| 1999 | 0.576 | 0.183 | 0.241 | 0.574 | 0.096 | 0.330 | 0.623 | 0.085 | 0.292 | 0.514 | 0.221 | 0.265 |  |  |  |
| 2000 | 0.252 | 0.350 | 0.397 | 0.252 | 0.094 | 0.654 | 0.284 | 0.063 | 0.653 | 0.254 | 0.333 | 0.413 |  |  |  |
| 2001 | 0.175 | 0.599 | 0.226 | 0.437 | 0.092 | 0.470 | 0.342 | 0.097 | 0.561 | 0.208 | 0.510 | 0.282 |  |  |  |
| 2002 | 0.320 | 0.552 | 0.128 | 0.376 | 0.128 | 0.496 | 0.422 | 0.084 | 0.494 | 0.391 | 0.451 | 0.157 |  |  |  |
| 2003 | 0.427 | 0.412 | 0.161 | 0.696 | 0.084 | 0.220 | 0.605 | 0.157 | 0.238 | 0.448 | 0.424 | 0.128 |  |  |  |
| 2004 | 0.707 | 0.276 | 0.016 | 0.861 | 0.072 | 0.067 | 0.909 | 0.002 | 0.089 | 0.512 | 0.455 | 0.033 |  |  |  |
| 2005 | 0.761 | 0.221 | 0.018 | 0.962 | 0.017 | 0.021 | 0.956 | 0.031 | 0.013 | 0.542 | 0.453 | 0.005 |  |  |  |
| 2006 | 0.747 | 0.075 | 0.178 | 0.852 | 0.015 | 0.133 | 0.780 | 0.089 | 0.131 | 0.355 | 0.631 | 0.014 |  |  |  |
| 2007 | 0.635 | 0.173 | 0.191 | 0.658 | 0.299 | 0.043 | 0.643 | 0.316 | 0.042 | 0.262 | 0.662 | 0.076 |  |  |  |
| 2008 | 0.470 | 0.141 | 0.389 | 0.719 | 0.095 | 0.186 | 0.729 | 0.088 | 0.183 | 0.385 | 0.348 | 0.266 | 0.278 | 0.233 | 0.489 |
| 2009 | 0.601 | 0.149 | 0.250 | 0.668 | 0.029 | 0.303 | 0.686 | 0.033 | 0.281 | 0.323 | 0.490 | 0.187 | 0.220 | 0.067 | 0.714 |
| 2010 | 0.456 | 0.188 | 0.356 | 0.565 | 0.007 | 0.428 | 0.570 | 0.017 | 0.413 | 0.258 | 0.634 | 0.108 | 0.427 | 0.061 | 0.512 |
| 2011 | 0.495 | 0.293 | 0.212 | 0.678 | 0.034 | 0.288 | 0.670 | 0.046 | 0.284 | 0.268 | 0.578 | 0.154 | 0.343 | 0.089 | 0.568 |
| 2012 | 0.274 | 0.476 | 0.250 | 0.460 | 0.011 | 0.529 | 0.475 | 0.033 | 0.491 | 0.242 | 0.443 | 0.315 | 0.091 | 0.026 | 0.883 |
| 2013 | 0.347 | 0.460 | 0.193 | 0.578 | 0.143 | 0.279 | 0.505 | 0.205 | 0.290 | 0.236 | 0.748 | 0.016 | 0.136 | 0.142 | 0.722 |
| 2014 | 0.547 | 0.210 | 0.243 | 0.564 | 0.057 | 0.379 | 0.584 | 0.064 | 0.353 | 0.450 | 0.306 | 0.243 | 0.490 | 0.030 | 0.480 |
| 2015 | 0.444 | 0.266 | 0.290 | 0.587 | 0.035 | 0.378 | 0.584 | 0.020 | 0.396 | 0.516 | 0.172 | 0.312 |  |  |  |
| 2016 | 0.687 | 0.147 | 0.166 | 0.812 | 0.002 | 0.186 | 0.804 | 0.002 | 0.194 | 0.539 | 0.279 | 0.182 |  |  |  |
| 2017 | 0.695 | 0.193 | 0.113 | 0.633 | 0.079 | 0.288 | 0.596 | 0.062 | 0.342 | 0.665 | 0.281 | 0.054 |  |  |  |
| 2018 | 0.650 | 0.314 | 0.035 | 0.963 | 0.020 | 0.017 | 0.965 | 0.020 | 0.015 | 0.650 | 0.324 | 0.026 |  |  |  |
| 2019 | 0.790 | 0.210 | 0.000 | 0.980 | 0.000 | 0.000 | 0.980 | 0.020 | 0.000 |  |  |  |  |  |  |
| Averages |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 79-18 | 0.480 | 0.397 | 0.201 | 0.742 | 0.079 | 0.283 | 0.745 | 0.083 | 0.286 |  |  |  |  |  |  |
| 09-18 | 0.519 | 0.270 | 0.211 | 0.651 | 0.042 | 0.307 | 0.644 | 0.050 | 0.306 | 0.415 | 0.426 | 0.160 |  |  |  |
| 1972 |  |  |  |  |  |  | 3,936 | 437 |  |  |  |  |  |  |  |
| 1973 |  |  |  |  |  |  | 3,303 | 367 |  |  |  |  |  |  |  |
| 1974 |  |  |  |  |  |  | 3,150 | 350 |  |  |  |  |  |  |  |
| 1975 |  |  |  | 243 | 27 |  | 1,784 | 198 |  |  |  |  |  |  |  |
| 1976 |  |  |  | 660 | 73 |  | 2,620 | 291 |  |  |  |  |  |  |  |
| 1977 |  |  |  | 1,778 | 198 |  | 3,902 | 434 |  |  |  |  |  |  |  |
| 1978 |  |  |  | 1,350 | 150 |  | 3,150 | 350 |  |  |  |  |  |  |  |
| 1979 | 4,561 | 5,973 |  |  |  |  | 2,700 | 300 |  |  |  |  |  |  |  |
| 1980 | 5.599 | 12,520 |  | 630 | 70 |  | 1,890 | 210 |  |  |  |  |  |  |  |
| 1981 | 10,258 | 11,293 |  | 692 | 77 |  | 4,227 | 470 |  |  |  |  |  |  |  |
| 1982 | 9,608 | 5,789 |  | 176 | 20 |  | 4,453 | 495 |  |  |  |  |  |  |  |
| 1983 | 6,692 | 9,165 |  | 553 | 61 |  | 4,184 | 465 |  |  |  |  |  |  |  |
| 1984 |  |  |  |  |  |  | 4,794 | 533 |  |  |  |  |  |  |  |
| 1985 | 10,649 | 6,444 |  | 976 | 108 |  | 6,558 | 729 |  | 499 | 841 |  |  |  |  |
| 1986 | 6,069 | 6,342 |  | 734 | 82 |  | 3,787 | 421 |  | 145 | 267 |  |  |  |  |
| 1987 | 1,380 | 4,758 |  | 448 | 50 |  | 2,681 | 298 |  | 455 | 1,213 |  |  |  |  |
| 1988 | 2,062 | 10,704 |  | 313 | 35 |  | 1,959 | 218 |  | 352 | 895 |  |  |  |  |
| 1989 | 2,813 | 14,366 |  | 444 | 49 |  | 2,124 | 236 |  | 415 | 1,192 |  |  |  |  |
| 1990 | 5,029 | 9,501 |  | 425 | 47 |  | 2,720 | 302 |  | 881 | 1,059 |  |  |  |  |
| 1991 | 11,136 | 6.427 |  | 685 | 76 |  | 3,995 | 444 |  | 1,443 | 932 |  |  |  |  |
| 1992 | 10,134 | 10,897 |  | 740 | 82 |  | 3,988 | 443 |  | 1,912 | 1,046 |  |  |  |  |
| 1993 | 20,662 | 17,802 |  | 1,523 | 169 |  | 6,337 | 704 |  | 2,184 | 1,565 |  |  |  |  |
| 1994 | 23,678 | 14,784 |  | 2,219 | 247 |  | 3,750 | 417 |  | 1,228 | 205 |  |  |  |  |
| 1995 | 30,848 | 13,881 | 893 | 2,120 | 176 | 60 | 4,941 | 410 | 139 | 2,064 | 486 | 20 |  |  |  |
| 1996 | 35,584 | 23,213 | 7,465 | 945 | 6 | 150 | 5,802 | 144 | 972 | 875 | 321 | 116 |  |  |  |
| 1997 | 20,269 | 21,213 | 15,513 | 1,152 | 213 | 834 | 3,318 | 644 | 2,403 | 97 | 94 | 54 |  |  |  |
| 1998 | 12,498 | 11,675 | 13,137 | 363 | 27 | 517 | 2,352 | 131 | 3,103 | 70 | 69 | 51 |  |  |  |
| 1999 | 18,742 | 5,952 | 7,862 | 359 | 60 | 206 | 3,038 | 413 | 1,423 | 3,031 | 1,301 | 1,564 |  |  |  |
| 2000 | 5,165 | 7,171 | 8,136 | 224 | 84 | 581 | 1,733 | 385 | 3,989 | 605 | 791 | 982 |  |  |  |
| 2001 | 3,482 | 11,907 | 4,483 | 213 | 45 | 229 | 1,795 | 507 | 2,939 | 684 | 1,673 | 924 |  |  |  |
| 2002 | 3,335 | 5,750 | 1,335 | 182 | 62 | 240 | 2,697 | 538 | 3,155 | 1,726 | 1,992 | 694 |  |  |  |
| 2003 | 22,067 | 21,333 | 8,335 | 316 | 38 | 100 | 3,987 | 1,037 | 1,571 | 1,505 | 1,423 | 428 |  |  |  |
| 2004 | 54,841 | 21,415 | 1,276 | 539 | 45 | 42 | 6,240 | 14 | 608 | 686 | 608 | 44 |  |  |  |
| 2005 | 60,881 | 17,634 | 1,437 | 582 | 10 | 13 | 5,099 | 163 | 71 | 895 | 748 | 8 |  |  |  |
| 2006 | 71,573 | 7,139 | 17,079 | 443 | 8 | 69 | 3,974 | 452 | 668 | 329 | 586 | 13 |  |  |  |
| 2007 | 36,167 | 9,855 | 10,891 | 600 | 273 | 39 | 1,406 | 691 | 91 | 290 | 734 | 84 |  |  |  |
| 2008 | 13,455 | 4,028 | 11,153 | 363 | 48 | 94 | 3,287 | 398 | 825 | 428 | 387 | 296 | 543 | 455 | 956 |
| 2009 | 23,666 | 5,891 | 9,852 | 1,654 | 73 | 749 | 3,530 | 169 | 1,449 | 434 | 657 | 251 | 471 | 144 | 1,530 |
| 2010 | 19,185 | 7,899 | 14,965 | 687 | 9 | 520 | 4,145 | 127 | 3,004 | 453 | 1,114 | 190 | 1,192 | 171 | 1,429 |
| 2011 | 23,530 | 13,939 | 10,106 | 659 | 33 | 280 | 4,620 | 316 | 1,957 | 841 | 1,813 | 482 | 988 | 257 | 1,634 |
| 2012 | 7,102 | 12,352 | 6,485 | 215 | 5 | 248 | 1,901 | 133 | 1,966 | 434 | 796 | 566 | 210 | 60 | 2,036 |
| 2013 | 8,430 | 11,182 | 4,679 | 506 | 126 | 244 | 3,804 | 1,540 | 2,183 | 313 | 992 | 21 | 292 | 305 | 1,547 |
| 2014 | 16,678 | ${ }^{6,391}$ | 7,418 | 309 | 31 | 207 | 5,809 | 634 | 3,508 | 805 | 547 | 435 | 433 | 26 | 424 |
| 2015 | 22,924 | 13,736 | 15,000 | 119 | 7 | 76 | 4,780 | 165 | 3,239 | 962 | 321 | 582 |  |  |  |
| 2016 | 52,021 | 11,151 | 12,568 | 270 | 1 | 62 | 8.561 | 21 | 2,062 | 949 | 492 | 320 |  |  |  |
| 2017 | 22,823 | 6.325 | 3,701 | 204 | 25 | 93 | 5.111 | 534 | 2,933 | 1,270 | 536 | 103 |  |  |  |
| 2018 | 10,999 | 5,318 | 598 | 392 | 8 | 7 | 5,227 | 108 | 80 | 852 | 426 | 34 |  |  |  |
| 2019 | 8.513 | 2,259 | 0 | 39 | 0 | 0 | 5,293 | 108 | 0 |  |  |  |  |  |  |
| Averages |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| $\begin{array}{r}79-18 \\ \hline 09-18 \\ \hline\end{array}$ | 18,631 20,736 | 10,849 9,418 | 8,099 8,537 | 631 502 | 68 32 | 236 249 | $\begin{aligned} & 3,933 \\ & 4,749 \end{aligned}$ | $\begin{gathered} 409 \\ 375 \\ \hline \end{gathered}$ | 2,238 | 731 | 769 | 298 |  |  |  |

Appendix B. 16. Tahltan sockeye salmon stock proportions and harvest by stock in the Canadian commercial and assessment fishery in the Stikine River, 1979-2019.

| Year | LRCF |  |  | URCF |  |  | Telegraph Aboriginal |  |  | LRTF |  |  | Tuya Assessment |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All Tahltan | TahltanEnhance | WildTahltan | All Tahltan | TahltanEnhance | WildTahltan | All Tahltan | TahltanEnhance | WildTahltan | All Tahltan | TahltanEnhance | WildTahltan | All Tahltan | TahltanEnhance | WildTahltan |
| 1994 | 0.616 | 0.000 | 0.616 | 0.900 | 0.128 | 0.772 | 0.900 | 0.128 | 0.772 | 0.857 | 0.000 | 0.857 |  |  |  |
| 1995 | 0.676 | 0.195 | 0.481 | 0.900 | 0.260 | 0.640 | 0.900 | 0.260 | 0.640 | 0.803 | 0.284 | 0.519 |  |  |  |
| 1996 | 0.537 | 0.066 | 0.471 | 0.858 | 0.110 | 0.748 | 0.839 | 0.126 | 0.713 | 0.667 | 0.082 | 0.585 |  |  |  |
| 1997 | 0.356 | 0.072 | 0.284 | 0.524 | 0.108 | 0.416 | 0.521 | 0.108 | 0.413 | 0.396 | 0.082 | 0.314 |  |  |  |
| 1998 | 0.335 | 0.020 | 0.315 | 0.400 | 0.030 | 0.370 | 0.421 | 0.022 | 0.399 | 0.368 | 0.021 | 0.347 |  |  |  |
| 1999 | 0.576 | 0.021 | 0.554 | 0.574 | 0.005 | 0.570 | 0.623 | 0.028 | 0.596 | 0.514 | 0.019 | 0.495 |  |  |  |
| 2000 | 0.252 | 0.039 | 0.213 | 0.252 | 0.000 | 0.252 | 0.284 | 0.009 | 0.275 | 0.254 | 0.040 | 0.215 |  |  |  |
| 2001 | 0.175 | 0.032 | 0.143 | 0.437 | 0.133 | 0.304 | 0.342 | 0.065 | 0.277 | 0.208 | 0.038 | 0.171 |  |  |  |
| 2002 | 0.320 | 0.074 | 0.246 | 0.376 | 0.087 | 0.289 | 0.422 | 0.095 | 0.327 | 0.391 | 0.091 | 0.300 |  |  |  |
| 2003 | 0.427 | 0.131 | 0.296 | 0.696 | 0.214 | 0.482 | 0.605 | 0.201 | 0.403 | 0.448 | 0.111 | 0.337 |  |  |  |
| 2004 | 0.707 | 0.285 | 0.422 | 0.861 | 0.380 | 0.481 | 0.909 | 0.371 | 0.538 | 0.512 | 0.207 | 0.305 |  |  |  |
| 2005 | 0.761 | 0.352 | 0.409 | 0.962 | 0.240 | 0.722 | 0.956 | 0.235 | 0.721 | 0.542 | 0.198 | 0.344 |  |  |  |
| 2006 | 0.747 | 0.416 | 0.331 | 0.852 | 0.421 | 0.431 | 0.780 | 0.382 | 0.398 | 0.355 | 0.197 | 0.158 |  |  |  |
| 2007 | 0.635 | 0.321 | 0.315 | 0.658 | 0.235 | 0.423 | 0.643 | 0.237 | 0.406 | 0.262 | 0.105 | 0.157 |  |  |  |
| 2008 | 0.470 | 0.228 | 0.242 | 0.719 | 0.121 | 0.598 | 0.729 | 0.121 | 0.608 | 0.385 | 0.183 | 0.203 | 0.278 | 0.122 | 0.156 |
| 2009 | 0.601 | 0.155 | 0.445 | 0.668 | 0.158 | 0.511 | 0.686 | 0.143 | 0.542 | 0.323 | 0.093 | 0.230 | 0.220 | 0.038 | 0.182 |
| 2010 | 0.456 | 0.122 | 0.334 | 0.565 | 0.221 | 0.345 | 0.570 | 0.227 | 0.342 | 0.258 | 0.060 | 0.198 | 0.427 | 0.190 | 0.237 |
| 2011 | 0.495 | 0.188 | 0.307 | 0.678 | 0.240 | 0.438 | 0.670 | 0.223 | 0.447 | 0.268 | 0.115 | 0.153 | 0.343 | 0.127 | 0.216 |
| 2012 | 0.274 | 0.096 | 0.177 | 0.460 | 0.152 | 0.308 | 0.475 | 0.173 | 0.302 | 0.242 | 0.115 | 0.127 | 0.091 | 0.037 | 0.054 |
| 2013 | 0.347 | 0.140 | 0.207 | 0.578 | 0.227 | 0.351 | 0.505 | 0.216 | 0.289 | 0.236 | 0.029 | 0.207 | 0.136 | 0.067 | 0.069 |
| 2014 | 0.547 | 0.261 | 0.286 | 0.564 | 0.233 | 0.332 | 0.584 | 0.238 | 0.346 | 0.450 | 0.199 | 0.252 | 0.490 | 0.120 | 0.370 |
| 2015 | 0.444 | 0.153 | 0.290 | 0.587 | 0.242 | 0.345 | 0.584 | 0.225 | 0.359 | 0.516 | 0.207 | 0.309 |  |  |  |
| 2016 | 0.687 | 0.202 | 0.484 | 0.812 | 0.223 | 0.589 | 0.804 | 0.238 | 0.567 | 0.539 | 0.185 | 0.353 |  |  |  |
| 2017 | 0.695 | 0.267 | 0.428 | 0.633 | 0.087 | 0.546 | 0.596 | 0.099 | 0.497 | 0.665 | 0.279 | 0.387 |  |  |  |
| 2018 | 0.650 | 0.413 | 0.237 | 0.963 | 0.205 | 0.758 | 0.965 | 0.277 | 0.688 | 0.650 | 0.363 | 0.287 |  |  |  |
| 2019 | 0.790 | 0.441 | 0.349 | 0.980 | 0.000 | 0.980 | 0.980 | 0.559 | 0.421 |  |  |  |  |  |  |
| Averages |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 09-18 | 0.519 | 0.200 | 0.320 | 0.651 | 0.199 | 0.452 | 0.644 | 0.206 | 0.438 | 0.415 | 0.164 | 0.250 |  |  |  |
| 1994 | 23,678 | 0 | 23,678 | 2,219 | 315 | 1,904 | 3,750 | 533 | 3,217 | 1,228 | 0 | 1,228 |  |  |  |
| 1995 | 30,848 | 8.912 | 21,936 | 2,120 | 612 | 1,508 | 4,941 | 1,427 | 3,514 | 2,064 | 729 | 1,335 |  |  |  |
| 1996 | 35,584 | 4,387 | 31,197 | 945 | 121 | 824 | 5,802 | 871 | 4,931 | 875 | 108 | 767 |  |  |  |
| 1997 | 20,269 | 4,094 | 16,175 | 1,152 | 238 | 914 | 3,318 | 687 | 2,631 | 97 | 20 | 77 |  |  |  |
| 1998 | 12,498 | 747 | 11,751 | 363 | 27 | 336 | 2,352 | 125 | 2,227 | 70 | 4 | 66 |  |  |  |
| 1999 | 18,742 | 696 | 18,046 | 359 | 3 | 356 | 3,038 | 135 | 2,903 | 3,031 | 113 | 2,918 |  |  |  |
| 2000 | 5.165 | 801 | 4,364 | 224 | 0 | 224 | 1,733 | 52 | 1,681 | 605 | 94 | 511 |  |  |  |
| 2001 | 3,482 | 632 | 2,850 | 213 | 65 | 148 | 1,795 | 341 | 1,454 | 684 | 124 | 560 |  |  |  |
| 2002 | 3,335 | 776 | 2.559 | 182 | 42 | 140 | 2,697 | 605 | 2,092 | 1,726 | 402 | 1,324 |  |  |  |
| 2003 | 22,067 | 6,763 | 15,304 | 316 | 97 | 219 | 3.987 | 1,328 | 2,659 | 1,505 | 374 | 1,131 |  |  |  |
| 2004 | 54,841 | 22,124 | 32,717 | 539 | 238 | 301 | 6,240 | 2,549 | 3,691 | 686 | 277 | 409 |  |  |  |
| 2005 | 60,881 | 28,174 | 32,707 | 582 | 145 | 437 | 5,099 | 1,254 | 3,845 | 895 | 327 | 568 |  |  |  |
| 2006 | 71,573 | 39,888 | 31,685 | 443 | 219 | 224 | 3,974 | 1,946 | 2,028 | 329 | 183 | 146 |  |  |  |
| 2007 | 36,167 | 18,266 | 17,901 | 600 | 214 | 386 | 1,406 | 518 | 888 | 290 | 116 | 174 |  |  |  |
| 2008 | 13,455 | 6.533 | 6.922 | 363 | 61 | 302 | 3,287 | 547 | 2,740 | 428 | 203 | 225 | 543 | 239 | 304 |
| 2009 | 23,666 | 6,124 | 17,542 | 1,654 | 390 | 1,264 | 3,530 | 738 | 2,791 | 434 | 125 | 309 | 471 | 81 | 390 |
| 2010 | 19,185 | 5,126 | 14,059 | 687 | 268 | 419 | 4,145 | 1,654 | 2,490 | 453 | 105 | 348 | 1,192 | 530 | 662 |
| 2011 | 23,530 | 8.924 | 14,606 | 659 | 234 | 425 | 4,620 | 1,540 | 3,080 | 841 | 361 | 480 | 988 | 365 | 622 |
| 2012 | 7,102 | 2,498 | 4,604 | 215 | 71 | 144 | 1,901 | 692 | 1,209 | 434 | 206 | 228 | 210 | 86 | 124 |
| 2013 | 8,430 | 3,401 | 5,028 | 506 | 199 | 307 | 3,804 | 1,628 | 2,176 | 313 | 38 | 275 | 292 | 143 | 149 |
| 2014 | 16,678 | 7,953 | 8,725 | 309 | 127 | 182 | 5,809 | 2,369 | 3,440 | 805 | 355 | 450 | 433 | 106 | 327 |
| 2015 | 22,924 | 7,922 | 15,002 | 119 | 49 | 70 | 4,780 | 1,839 | 2,941 | 962 | 385 | 577 |  |  |  |
| 2016 | 52,021 | 15,332 | 36,688 | 270 | 74 | 196 | 8.561 | 2,529 | 6,031 | 949 | 326 | 622 |  |  |  |
| 2017 | 22,823 | 8,763 | 14,060 | 204 | 28 | 176 | 5,111 | 847 | 4,264 | 1,270 | 532 | 738 |  |  |  |
| 2018 | 10,999 | 6.991 | 4,007 | 392 | 84 | 309 | 5,227 | 1,502 | 3,725 | 852 | 476 | 376 |  |  |  |
| 2019 | 8.513 | 4,749 | 3,764 | 39 | 0 | 39 | 5,293 | 3,017 | 2,276 |  |  |  |  |  |  |
| Averages |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 09-18 | 20,736 | 7,304 | 13,432 | 502 | 152 | 349 | 4,749 | 1,534 | 3,215 | 731 | 291 | 440 |  |  |  |

Appendix B. 17. Tahltan Lake weir data with enhanced and wild Tahltan fish, 19792019.

| Year | Weir count |  |  | Actual escapement |  |  | Broodstock taken |  |  | Sockeye otolith samples |  |  | Natural spawners |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | TahltanEshance | WildTahlitan | Total | TahltanEnhance | Wildrahtan | Total | TahltanEnhance | WildTahltan | Total | TahltanEnhance | Wildatahtan | Total | TailtanEnhance | Wildrahlan |
| 1979 | 10,211 |  |  | 10,211 |  |  |  |  |  |  |  |  |  |  |  |
| 1980 | 11,018 |  |  | 11,018 |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | 50,790 |  |  | 50,790 |  |  |  |  |  |  |  |  |  |  |  |
| 1982 | 28,257 |  |  | 28.257 |  |  |  |  |  |  |  |  |  |  |  |
| 1983 | 21,256 |  |  | 21,256 |  |  |  |  |  |  |  |  |  |  |  |
| 1984 | 32,777 |  |  | 32,777 |  |  |  |  |  |  |  |  |  |  |  |
| 1985 | 67.326 |  |  | 67.326 |  |  |  |  |  |  |  |  |  |  |  |
| 1986 | 20,280 |  |  | 20,280 |  |  |  |  |  |  |  |  |  |  |  |
| 1987 | 6.958 |  |  | 6.958 |  |  |  |  |  |  |  |  |  |  |  |
| 1988 | 2.536 |  |  | 2.536 |  |  |  |  |  |  |  |  |  |  |  |
| 1989 | 8.316 |  |  | ${ }_{8,316}$ |  |  | 2,210 |  |  |  |  |  |  |  |  |
| 1990 | 14.927 |  |  | 14.927 |  |  | 3,302 |  |  |  |  |  |  |  |  |
| 1991 | 50,135 |  |  | 50,135 |  |  | 3,552 |  |  |  |  |  |  |  |  |
| 1992 | 59,907 |  |  | 59,907 |  |  | 3,694 |  |  |  |  |  |  |  |  |
| 1993 | 53,362 | 1.167 | 52,195 | 51,610 | 1.129 | 50,481 | 4.506 | 99 | 4.407 |  |  |  | 47,104 | 1,030 | 46,074 |
| 1994 | 46.363 | 7.919 | 38,444 | 39,511 | 6,749 | 32,762 | 3.378 | 577 | 2,801 |  |  |  | 36,133 | 6.172 | 29.961 |
| 1995 | 42.317 | 15.997 | 26.320 | 31.577 | 11,937 | 19,640 | 4.902 | 1.853 | 3,049 |  |  |  | 26,675 | 10,084 | 16.591 |
| 1996 | 52,500 | 6.121 | 46,379 | 38.161 | 4,449 | 33,712 | 4.402 | 513 | 3.889 |  |  |  | 33,759 | 3.936 | 29.823 |
| 1997 | 12,483 | 2.521 | 9,962 | 12,105 | 2,445 | 9,660 | 2,294 | 463 | 1,831 | 378 | 76 | 302 | 9,811 | 1,982 | 7.829 |
| 1998 | 12,658 | 717 | 11.941 | 12,268 | 691 | 11.577 | 3,099 | 75 | 3,024 | 390 | 26 | 364 | 9,169 | 616 | 8.553 |
| 1999 | 10,748 | 719 | 10,029 | 10,319 | 690 | 9,629 | 2,870 | 193 | 2,677 | 429 | 29 | 400 | 7,449 | 497 | 6.952 |
| 2000 | ${ }_{6,076}$ | 1,230 | 4,846 | 5.670 | 1,148 | 4.522 | 1,717 | 347 | 1,370 | 406 | 82 | 324 | ${ }^{3,953}$ | 801 | 3,152 |
| 2001 | 14.811 | 5.865 | 8.946 | 14,761 | 5.845 | 8.916 | 2,386 | 945 | 1,441 | 50 | 20 | ${ }^{30}$ | 12,375 | 4,900 | 7.475 |
| 2002 | 17,740 | 5,212 | 12,528 | 17,340 | 5,097 | 12,243 | 3,051 | 1,298 | 1,753 | 400 | 115 | 285 | 14,289 | 3,799 | 10,490 |
| 2003 | 53,933 | 23.595 | 30.338 | 53.533 | 23,420 | 30,113 | 3.946 | 1,726 | 2,220 | 400 | 175 | 225 | 49,587 | 21,694 | 27,893 |
| 2004 | 63,372 | 31,439 | 31,933 | 62.952 | 31,244 | 31708 | 4.243 | 1,250 | 2,993 | 420 | 195 | 225 | 58,709 | 29.994 | 28,715 |
| 2005 | 43,446 | 17,928 | 25.518 | 43,046 | 17,770 | 25,276 | 3,424 | 1,350 | 2,074 | 400 | 158 | 242 | 39,622 | 16.420 | 23,202 |
| 2006 | 53,855 | 25.966 | 27,889 | 53,455 | 25,772 | 27,683 | 3,403 | 1,646 | 1,757 | 400 | 194 | 206 | 50,052 | 24,126 | 25.926 |
| 2007 | 21,074 | 8.966 | 12,108 | 20,874 | 8,881 | 11,993 | 2,839 | 1,208 | 1,631 | 200 | 85 | 115 | 18.035 | 7,673 | 10,362 |
| 2008 | 10.516 | 5,344 | 5.172 | 10.416 | 5,295 | 5.121 | 2.364 | 1,152 | 1,212 | 100 | 49 | 51 | 8.052 | 4,143 | 3,909 |
| 2009 | 30.673 | 5,030 | 25,643 | 30.324 | 4,971 | 25,353 | 3,011 | 930 | 2,081 | 349 | 59 | 290 | 27,313 | 4,041 | 23,272 |
| 2010 | 22.860 | 9,670 | 13,190 | 22,702 | 9.596 | 13,106 | 4.484 | 1,807 | 2.677 | 158 | 74 | 84 | 18,218 | 7,789 | 10,429 |
| 2011 | 34.588 | 12,123 | 22,465 | 34,248 | 12.017 | 22,231 | 4.559 | 1,769 | 2,790 | 340 | 106 | 234 | 29,689 | 10,248 | 19,441 |
| 2012 | 13,687 | 5.851 | 7,836 | 13,463 | 5,764 | 7,699 | 3,949 | 1,836 | 2,113 | 224 | 87 | 137 | 9.514 | 3,928 | 5.586 |
| 2013 | 15.828 | 8.026 | 7,802 | 15.828 | 8,026 | 7,802 | 3,196 | 1,643 | 1.553 | 0 | 0 | 0 | 12,632 | 6.383 | 6.249 |
| 2014 | 40,145 | 19,189 | 20,956 | 39.745 | 18.998 | 20,747 | 2,881 | 1,622 | 1,259 | 400 | 191 | 209 | 36,864 | 17.376 | 19,488 |
| 2015 | 33,159 | 16.204 | 16.955 | 33,159 | 16,204 | 16.955 | 3.871 | 1.892 | 1.979 | 0 | 0 | 0 | 29,288 | 14.312 | 14.976 |
| 2016 | 38,631 | 14.969 | 23,665 | 38.458 | 14.917 | 23,544 | 4.315 | 1,672 | 2,643 | 173 | 52 | 121 | 34,143 | 13.245 | 20,901 |
| 2017 | 19,241 | 10,044 | 9,197 | 19,241 | 10,044 | 9,197 | 2,909 | 1.518 | 1,391 | 0 | 0 | 0 | 16.332 | 8.525 | 7.807 |
| 2018 | 16.557 | 8.273 | 8.284 | 16.350 | 8.146 | 8.204 | 1.878 | 936 | 942 | 207 | 127 | 80 | 14,472 | 7.210 | 7.262 |
| 2019 | 36,999 | 20,438 | 16.561 | 36,787 | 20.320 | 16.467 | 3.579 | 1.283 | 2,296 | 212 | 117 | 95 | 33.208 | 19,037 | 14,171 |
| $\begin{gathered} \text { Averages } \\ 09-18 \end{gathered}$ | 26.537 | 10,938 | 15,599 | 26,352 | 10.868 | 15,484 | 3.505 | 1.563 | 1,943 | 185 | 70 | 116 | 22.847 | 9,306 | 13,541 |

Appendix B. 18. Sockeye salmon harvest by stock in the Stikine River under Canadian ESSR licenses, 1992-2019.

| Year | Tahltan Area ESSR License |  |  | Tuya Area ESSR |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All Tahltan | TahltanEnhance | WildTahltan | Tuya | Total | otolith samples |
| 1993 | 1,752 | 38 | 1,714 |  | 0 |  |
| 1994 | 6,852 | 1,170 | 5,682 |  | 0 |  |
| 1995 | 10,740 | 4,060 | 6,680 |  | 0 |  |
| 1996 | 14,339 | 1,672 | 12,667 | 216 | 14,555 |  |
| 1997 |  |  |  | 2,015 | 2,015 |  |
| 1998 |  |  |  | 6,103 | 6,103 |  |
| 1999 |  |  |  | 2,822 | 2,822 |  |
| 2000 |  |  |  | 1,283 | 1,283 |  |
| 2001 |  |  |  |  | 0 | 410 |
| 2002 |  |  |  |  | 0 | 501 |
| 2003 |  |  |  | 7,031 | 7,031 |  |
| 2004 |  |  |  | 1,675 | 1,675 |  |
| 2005 |  |  |  |  | 0 | 148 |
| 2006 |  |  |  |  | 0 | 0 |
| 2007 |  |  |  |  | 0 | 151 |
| 2008 |  |  |  |  |  | 280 |
| 2009 |  |  |  |  |  | 214 |
| 2010 |  |  |  |  |  | 224 |
| 2011 |  |  |  |  |  | 153 |
| 2012 |  |  |  |  |  | 189 |
| 2013 |  |  |  |  |  | 207 |
| 2014 |  |  |  |  |  | 0 |

Appendix B. 19. Estimated proportion of inriver run comprised of Tahltan, Tuya, and mainstem sockeye salmon, 1979-2019.

| In 1979-1988, there were US estimates and 1983-1988, they overlapped with estimates from Canada and the All tahltan estimate was oftened averaged. The estimates are from the LRCF, test, or average of LRCF and Test. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Year | All Tahltan | Mainstem | Tuya | Type |
| 1979 | 0.433 | 0.567 |  |  |
| 1980 | 0.305 | 0.695 |  |  |
| 1981 | 0.475 | 0.525 |  |  |
| 1982 | 0.618 | 0.382 |  |  |
| 1983 | 0.456 | 0.544 |  |  |
| 1984 | 0.493 | 0.507 |  |  |
| 1985 | 0.466 | 0.534 |  |  |
| 1986 | 0.449 | 0.551 |  |  |
| 1987 | 0.304 | 0.696 |  |  |
| 1988 | 0.172 | 0.828 |  |  |
| 1989 | 0.188 | 0.812 |  |  |
| 1990 | 0.417 | 0.583 |  |  |
| 1991 | 0.561 | 0.439 |  |  |
| 1992 | 0.496 | 0.504 |  |  |
| 1993 | 0.477 | 0.523 |  |  |
| 1994 | 0.606 | 0.394 |  | LRCF |
| 1995 | 0.578 | 0.406 | 0.016 | LRCF |
| 1996 | 0.519 | 0.377 | 0.104 | LRCF |
| 1997 | 0.297 | 0.474 | 0.229 | LRCF |
| 1998 | 0.309 | 0.344 | 0.348 | LRCF |
| 1999 | 0.545 | 0.209 | 0.245 | LRCF |
| 2000 | 0.260 | 0.349 | 0.391 | LRCF |
| 2001 | 0.202 | 0.530 | 0.268 | test |
| 2002 | 0.360 | 0.498 | 0.141 | test |
| 2003 | 0.421 | 0.421 | 0.158 | test |
| 2004 | 0.664 | 0.311 | 0.026 | LRCF |
| 2005 | 0.662 | 0.318 | 0.020 | LRCF |
| 2006 | 0.672 | 0.185 | 0.144 | LRCF |
| 2007 | 0.541 | 0.294 | 0.165 | LRCF |
| 2008 | 0.385 | 0.289 | 0.326 | LRCF |
| 2009 | 0.541 | 0.215 | 0.244 | average |
| 2010 | 0.417 | 0.294 | 0.289 | average |
| 2011 | 0.467 | 0.328 | 0.205 | LRCF |
| 2012 | 0.246 | 0.492 | 0.262 | average |
| 2013 | 0.346 | 0.489 | 0.166 | average |
| 2014 | 0.523 | 0.223 | 0.255 | average |
| 2015 | 0.435 | 0.286 | 0.279 | LRCF |
| 2016 | 0.611 | 0.245 | 0.144 | LRCF |
| 2017 | 0.647 | 0.254 | 0.099 | LRCF |
| 2018 | 0.609 | 0.357 | 0.034 | LRCF |
| 2019 | 0.666 | 0.334 |  | age of 10 yrs |
| Averages |  |  |  |  |
| 79-18 | 0.454 | 0.432 |  |  |
| 09-18 | 0.484 | 0.318 | 0.198 |  |

Appendix B. 20. Aerial survey counts of Mainstem sockeye salmon stocks in the Stikine River drainage, 1984-2019.


Appendix B. 21. Stikine River sockeye salmon run size, 1979-2019.

| Year | All Tailtan |  |  |  |  | Stikine Mainstem |  |  |  |  | All Taillan + Mainstem |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Above border | Canadian |  | U.S. | Terminal | Above border | Canadian |  | U.S. | Terminal | Above border | Canadian |  | U.S. | Terminal |
|  | Run | Harvest | Escapement | Harvest | Run | Run | Harvest | Escapement | Harvest | Run | Run | Harvest | Escapement | Harvest | Run |
| 1979 | 17,472 | 7,261 | 10,211 | 5,076 | 22.548 | 22,880 | ${ }_{6}^{6,273}$ | 16,608 | 3,223 | 26,103 | 40,353 | 13,534 | 26.819 | 8,299 | 48,652 |
| 1980 | 19,137 | 8.119 | 11,018 | 11,239 | ${ }^{30,376}$ | 43,606 | 12,800 | 30,806 | 11.967 | 55,573 | 62,743 | 20,919 | 41.824 | 23,206 | 85.949 |
| 1981 | 65.968 | 15.178 | 50,790 | 16.189 | 82,157 | 72,911 | 11.839 | 61,072 | 11,349 | 84,260 | 138.879 | 27,017 | 111.862 | 27.538 | 166,417 |
| 1982 | 42,493 | 14,236 | 28,257 | 20.981 | 63,474 | 26,267 | 6,304 | 19,964 | 21,501 | 47,768 | 68,761 | 20.540 | 48,221 | 42,482 | 111,243 |
| 1983 | 32,684 | 11,428 | ${ }^{21,256}$ | 5,075 | 37,759 | 38,999 | 9,692 | 29,307 | 699 | ${ }^{39,698}$ | 71,683 | 21,120 | 50.563 | 5,774 | 77,457 |
| 1984 | 37.571 | 4,794 | 32,777 | 3,114 | 40,685 | 38,640 | 533 | 38,107 | 4,636 | 43.276 | 76.211 | 5.327 | 70,884 | 7,750 | 83.961 |
| 1985 | 86,008 | 18,682 | 67,326 | 25,197 | 111,205 | 98,739 | 8,122 | 90,617 | 4,550 | 103,289 | 184,747 | 26,804 | 157.943 | 29,747 | 214,494 |
| 1986 | 31,015 | 10,735 | 20,280 | 2,757 | 33,771 | 38,022 | 7,111 | 30,910 | 3,663 | 41,685 | 69,036 | 17,846 | 51,190 | ${ }_{6,420}$ | 75,456 |
| 1987 | 11,923 | 4.965 | 6.958 | 2,255 | 14,178 | 27,342 | 6.318 | 21,023 | 1,822 | 29,164 | 39,264 | 11,283 | 27,981 | 4,077 | 43.342 |
| 1988 | 7.222 | 4,686 | 2.536 | 2,129 | 9,351 | 34,693 | 11,852 | 22,841 | 1,052 | 35,745 | 41,915 | 16.538 | 25,377 | 3,181 | 45,096 |
| 1989 | 14,111 | 5,795 | 8.316 | 1.561 | 15,672 | 60.947 | 15,844 | 45,103 | 13,931 | 74,878 | 75,058 | 21,639 | 53,419 | 15,492 | 90.550 |
| 1990 | 23.982 | 9.055 | 14.927 | ${ }^{2}, 307$ | 26,289 | 33,547 | 10.909 | 22,638 | 7.549 | ${ }^{41,096}$ | 57.529 | 19.964 | 37.565 | 9.856 | ${ }^{67,385}$ |
| 1991 | 67,394 | 17,259 | 50,135 | 21,916 | 89,311 | 52,759 | 7.879 | 44,880 | 9.368 | ${ }^{62,126}$ | 120,153 | 25,138 | 95,015 | 31,284 | 151,437 |
| 1992 | 76,680 | 16,773 | 59,907 | 28,218 | 104,899 | 77,861 | 12,469 | 65,392 | 49,176 | 127,037 | 154.541 | 29,242 | 125,299 | 77,394 | 231,935 |
| 1993 | 84.068 | 32,458 | 51,610 | 40.036 | 124,104 | 92,033 | 20.240 | 71,792 | ${ }_{64,594}$ | 156,627 | 176,100 | 52,698 | 123,402 | 104,630 | 280,730 |
| 1994 | 77,239 | 37,728 | 39,511 | 65,101 | 142,340 | 50,288 | 15,652 | 34,636 | 15,408 | 65,996 | 127.527 | 53,380 | 74,147 | 80.509 | 208,036 |
| 1995 | 82,290 | 50,713 | 31.577 | 51,665 | 133,955 | 57,802 | 14,953 | 42,850 | 24,169 | 81,971 | 140,092 | 65,665 | 74.427 | 75,834 | ${ }^{215,926}$ |
| 1996 | 95,706 | 57,545 | 38,161 | 147,435 | 243,141 | 69,536 | 23,684 | 45,852 | 21,508 | 91,044 | 165,242 | 81,229 | 84,013 | 168,943 | 334,185 |
| 1997 | 37,319 | 25,214 | 12,105 | 43,408 | ${ }^{80,727}$ | 59,600 | 22,164 | 37,436 | 20.330 | 79,930 | 96,919 | 47,378 | 49.541 | 63,738 | 160,657 |
| 1998 | 27,941 | 15,673 | 12,268 | 7,086 | 35,027 | 31,077 | 11,902 | 19,175 | 7.962 | 39,039 | 59,018 | 27.575 | 31,443 | 15,048 | 74,066 |
| 1999 | 35,918 | 25,599 | 10,319 | 23,449 | 59.367 | 13,797 | 7,726 | 6.071 | 20,092 | 33,889 | 49,715 | 33,325 | 16.390 | 43,541 | 93,256 |
| 2000 | 13.803 | 8.133 | 5.670 | 5.340 | 19,143 | 18.563 | 8.431 | 10,132 | 6.764 | 25,327 | ${ }^{32,366}$ | 16.564 | 15,802 | 12,104 | 44,470 |
| 2001 | 20,985 | 6,224 | 14,761 | 6,339 | 27,324 | 54,987 | 14,132 | 40,855 | 4,193 | 59,180 | 75,972 | 20,356 | 55,616 | 10.532 | 86.504 |
| 2002 | 25,680 | 8.340 | 17,340 | 2,055 | 27,735 | 35,496 | 8.342 | 27,154 | 1.963 | 37,459 | 61,176 | 16,682 | 44,494 | 4,018 | 65,194 |
| 2003 | 81,808 | 28,275 | 53,533 | 16,298 | 98,106 | 81,803 | 23,831 | 57,972 | 21,494 | 103,297 | 163,611 | 52,106 | ${ }^{111,505}$ | 37,792 | 201,403 |
| 2004 | 125,677 | 62,725 | 62.952 | 91,535 | 217,213 | 58.809 | 22,080 | 36,728 | 26,799 | 85,608 | 184,486 | 84,806 | 99,680 | 118,335 | 302,821 |
| 2005 | 110,903 | 67,857 | 43,046 | 63,714 | 174,617 | 53,343 | 18.555 | 34,788 | 28,517 | 81,860 | 164,245 | 86,412 | 77,834 | 92,231 | 256,476 |
| 2006 | 130,174 | 76,719 | 53,455 | 54,923 | 185,097 | 35,788 | ${ }^{8,185}$ | 27,603 | 9,772 | 45,560 | 165,962 | 84,904 | 81,058 | 64,695 | 230,657 |
| 2007 | 59,537 | 38,663 | 20,874 | 63,330 | 122,867 | 32,418 | 11.553 | 20,865 | 5,274 | 37,692 | 91,955 | 50,216 | 41,739 | 68,604 | 160.559 |
| 2008 | 28.592 | 18,176 | 10,416 | 17,743 | 46,335 | 21,494 | 5.316 | 16,178 | 10,434 | 31.928 | 50,087 | 23,493 | 26,594 | 28,177 | 78,264 |
| 2009 | 60.428 | 30,104 | ${ }^{30,324}$ | 37,664 | 98,092 | 24,082 | 6.933 | 17,148 | 17.304 | ${ }^{41,385}$ | 84.509 | 37,037 | 47,472 | 54,968 | 139,477 |
| 2010 | 48,521 | 25,819 | 22,702 | 17,565 | ${ }_{66,086}$ | 34,152 | 9,320 | 24,831 | 11,018 | 45,169 | 82,672 | 35,139 | 47,533 | 28.583 | 111,255 |
| 2011 | 65,226 | 30,978 | 34,248 | 37,480 | 102,706 | 45,750 | 16,357 | 29,393 | 19,021 | 64,771 | 110,977 | 47,335 | 63,641 | 56,501 | 167,477 |
| 2012 | 23,550 | 10,087 | 13,463 | 6,188 | 29,738 | 47,158 | 13,347 | 33,812 | 14,340 | ${ }^{61,498}$ | 70,708 | 23,433 | 47,275 | 20.528 | 91,236 |
| 2013 | 29,173 | 13,345 | 15,828 | 7,618 | 36,791 | 41,236 | 14,144 | 27,091 | 15,684 | 56,920 | 70,408 | 27,489 | 42,919 | 23,302 | 93,710 |
| 2014 | 67,673 | 24,434 | 39,745 | 10.533 | 74,712 | 23,828 | 7.630 | 19,691 | ${ }_{8,363}$ | 35,685 | 91.501 | 32,064 | 59,436 | 18,896 | 110,397 |
| 2015 | ${ }^{61,944}$ | 28,785 | 33,159 | 12,207 | 74,151 | 40,661 | 14,229 | 26,432 | 10.552 | 51,212 | 102,605 | 43,014 | 59,591 | 22,759 | 125,363 |
| 2016 | 100,431 | 61,973 | 38,458 | 54.900 | 155,331 | 40,310 | 11,665 | 28,646 | 15,343 | 55,653 | 140,742 | 73,638 | 67,104 | 70,243 | 210,984 |
| 2017 | 48,649 | 29,408 | 19,241 | 14,698 | 63,347 | 19,098 | 7,420 | 11,678 | 7.122 | 26,220 | 67,747 | 36,828 | 30.919 | 21,820 | ${ }^{89,566}$ |
| 2018 | 33,852 | 17.502 | 16.350 | 4,278 | 38,130 | 19,818 | ${ }_{6}^{6,056}$ | 13,762 | ${ }_{4}^{4,363}$ | 24,181 | 53,670 | 23.558 | 30,112 | 8,641 | 62,311 |
| 2019 | 50,845 | 14,058 | 36,787 | 7,784 | 58.628 | 25,541 | 2,367 | 23,174 | 5.154 | 30,695 | 76,386 | 16,425 | 59.961 | 12,937 | 89,323 |
| Average |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 79-18 | 52,769 | ${ }^{24,536}$ | 28,145 | 26,265 | 78.946 | ${ }^{44,253}$ | 11,795 | 32,546 | 13.922 | 58.262 | 97.022 | ${ }^{36,331}$ | ${ }^{60,691}$ | 40,187 | 137,209 |
| 09-18 | 53.945 | 27,243 | 26.352 | 20,313 | 73,908 | 33,609 | 10,710 | 23,248 | 12,311 | 46,269 | 87,554 | 37,954 | 49,600 | 32.624 | 120,178 |

Appendix B. 21. Page 2 of 2.

|  | Stikine River |  |  |  |  | Tuya |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Above border Run | Canadian Harvest | Escapement | U.S. <br> Harvest | $\begin{gathered} \text { Terminal } \\ \text { Run } \\ \hline \end{gathered}$ | Above border Run | Canadian Harvest | Excess | U.S. <br> Harvest | $\begin{gathered} \hline \text { Terminal } \\ \text { Run } \\ \hline \end{gathered}$ |
| 1979 | 40,353 | 13,534 | 26,819 | 8,299 | 48,652 |  |  |  |  |  |
| 1980 | 62,743 | 20,919 | 41,824 | 23,206 | 85,949 |  |  |  |  |  |
| 1981 | 138,879 | 27,017 | 111,862 | 27,538 | 166,417 |  |  |  |  |  |
| 1982 | 68,761 | 20,540 | 48,221 | 42,482 | 111,243 |  |  |  |  |  |
| 1983 | 71,683 | 21,120 | 50,563 | 5,774 | 77,457 |  |  |  |  |  |
| 1984 | 76,211 | 5,327 | 70,884 | 7,750 | 83,961 |  |  |  |  |  |
| 1985 | 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 | 4,077 | 43,342 |  |  |  |  |  |
| 1988 | 41,915 | 16,538 | 25,377 | 3,181 | 45,096 |  |  |  |  |  |
| 1989 | 75,058 | 21,639 | 53,419 | 15,492 | 90,550 |  |  |  |  |  |
| 1990 | 57,529 | 19,964 | 37,565 | 9,856 | 67,385 |  |  |  |  |  |
| 1991 | 120,153 | 25,138 | 95,015 | 31,284 | 151,437 |  |  |  |  |  |
| 1992 | 154,541 | 29,242 | 125,299 | 77,394 | 231,935 |  |  |  |  |  |
| 1993 | 176,100 | 52,698 | 123,402 | 104,630 | 280,730 |  |  |  |  |  |
| 1994 | 127,527 | 53,380 | 74,147 | 80,509 | 208,036 |  |  |  |  |  |
| 1995 | 142,308 | 66,777 | 75,531 | 76,420 | 218,728 | 2,216 | 1,112 | 1,104 | 586 | 2,802 |
| 1996 | 184,400 | 90,148 | 94,252 | 188,385 | 372,785 | 19,158 | 8,919 | 10,239 | 19,442 | 38,600 |
| 1997 | 125,657 | 68,197 | 57,460 | 101,258 | 226,915 | 28,738 | 20,819 | 7,919 | 37,520 | 66,258 |
| 1998 | 90,459 | 50,486 | 39,973 | 30,989 | 121,448 | 31,442 | 22,911 | 8,531 | 15,941 | 47,383 |
| 1999 | 65,879 | 47,202 | 18,677 | 58,765 | 124,644 | 16,165 | 13,877 | 2,288 | 15,224 | 31,389 |
| 2000 | 53,145 | 31,535 | 21,610 | 25,359 | 78,504 | 20,779 | 14,971 | 5,808 | 13,255 | 34,034 |
| 2001 | 103,755 | 29,341 | 74,414 | 23,500 | 127,255 | 27,783 | 8,985 | 18,798 | 12,968 | 40,751 |
| 2002 | 71,253 | 22,607 | 48,646 | 8,076 | 79,329 | 10,078 | 5,925 | 4,153 | 4,058 | 14,136 |
| 2003 | 194,425 | 69,571 | 124,854 | 46,552 | 240,977 | 30,814 | 17,465 | 13,349 | 8,760 | 39,574 |
| 2004 | 189,395 | 88,451 | 100,944 | 122,592 | 311,987 | 4,909 | 3,645 | 1,264 | 4,257 | 9,166 |
| 2005 | 167,570 | 88,089 | 79,482 | 92,362 | 259,932 | 3,325 | 1,677 | 1,648 | 131 | 3,456 |
| 2006 | 193,768 | 102,733 | 91,035 | 74,817 | 268,585 | 27,806 | 17,829 | 9,977 | 10,122 | 37,928 |
| 2007 | 110,132 | 61,472 | 48,660 | 86,654 | 196,786 | 18,176 | 11,256 | 6,920 | 18,050 | 36,227 |
| 2008 | 74,267 | 37,097 | 37,170 | 45,942 | 120,209 | 24,180 | 13,604 | 10,576 | 17,765 | 41,945 |
| 2009 | 111,780 | 51,082 | 60,699 | 73,495 | 185,275 | 27,271 | 14,044 | 13,226 | 18,527 | 45,798 |
| 2010 | 116,354 | 55,471 | 60,883 | 40,647 | 157,001 | 33,682 | 20,332 | 13,350 | 12,064 | 45,746 |
| 2011 | 139,541 | 61,947 | 77,594 | 73,857 | 213,399 | 28,565 | 14,612 | 13,953 | 17,356 | 45,921 |
| 2012 | 95,840 | 34,922 | 60,918 | 28,700 | 124,540 | 25,132 | 11,489 | 13,643 | 8,172 | 33,304 |
| 2013 | 84,380 | 36,371 | 48,009 | 29,136 | 113,515 | 13,972 | 8,882 | 5,090 | 5,833 | 19,805 |
| 2014 | 122,759 | 44,056 | 78,703 | 23,881 | 146,640 | 31,259 | 11,992 | 19,267 | 4,984 | 36,243 |
| 2015 | 142,334 | 61,911 | 80,423 | 31,958 | 174,292 | 39,729 | 18,897 | 20,832 | 9,200 | 48,929 |
| 2016 | 164,451 | 88,649 | 75,802 | 83,441 | 247,892 | 23,709 | 15,011 | 8,698 | 13,199 | 36,908 |
| 2017 | 75,159 | 43,657 | 31,502 | 23,609 | 98,768 | 7,412 | 6,829 | 583 | 1,790 | 9,202 |
| 2018 | 55,541 | 24,256 | 31,285 | 8,950 | 64,491 | 1,871 | 698 | 1,173 | 309 | 2,180 |
| 2019 | 76,386 | 16,425 | 59,961 | 12,996 | 89,381 | 0 | 0 | 0 | 58 | 58 |
| Averages |  |  |  |  |  |  |  |  |  |  |
| 79-18 | 109,476 | 43,475 | 66,001 | 46,925 | 156,401 |  |  |  |  |  |
| 09-18 | 110,814 | 50,232 | 60,582 | 41,767 | 152,581 | 23,260 | 12,279 | 10,982 | 9,143 | 32,404 |

Appendix B. 22. Tahltan wild and enhanced sockeye salmon run size, 1994-2019.

| Year | All Talltan |  |  |  |  | EnhancedTahltan |  |  |  |  | Wildrahltan |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Above border | Canadian |  | U.S. | Terminal | Above border | Canadian |  | U.S. | Terminal | Abowe border | Canadian |  | U.S. | Terminal |
|  | Run | Harvest | Escapement | Harvest | Run | Run | Harrest | Escapement | Harvest | Run | Run | Harvest | Escapement | Harvest | Run |
| 1994 | 77,239 | 37,728 | 39.511 | 65,101 | 142,340 | 8.767 | 2,018 | 6,749 | 18,305 | 27,072 | 68,471 | 35,709 | 32,762 | 46,793 | 115,264 |
| 1995 | 82,290 | 50,713 | 31.577 | 51,665 | 133,955 | 27,677 | 15,740 | 11,937 | 27,259 | 54,936 | 54,612 | 34,972 | 19,640 | 24,406 | 79,018 |
| 1996 | 95,706 | 57,545 | 38,161 | 147,435 | 243,141 | 11,608 | 7,159 | 4,449 | 16,568 | 28,176 | 84,098 | 50,386 | 33,712 | 130,867 | 214,965 |
| 1997 | 37,319 | 25,214 | 12,105 | 43,408 | 80,727 | 7.560 | 5,115 | 2,445 | 12.983 | 20,543 | 29,759 | 20,099 | 9,660 | 30.425 | 60,184 |
| 1998 | 27,941 | 15,673 | 12,268 | 7,086 | 35,027 | 1,620 | 929 | 691 | 428 | 2,048 | 26,321 | 14,744 | 11,577 | 6,658 | 32,979 |
| 1999 | 35,918 | 25,599 | 10,319 | 23,449 | 59,367 | 1,666 | 976 | 690 | 1,300 | 2,966 | 34,252 | 24,623 | 9,629 | 22,149 | 56,401 |
| 2000 | 13,803 | 8,133 | 5,670 | 5.340 | 19,143 | 2,177 | 1,029 | 1,148 | 1,051 | 3,228 | 11,626 | 7,104 | 4.522 | 4,289 | 15,915 |
| 2001 | 20,985 | 6.224 | 14,761 | ${ }_{6} \mathbf{3} 39$ | 27,324 | 7,027 | 1,182 | 5,845 | 1.592 | 8.619 | 13,958 | 5,042 | 8.916 | 4.747 | 18,705 |
| 2002 | 25,680 | 8.340 | 17,340 | 2,055 | 27,735 | 7,037 | 1,940 | 5,097 | 680 | 7,717 | 18,643 | 6.400 | 12,243 | 1,375 | 20,018 |
| 2003 | 81,808 | 28,275 | 53.533 | 16,298 | 98,106 | 32,157 | 8,737 | 23,420 | 7.852 | 40,009 | 49,651 | 19,538 | 30,113 | 8.446 | 58,097 |
| 2004 | 125,677 | 62,725 | 62.952 | 91,535 | 217,213 | 56,627 | 25,383 | 31,244 | 37,444 | 94,071 | 69,050 | 37,342 | 31,708 | 54,091 | 123,142 |
| 2005 | ${ }_{110,903}$ | 67,857 | 43,046 | 63,714 | 174,617 | 47,828 | 30,058 | 17,770 | 36,047 | 83,875 | 63,075 | 37,799 | 25,276 | 27,667 | 90,741 |
| 2006 | 130,174 | 76,719 | 53.455 | 54,923 | 185,097 | 68,202 | 42,430 | 25,772 | 30,768 | 98,970 | 61,972 | 34,289 | 27,683 | 24,155 | 86,127 |
| 2007 | 59.537 | 38,663 | 20.874 | 63,330 | 122,867 | 28,080 | 19,199 | 8,881 | 41,440 | 69,520 | 31,457 | 19,464 | 11,993 | 21,890 | 53,347 |
| 2008 | 28.592 | 18,176 | 10.416 | 17,743 | 46.335 | 12,927 | 7,632 | 5,295 | 8.219 | 21,146 | 15,666 | 10.544 | 5,121 | 9.524 | 25,190 |
| 2009 | 60,428 | 30,104 | 30.324 | 37,664 | 98,092 | 12,489 | 7.518 | 4,971 | 10,714 | 23,203 | 47.939 | 22.586 | 25,353 | 26,950 | 74,889 |
| 2010 | 48,521 | 25,819 | 22,702 | 17,565 | ${ }_{66,086}$ | 17,353 | 7,757 | 9,596 | 6,990 | 24,342 | 31,168 | 18,062 | 13,106 | 10,575 | 41,743 |
| 2011 | 65,226 | 30,978 | 34,248 | 37,480 | 102,706 | 23,547 | 11,530 | 12,017 | 17.592 | 41,138 | 41,680 | 19,449 | 22,231 | 19,888 | 61,568 |
| 2012 | 23,550 | 10,087 | 13,463 | 6,188 | 29,738 | 9,404 | 3,640 | 5,764 | 2,337 | 11,740 | 14,146 | 6,447 | 7,699 | 3,851 | 17,998 |
| 2013 | 29,173 | 13,345 | 15,828 | 7.618 | 36,791 | 13,435 | 5,409 | 8,026 | 3,723 | 17,158 | 15,738 | 7.935 | 7,802 | 3,895 | 19,633 |
| 2014 | 67,673 | 24,434 | 39,745 | 10,533 | 74,712 | 30,100 | 11,102 | 18,998 | 5,418 | 35,518 | 34,079 | 13,332 | 20,747 | 5,115 | 39,194 |
| 2015 | 61,944 | 28,785 | 33,159 | 12,207 | 74,151 | 26,399 | 10,195 | 16,204 | 5.165 | 31,564 | 35,545 | 18,590 | 16.955 | 7,042 | 42.587 |
| 2016 | 100,431 | ${ }_{61,973}$ | 38.458 | 54,900 | 155,331 | 33,232 | 18,314 | 14,917 | 18,189 | 51,421 | 67,203 | 43.659 | 23,544 | 36,711 | 103.913 |
| 2017 | 48,649 | 29,408 | 19,241 | 14,698 | 6,347 | 20,214 | 10,170 | 10,044 | 5.311 | 25,526 | 28,435 | ${ }^{19,237}$ | 9,197 | 9.386 | 37,821 |
| 2018 | 33.852 | 17.502 | 16.350 | 4,278 | 38,130 | 17,326 | 9,180 | 8,146 | 2,272 | 19,598 | 16.526 | ${ }_{8,322}$ | 8,204 | 2,006 | 18,532 |
| 2019 | 50.845 | 14,058 | 36.787 | 7,784 | 58,628 | 28,203 | 7.883 | 20,320 | 3,724 | 31.928 | 22,641 | 6.175 | 16.467 | 4.060 | 26,701 |
| $\begin{aligned} & \text { Averages } \\ & 09-18 \end{aligned}$ | 53.945 | 27,243 | 26.352 | 20.313 | 73.908 | 20,350 | 9.481 | 10.868 | 7,771 | 28.121 | 33.246 | 17,762 | 15.484 | 12.542 | 45,788 |

Appendix B. 23. Coho salmon harvest in the Alaskan District 106 and 108 test fisheries, 1984-2019.
Table only includes years when test fisheries were operated.

| Year | $106-41 / 42$ | $106-30$ | Total 106 | 108 |
| :---: | :---: | :---: | :---: | :---: |
| 1984 | 101 |  | 1,370 | 11 |
| 1985 | 301 |  | 4,345 | 11 |
| 1986 | 177 |  | 1,345 | 3 |
| 1987 | 799 | 95 | 3,558 | 13 |
| 1988 | 89 | 589 | 1,036 | 9 |
| 1989 | 275 | 412 | 2,080 | 45 |
| 1990 | 432 | 464 | 2,256 | 45 |
| 1991 |  |  |  | 18 |
| 1992 |  |  |  | 23 |
| 1993 |  |  | 12 | 0 |
| 1994 |  |  |  | 142 |
| -- |  |  |  | 217 |
| 1998 |  |  |  | 140 |
| 1999 |  |  |  |  |
| 2000 |  |  |  | 0 |
| -- |  |  |  | 0 |
| 2009 |  |  |  |  |

Appendix B. 24. Annual harvest of coho salmon in the Canadian lower and upper river commercial, Telegraph Aboriginal and the Canadian test fisheries, 1979-2019.

|  | Commercial |  |  | URCF | Telegraph Canada total <br> Aboriginal Stikine harvest |  | Test |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | LRCF | Before SW 35 | SW 35 to end |  |  |  | drift | set | additional | test total |
| 1972 |  |  |  |  | 0 | 0 |  |  |  | 0 |
| 1973 |  |  |  |  | 0 | 0 |  |  |  | 0 |
| 1974 |  |  |  |  | 0 | 0 |  |  |  | 0 |
| 1975 |  |  |  | 45 | 5 | 50 |  |  |  | 0 |
| 1976 |  |  |  | 13 | 0 | 13 |  |  |  | 0 |
| 1977 |  |  |  | 0 | 0 | 0 |  |  |  | 0 |
| 1978 |  |  |  | 0 | 0 | 0 |  |  |  | 0 |
| 1979 | 10,720 |  |  |  | 0 | 10,720 |  |  |  | 0 |
| 1980 | 6,629 |  |  | 40 | 100 | 6,769 |  |  |  | 0 |
| 1981 | 2,667 |  |  | 0 | 200 | 2,867 |  |  |  | 0 |
| 1982 | 15,904 |  |  | 0 | 40 | 15,944 |  |  |  | 0 |
| 1983 | 6,170 |  |  | 0 | 3 | 6,173 |  |  |  | 0 |
| 1984 |  |  |  |  | 1 | 1 |  |  |  | 0 |
| 1985 | 2,172 |  |  | 0 | 3 | 2,175 |  |  |  | 0 |
| 1986 | 2,278 |  |  | 0 | 2 | 2,280 | 226 |  |  | 226 |
| 1987 | 5,728 |  |  | 0 | 3 | 5,731 | 162 | 620 |  | 782 |
| 1988 | 2,112 |  |  | 0 | 5 | 2,117 | 75 | 130 |  | 205 |
| 1989 | 6,092 |  |  | 0 | 6 | 6,098 | 242 | 502 |  | 744 |
| 1990 | 4,020 |  |  | 0 | 17 | 4,037 | 134 | 271 |  | 405 |
| 1991 | 2,638 |  |  | 0 | 10 | 2,648 | 118 | 127 |  | 245 |
| 1992 | 1,850 |  |  | 0 | 5 | 1,855 | 75 | 193 | 0 | 268 |
| 1993 | 2,616 |  |  | 0 | 0 | 2,616 | 37 | 136 | 2 | 175 |
| 1994 | 3,377 |  |  | 0 | 4 | 3,381 | 71 | 0 | 0 | 71 |
| 1995 | 3,418 |  |  | 0 | 0 | 3,418 | 35 | 166 | 26 | 227 |
| 1996 | 1,402 |  |  | 0 | 2 | 1,404 | 55 | 0 | 0 | 55 |
| 1997 | 401 |  |  | 0 | 0 | 401 | 11 |  |  | 11 |
| 1998 | 726 |  |  | 0 | 0 | 0 | 207 |  |  | 207 |
| 1999 | 181 | 76 | 105 | 0 | 0 | 181 | 312 | 64 | 16 | 392 |
| 2000 | 298 | 235 | 63 | 0 | 3 | 301 | 60 | 181 | 195 | 436 |
| 2001 | 233 | 99 | 134 | 0 | 0 | 233 | 257 | 1,078 | 426 | 1,761 |
| 2002 | 82 | 82 | 0 | 0 | 0 | 82 | 306 | 1,323 | 1,116 | 2,745 |
| 2003 | 190 | 135 | 55 | 0 | 0 | 190 | 291 | 525 | 883 | 1,699 |
| 2004 | 271 | 242 | 29 | 0 | 4 | 275 | 352 | 135 | 0 | 487 |
| 2005 | 276 | 276 | 0 | 0 | 0 | 276 | 444 | 271 | 0 | 715 |
| 2006 | 72 | 72 | 0 | 0 | 0 | 72 | 343 | 181 | 0 | 524 |
| 2007 | 50 | 45 | 0 | 0 | 2 | 47 | 89 | 99 | 0 | 188 |
| 2008 | 2,398 | 61 | 2,337 | 0 | 0 | 2,398 | 321 | 216 | 0 | 537 |
| 2009 | 5,981 | 898 | 5,061 | 0 | 0 | 5,959 | 348 | 146 | 0 | 494 |
| 2010 | 5,301 | 349 | 4,952 | 0 | 0 | 5,301 | 488 | 253 | 0 | 741 |
| 2011 | 5,821 | 1,015 | 4,703 | 0 | 0 | 5,718 | 280 | 130 | 0 | 410 |
| 2012 | 6,188 | 440 | 5,748 | 0 | 0 | 6,188 | 393 | 43 | 0 | 436 |
| 2013 | 6,757 | 1,922 | 4,835 | 0 | 0 | 6,757 | 249 | 1,094 | 0 | 1,343 |
| 2014 | 5,409 | 417 | 4,992 | 0 | 0 | 5,409 | 83 | 259 | 0 | 342 |
| 2015 | 5,619 | 696 | 4,923 | 0 | 0 | 5,619 | 21 | 12 | 0 | 33 |
| 2016 | 5,346 | 389 | 4,957 | 0 | 0 | 5,346 | 36 | 104 | 0 | 140 |
| 2017 | 5,502 | 519 | 4,983 | 0 | 0 | 5,502 | 2 | 10 | 0 | 12 |
| 2018 | 3,685 | 361 | 3,324 | 0 | 0 | 3,685 | 32 | 86 | 0 | 118 |
| 2019 | 5,228 | 0 | 5,228 | 0 | 0 | 5,228 | 0 | 0 | 0 | 0 |
| Averages |  |  |  |  |  |  |  |  |  |  |
| 85-18 | 2,897 |  |  | 0 | 2 | 2,874 | 187 | 279 | 107 | 505 |
| 09-18 | 5,561 |  |  | 0 | 0 | 5,548 | 193 | 214 | 0 | 407 |

Appendix B. 25. Index counts of Stikine River coho salmon escapements, 1984-2019.

| Missing data due to poor survey conditions. |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Katete |  |  |  | Bronson | Scud | ’orcupine |  |  |
| Year | Date | West | Katete | Craig | Verrett | Slough | Slough | Slough | Christina | Total |
| 1984 | 10/30 | 147 | 313 | 0 | 15 | 42 |  |  |  | 517 |
| 1985 | 10/25 | 590 | 1,217 | 735 | 39 | 0 | 924 | 365 |  | 3,870 |
| 1988 | 10/28 | 32 | 227 |  | 175 |  | 97 | 53 | 0 | 584 |
| 1989 | 10/29 | 336 | 896 | 992 | 848 | 120 | 707 | 90 | 55 | 4,044 |
| 1990 | 10/30 | 94 | 548 | 810 | 494 |  | 664 | 430 |  | 3,040 |
| 1991 | 10/29 | 302 | 878 | 985 | 218 |  | 221 | 352 |  | 2,956 |
| 1992 | 10/29 | 295 | 1,346 | 949 | 320 |  | 462 | 316 |  | 3,688 |
| 1993 | 10/30 |  |  |  |  |  | 206 | 324 |  |  |
| 1994 | 11/1 | 28 | 652 | 1,026 | 466 |  | 448 | 1,105 |  | 3,725 |
| 1995 | 10/30 | 211 | 208 | 1,419 | 574 |  | 621 | 719 |  | 3,752 |
| 1996 | 10/30 | 163 | 232 | 205 | 549 |  | 630 | 1,466 |  | 3,245 |
| 1997 | 11/1 | 2 | 0 | 19 | 116 |  | 272 | 648 |  | 1,057 |
| 1998 | 10/30 | 14 | 63 | 141 | 282 |  | 143 | 450 |  | 1,093 |
| 1999 | 11/5 | 163 | 773 | 891 | 490 |  | 661 | 894 |  | 3,872 |
| 2000 | 11/2 |  |  |  | 5 |  | 95 | 206 |  | 306 |
| 2001 | 11/2 | 207 | 1,401 | 3,121 | 708 |  | 1,571 | 397 |  | 7,405 |
| 2002 | 11/5 | 806 | 2,642 | 4,488 | 1,695 |  | 1,389 | 1,626 |  | 12,646 |
| 2003 |  |  |  |  |  |  |  |  |  |  |
| 2004 | 11/03a | 78 | 762 | 19 | 959 |  | 173 | 1,009 |  | 3,000 |
| 2005 | 10/31 | 300 | 1,195 | 444 | 353 |  | 218 | 689 |  | 3,199 |
| 2006 | 11/2 | 350 | 543 | 675 | 403 |  | 95 | 147 |  | 2,213 |
| 2007 | 11/10 | 66 | 190 | 567 | 240 |  | 153 | 341 |  | 1,557 |
| 2008 | 11/01-05b |  |  | 535 | 501 |  | 86 | 25 |  | 1,147 |
| 2009 | 11/2 | 212 | 698 | 475 | 257 |  | 16 | 617 |  | 2,275 |
| 2010 | 11/03a | 37 | 237 | 31 | 363 |  | 130 | 953 |  | 1,751 |
| 2011 | 11/4 | 182 | 689 | 459 | 309 |  | 437 | 468 |  | 2,542 |
| 2012 | 11/05c | aborted | aborted | aborted | aborted |  | 3 | 336 |  |  |
| 2013 | 11/5 | 449 | 191 | 675 | 249 |  | 23 | 53 |  | 1,640 |
| 2014 | 11/6 | 7 | 255 | 212 | 74 |  | 138 | 509 |  | 1,195 |
| 2015 | 11/7 | 15 | 168 | 608 | 66 |  | 61 | 263 |  | 1,181 |
| 2016 | 11/3 | 0 | 0 | 10 | 152 |  | 90 | 40 |  | 292 |
| 2017 | 11/2 | 246 | 538 | 570 | 189 |  | 36 | 77 |  | 1,656 |
| 2018 | 11/6 | 463 | 185 | 736 | 22 |  | 128 | 460 |  | 1,994 |
| 2019 | 11/10 | 1 | 50 | 61 | 48 |  | 190 | 48 |  | 398 |
| Average |  |  |  |  |  |  |  |  |  |  |
| 84-18 | 43,131 | 207 | 609 | 778 | 371 |  | 352 | 498 |  | 2,715 |
| 09-18 | 43,773 | 179 | 329 | 420 | 187 |  | 106 | 378 |  | 1,614 |

${ }^{\text {a }}$ Veiwing conditions at the Craig River site were poor in 2004 and 2010.
${ }^{\mathrm{b}}$ West Katete and Katete not survey due to inclement weather
${ }^{\text {c }}$ aborted to due ice condtions and inclement weather

Appendix B. 26. Effort in the Canadian fisheries, including assessment fisheries in the Stikine River, 1979-2019.


Appendix B. 27. Counts of adult sockeye salmon migrating through Tahltan Lake weir, 1959-2019.

| Year |  | Date of Arrival |  |  | $\begin{aligned} & \text { Weir } \\ & \text { Pulled } \end{aligned}$ | Observed Count |  | Broodstock | $\begin{gathered} \text { Samples } \\ \text { or ESSR } \end{gathered}$ | $\begin{array}{\|c} \hline \text { Ololith } \\ \text { Samples } \end{array}$ | Spauners |  |  | Estimated landslide moralality |  |  | Estimuted Expansion |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | First | 50\% | $90 \%$ |  |  |  |  |  |  | Total | Enhanced | Wild | Total | Enhanced | Wild | Total | Enhanced | Wild |
|  | ${ }^{30-J u n}$ | ${ }^{2 \text {-Aug }}$ | ${ }^{12-A u g ~}$ | ${ }^{16-A u g}$ |  | 4.311 |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1960 | 15-Jul | 2 -Aug | 24-Aug | 27-Aug |  | 6.387 | 6.387 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1961 | 20-Jul | 9 -Aug | 11-Aug | 15-Aug |  | 16.619 | 16.619 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1962 | ${ }^{1-\text {-ung }}$ | 2 -Aug | 5 -Aug | 8 -Aug |  | 14.508 | 14.508 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1963 1964 | ${ }^{\text {3-Aug }}$ | 26 -Jul | 14-Aus | 25-Aug |  | 1.780 , 8.53 | 1.780 18.733 |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }_{1965^{\circ}}$ | 19.-Jul | ${ }_{\text {18,-Jul }}^{2 \text {-3.ul }}$ | ${ }_{\text {2 }}^{\text {2-sep }}$ | ${ }_{\text {7-Scp }}^{\text {25-Aug }}$ |  | 18,353 1.471 | 18,353 1,471 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1966 | 12-Jul | 3-Aug | ${ }^{13-A u g}$ | ${ }^{21-A u g}$ |  | 21.580 | 21.580 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1967 | 11-Jul | 14.Jul | ${ }^{21-J u l}$ | 28 -Jul |  | 38.801 | 38.801 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1968 1969 | 71-Jul | 21-Jul | ${ }_{\text {cole }}^{\text {25-Jul }}$ | - ${ }_{\text {8-Aug }}^{\text {31-Jul }}$ |  | ${ }_{11}^{19,895}$ | ${ }_{1}^{11,8,726}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 1970 | 5-Jul | 2 5-Jul | 1-Aug | 11-Aug |  | ${ }_{8.419}$ | ${ }_{8.419}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 1971 | 12-Jul | 19.Jul | $28 . \mathrm{Jul}$ | 12-Aug |  | 18.523 | 18.523 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1972 | 13-Jul | 13-Jul | 19-Jul | 31-Aug | 21-Aug | 52.545 | 52.545 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1973 | 10-Jul | 24 -Jul | 30-Jul | ${ }^{\text {7-Aug }}$ | 1.Scp | 2.877 | 2.887 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1974 | 3-Jul | ${ }^{28-\text {-ul }}$ | 3-Aug | 17-Aug | 13-5.p | 8.101 | 8.101 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1975 1976 | ${ }_{\text {l }}^{\text {16-Jul }}$ | ${ }^{29}$ 2-Jul | ${ }_{\text {chen }}^{\text {8-Augg }}$ |  | ${ }^{24}$ 2-Augg | 24,111 | - 24.111 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1977 | ${ }^{6 . J \mathrm{Jul}}$ | 11 -Jul | 16 -Jul | ${ }^{10-A u g}$ | ${ }^{25}$-Aug | 42.960 | 42,600 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1978 | ${ }^{10-\mathrm{Jul}}$ | ${ }^{\text {10-Jul }}$ | 20 -Jul | 29-Jul | ${ }^{26-\text {-aug }}$ | ${ }^{22,788}$ | ${ }^{22,788}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 1980 | ${ }^{\text {9.Jual }}$ | ${ }^{\text {15-Jul }}$ | ${ }^{\text {22-Jul }}$ | ${ }_{\text {12-Aug }}$ |  | ${ }_{11}^{10,0,18}$ | $\xrightarrow{10,211}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 1981 | $30-\mathrm{Jun}$ | 16-Jul | 26. -Jul | 3 -Aug | 8 8.cep | 50,790 | 50,790 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1982 | 2-Jul | ${ }^{\text {10,-ul }}$ | 19-Jul | ${ }^{29 . \mathrm{Jul}}$ | ${ }^{\text {4.scp }}$ | ${ }^{28,257}$ | ${ }^{28,257}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 1983 | 27 -Jun | 5.Jul | ${ }^{22-\text {-Jul }}$ | 5-Aug | ${ }^{7.5 \mathrm{Scp}}$ | ${ }^{21,256}$ | ${ }^{21,256}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 1984 1985 | ${ }_{2 \text { 28-Jun }}^{20 . \mathrm{Jun}}$ | - 19. -Jul | ${ }_{\text {l }}^{\text {2-JJul }}$ | ${ }^{\text {3-Aug }}$ | ${ }_{\text {cosen }}^{\text {2-Aug }}$ | ${ }^{322777}$ | 32,777 67326 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1985 1986 |  | ${ }_{\text {l }}^{\text {18-Jul }}$ | ${ }^{\text {31-Jul }}$ - Aug | ${ }_{1}^{\text {1-Augg }}$ | ${ }_{\substack{\text { 5-Scp } \\ 4 \text {-Scp }}}^{\text {des }}$ | 67326 20.280 | 67.326 20.280 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1987 | 14.Jul | 21.Jul | 4.Aug | 13-Aug | 27-Aug | ${ }_{6,958}$ | ${ }_{6} 6.958$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 1988 | ${ }^{16-\mathrm{Jul}}$ | ${ }^{16-\text {-ul }}$ | 6 -Aug | 14-Aug | 29-Aug | ${ }^{2} 536$ | ${ }^{2} 536$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 1989 | 7 -Jul | 9-Jul | ${ }^{\text {1-Aug }}$ | 14-Aug | 4.sep | 8316 | 8.316 | 2.210 |  |  | ${ }^{6.106}$ |  |  |  |  |  |  |  |  |
| 1990 1991 |  | ${ }^{\text {15, -Jul }}$ | ${ }_{2}^{26-\text {-Jul }}$ | ${ }^{\text {3-Aug }}$ | ${ }_{\text {c-sep }}^{\text {28-Aug }}$ | ${ }_{50}^{14,927}$ | ${ }_{50}^{14,927}$ | 3.302 <br> 3.55 |  |  | ${ }^{11.625}$ |  |  |  |  |  |  |  |  |
| 1991 1992 |  | ${ }_{\text {18-Jul }}$ | ${ }_{2 \text { 2S-Jul }}^{\text {25-JII }}$ | ${ }_{\text {3-Augg }}$ | ${ }_{\text {2-Scp }}^{\text {S.Sep }}$ | 50,135 59.97 | 50,135 59.907 | 3.552 <br> 3.694 |  |  | ${ }_{56,213}^{46,53}$ |  |  |  |  |  |  |  |  |
| 1993 | 7-Jul | 10.Jul | 28 -Jul | 10-Aug | 11-Scp | 53.362 | 51,610 | 4.506 | 1,752 |  | 47,104 | 1,030 | 46.074 |  |  |  |  |  |  |
| 1994 | 7 -Jul | 14-Jul | 30-Jul | 9 9-Aug | ${ }^{7}$-5.pp | ${ }^{46,363}$ | 39,511 | 3.378 | ${ }_{6}^{6.852}$ |  | ${ }^{36,133}$ | ${ }^{6.172}$ | 29.961 |  |  |  |  |  |  |
| 1995 | 8 -Jul | 9.Jul | 24. Jul | 12-Aug | 16-Scp | 42.317 | ${ }^{31,577}$ | 4.902 | 10.740 |  | ${ }^{26,675}$ | 10,084 | 16.591 |  |  |  |  |  |  |
| 1996 | 6 -Jul | 14 -Jul | 22 -Jul | 04 -Aug | ${ }^{10-S c p}$ | 52.500 | 38.161 | 4.402 | 14,339 |  | 33.759 | ${ }^{3} .936$ | 29.823 |  |  |  |  |  |  |
| 1997 1998 | 9.Jul | 15.Jul | ${ }^{25-5.1 / 31}$ | ${ }^{26-\text {-aug }}$ | 26-scp | ${ }^{12,483}$ | ${ }^{12,105}$ | 2, 2.24 |  | 378 390 | 9.811 <br> 1169 | 1.982 | 7.829 8553 |  |  |  |  |  |  |
| 1998 1999 |  | 19.-Jul | ${ }_{\text {3 }}$ 2-J-Jul | ${ }_{\text {l }}{ }^{213-A \text { Aug }}$ | ${ }_{\text {1-s.cp }}^{\text {1-sp }}$ | ${ }^{12} 12.0788$ | $12,2.68$ 10,319 | 3,099 2.870 |  | 390 429 | 7.449 | 616 497 | 8.9.953 <br> 6.95 |  |  |  |  |  |  |
| 2000 | 9.Jul | 21 -Jul | 25 -Jul | $0^{33-A u g}$ | 4.Scp | ${ }_{6} 6.076$ | 5.670 | 1.717 |  | 406 | 3.953 | 801 | ${ }^{3.152}$ |  |  |  |  |  |  |
| ${ }_{2001}^{2002}$ | ${ }_{\text {l }}^{\text {08-Jul }}$ 07-Jul |  | ${ }_{2}{ }^{\text {2 }}$-JIJul | ${ }_{\text {OS }}^{\text {O-Aug }}$ |  | 14,811 17,740 | l <br> $\begin{array}{l}14,761 \\ 17.340\end{array}$ | 2.386 3.051 |  | 50 400 | 12,375 14.289 | 4.900 3,799 | 7.475 10.490 |  |  |  |  |  |  |
| 2003 | ${ }^{\text {07-Jul }}$ | ${ }^{12-\text {-Jul }}$ | ${ }^{29}$ 2-Jul | ${ }_{\text {OS-Aug }}$ | ${ }_{18 \text { - } 5 \text { cp }}$ | 53,933 | ${ }_{53,533}$ | ${ }_{3} 3.946$ |  | 400 | ${ }_{4}^{4,587}$ | 21,694 | ${ }_{27} 27,893$ |  |  |  |  |  |  |
| 2004 | 07-Jul | 12-Jul | $25 . \mathrm{Jul}$ | 10-Aug | 15-Scp | 63.372 | 62.952 | 4.243 |  | 420 | 58,709 | 29.994 | 28,715 |  |  |  |  |  |  |
| 2005 | ${ }^{\text {07-Jul }}$ | ${ }^{11-\text {-Jul }}$ | ${ }^{0.4 .4 u g ~}$ | ${ }^{25-A u g}$ | 15-scp | ${ }^{43,446}$ | ${ }^{43.046}$ | 3,424 |  | 400 | 39,622 50 | ${ }^{16,420}$ | ${ }^{23,202}$ |  |  |  |  |  |  |
| 2006 | ${ }^{\text {09, Jul }}$ | 12-Jul | 27-Jul | ${ }^{20-A u g}$ | 13-5cp | 53,855 | 53,455 | ${ }^{3}, 403$ |  | 400 | ${ }^{50.052}$ | 24.126 | 25.926 |  |  |  |  |  |  |
| 2007 | ${ }^{\text {09,-Jul }}$ | 20 -Jul | 08 -Aug | ${ }^{19-A n g}$ | ${ }^{15-5 \mathrm{Sc}}$ P | ${ }^{21,074}$ | 20.874 | ${ }^{2} .839$ |  | 200 | 18.035 | 7.673 | 10.362 |  |  |  |  |  |  |
| 2008 209 |  | ${ }_{1}^{213-\text {-ulul }}$ |  | ${ }_{\text {04 Augy }}$ | 18-5cp 1-Scp | ${ }_{30.516}^{10.673}$ | 10,416 30,324 | 2.364 3.011 |  | 100 349 | ${ }^{8.052}$ | 4.143 4.041 | 3,909 23.272 |  |  |  |  |  |  |
| 2010 | 07-Jul | 10-Jul | 29.Jul | 12-Aug | 15-scp | 22,860 | 22,702 | 4.484 |  | 158 | 18,218 | 7,789 | 10,429 |  |  |  |  |  |  |
| 2011 | 09-Jul | 13-Jul | 18-Jul | 07-Aug | 15-Scp | 34.588 | 34,248 | 4.559 |  | ${ }^{340}$ | 29,689 | 10,248 | 19,441 |  |  |  |  |  |  |
| 2012 | ${ }^{\text {0, -Jul }}$ | 16--Jul | 24. Jul | ${ }^{08-A u g}$ | 30-Aug | ${ }^{13,5887}$ | ${ }^{13,463}$ | ${ }^{3} .949$ |  | 224 | 9.514 | ${ }^{3.928}$ | ${ }_{5}^{5.586}$ |  |  |  |  |  |  |
| ${ }_{2014}^{2013}$ |  | ${ }_{2}{ }_{2}$ 2--Jul | ${ }_{2}^{25-\text {-ulu }}$ | ${ }_{\substack{\text { O2-Aug } \\ \text { 31-Jul }}}$ | cos.sp | 15.828 40.145 | 15.828 39.745 | 3.196 2.881 |  | 400 | 12,632 36.864 | 6,383 17.376 | 6.249 19.488 | 3.494 | 1.656 | 1.838 |  |  |  |
| 2015 | ${ }^{\text {09-Jul }}$ | 15.Jul | ${ }^{07-\text {-aug }}$ | ${ }^{23-A u g}$ | 13 -sep | 33,159 | 33,159 | ${ }^{3.871}$ |  | 0 | 29,288 | 14.312 | 14.976 |  |  |  |  |  |  |
| 2016 | ${ }^{07-\text {-Jul }}$ | 11-Jul | 05 -Aug | ${ }^{22-A u g}$ | 12-Scp | ${ }^{38.631}$ | 38,458 | 4.315 |  | 173 | 34,146 | 13.245 | 20.901 |  |  |  |  |  |  |
| 2017 | 07-Jul | 14-Jul | 05 -Aug | 31-Ang | 18.Scp | 19.241 | 19,241 | 2.909 |  | 0 | 16.332 | 8.525 | 7.807 |  |  |  |  |  |  |
| 2018 | ${ }^{\text {07-Jul }}$ | $15 . \mathrm{Jul}$ |  |  | 09.Scp | 9.854 | 16.350 | 1.878 |  | 207 | 14,472 | 7.210 | 7.262 |  |  |  | 6.703 | 3.340 | 3,363 |
| $\frac{2019}{\text { Averages }}$ | 07-Jul | 13-Jul | 30-Jul | 12-Aug | 10.Scp | 36.999 | 36,787 | 3.579 |  | 212 | 33,208 | 19,037 | 14.171 |  |  |  |  | 0 | ${ }^{0}$ |
| $59-18$ | 09-Jul | 17-Jul | 29-Jul | ${ }^{11-A u g}$ | 07-Sp | 25.041 | 24,494 |  |  |  |  |  |  |  |  |  |  |  |  |
| 09-18 | 08.Jul | 14-Jul | 27-Jul | 12-Aug | 11-Scp | 25.867 | 26,352 | 3.505 |  | 185 | 22,847 | 9.306 | 13.541 |  |  |  |  |  |  |

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

Appendix B. 28. Estimates of sockeye salmon smolt migrating through Tahltan Lake smolt weir, 1984-2019.

| Year | Weir <br> Installed | Date of Arrival |  |  | Total <br> Count | Total Estimate | Date and Expansion | Smolt |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | First | 50\% | 90\% |  |  |  | Natural | Hatchery |
| 1984 | 10-May | 11-May | 23-May | 06-Jun |  | 218,702 |  |  |  |
| 1985 | $25-\mathrm{Apr}$ | 23-May | 31-May | 28-May |  | 613,531 |  |  |  |
| 1986 | 8-May | 10-May | 31-May | 07-Jun |  | 244,330 |  |  |  |
| $1987{ }^{\text {a }}$ | 7-May | 15-May | 23-May | 24-May |  | 810,432 |  |  |  |
| 1988 | 1-May | 08-May | 20-May | 06-Jun |  | 1,170,136 |  |  |  |
| 1989 | 5-May | 08-May | 22-May | 06-Jun |  | 580,574 |  |  |  |
| $1990{ }^{\text {b }}$ |  | 15-May | 29-May | 05-Jun | 595,147 | 610,407 | 6/14 97.5\% |  |  |
| $1991{ }^{\text {c }}$ | 5-May | 14-May | 21-May | 30-May | 1,439,676 | 1,487,265 | 6/13 96.8\% | 1,220,397 | 266,868 |
| $1992{ }^{\text {d }}$ | 7-May | 13-May | 21-May | 27-May | 1,516,150 | 1,555,026 | 6/14 97.5\% | 750,702 | 804,324 |
| 1993 | 7-May | 11-May | 17-May | 22-May |  | 3,255,045 |  | 2,855,562 | 399,483 |
| 1994 | 8-May | 08-May | 16-May | 12-Jun |  | 915,119 |  | 620,809 | 294,310 |
| 1995 | 5-May | 06-May | 13-May | 11-Jun |  | 822,284 |  | 767,027 | 55,257 |
| 1996 | 11-May | 11-May | 20-May | 25-May |  | 1,559,236 |  | 1,408,020 | 151,216 |
| 1997 | 7-May | 11-May | 23-May | 30-May |  | 518,202 |  | 348,685 | 169,517 |
| 1998 | 7-May | 08-May | 25-May | 05-Jun |  | 540,866 |  | 326,420 | 214,446 |
| 1999 | 6-May | 10-May | 09-Jun | 15-Jun |  | 762,033 |  | 468,488 | 293,545 |
| 2000 | 7-May | 09-May | 22-May | 17-Jun |  | 619,274 |  | 355,618 | 263,656 |
| 2001 | 6-May | 07-May | 24-May | 18-Jun |  | 1,495,642 |  | 841,268 | 654,374 |
| 2002 | 6-May | 14-May | 27-May | 12-Jun |  | 1,873,598 |  | 1,042,435 | 831,163 |
| 2003 | 6-May | 11-May | 29-May | 06-Jun |  | 1,960,480 |  | 979,442 | 981,038 |
| 2004 | 6-May | 10-May | 21-May | 25-May |  | 2,116,701 |  | 825,513 | 1,291,188 |
| 2005 | 6-May | 07-May | 17-May | 25-May |  | 1,843,804 |  | 943,929 | 899,875 |
| 2006 | 6-May | 10-May | 25-May | 02-Jun |  | 2,195,266 |  | 1,773,062 | 422,204 |
| 2007 | 6-May | 16-May | 21-May | 28-May |  | 1,055,114 |  | 644,987 | 410,127 |
| 2008 | 6-May | 12-May | 23-May | 02-Jun |  | 1,402,995 |  | 870,295 | 532,700 |
| 2009 | 6-May | 14-May | 26-May | 01-Jun |  | 746,045 |  | 484,929 | 261,116 |
| 2010 | 6-May | 10-May | 23-May | 07-Jun |  | 557,532 |  | 306,344 | 251,188 |
| 2011 | 7-May | 17-May | 26-May | 01-Jun |  | 1,632,119 |  | 960,531 | 671,588 |
| 2012 | 10-May | 13-May | 25-May | 02-Jun |  | 639,473 |  | 324,876 | 314,597 |
| 2013 | 8-May | 10-May | 23-May | 28-May |  | 2,387,669 |  | 1,671,368 | 716,301 |
| 2014 | 11-May | 16-May | 24-May | 30-May | 1,461,359 | 1,531,823 | /05 95.4\% | 980,367 | 551,456 |
| 2015 | 7-May | 12-May | 20-May | 26-May | 2,096,350 | 2,123,168 |  | 966,041 | 1,157,127 |
| 2016 | 6-May | 10-May | 18-May | 24-May | 2,094,592 | 2,094,592 |  | 1,019,421 | 1,075,171 |
| 2017 | 4-May | 07-May | 28-May | 03-Jun | 2,461,675 | 2,461,675 |  | 1,186,954 | 1,274,721 |
| 2018 | 6-May | 11-May | 19-May | 25-May | 1,014,975 | 1,014,975 |  | 378,733 | 636,242 |
| 2019 | 04-May | 14-May | 23-May | 27-May | 1,599,695 | 1,599,695 |  | 456,083 | 1,143,612 |
| Averages |  |  |  |  |  |  |  |  |  |
| 84-18 | 06-May | 11-May | 23-May | 02-Jun |  | 1,297,575 |  | 904,365 | 565,886 |
| 09-18 | 07-May | 12-May | 23-May | 30-May |  | 1,518,907 |  | 827,956 | 690,951 |

[^0]Appendix B. 29. Weir counts of Chinook salmon at Little Tahltan River, 1985-2019.

| Year | Weir Installed | Date of Arrival |  |  | Total <br> Count | Broodstock and Other | Natural Spawners | Landslide mortality |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | First | 50\% | 90\% |  |  |  |  |
| Large Chinook |  |  |  |  |  |  |  |  |
| 1985 | 03-Jul | 04-Jul | 30-Jul | 06-Aug | 3,114 |  | 3,114 |  |
| 1986 | 28-Jun | 29-Jun | 21-Jul | 05-Aug | 2,891 |  | 2,891 |  |
| 1987 | 28-Jun | 04-Jul | 24-Jul | 02-Aug | 4,783 |  | 4,783 |  |
| 1988 | 26-Jun | 27-Jun | 18-Jul | 03-Aug | 7,292 |  | 7,292 |  |
| 1989 | 25-Jun | 26-Jun | 23-Jul | 02-Aug | 4,715 |  | 4,715 |  |
| 1990 | 22-Jun | 29-Jun | 23-Jul | 04-Aug | 4,392 |  | 4,392 |  |
| 1991 | 23-Jun | 25-Jun | 20-Jul | 03-Aug | 4,506 |  | 4,506 |  |
| 1992 | 24-Jun | 04-Jul | 21-Jul | 30-Jul | 6,627 | -12 | 6,615 |  |
| 1993 | 20-Jun | 21-Jun | 16-Jul | 28-Jul | 11,449 | -12 | 11,437 |  |
| 1994 | 18-Jun | 28-Jun | 22-Jul | 02-Aug | 6,387 | -14 | 6,373 |  |
| 1995 | 17-Jun | 20-Jun | 17-Jul | 04-Aug | 3,072 | 0 | 3,072 |  |
| 1996 | 17-Jun | 26-Jun | 16-Jul | 30-Jul | 4,821 | 0 | 4,821 |  |
| 1997 | 14-Jun | 22-Jun | 16-Jul | 29-Jul | 5,557 | -10 | 5,547 |  |
| 1998 | 13-Jun | 19-Jun | 14-Jul | 29-Jul | 4,879 | -6 | 4,873 |  |
| 1999 | 18-Jun | 27-Jun | 19-Jul | 1-Aug | 4,738 | -5 | 4,733 |  |
| 2000 | 19-Jun | 23-Jun | 21-Jul | 5-Aug | 6,640 | -9 | 6,631 |  |
| 2001 | 20-Jun | 23-Jun | 18-Jul | 2-Aug | 9,738 | -8 | 9,730 |  |
| 2002 | 20-Jun | 23-Jun | 18-Jul | 27-Jul | 7,490 | -14 | 7,476 |  |
| 2003 | 20-Jun | 20-Jun | 19-Jul | 6-Aug | 6,492 | 0 | 6,492 |  |
| 2004 | 18-Jun | 19-Jun | 20-Jul | 31-Jul | 16,381 | 0 | 16,381 |  |
| 2005 | 19-Jun | 21-Jun | 22-Jul | 4-Aug | 7,387 | 0 | 7,387 |  |
| 2006 | 20-Jun | 26-Jun | 21-Jul | 29-Jul | 3,860 | 0 | 3,860 |  |
| 2007 | 4-Jul | 10-Jul | 29-Jul | 4-Aug | 562 | 0 | 562 |  |
| 2008 | 19-Jun | 6-Jul | 26-Jul | 4-Aug | 2,663 | 0 | 2,663 |  |
| 2009 | 19-Jun | 3-Jul | 19-Jul | 4-Aug | 2,245 | 0 | 2,245 |  |
| 2010 | 19-Jun | 22-Jun | 23-Jul | 2-Aug | 1,057 | 0 | 1,057 |  |
| 2011 | 19-Jun | 22-Jun | 23-Jul | 2-Aug | 1,753 | 0 | 1,753 |  |
| 2012 | 27-Jun | 7-Jul | 26-Jul | 5-Aug | 720 | 0 | 720 |  |
| 2013 | 20-Jun | 9-Jul | 27-Jul | 5-Aug | 878 | 0 | 878 |  |
| 2014 | 23-Jun | 18-Jul | 28-Jul | 31-Jul | 169 |  | 169 | 394 |
| 2015 | 19-Jun | 14-Jul | 24-Jul | 27-Jul | 450 |  | 450 |  |
| 2016 | 22-Jun | 8-Jul | 28-Jul | 5-Aug | 921 |  | 921 |  |
| 2017 | 23-Jun | 23-Jun | 18-Jul | 6-Aug | 492 |  | 492 |  |
| 2018 | 23-Jun | 23-Jun | 18-Jul | 31-Jul | 453 |  | 453 |  |
| 2019 | 22-Jun | 29-Jun | 24-Jul | 7-Aug | 536 |  | 536 |  |
| Averages |  |  |  |  |  |  |  |  |
| 85-18 | 21-Jun | 28-Jun | 21-Jul | 01-Aug | 4,399 |  | 4,397 |  |
| 09-18 | 21-Jun | 02-Jul | 23-Jul | 02-Aug | 914 |  | 914 |  |
| nonlarge Chinook |  |  |  |  |  |  |  |  |
| 1985 | 03-Jul | 04-Jul | 31-Jul | 10-Aug | 316 |  | 316 |  |
| 1986 | 28-Jun | 03-Jul | 25-Jul | 06-Aug | 572 |  | 572 |  |
| 1987 | 28-Jun | 03-Jul | 26-Jul | 06-Aug | 365 |  | 365 |  |
| 1988 | 26-Jun | 27-Jun | 17-Jul | 02-Aug | 327 |  | 327 |  |
| 1989 | 25-Jun | 26-Jun | 23-Jul | 02-Aug | 199 |  | 199 |  |
| 1990 | 22-Jun | $05-\mathrm{Jul}$ | 22-Jul | 30-Jul | 417 |  | 417 |  |
| 1991 | 23-Jun | 03-Jul | 24-Jul | 07-Aug | 313 |  | 313 |  |
| 1992 | 24-Jun | 12-Jul | 22-Jul | 30-Jul | 131 |  | 131 |  |
| 1993 | 20-Jun | 30-Jun | 14-Jul | 01-Aug | 60 |  | 60 |  |
| 1994 | 18-Jun | 02-Jul | 22-Jul | 05-Aug | 121 |  | 121 |  |
| 1995 | 17-Jun | 22-Jun | 28-Jul | 10-Aug | 135 |  | 135 |  |
| 1996 | 17-Jun | 12-Jul | 25-Jul | 05-Aug | 22 |  | 22 |  |
| 1997 | 14-Jun | 26-Jun | 21-Jul | 1-Aug | 54 |  | 54 |  |
| 1998 | 13-Jun | 26-Jun | 20-Jul | 7-Aug | 37 |  | 37 |  |
| 1999 | 18-Jun | 1-Jul | 23-Jul | 6-Aug | 202 |  | 202 |  |
| 2000 | 19-Jun | 23-Jun | 20-Jul | 5-Aug | 108 |  | 108 |  |
| 2001 | 20-Jun | 23-Jun | 27-Jul | 3-Aug | 269 |  | 269 |  |
| 2002 | 20-Jun | 26-Jun | 21-Jul | 7-Aug | 618 |  | 618 |  |
| 2003 | 20-Jun | 30-Jun | 21-Jul | 5-Aug | 334 |  | 334 |  |
| 2004 | 18-Jun | 21-Jun | 19-Jul | 31-Jul | 250 |  | 250 |  |
| 2005 | 19-Jun | 29-Jun | 23-Jul | 4-Aug | 231 |  | 231 |  |
| 2006 | 20-Jun | 7-Jul | 23-Jul | 5-Aug | 93 |  | 93 |  |
| 2007 | 04-Jul | 15-Jul | 29-Jul | 1-Aug | 12 |  | 12 |  |
| 2008 | 19-Jun | 14-Jul | 25-Jul | 29-Jul | 139 |  | 139 |  |
| 2009 | 19-Jun | 9-Jul | 19-Jul | 4-Aug | 99 |  | 99 |  |
| 2010 | 19-Jun | 7-Jul | 26-Jul | 4-Aug | 221 |  | 221 |  |
| 2011 | 27-Jun | 7-Jul | 26-Jul | 4-Aug | 194 |  | 194 |  |
| 2012 | 27-Jun | 11-Jul | 18-Jul | 27-Jul | 51 |  | 51 |  |
| 2013 | 20-Jun | 13-Jul | 27-Jul | 3-Aug | 183 |  | 183 |  |
| $2014{ }^{\text {a }}$ | 23-Jun | 18-Jul | 28-Jul | 31-Jul | 39 |  | 39 | 91 |
| 2015 | 19-Jun | 14-Jul | 24-Jul | 27-Jul | 490 |  | 490 |  |
| 2016 | 22-Jun | 9-Jul | 28-Jul | 6-Aug | 318 |  | 318 |  |
| 2017 | 23-Jun | 26-Jun | 26-Jul | 7-Aug | 311 |  | 311 |  |
| 2018 | 24-Jun | 1-Jul | 27-Jul | 4-Aug | 413 |  | 413 |  |
| 2019 | 23-Jun | 25-Jun | 31-Jul | 6-Aug | 1,002 |  | 1,002 |  |
| Averages |  |  |  |  |  |  |  |  |
| 85-18 | 21-Jun | 03-Jul | 23-Jul | 03-Aug | 225 |  | 225 |  |
| 09-18 | 22-Jun | 08-Jul | 24-Jul | 02-Aug | 232 |  | 232 |  |

Appendix C. 1. Weekly Chinook salmon estimates in the U.S. fisheries in D111, 2019.

| $\begin{aligned} & \begin{array}{l} \text { ONLY } \\ \text { (small } \end{array} \\ & \hline \end{aligned}$ | $\frac{\mathrm{PU}}{\text { LargeTaku }}$ | D111sport |  | D111 gillnet |  |  |  | D111 troll |  |  | US large <br> Taku | Amalga Seine non-Taku |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Largetotal | arge non-TaLLarge Taku | Nonlarge | Large tot | - | ge Tak |  |  | eTaku |  |  |
| 18 |  |  | 0 |  |  |  |  |  |  |  |  |  |
| 19 |  |  | 0 |  |  |  |  |  |  |  |  |  |
| 20 |  |  | 0 |  |  |  |  |  |  |  |  |  |
| 21 |  |  | 0 |  |  |  |  |  |  |  |  |  |
| 22 |  |  | 0 |  |  |  |  |  |  |  |  |  |
| 23 |  |  | 0 |  |  |  |  |  |  |  |  |  |
| 24 |  | 258 | $69 \quad 189$ |  |  |  |  |  |  |  |  |  |
| 25 |  | 644 | $345 \quad 299$ | 34 | 49 | 22 | 27 |  |  |  |  |  |
| 26 |  | 832 | 925 -93 | 47 | 86 |  | 86 |  |  |  |  |  |
| 27 |  | 498 | $167 \quad 331$ | 158 | 146 | 24 | 122 |  |  |  |  |  |
| 28 |  | 276 | 0276 | 163 | 109 | 75 | 34 |  |  |  |  |  |
| 29 |  | 125 | $67 \quad 58$ | 81 | 63 | 74 | -11 |  |  |  |  |  |
| Total | 11 | 2,633 | 1,573 1,060 | 483 | 454 | 195 | 259 | 0 | 0 | 0 | 0 | 0 |

Appendix C. 2. Weekly Chinook salmon abundance estimates of above border run and harvest in the Canadian fisheries in the Taku River 2019.

| Above |  | Commercial |  |  |  | Assesment/Test fishery |  |  |  | Aboriginal |  | Rec | $\begin{aligned} & \text { Total } \\ & \text { Large } \end{aligned}$ | Spawning |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Large |  | Nonlarge |  | Large |  | Nonlarge |  | Large | Nonlarge |  |  |  |
| SW | Border Run | Harvested | Released | Harvested | Released | Harvested | Released | Harvested | Released | Harvested | Harvested | Harvested | Harvest | Escapement |
| 19 |  |  |  |  |  |  |  |  |  |  |  |  | 0 |  |
| 20 |  |  |  |  |  |  |  |  |  |  |  |  | 0 |  |
| 21 |  |  |  |  |  |  |  |  |  |  |  |  | 0 |  |
| 22 |  |  |  |  |  |  |  |  |  |  |  |  | 0 |  |
| 23 |  |  |  |  |  |  |  |  |  |  |  |  | 0 |  |
| 24 |  |  |  |  |  |  |  |  |  |  |  |  | 0 |  |
| 25 |  |  |  |  |  |  |  |  |  |  |  |  | 0 |  |
| 26 |  |  |  |  |  |  |  |  |  |  |  |  | 0 |  |
| 27 |  |  | 24 |  | 6 |  |  |  |  |  |  |  | 0 |  |
| 28 |  |  | 40 |  | 13 |  |  |  |  |  |  |  | 0 |  |
| 29 |  |  | 17 |  | 8 |  |  |  |  |  |  |  | 0 |  |
| 30 |  |  | 7 |  | 1 |  |  |  |  |  |  |  | 0 |  |
| 31 |  |  | 3 |  | 0 |  |  |  |  |  |  |  | 0 |  |
| 32 |  |  | 5 |  | 0 |  |  |  |  |  |  |  | 0 |  |
| 33 |  |  | 8 |  | 1 |  |  |  |  |  |  |  | 0 |  |
| 34 |  |  | 1 |  | 0 |  |  |  |  |  |  |  | 0 |  |
| 35 |  |  | 1 |  | 0 |  |  |  |  |  |  |  | 0 |  |
| Insea | on Estimate |  | 106 | 0 | 29 | 0 | 0 | 0 | 0 | 10 | 5 |  | 10 |  |
| Postseason estimate |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 11,568 |  |  |  |  | 0 | 0 |  |  | 10 | 5 |  | 10 | 11,558 |

Appendix C. 3. Weekly sockeye salmon harvest of Alaskan D111 traditional and terminal hatchery access common property commercial drift gillnet fishery, 2019.

| SW | D111 Commercial drift gillnet |  |  |  |  |  | Amalga Seine111-55 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gillnet | Traditional StatArea specific harvests |  |  |  | Speel Arm SHA |  |
|  | D111 Total | 111-32 | 111-31/90 | 111-20 | 111-34 | 111-33 |  |
| 25 | 191 | 142 | 49 |  |  |  |  |
| 26 | 988 | 941 | 47 |  |  |  |  |
| 27 | 2,363 | 1,712 | 651 |  |  |  |  |
| 28 | 7,914 | 5,965 | 1,949 |  |  |  |  |
| 29 | 17,694 | 14,283 | 3,411 |  |  |  |  |
| 30 | 27,574 | 22,795 | 4,779 |  |  |  |  |
| 31 | 21,400 | 17,306 | 4,094 |  |  |  |  |
| 32 | 11,303 | 5,638 | 1,998 |  | 2,252 | 1,415 |  |
| 33 | 9,454 | 2,862 | 2,168 |  | 500 | 3,924 |  |
| 34 | 4,369 | 895 | 326 |  | 484 | 2,664 |  |
| 35 | 1,586 | 112 | 1 |  |  | 1,473 |  |
| 36 | 183 | 46 | 8 |  |  | 129 |  |
| 37 | 7 | 7 | 0 |  |  |  |  |
| 38 | 0 | 0 | 0 |  |  |  |  |
| 39 | 0 | 0 | 0 |  |  |  |  |
| 40 | 0 | 0 | 0 |  |  |  |  |
| 41 | 0 | 0 | 0 |  |  |  |  |
| Total | 105,026 | 72,704 | 19,481 | 0 | 3,236 | 9,605 | 0 |

Appendix C. 4. Weekly stock proportions of sockeye salmon harvested in the Alaskan District 111 traditional commercial drift gillnet fishery, 2019.

| Does not inlcude Port Snettisham harvests. Taku River wild stock composition estimates are based on GSI; see Appendix G. 4 for GSI details. |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | D111 Commercial gillnet |  |  |  |  |  |  |  |  |  |  |  |
|  | Taku harvest proportions |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | Tats | menie | King Salmon | Taku | Total | Wild Snet/ | U.S. | Stikine | Total | Total |
| SW | Taku Lakes | Mainstem | Wild | Enhanced | Enhanced | Wild | Taku | wild other | Enhanced | Enhanced | Enhanced | Wild |
| 25 | 0.108 | 0.463 | 0.003 | 0.003 | 0.003 | 0.574 | 0.580 | 0.415 | 0.003 | 0.003 | 0.011 | 0.989 |
| 26 | 0.182 | 0.646 | 0.001 | 0.000 | 0.013 | 0.829 | 0.842 | 0.141 | 0.005 | 0.013 | 0.030 | 0.970 |
| 27 | 0.205 | 0.681 | 0.001 | 0.000 | 0.006 | 0.888 | 0.894 | 0.081 | 0.006 | 0.020 | 0.032 | 0.968 |
| 28 | 0.187 | 0.610 | 0.001 | 0.002 | 0.004 | 0.797 | 0.804 | 0.130 | 0.064 | 0.002 | 0.072 | 0.928 |
| 29 | 0.152 | 0.561 | 0.001 | 0.004 | 0.004 | 0.714 | 0.723 | 0.077 | 0.199 | 0.000 | 0.209 | 0.791 |
| 30 | 0.107 | 0.525 | 0.011 | 0.011 | 0.000 | 0.644 | 0.656 | 0.096 | 0.248 | 0.001 | 0.261 | 0.739 |
| 31 | 0.089 | 0.697 | 0.019 | 0.012 | 0.001 | 0.805 | 0.819 | 0.082 | 0.097 | 0.001 | 0.112 | 0.888 |
| 32 | 0.048 | 0.564 | 0.039 | 0.025 | 0.000 | 0.651 | 0.677 | 0.035 | 0.289 | 0.000 | 0.315 | 0.685 |
| 33 | 0.065 | 0.431 | 0.077 | 0.034 | 0.001 | 0.573 | 0.608 | 0.043 | 0.348 | 0.001 | 0.384 | 0.616 |
| 34 | 0.027 | 0.229 | 0.046 | 0.008 | 0.001 | 0.302 | 0.312 | 0.107 | 0.580 | 0.001 | 0.591 | 0.409 |
| 35 | 0.007 | 0.412 | 0.128 | 0.022 | 0.002 | 0.548 | 0.572 | 0.064 | 0.362 | 0.002 | 0.389 | 0.611 |
| 36 | 0.007 | 0.412 | 0.128 | 0.022 | 0.002 | 0.548 | 0.572 | 0.064 | 0.362 | 0.002 | 0.389 | 0.611 |
| 37 | 0.007 | 0.412 | 0.128 | 0.022 | 0.002 | 0.548 | 0.572 | 0.064 | 0.362 | 0.002 | 0.389 | 0.611 |
| 38 | 0.007 | 0.412 | 0.128 | 0.022 | 0.002 | 0.548 | 0.572 | 0.064 | 0.362 | 0.002 | 0.389 | 0.611 |
| 39 | 0.007 | 0.412 | 0.128 | 0.022 | 0.002 | 0.548 | 0.572 | 0.064 | 0.362 | 0.002 | 0.389 | 0.611 |
| 40 | 0.007 | 0.412 | 0.128 | 0.022 | 0.002 | 0.548 | 0.572 | 0.064 | 0.362 | 0.002 | 0.389 | 0.611 |
| 41 | 0.007 | 0.412 | 0.128 | 0.022 | 0.002 | 0.548 | 0.572 | 0.064 | 0.362 | 0.002 | 0.389 | 0.611 |
| Total | 0.113 | 0.578 | 0.016 | 0.011 | 0.002 | 0.708 | 0.722 | 0.085 | 0.192 | 0.002 | 0.207 | 0.793 |
| 25 | 21 | 88 | 1 | 1 | 1 | 110 | 111 | 79 | 0 | 1 | 2 | 189 |
| 26 | 180 | 639 | 1 | 0 | 12 | 819 | 832 | 139 | 5 | 12 | 30 | 958 |
| 27 | 484 | 1,610 | 3 | 1 | 14 | 2,097 | 2,112 | 191 | 14 | 47 | 75 | 2,288 |
| 28 | 1,479 | 4,824 | 7 | 18 | 32 | 6,310 | 6,360 | 1,031 | 505 | 18 | 573 | 7,341 |
| 29 | 2,698 | 9,933 | 11 | 77 | 79 | 12,641 | 12,798 | 1,361 | 3,528 | 7 | 3,692 | 14,002 |
| 30 | 2,954 | 14,485 | 313 | 315 | 9 | 17,752 | 18,076 | 2,637 | 6,825 | 36 | 7,186 | 20,388 |
| 31 | 1,908 | 14,921 | 407 | 261 | 30 | 17,236 | 17,526 | 1,764 | 2,080 | 30 | 2,400 | 19,000 |
| 32 | 364 | 4,305 | 300 | 194 | 3 | 4,969 | 5,166 | 263 | 2,203 | 3 | 2,403 | 5,233 |
| 33 | 326 | 2,168 | 388 | 170 | 5 | 2,882 | 3,056 | 217 | 1,752 | 5 | 1,931 | 3,099 |
| 34 | 33 | 280 | 56 | 10 | 2 | 369 | 380 | 131 | 708 | 2 | 721 | 500 |
| 35 | 1 | 47 | 15 | 3 | 0 | 62 | 65 | 7 | 41 | 0 | 44 | 69 |
| 36 | 0 | 22 | 7 | 1 | 0 | 30 | 31 | 3 | 20 | 0 | 21 | 33 |
| 37 | 0 | 3 | 1 | 0 | 0 | 4 | 4 | 0 | 3 | 0 | 3 | 4 |
| 38 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 39 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 40 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| 41 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | 10,448 | 53,324 | 1,508 | 1,050 | 187 | 65,281 | 66,518 | 7,824 | 17,683 | 160 | 19,080 | 73,105 |

Appendix C. 5. Weekly sockeye salmon abundance estimates of above border run and harvest in the Canadian fisheries in the Taku River, 2019.
The above border run is are BTSPAS estimates.

| SW | Above <br> Border <br> Run | Commercial |  | Assesment/Test | Aboriginal | Above <br> Border <br> Escapement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | All | Taku |  |  |  |
| 22 |  |  |  |  |  |  |
| 23 |  |  |  |  |  |  |
| 24 |  |  |  |  |  |  |
| 25 |  |  |  |  |  |  |
| 26 |  |  |  |  |  |  |
| 27 |  | 585 | 585 |  |  |  |
| 28 | 12,454 | 1,435 | 1,432 |  |  |  |
| 29 | 22,673 | 2,497 | 2,482 |  |  |  |
| 30 | 47,566 | 4,423 | 4,423 |  |  |  |
| 31 | 67,743 | 5,796 | 5,796 |  |  |  |
| 32 | 79,687 | 2,222 | 2,222 |  |  |  |
| 33 | 89,858 | 2,645 | 2,645 |  |  |  |
| 34 | 95,572 | 1,157 | 1,157 |  |  |  |
| 35 |  | 461 | 461 |  |  |  |
| 36 |  | 125 | 125 |  |  |  |
| 37 |  | 45 | 44 |  |  |  |
| 38 |  | 4 | 4 |  |  |  |
| 39 |  |  |  |  |  |  |
| 40 |  |  |  |  |  |  |
| Postseaso | 98,203 | 21,395 | 21,376 | 0 | 105 | 76,722 |

Appendix C. 6. Estimates of wild and enhanced sockeye salmon stock harvested in the Canadian commercial fishery in the Taku River by week, 2019.

| Enhanced estimates based on harvest expanations of thermally marked fish. |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SW |  | Tatsameni Enhanced | Stikine <br> Enhanced | US <br> Enhanced | Taku Wild | King <br> Salmon <br> Enhanced | Tatsamenic Enhanced | Stikine <br> Enhanced | $\begin{gathered} \text { US } \\ \text { Enhanced } \end{gathered}$ | Taku Wild |
| 26 |  |  |  |  | 1.000 | 0 | 0 | 0 | 0 | 0 |
| 27 | 0.016 | 0.000 | 0.005 | 0.000 | 0.979 | 9 | 0 | 3 | 0 | 573 |
| 28 | 0.016 | 0.005 | 0.005 | 0.005 | 0.968 | 23 | 8 | 8 | 8 | 1,390 |
| 29 | 0.011 | 0.000 | 0.000 | 0.000 | 0.989 | 26 | 0 | 0 | 0 | 2,471 |
| 30 | 0.005 | 0.021 | 0.000 | 0.000 | 0.974 | 23 | 93 | 0 | 0 | 4,307 |
| 31 | 0.000 | 0.016 | 0.000 | 0.000 | 0.984 | 0 | 93 | 0 | 0 | 5,703 |
| 32 | 0.000 | 0.011 | 0.000 | 0.000 | 0.989 | 0 | 24 | 0 | 0 | 2,198 |
| 33 | 0.005 | 0.026 | 0.000 | 0.000 | 0.969 | 14 | 69 | 0 | 0 | 2,562 |
| 34 | 0.000 | 0.021 | 0.000 | 0.000 | 0.979 | 0 | 25 | 0 | 0 | 1,132 |
| 35 | 0.000 | 0.031 | 0.000 | 0.000 | 0.969 | 0 | 14 | 0 | 0 | 447 |
| 36 | 0.000 | 0.018 | 0.000 | 0.009 | 0.974 | 0 | 2 | 0 | 1 | 122 |
| 37 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 | 0 | 0 | 0 | 0 | 45 |
| 38 | 0.000 | 0.000 | 0.000 | 0.000 | 1.000 | 0 | 0 | 0 | 0 | 4 |
| Total | 0.004 | 0.015 | 0.000 | 0.000 | 0.979 | 95 | 328 | 11 | 9 | 20,952 |

Appendix C. 7. Weekly coho salmon harvest in the traditional Alaskan District 111 and StatArea 111-32 (Taku Inlet), commercial drift gillnet fishery, 2019.

|  | D111 Total |  |  |  | $111-32$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| SW | Total | Hatchery | Wild |  | Total |
| 25 | 1 |  | 1 |  | 0 |
| 26 | 6 |  | 6 |  | 5 |
| 27 | 39 |  | 39 |  | 25 |
| 28 | 75 |  | 75 |  | 27 |
| 29 | 155 |  | 155 |  | 128 |
| 30 | 637 |  | 637 |  | 560 |
| 31 | 1,900 |  | 1,900 |  | 1,227 |
| 32 | 1,105 | 73 | 1,032 |  | 761 |
| 33 | 1,206 | 114 | 1,092 |  | 818 |
| 34 | 1,941 | 592 | 1,349 |  | 1,671 |
| 35 | 2,563 | 1,100 | 1,463 |  | 2,473 |
| 36 | 2,120 | 795 | 1,325 |  | 1,337 |
| 37 | 7,048 | 3,677 | 3,371 |  | 6,937 |
| 38 | 4,041 | 1,456 | 2,585 |  | 3,983 |
| $39-40$ | 398 | 429 | -31 | 398 |  |
|  |  |  |  |  |  |
| Total | 23,235 | 8,236 | 14,999 | 20,350 |  |

Appendix C. 8. Weekly coho salmon abundance estimates of above border run and harvest in the Canadian fisheries in the Taku River, 2019.

| SW | Above border Run | Harvest |  |  |  | Above border Escapement |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Commercial | Aboriginal | Recreational | Assesment/test |  |
| 18 |  |  |  |  |  |  |
| 19 |  |  |  |  |  |  |
| 20 |  |  |  |  |  |  |
| 21 |  |  |  |  |  |  |
| 22 |  |  |  |  |  |  |
| 23 |  |  |  |  |  |  |
| 24 |  |  |  |  |  |  |
| 25 |  |  |  |  |  |  |
| 26 |  |  |  |  |  |  |
| 27 |  | 0 |  |  |  |  |
| 28 |  | 18 |  |  |  |  |
| 29 |  | 98 |  |  |  |  |
| 30 |  | 339 |  |  |  |  |
| 31 |  | 555 |  |  |  |  |
| 32 |  | 397 |  |  |  |  |
| 33 | 15,046 | 992 |  |  |  |  |
| 34 | 24,176 | 1,478 |  |  |  |  |
| 35 | 32,885 | 986 |  |  |  |  |
| 36 | 48,760 | 2,393 |  |  |  |  |
| 37 | 66,209 | 2,204 |  |  |  |  |
| 38 | 73,610 | 1,553 |  |  |  |  |
| 39 | 81,022 | 462 |  |  |  |  |
| 40 | 88,643 | 538 |  |  |  |  |
| 41 | 94,790 | 132 |  |  |  |  |
| 42 |  |  |  |  |  |  |
| Before SW34 |  | 2,399 |  |  |  |  |
| SW34 to end |  | 9,746 |  |  |  |  |
| Postseason Estimate | 95,011 | 12,145 | 107 | 0 | 0 | 82,759 |

Appendix C. 9. Weekly effort in the Alaskan traditional District 111 and StatArea 11132 (Taku Inlet), commercial drift gillnet fishery, 2019.

| SW | Start <br> Date | D111 |  |  | D111-32 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Days | Boat |  | Days | Boat |
|  |  | Boats | Open | Days | Boats | Open | Days |
| 25 | 16-Jun | 35 | 2.0 | 70 | 24 | 2.0 | 48 |
| 26 | 23-Jun | 41 | 2.0 | 82 | 39 | 2.0 | 78 |
| 27 | 30-Jun | 59 | 2.0 | 118 | 48 | 2.0 | 96 |
| 28 | 7-Jul | 99 | 3.0 | 297 | 69 | 2.0 | 138 |
| 29 | 14-Jul | 87 | 4.0 | 348 | 66 | 3.0 | 198 |
| 30 | 21-Jul | 96 | 4.0 | 384 | 70 | 3.0 | 210 |
| 31 | 28-Jul | 108 | 4.0 | 432 | 86 | 3.0 | 258 |
| 32 | 4-Aug | 56 | 5.0 | 280 | 36 | 3.0 | 108 |
| 33 | 11-Aug | 23 | 4.0 | 92 | 18 | 3.0 | 54 |
| 34 | 18-Aug | 19 | 3.0 | 57 | 15 | 2.0 | 30 |
| 35 | 26-Aug | 22 | 2.0 | 44 | 20 | 2.0 | 40 |
| 36 | 1-Sep | 20 | 3.0 | 60 | 18 | 1.0 | 18 |
| 37 | 8-Sep | 25 | 4.0 | 100 | 24 | 4.0 | 96 |
| 38 | 15-Sep | 26 | 5.0 | 130 | 26 | 5.0 | 130 |
| 39 | 22-Sep | 8 | 5.0 | 40 | 8 | 5.0 | 40 |
| 40 | 29-Sep | 2 | 5.0 | 10 | 2 | 5.0 | 10 |
| 41 | 6-Oct | 0 | 5.0 | 0 | 0 | 5.0 | 0 |
| Total |  | 183 | 62.0 | 2,544 |  | 52.0 | 1,552 |

Appendix C. 10. Weekly effort in the Canadian commercial and assessment fisheries in the Taku River, 2019.

| SW | Start <br> Date | Commercial |  |  | Assesment/test |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Average <br> Permits | Days <br> Fished | Permit Days | Average Permits | Days <br> Fished | $\begin{array}{r} \text { Permit } \\ \text { Days } \\ \hline \end{array}$ |
| 18 |  |  |  |  |  |  |  |
| 19 |  |  |  |  |  |  |  |
| 20 |  |  |  |  |  |  |  |
| 21 |  |  |  |  |  |  |  |
| 22 |  |  |  |  |  |  |  |
| 23 |  |  |  |  |  |  |  |
| 24 |  |  |  |  |  |  |  |
| 25 |  |  |  |  |  |  |  |
| 26 |  |  |  |  |  |  |  |
| 27 | 1-Jul | 2.00 | 2.00 | 4.00 |  |  |  |
| 28 | 7-Jul | 4.67 | 3.00 | 14.00 |  |  |  |
| 29 | 14-Jul | 5.50 | 4.00 | 22.00 |  |  |  |
| 30 | 21-Jul | 5.00 | 5.00 | 25.00 |  |  |  |
| 31 | 28-Jul | 6.75 | 4.00 | 27.00 |  |  |  |
| 32 | 4-Aug | 5.67 | 3.00 | 17.00 |  |  |  |
| 33 | 11-Aug | 7.00 | 3.00 | 21.00 |  |  |  |
| 34 | 18-Aug | 6.33 | 3.00 | 19.00 |  |  |  |
| 35 | 25-Aug | 5.75 | 4.00 | 23.00 |  |  |  |
| 36 | 1-Sep | 3.00 | 4.00 | 12.00 |  |  |  |
| 37 | 8-Sep | 2.80 | 5.00 | 14.00 |  |  |  |
| 38 | 15-Sep | 2.60 | 5.00 | 13.00 |  |  |  |
| 39 | 22-Sep | 1.00 | 4.00 | 4.00 |  |  |  |
| 40 | 29-Sep | 1.00 | 5.00 | 5.00 |  |  |  |
| 41 | 6-Oct | 1.00 | 6.00 | 6.00 |  |  |  |
| Total |  |  | 60 | 226 |  | 0 | 0 |

Appendix C. 11. Daily counts of adult sockeye salmon passing through Tatsamenie Lake weir, 2019.

| Date | Count | Cumulative |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Count | Percent |  |
| 16-Aug | Weir installed |  |  |  |
| 17-Aug | 2 | 2 | 0.1 |  |
| 18-Aug | 0 | 2 | 0.1 |  |
| 19-Aug | 0 | 2 | 0.1 |  |
| 20-Aug | 0 | 2 | 0.1 |  |
| 21-Aug | 0 | 2 | 0.1 |  |
| 22-Aug | 0 | 2 | 0.1 |  |
| 23-Aug | 1 | 3 | 0.1 |  |
| 24-Aug | 2 | 5 | 0.1 |  |
| 25-Aug | 138 | 143 | 3.7 |  |
| 26-Aug | 113 | 256 | 6.6 |  |
| 27-Aug | 244 | 500 | 12.8 |  |
| 28-Aug | 252 | 752 | 19.3 |  |
| 29-Aug | 154 | 906 | 23.2 |  |
| 30-Aug | 237 | 1,143 | 29.3 |  |
| 31-Aug | 237 | 1,380 | 35.4 |  |
| 1-Sep | 169 | 1,549 | 39.7 |  |
| 2-Sep | 109 | 1,658 | 42.5 |  |
| 3-Sep | 115 | 1,773 | 45.4 |  |
| 4-Sep | 58 | 1,831 | 46.9 |  |
| 5-Sep | 48 | 1,879 | 48.2 |  |
| 6-Sep | 106 | 1,985 | 50.9 |  |
| 7-Sep | 28 | 2,013 | 51.6 |  |
| 8-Sep | 31 | 2,044 | 52.4 |  |
| 9-Sep | 37 | 2,081 | 53.3 |  |
| 10-Sep | 133 | 2,214 | 56.7 |  |
| 11-Sep | 98 | 2,312 | 59.3 |  |
| 12-Sep | 135 | 2,447 | 62.7 |  |
| 13-Sep | 157 | 2,604 | 66.7 |  |
| 14-Sep | 114 | 2,718 | 69.7 |  |
| 15-Sep | 159 | 2,877 | 73.7 |  |
| 16-Sep | 30 | 2,907 | 74.5 |  |
| 17-Sep | 13 | 2,920 | 74.8 |  |
| 18-Sep | 36 | 2,956 | 75.8 |  |
| 19-Sep | 174 | 3,130 | 80.2 |  |
| 20-Sep | 52 | 3,182 | 81.5 |  |
| 21-Sep | 56 | 3,238 | 83.0 |  |
| 22-Sep | 276 | 3,514 | 90.1 |  |
| 23-Sep | 35 | 3,549 | 91.0 |  |
| 24-Sep | 45 | 3,594 | 92.1 |  |
| 25-Sep | 41 | 3,635 | 93.2 |  |
| 26-Sep | 28 | 3,663 | 93.9 |  |
| 27-Sep | 53 | 3,716 | 95.2 |  |
| 28-Sep | 29 | 3,745 | 96.0 |  |
| 29-Sep | 23 | 3,768 | 96.6 |  |
| 30-Sep | 56 | 3,824 | 98.0 |  |
| 1-Oct | 26 | 3,850 | 98.7 |  |
| 2-Oct | 27 | 3,877 | 99.4 |  |
| 3-Oct | 15 | 3,892 | 99.7 |  |
| 4-Oct | 10 | 3,902 | 100.0 |  |
| 5-Oct | Weir removed |  |  |  |
|  |  | Total | Wild | enhanced |
| Holding below weir |  |  |  |  |
| Weir cou |  | 3,902 | 2,034 | 1,868 |
| Outlet spawners |  |  |  |  |
| carcass otolith samples |  | 0 |  |  |
| broodstock otolith samples |  | 376 | 196 | 180 |
| Broodstock a |  | 1,248 | 651 | 597 |
| Broodstock holding mortalities |  | 146 | 76 | 70 |
| Natural Spawners |  | 2,508 | 1,307 | 1,201 |

a Broodstock included 685 females and 563 males from which gametes were collected,
Mortalities included 115 females and 31 males.
b Includes 169 females and 54 males held for broodstock but released unspawned.The spawning success of these fish is not known.

Appendix C. 12. Daily counts of adult sockeye salmon passing through Little Trapper Lake weir, 2019.

| Date |  | Cumulative |  |
| :---: | :---: | :---: | :---: |
|  | Count | Count | Percent |
| 22-Jul | Weir installed |  |  |
| 23-Jul | 0 | 0 | 0.0 |
| 24-Jul | 0 | 0 | 0.0 |
| 25-Jul | 0 | 0 | 0.0 |
| 26-Jul | 0 | 0 | 0.0 |
| 27-Jul | 0 | 0 | 0.0 |
| 28-Jul | 0 | 0 | 0.0 |
| 29-Jul | 0 | 0 | 0.0 |
| 30-Jul | 0 | 0 | 0.0 |
| 31-Jul | 352 | 352 | 5.5 |
| 1-Aug | 193 | 545 | 8.5 |
| 2-Aug | 48 | 593 | 9.3 |
| 3-Aug | 387 | 980 | 15.4 |
| 4-Aug | 399 | 1,379 | 21.6 |
| 5-Aug | 126 | 1,505 | 23.6 |
| 6-Aug | 683 | 2,188 | 34.3 |
| 7-Aug | 392 | 2,580 | 40.4 |
| 8-Aug | 254 | 2,834 | 44.4 |
| 9-Aug | 207 | 3,041 | 47.6 |
| 10-Aug | 41 | 3,082 | 48.3 |
| 11-Aug | 250 | 3,332 | 52.2 |
| 12-Aug | 190 | 3,522 | 55.2 |
| 13-Aug | 231 | 3,753 | 58.8 |
| 14-Aug | 72 | 3,825 | 59.9 |
| 15-Aug | 123 | 3,948 | 61.9 |
| 16-Aug | 123 | 4,071 | 63.8 |
| 17-Aug | 149 | 4,220 | 66.1 |
| 18-Aug | 151 | 4,371 | 68.5 |
| 19-Aug | 185 | 4,556 | 71.4 |
| 20-Aug | 168 | 4,724 | 74.0 |
| 21-Aug | 133 | 4,857 | 76.1 |
| 22-Aug | 72 | 4,929 | 77.2 |
| 23-Aug | 146 | 5,075 | 79.5 |
| 24-Aug | 92 | 5,167 | 81.0 |
| 25-Aug | 62 | 5,229 | 81.9 |
| 26-Aug | 73 | 5,302 | 83.1 |
| 27-Aug | 226 | 5,528 | 86.6 |
| 28-Aug | 98 | 5,626 | 88.2 |
| 29-Aug | 229 | 5,855 | 91.7 |
| 30-Aug | 185 | 6,040 | 94.6 |
| 31-Aug | 20 | 6,060 | 95.0 |
| 1-Sep | 33 | 6,093 | 95.5 |
| 2-Sep | 20 | 6,113 | 95.8 |
| 3-Sep | 54 | 6,167 | 96.6 |
| 4-Sep | 8 | 6,175 | 96.8 |
| 5-Sep | 98 | 6,273 | 98.3 |
| 6-Sep | 36 | 6,309 | 98.9 |
| 7-Sep | 13 | 6,322 | 99.1 |
| 8-Sep | 20 | 6,342 | 99.4 |
| 9-Sep | 30 | 6,372 | 99.8 |
| 10-Sep | 3 | 6,375 | 99.9 |
| 11-Sep | 1 | 6,376 | 99.9 |
| 12-Sep | 6 | 6,382 | 100.0 |
| 13-Sep Weir removed |  |  |  |
|  |  | Total | Wild enhanced |
| Holding below weir |  | 0 |  |
| Escapement to lake |  | 6,382 |  |
| Outlet spawners |  | 0 |  |
| otolith samples |  | 0 |  |
| Broodstock |  | 444 |  |
| Natural Spawners |  | 5,938 |  |

Appendix C. 13. Daily counts of adult sockeye salmon passing through the King Salmon Lake weir, 2019.

| Date | Count | Cumulative |  |
| :---: | :---: | :---: | :---: |
|  |  | Count | Percent |
| 4-Jul | Weir installed |  |  |
| 5-Jul | 0 | 0 | 0.0 |
| 6-Jul | 0 | 0 | 0.0 |
| 7-Jul | 1 | 1 | 0.0 |
| 8 -Jul | 0 | 1 | 0.0 |
| 9 -Jul | 0 | 1 | 0.0 |
| 10-Jul | 14 | 15 | 0.3 |
| 11-Jul | 33 | 48 | 1.1 |
| 12-Jul | 22 | 70 | 1.6 |
| 13-Jul | 13 | 83 | 1.9 |
| 14-Jul | 11 | 94 | 2.2 |
| 15-Jul | 1 | 95 | 2.2 |
| 16-Jul | 4 | 99 | 2.3 |
| 17-Jul | 0 | 99 | 2.3 |
| 18-Jul | 0 | 99 | 2.3 |
| 19-Jul | 5 | 104 | 2.4 |
| 20-Jul | 0 | 104 | 2.4 |
| 21-Jul | 0 | 104 | 2.4 |
| 22-Jul | 0 | 104 | 2.4 |
| 23-Jul | 1 | 105 | 2.4 |
| 24-Jul | 0 | 105 | 2.4 |
| 25 -Jul | 0 | 105 | 2.4 |
| 26-Jul | 0 | 105 | 2.4 |
| 27-Jul | 0 | 105 | 2.4 |
| 28-Jul | 0 | 105 | 2.4 |
| 29-Jul | 1,466 | 1,571 | 36.6 |
| 30-Jul | 30 | 1,601 | 37.3 |
| 31-Jul | 104 | 1,705 | 39.7 |
| 1-Aug | 132 | 1,837 | 42.8 |
| 2-Aug | 0 | 1,837 | 42.8 |
| 3-Aug | 455 | 2,292 | 53.4 |
| 4-Aug | 408 | 2,700 | 62.9 |
| 5-Aug | 363 | 3,063 | 71.3 |
| 6-Aug | 219 | 3,282 | 76.4 |
| 7-Aug | 272 | 3,554 | 82.8 |
| 8-Aug | 67 | 3,621 | 84.3 |
| 9-Aug | 29 | 3,650 | 85.0 |
| 10-Aug | 72 | 3,722 | 86.7 |
| 11-Aug | 101 | 3,823 | 89.0 |
| 12-Aug | 67 | 3,890 | 90.6 |
| 13-Aug | 71 | 3,961 | 92.2 |
| 14-Aug | 71 | 4,032 | 93.9 |
| 15-Aug | 20 | 4,052 | 94.4 |
| 16-Aug | 62 | 4,114 | 95.8 |
| 17-Aug | 16 | 4,130 | 96.2 |
| 18-Aug | 46 | 4,176 | 97.3 |
| 19-Aug | 19 | 4,195 | 97.7 |
| 20-Aug | 4 | 4,199 | 97.8 |
| 21-Aug | 5 | 4,204 | 97.9 |
| 22-Aug | 15 | 4,219 | 98.3 |
| 23-Aug | 24 | 4,243 | 98.8 |
| 24-Aug | 21 | 4,264 | 99.3 |
| 25-Aug | 0 | 4,264 | 99.3 |
| 26-Aug | 0 | 4,264 | 99.3 |
| 27-Aug | 1 | 4,265 | 99.3 |
| 28-Aug | 29 | 4,294 | 100.0 |
| 29-Aug | 0 | 4,294 | 100.0 |
| 30-Aug | 0 | 4,294 | 100.0 |
| 31-Aug | 0 | 4,294 | 100.0 |
| 1-Sep | 0 | 4,294 | 100.0 |
| 2-Sep | 0 | 4,294 | 100.0 |
| 3-Sep | 0 | 4,294 | 100.0 |
| 4-Sep |  | 4,294 | 100.0 |
| 5-Sep | Weir removed |  |  |
| Total | 4,294 |  |  |
| Escapement to lake |  | 4,294 |  |
| Broodstock |  |  |  |
| Spawners <br> Helicopter survey |  | 4,294 |  |
|  |  |  |  |

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

| Date | Count | weir, 2019. |  |
| :---: | :---: | :---: | :---: |
|  |  | Cumulative |  |
|  |  | Count | Percent |
| 6-Jul | Weir installed |  |  |
| 7-Jul | 0 | 0 | 0.0 |
| 8-Jul | 0 | 0 | 0.0 |
| 9 -Jul | 0 | 0 | 0.0 |
| 10-Jul | 0 | 0 | 0.0 |
| 11-Jul | 0 | 0 | 0.0 |
| 12-Jul | 0 | 0 | 0.0 |
| 13-Jul | 0 | 0 | 0.0 |
| 14-Jul | 0 | 0 | 0.0 |
| 15-Jul | 0 | 0 | 0.0 |
| 16-Jul | 0 | 0 | 0.0 |
| 17-Jul | 0 | 0 | 0.0 |
| 18-Jul | 0 | 0 | 0.0 |
| 19-Jul | 5 | 5 | 0.8 |
| 20-Jul | 68 | 73 | 12.1 |
| 21-Jul | 26 | 99 | 16.4 |
| 22-Jul | 1 | 100 | 16.5 |
| 23-Jul | 1 | 101 | 16.7 |
| 24-Jul | 1 | 102 | 16.9 |
| $25-\mathrm{Jul}$ | 91 | 193 | 31.9 |
| 26-Jul | 46 | 239 | 39.5 |
| 27-Jul | 125 | 364 | 60.2 |
| 28-Jul | 26 | 390 | 64.5 |
| 29-Jul | 2 | 392 | 64.8 |
| 30-Jul | 8 | 400 | 66.1 |
| 31-Jul | 52 | 452 | 74.7 |
| 1-Aug | 0 | 452 | 74.7 |
| 2-Aug | 5 | 457 | 75.5 |
| 3-Aug | 13 | 470 | 77.7 |
| 4-Aug | 14 | 484 | 80.0 |
| 5-Aug | 0 | 484 | 80.0 |
| 6-Aug | 0 | 484 | 80.0 |
| 7-Aug | 0 | 484 | 80.0 |
| 8-Aug | 1 | 485 | 80.2 |
| 9-Aug | 0 | 485 | 80.2 |
| 10-Aug | 0 | 485 | 80.2 |
| 11-Aug | 0 | 485 | 80.2 |
| 12-Aug | 0 | 485 | 80.2 |
| 13-Aug | 0 | 485 | 80.2 |
| 14-Aug | 0 | 485 | 80.2 |
| 15-Aug | 0 | 485 | 80.2 |
| 16-Aug | 0 | 485 | 80.2 |
| 17-Aug | 0 | 485 | 80.2 |
| 18-Aug | 3 | 488 | 80.7 |
| 19-Aug | 0 | 488 | 80.7 |
| 20-Aug | 0 | 488 | 80.7 |
| 21-Aug | 0 | 488 | 80.7 |
| 22-Aug | 0 | 488 | 80.7 |
| 23-Aug | 0 | 488 | 80.7 |
| 24-Aug | 1 | 489 | 80.8 |
| 25-Aug | 83 | 572 | 94.5 |
| 26-Aug | 11 | 583 | 96.4 |
| 27-Aug | 9 | 592 | 97.9 |
| 28-Aug | 11 | 603 | 99.7 |
| 29-Aug | 1 | 604 | 99.8 |
| 30-Aug | 1 | 605 | 100.0 |
| 31-Aug | 0 | 605 | 100.0 |
| 1-Sep | 0 | 605 | 100.0 |
| 2-Sep | 0 | 605 | 100.0 |
| 3-Sep | 0 |  |  |
| Total co |  | 605 |  |
| Harvest above weir |  |  |  |
| Escapem |  | 605 |  |

Appendix D. 1. All historic harvest and effort of salmon in the D111 gillnet fishery, 1960-2019.

| These estimates include traditional and hatchery access common property commercial drift gillnet harvest in District 111. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Chinook | Sockeye | Coho | Pink | Chum | Boat Day | sDays open |
| 1960 | 8,810 | 42,819 | 22,374 | 33,155 | 41,852 |  | 60 |
| 1961 | 7,434 | 45,981 | 15,486 | 41,455 | 24,433 |  | 62 |
| 1962 | 5,931 | 36,745 | 15,661 | 17,280 | 20,635 |  | 52 |
| 1963 | 2,652 | 24,119 | 10,855 | 21,692 | 20,114 |  | 54 |
| 1964 | 2,509 | 34,140 | 29,315 | 26,593 | 12,853 |  | 56 |
| 1965 | 4,170 | 27,569 | 32,667 | 2,768 | 11,533 |  | 63 |
| 1966 | 4,829 | 33,925 | 26,065 | 23,833 | 35,133 |  | 64 |
| 1967 | 5,417 | 17,735 | 40,391 | 12,372 | 22,834 |  | 53 |
| 1968 | 4,904 | 19,501 | 39,103 | 67,365 | 21,890 |  | 60 |
| 1969 | 6,986 | 41,222 | 10,802 | 74,178 | 15,046 | 1,518 | 42 |
| 1970 | 3,357 | 50,862 | 44,569 | 196,237 | 110,621 | 2,688 | 53 |
| 1971 | 6,945 | 66,261 | 41,588 | 31,296 | 90,964 | 3,053 | 55 |
| 1972 | 10,949 | 80,911 | 49,609 | 144,237 | 148,432 | 3,103 | 51 |
| 1973 | 9,799 | 85,402 | 35,453 | 58,186 | 109,245 | 3,286 | 41 |
| 1974 | 2,908 | 38,726 | 38,667 | 57,820 | 86,692 | 2,315 | 30 |
| 1975 | 2,182 | 32,550 | 1,185 | 9,567 | 2,678 | 1,084 | 16 |
| 1976 | 1,757 | 62,174 | 41,664 | 14,977 | 81,972 | 1,914 | 25 |
| 1977 | 1,068 | 72,030 | 54,929 | 88,904 | 60,964 | 2,258 | 27 |
| 1978 | 1,926 | 55,398 | 31,944 | 51,385 | 36,254 | 2,174 | 26 |
| 1979 | 3,701 | 122,148 | 16,194 | 152,836 | 61,194 | 2,269 | 29 |
| 1980 | 2,251 | 123,451 | 41,677 | 296,622 | 192,793 | 4,123 | 31 |
| 1981 | 1,721 | 49,942 | 26,711 | 254,856 | 76,438 | 2,687 | 30 |
| 1982 | 3,014 | 83,722 | 29,073 | 109,270 | 37,584 | 2,433 | 36 |
| 1983 | 888 | 31,821 | 21,455 | 66,239 | 15,264 | 1,274 | 33 |
| 1984 | 1,773 | 77,233 | 33,836 | 145,971 | 86,764 | 2,757 | 53 |
| 1985 | 2,632 | 88,093 | 55,518 | 311,305 | 106,900 | 3,264 | 48 |
| 1986 | 2,584 | 73,061 | 30,512 | 16,568 | 58,792 | 2,129 | 33 |
| 1987 | 2,076 | 75,212 | 35,219 | 363,439 | 121,660 | 2,514 | 35 |
| 1988 | 1,777 | 38,901 | 44,818 | 157,732 | 140,038 | 2,135 | 32 |
| 1989 | 1,811 | 74,019 | 51,812 | 180,639 | 36,979 | 2,333 | 41 |
| 1990 | 3,480 | 126,884 | 67,530 | 153,126 | 145,799 | 3,188 | 38 |
| 1991 | 3,214 | 109,471 | 126,576 | 74,170 | 160,422 | 4,145 | 57 |
| 1992 | 2,341 | 135,411 | 172,662 | 314,445 | 112,527 | 4,550 | 50 |
| 1993 | 7,159 | 171,427 | 65,539 | 29,216 | 167,902 | 3,827 | 43 |
| 1994 | 5,047 | 105,893 | 188,501 | 401,525 | 214,171 | 5,078 | 66 |
| 1995 | 4,660 | 103,362 | 83,606 | 41,228 | 349,949 | 4,034 | 49 |
| 1996 | 2,659 | 199,014 | 33,633 | 12,660 | 354,463 | 3,229 | 46 |
| 1997 | 2,804 | 94,745 | 3,515 | 51,424 | 176,864 | 2,107 | 33 |
| 1998 | 794 | 69,677 | 28,713 | 168,283 | 296,111 | 3,070 | 48 |
| 1999 | 1,949 | 79,686 | 17,608 | 59,316 | 429,359 | 2,841 | 59 |
| 2000 | 1,154 | 185,956 | 7,828 | 58,696 | 669,994 | 2,919 | 40 |
| 2001 | 1,698 | 293,043 | 22,646 | 123,026 | 237,122 | 4,731 | 54 |
| 2002 | 1,850 | 204,103 | 40,464 | 78,624 | 231,936 | 4,095 | 62 |
| 2003 | 1,467 | 238,160 | 24,338 | 114,166 | 170,874 | 3,977 | 78 |
| 2004 | 2,345 | 283,756 | 45,769 | 154,640 | 131,757 | 3,342 | 63 |
| 2005 | 23,301 | 106,048 | 21,289 | 182,778 | 93,700 | 3,734 | 68 |
| 2006 | 11,261 | 262,527 | 60,145 | 191,992 | 382,952 | 4,052 | 89 |
| 2007 | 1,452 | 112,241 | 22,394 | 100,375 | 590,169 | 3,505 | 64 |
| 2008 | 2,193 | 116,693 | 37,349 | 90,162 | 774,095 | 3,116 | 49 |
| 2009 | 6,800 | 62,070 | 36,615 | 56,801 | 918,350 | 3,438 | 62 |
| 2010 | 1,685 | 76,607 | 62,241 | 132,785 | 488,898 | 2,832 | 54 |
| 2011 | 2,510 | 163,896 | 28,574 | 344,766 | 667,929 | 3,481 | 46 |
| 2012 | 1,291 | 140,898 | 24,115 | 193,969 | 566,741 | 2,608 | 43 |
| 2013 | 1,224 | 207,231 | 51,441 | 127,343 | 726,849 | 3,655 | 62 |
| 2014 | 1,471 | 126,738 | 54,186 | 29,190 | 291,409 | 3,343 | 65 |
| 2015 | 1,150 | 83,431 | 23,572 | 296,575 | 475,456 | 2,391 | 44 |
| 2016 | 595 | 215,049 | 35,037 | 46,604 | 448,284 | 2,850 | 56 |
| 2017 | 1,086 | 113,818 | 16,002 | 230,243 | 885,694 | 3,384 | 43 |
| 2018 | 783 | 92,889 | 35,930 | 24,300 | 517,812 | 3,080 | 44 |
| 2019 | 1,358 | 105,026 | 23,473 | 71,724 | 246,600 | 2,544 | 62 |
| averag |  |  |  |  |  |  |  |
| 60-18 | 3,698 | 101,464 | 40,796 | 117,139 | 229,935 | 3,038 |  |
| 09-18 | 1,860 | 128,263 | 36,771 | 148,258 | 598,742 | 3,106 |  |

Appendix D. 2. District 111 total Chinook salmon harvest in the US gillnet, sport, and personal use fisheries, 2005-2019.
Reference only mostly based on CWT--See Appendix D3 for estimates of Taku River large Chinook salmon.

| Year | PU | Sport |  | Drift Gillnet |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Large | Large | arge non-Tal | Large | Large non-Taku | nonlarge |
| 2005 | 32 | 2,967 |  | 17,952 | 850 | 5,056 |
| 2006 | 18 | 2,396 |  | 10,233 | 808 | 948 |
| 2007 | 22 | 1,411 |  | 616 | 32 | 619 |
| 2008 | 46 | 1,255 |  | 920 | 332 | 893 |
| 2009 | 25 | 1,287 |  | 5,673 | 814 | 886 |
| 2010 | 36 | 2,173 | 849 | 975 | 235 | 308 |
| 2011 | 48 | 1,261 | 198 | 641 | 86 | 941 |
| 2012 | 34 | 1,407 | 449 | 762 | 68 | 309 |
| 2013 | 20 | 2,171 | 1,327 | 473 | 90 | 496 |
| 2014 | 21 | 2,045 | 927 | 769 | 124 | 375 |
| 2015 | 29 | 953 |  | 493 | 82 | 392 |
| 2016 | 30 | 1,081 | 444 | 212 | 80 | 157 |
| 2017 | 1 | 1,120 | 1,240 | 309 | 73 | 566 |
| 2018 | 11 | 1,244 | 746 | 260 | 239 | 220 |
| 2019 | 11 | 2,633 | 1,573 | 454 | 195 | 483 |
| Averages $09-18$ | 27 |  |  |  | 202 | 504 |

Appendix D. 3. Annual estimates of Taku River large Chinook salmon in the D111 fisheries, 2005-2019.
Estimates based on GSI for gillnet and sport; troll is CWT.
For detailed GSI stock comp estimates see Appendix G. 6.

| Year | PU | Sport | Gillnet | Troll | Total large Taku |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2010 |  | 0.453 | 0.539 |  |  |
| 2011 |  | 0.454 | 0.809 |  |  |
| 2012 |  | 0.494 | 0.876 |  |  |
| 2013 |  | 0.125 | 0.753 |  |  |
| 2014 |  | 0.396 | 0.635 |  |  |
| 2015 |  | 0.486 | 0.592 |  |  |
| 2016 |  | 0.587 | 0.749 |  |  |
| 2017 |  | 0.031 | 0.464 |  |  |
| 2018 |  | 0.007 | 0.118 |  |  |
| 2019 |  | 0.036 | 0.274 |  |  |
| Average |  |  |  |  |  |
| 10-17 |  | 0.38 | 0.68 |  |  |
| 2005 | 32 | 2,476 | 16,490 | 21 | 19,019 |
| 2006 | 18 | 2,048 | 9,257 | 11 | 11,334 |
| 2007 | 22 | 1,034 | 303 | 0 | 1,359 |
| 2008 | 46 | 632 | 445 | 0 | 1,123 |
| 2009 | 25 | 673 | 4,609 | 2 | 5,309 |
| 2010 | 36 | 984 | 526 | 0 | 1,546 |
| 2011 | 48 | 573 | 518 | 0 | 1,139 |
| 2012 | 34 | 695 | 668 | 8 | 1,405 |
| 2013 | 20 | 271 | 356 | 0 | 648 |
| 2014 | 21 | 810 | 489 | 0 | 1,320 |
| 2015 | 29 | 463 | 292 | 0 | 784 |
| 2016 | 30 | 635 | 159 | 0 | 824 |
| 2017 | 1 | 34 | 143 | 0 | 179 |
| 2018 | 11 | 9 | 31 | 0 | 50 |
| 2019 | 10 | 94 | 124 | 0 | 228 |
| Averages |  |  |  |  |  |
| 08-17 | 28 | 619 | 773 | 1 | 1,421 |

Appendix D. 4. Annual Chinook Salmon harvest in the Canadian fisheries in the Taku River, 1979-2019.

| Year | Commercial |  |  |  | Assesment/Test fishery |  |  |  | Aboriginal |  | Rec |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Large |  | Nonlarge |  | Large |  | Nonlarge |  | Large | nonlarge |  |
|  | Harvested | Released | Harvested | Released | d Harvested | Released | Harvested | Released | Harvested | Harvested | Harvested |
| 1979 | 97 |  |  |  |  |  |  |  |  |  | 300 |
| 1980 | 225 |  |  |  |  |  |  | 85 |  |  | 300 |
| 1981 | 159 |  |  |  |  |  |  |  |  |  | 300 |
| 1982 | 54 |  |  |  |  |  |  |  |  |  | 300 |
| 1983 | 156 |  | 400 |  |  |  |  | 9 |  |  | 300 |
| 1984 | 294 |  | 221 |  |  |  |  | 0 |  |  | 300 |
| 1985 | 326 |  | 24 |  |  |  |  | 4 |  |  | 300 |
| 1986 | 275 |  | 77 |  |  |  |  | 10 |  |  | 300 |
| 1987 | 127 |  | 106 |  |  |  |  | 0 |  |  | 300 |
| 1988 | 555 |  | 186 |  | 72 |  |  | 27 |  |  | 300 |
| 1989 | 895 |  | 139 |  | 31 |  |  | 6 |  |  | 300 |
| 1990 | 1,258 |  | 128 |  | 48 |  |  | 0 |  |  | 300 |
| 1991 | 1,177 |  | 432 |  | 0 |  |  | 0 |  |  | 300 |
| 1992 | 1,445 |  | 147 |  | 0 |  |  | 121 |  |  | 300 |
| 1993 | 1,619 |  | 171 |  | 0 |  |  | 25 |  |  | 300 |
| 1994 | 2,065 |  | 235 |  | There was no C | Canadian cond | ho test fisht | 119 |  |  | 300 |
| 1995 | 1,577 |  | 298 |  | There was no C | Canadian cond | ho test fishs | 70 |  |  | 105 |
| 1996 | 3,331 |  | 144 |  | There was no C | Canadian coh | ho test fishe | 63 |  |  | 105 |
| 1997 | 2,731 |  | 84 |  |  |  |  | 103 |  |  | 105 |
| 1998 | 1,107 |  | 227 |  | There was no C | Canadian cond | ho test fishs | 60 |  |  | 105 |
| 1999 | 908 |  | 257 |  | 577 | 2 | 181 | 50 |  |  | 105 |
| 2000 | 1,576 |  | 87 |  | 1,312 | 87 | 439 | 50 |  |  | 105 |
| 2001 | 1,458 |  | 118 |  | 1,175 | 229 | 871 | 125 |  |  | 105 |
| 2002 | 1,561 |  | 291 |  | 1,311 | 355 | 1,132 | 37 |  |  | 105 |
| 2003 | 1,894 |  | 547 |  | 1,403 | 397 |  | 277 | 237 |  | 105 |
| 2004 | 2,082 |  | 335 |  | 1,489 | 294 |  | 277 | 116 |  | 105 |
| 2005 | 7,399 |  | 821 |  | 0 | 0 |  | 212 |  |  | 105 |
| 2006 | 7,377 |  | 207 |  | 630 | 9 |  | 222 |  |  | 105 |
| 2007 | 874 |  | 426 |  | 1,396 | 302 |  | 167 | 16 |  | 105 |
| 2008 | 913 |  | 330 |  | 1,399 | 139 |  | 1 |  |  | 105 |
| 2009 | 6,759 |  | 1,137 |  | 0 | 0 |  | 172 | 0 |  | 105 |
| 2010 | 5,238 |  | 700 |  | 0 | 0 |  | 126 | 0 |  | 105 |
| 2011 | 2,342 |  | 514 |  | 680 | 134 |  | 150 | 21 |  | 105 |
| 2012 | 1,930 |  | 479 |  | 863 | 114 |  | 67 | 14 |  | 105 |
| 2013 | 579 |  | 653 |  | There were no | assesmen | t/test fisheris | 54 | 16 |  | 105 |
| 2014 | 1,041 |  | 579 |  | 1,230 | 62 |  | 96 | 16 |  | 105 |
| 2015 | 868 |  | 305 |  | 1,357 | 87 |  | 117 | 12 |  | 105 |
| 2016 | 508 |  | 195 |  | 1,021 | 144 |  | 91 | 10 |  | 10 |
| 2017 | 246 |  | 88 |  | 0 | 0 |  | 4 | 31 |  | 0 |
| 2018 | 0 | 221 | 0 | 158 | here were no | assesmen | t/test fisheris | 7 | 19 |  | 0 |
| 2019 | 0 | 106 | 0 | 29 | here were no | assesmen | t/test fisheris | 10 | 5 | 0 | 0 |
| Averages |  |  |  |  |  |  |  |  |  |  |  |
| 85-18 | 1,884 |  | 308 |  | 666 |  |  | 86 |  |  | 153 |
| 09-18 | 1,857 |  | 453 | 158 | 728 | 76 |  | 80 | 14 |  | 77 |

## Appendix D. 5. Taku River large Chinook salmon terminal run size, 1979-2019.

| Run estimate does not include spawning escapements below the U.S./Canada border. U.S. harvest estimates after 2004 are based on GSI (gillnet and sport fish) and CWT (troll) and harvest in the fisheries between SW 18-29. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Spawning Escapements | Method | Confidence Intervals |  | Canadian Catch/Harvest | Above Border |  |  |
|  |  |  |  |  | Run | U.S. | Terminal |
|  |  |  | Lower | Upper |  | Estimate | Harvest | Run |
| 1989 | 40,329 | Mark-recapture | 29,263 | 51,395 |  | 1,232 | 41,561 |  |  |
| 1990 | 52,142 | Mark-recapture | 33,863 | 70,421 | 1,606 | 53,748 |  |  |
| 1991 | 51,645 | Aerial expansion | 17,072 | 86,218 | 1,477 | 53,122 |  |  |
| 1992 | 55,889 | Aerial expansion | 18,475 | 93,303 | 1,866 | 57,755 |  |  |
| 1993 | 66,125 | Aerial expansion | 21,858 | 110,392 | 1,944 | 68,069 |  |  |
| 1994 | 48,368 | Aerial expansion | 15,989 | 80,747 | 2,484 | 50,852 |  |  |
| 1995 | 33,805 | Medium expansion | 23,887 | 43,723 | 1,752 | 35,557 | 6,263 | 41,820 |
| 1996 | 79,019 | Mark-recapture | 61,285 | 96,753 | 3,499 | 82,518 | 6,280 | 88,798 |
| 1997 | 114,938 | Mark-recapture | 79,878 | 149,998 | 2,939 | 117,877 | 8,325 | 126,202 |
| 1998 | 31,039 | Aerial expansion | 10,255 | 51,823 | 1,272 | 32,311 | 2,605 | 34,916 |
| 1999 | 16,786 | Mark-recapture | 10,571 | 23,001 | 1,640 | 18,426 | 4,019 | 22,445 |
| 2000 | 34,997 | Mark-recapture | 24,407 | 45,587 | 3,043 | 38,040 | 3,472 | 41,512 |
| 2001 | 46,644 | Mark-recapture | 33,383 | 59,905 | 2,863 | 49,507 | 3,883 | 53,390 |
| 2002 | 55,044 | Mark-recapture | 33,313 | 76,775 | 3,014 | 58,058 | 3,282 | 61,340 |
| 2003 | 36,435 | Mark-recapture | 23,293 | 49,577 | 3,679 | 40,114 | 2,768 | 42,882 |
| 2004 | 75,032 | Mark-recapture | 54,883 | 95,181 | 3,953 | 78,985 | 3,696 | 82,681 |
| 2005 | 38,599 | Mark-recapture | 28,980 | 48,219 | 7,716 | 46,315 | 19,019 | 65,334 |
| 2006 | 42,191 | Mark-recapture | 31,343 | 53,040 | 8,334 | 50,525 | 11,334 | 61,859 |
| 2007 | 14,749 | Mark-recapture | 8,326 | 21,172 | 2,542 | 17,291 | 1,359 | 18,650 |
| 2008 | 26,645 | Mark-recapture | 20,744 | 32,545 | 2,418 | 29,063 | 1,123 | 30,186 |
| 2009 | 22,761 | Mark-recapture | 17,134 | 28,388 | 7,036 | 29,797 | 5,309 | 35,106 |
| 2010 | 28,769 | Mark-recapture | 23,840 | 33,698 | 5,469 | 34,238 | 1,546 | 35,784 |
| 2011 | 19,672 | Aerial expansion | 12,938 | 26,406 | 3,277 | 22,949 | 1,139 | 24,088 |
| 2012 | 16,713 | Aerial expansion | 10,992 | 22,434 | 2,965 | 19,678 | 1,405 | 21,083 |
| 2013 | 18,002 | Aerial expansion | 4,500 | 31,504 | 738 | 18,740 | 648 | 19,388 |
| 2014 | 23,532 | Mark-recapture | 19,187 | 27,877 | 2,472 | 26,004 | 1,320 | 27,324 |
| 2015 | 23,567 | Mark-recapture | 20,512 | 26,622 | 2,447 | 26,014 | 784 | 26,798 |
| 2016 | 9,177 | Mark-recapture | 8,114 | 10,240 | 1,630 | 10,807 | 824 | 11,631 |
| 2017 | 8,214 | Mark-recapture | 6,679 | 9,749 | 250 | 8,464 | 179 | 8,643 |
| 2018 | 7,271 | Mark-recapture | 5,745 | 8,798 | 7 | 7,278 | 50 | 7,328 |
| 2019 | 11,558 | Mark-recapture | 8,802 | 14,314 | 10 | 11,568 | 228 | 11,796 |
| Averages |  |  |  |  |  |  |  |  |
| 95-18 | - 34,317 |  |  |  | 3,123 | 37,440 | 3,776 | 41,216 |
| 09-18 | 17,768 |  |  |  | 2,629 | 20,397 | 1,320 | 21,717 |

Appendix D. 6. Aerial survey index escapement counts of large (3-ocean and older)
Taku River Chinook salmon, 1975-2019.

| Year | Kowatua | Tatsamenie | Dudidontu | Tseta | Nakina ${ }^{\text {a }}$ |  | Nahlin | Total Index Count withor Tseta |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | 1 fish for in | Total fish |  |  |
| 1975 |  |  | 15 |  |  | 1,800 | 274 | 2,089 |
| 1976 | 341 | 620 | 40 |  |  | 3,000 | 725 | 4,726 |
| 1977 | 580 | 573 | 18 |  |  | 3,850 | 650 | 5,671 |
| 1978 | 490 | 550 |  | 21 |  | 1,620 | 624 | 3,284 |
| 1979 | 430 | 750 | 9 |  |  | 2,110 | 857 | 4,156 |
| 1980 | 450 | 905 | 158 |  |  | 4,500 | 1,531 | 7,544 |
| 1981 | 560 | 839 | 74 | 258 |  | 5,110 | 2,945 | 9,528 |
| 1982 | 289 | 387 | 130 | 228 |  | 2,533 | 1,246 | 4,585 |
| 1983 | 171 | 236 | 117 | 179 |  | 968 | 391 | 1,883 |
| 1984 | 279 | 616 |  | 176 |  | 1,887 | 951 | 3,733 |
| 1985 | 699 | 848 | 475 | 303 |  | 2,647 | 2,236 | 6,905 |
| 1986 | 548 | 886 | 413 | 193 |  | 3,868 | 1,612 | 7,327 |
| 1987 | 570 | 678 | 287 | 180 |  | 2,906 | 1,122 | 5,563 |
| 1988 | 1,010 | 1,272 | 243 | 66 |  | 4,500 | 1,535 | 8,560 |
| 1989 | 601 | 1,228 | 204 | 494 |  | 5,141 | 1,812 | 8,986 |
| 1990 | 614 | 1,068 | 820 | 172 |  | 7,917 | 1,658 | 12,077 |
| 1991 | 570 | 1,164 | 804 | 224 |  | 5,610 | 1,781 | 9,929 |
| 1992 | 782 | 1,624 | 768 | 313 |  | 5,750 | 1,821 | 10,745 |
| 1993 | 1,584 | 1,491 | 1,020 | 491 |  | 6,490 | 2,128 | 12,713 |
| 1994 | 410 | 1,106 | 573 | 614 |  | 4,792 | 2,418 | 9,299 |
| 1995 | 550 | 678 | 731 | 786 |  | 3,943 | 2,069 | 7,971 |
| 1996 | 1,620 | 2,011 | 1,810 | 1,201 |  | 7,720 | 5,415 | 18,576 |
| 1997 | 1,360 | 1,148 | 943 | 648 |  | 6,095 | 3,655 | 13,201 |
| 1998 | 473 | 675 | 807 | 360 |  | 2,720 | 1,294 | 5,969 |
| 1999 | 561 | 431 | 527 | 221 |  | 1,900 | 532 | 3,951 |
| 2000 | 702 | 953 | 482 | 160 |  | 2,907 | 728 | 5,772 |
| 2001 | 1,050 | 1,024 | 479 | 202 |  | 1,552 | 935 | 5,040 |
| 2002 | 945 | 1,145 | 834 | 192 |  | 4,066 | 1,099 | 8,089 |
| 2003 | 850 | 1,000 | 644 | 436 |  | 2,126 | 861 | 5,481 |
| 2004 | 828 | 1,396 | 1,036 | 906 |  | 4,091 | 1,787 | 9,138 |
| 2005 | 833 | 1,146 | 318 | 215 |  | 1,213 | 471 | 3,981 |
| 2006 | 1,180 | 908 | 395 | 199 |  | 1,900 | 955 | 5,338 |
| 2007 | 262 | 390 | 4 | 199 |  | NA | 277 | 933 |
| 2008 | 690 | 1,083 | 480 | 497 |  | 1,437 | 1,121 | 4,811 |
| 2009 | 408 | 633 | 272 | 145 |  | 1,698 | 1,033 | 4,044 |
| 2010 | 716 | 821 | 561 | 128 |  | 1,730 | 1,018 | 4,846 |
| 2011 | 377 | 917 | 301 | 128 |  | 1,380 | 808 | 3,783 |
| 2012 | 402 | 660 | 126 |  |  | 1,300 | 726 | 3,214 |
| 2013 | 708 | 438 | 166 |  | 148 | 1,623 | 527 | 3,462 |
| 2014 | 384 | 376 | 193 |  | 100 | 1,040 | 304 | 2,297 |
| 2015 | 622 | 434 | 289 |  | 134 | 1,340 | 612 | 3,297 |
| 2016 | 303 | 92 | 156 |  | 80 | 800 | 379 | 1,730 |
| 2017 | 272 | 179 | 37 |  | 30 | 301 | 134 | 923 |
| 2018 | 202 | 121 | 363 |  | 76 | 765 | 268 | 1,719 |
| 2019 | 361 | 330 | 949 |  | 107 | 1,070 | 282 | 2,992 |
| 85-18 | 697 | 883 | 517 | 358 | 95 | 3,129 | 1,327 | 6,461 |
| 09-18 | 439 | 467 | 246 | 134 | 95 | 1,198 | 581 | 2,932 |
|  | 0.82 | 0.71 | 3.85 | 0.00 | 1.13 | 0.89 | 0.49 | 1.02 |

[^1]Appendix D. 7. Annual sockeye salmon harvest in the Alaskan District 111 fisheries, includes estimates of Taku wild and enhanced fish in the gillnet, seine, and personal use fisheries, 1967-2019.

| Personal Use wild/enhanced estimates are based on the Canadian lower river commerical fishery. |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | D111 Gillnet harvest |  |  |  | D111 Amalga Seine harvest |  |  | PU Taku harvest |  |  |
|  | All <br> D111 Gillnet | Traditional D111 Gillnet without 111-34 for stock comp |  |  | All |  |  | All Taku | Wild TakunhancedTar |  |
|  |  | harvest | Wild Taku | EnhancedTaku | D111 Seine | Wild Taku | EnhancedTaku |  |  |  |
| 1967 | 17,735 | 15,282 |  |  |  |  |  | 103 | 103 |  |
| 1968 | 19,501 | 17,721 |  |  |  |  |  | 41 | 41 |  |
| 1969 | 41,169 | 40,053 |  |  |  |  |  | 122 | 122 |  |
| 1970 | 50,922 | 49,951 |  |  |  |  |  | 304 | 304 |  |
| 1971 | 66,181 | 62,593 |  |  |  |  |  | 512 | 512 |  |
| 1972 | 80,404 | 76,478 |  |  |  |  |  | 554 | 554 |  |
| 1973 | 85,317 | 81,149 |  |  |  |  |  | 1,227 | 1,227 |  |
| 1974 | 38,670 | 33,934 |  |  |  |  |  | 1,431 | 1,431 |  |
| 1975 | 32,513 | 32,271 |  |  |  |  |  | 170 | 170 |  |
| 1976 | 61,749 | 54,456 |  |  |  |  |  | 351 | 351 |  |
| 1977 | 70,097 | 66,844 |  |  |  |  |  |  |  |  |
| 1978 | 55,398 | 54,305 |  |  |  |  |  |  |  |  |
| 1979 | 122,148 | 115,192 |  |  |  |  |  |  |  |  |
| 1980 | 123,451 | 116,861 |  |  |  |  |  |  |  |  |
| 1981 | 49,942 | 48,912 |  |  |  |  |  |  |  |  |
| 1982 | 83,625 | 80,161 |  |  |  |  |  |  |  |  |
| 1983 | 31,821 | 31,073 |  |  |  |  |  |  |  |  |
| 1984 | 77,233 | 76,015 |  |  |  |  |  |  |  |  |
| 1985 | 88,077 | 87,550 |  |  |  |  |  | 920 | 920 |  |
| 1986 | 73,061 | 72,713 |  |  |  |  |  |  |  |  |
| 1987 | 75,212 | 76,377 |  |  |  |  |  |  |  |  |
| 1988 | 38,923 | 38,885 |  |  |  |  |  |  |  |  |
| 1989 | 74,019 | 73,991 |  |  |  |  |  | 562 | 562 |  |
| 1990 | 126,884 | 126,876 |  |  |  |  |  | 793 | 793 |  |
| 1991 | 109,877 | 111,002 |  |  |  |  |  | 800 | 800 |  |
| 1992 | 135,411 | 132,669 |  |  |  |  |  | 1,217 | 1,217 |  |
| 1993 | 171,556 | 171,373 |  |  |  |  |  | 1,201 | 1,201 |  |
| 1994 | 105,861 | 105,758 |  |  |  |  |  | 1,111 | 1,111 |  |
| 1995 | 103,377 | 103,361 | 86,929 | 4,065 |  |  |  | 990 | 950 | 40 |
| 1996 | 199,014 | 198,303 | 181,776 | 4,762 |  |  |  | 1,189 | 1,168 | 21 |
| 1997 | 94,745 | 94,486 | 76,043 | 2,031 |  |  |  | 1,053 | 1,024 | 29 |
| 1998 | 69,677 | 68,462 | 47,824 | 806 |  |  |  | 1,202 | 1,165 | 37 |
| 1999 | 79,425 | 77,515 | 61,205 | 599 |  |  |  | 1,254 | 1,236 | 18 |
| 2000 | 168,272 | 166,248 | 128,567 | 1,561 |  |  |  | 1,134 | 1,116 | 18 |
| 2001 | 290,450 | 284,786 | 194,091 | 8,880 |  |  |  | 1,462 | 1,405 | 57 |
| 2002 | 178,488 | 176,042 | 114,460 | 651 |  |  |  | 1,289 | 1,287 | 2 |
| 2003 | 205,433 | 177,903 | 134,957 | 767 |  |  |  | 1,218 | 1,208 | 10 |
| 2004 | 241,254 | 177,830 | 75,186 | 676 |  |  |  | 1,150 | 1,135 | 15 |
| 2005 | 87,254 | 71,472 | 44,360 | 579 |  |  |  | 1,150 | 1,136 | 14 |
| 2006 | 134,781 | 99,622 | 62,814 | 2,210 |  |  |  | 804 | 773 | 31 |
| 2007 | 112,241 | 107,129 | 60,879 | 3,684 |  |  |  | 566 | 508 | 58 |
| 2008 | 116,693 | 116,693 | 63,002 | 11,680 |  |  |  | 1,010 | 903 | 107 |
| 2009 | 62,070 | 62,070 | 35,121 | 240 |  |  |  | 871 | 863 | 8 |
| 2010 | 61,947 | 61,947 | 44,837 | 910 |  |  |  | 1,020 | 987 | 33 |
| 2011 | 100,400 | 100,049 | 65,090 | 5,604 |  |  |  | 1,111 | 1,024 | 87 |
| 2012 | 140,898 | 124,830 | 45,410 | 4,039 |  |  |  | 1,287 | 1,149 | 138 |
| 2013 | 207,231 | 137,739 | 84,567 | 12,779 | 4,429 | 1,054 | 372 | 1,371 | 1,152 | 219 |
| 2014 | 126,738 | 84,529 | 30,672 | 859 | 1,440 | 536 | 26 | 1,133 | 1,098 | 35 |
| 2015 | 83,431 | 51,286 | 40,904 | 194 | 912 |  |  | 955 | 948 | 7 |
| 2016 | 215,049 | 131,025 | 66,980 | 6,710 | 2,684 |  |  | 1,184 | 1,051 | 133 |
| 2017 | 113,818 | 111,409 | 67,706 | 6,042 | 2,689 |  |  | 856 | 775 | 81 |
| 2018 | 92,889 | 63,043 | 35,784 | 2,092 | 2,300 |  |  | 1,854 | 1,756 | 98 |
| 2018 | 105,026 | 92,185 | 65,281 | 1,237 | 0 |  |  | 1,500 | 1,469 | 31 |
| Averag |  |  |  |  |  |  |  |  |  |  |
| 95-18 | 136,899 | 118,657 | 77,048 | 3,434 |  |  |  | 1,130 | 1,076 | 54 |
| 09-18 | 120,447 | 92,793 | 51,707 | 3,947 |  |  |  | 1,164 | 1,080 | 84 |

Appendix D. 8. Stock proportions and harvest of sockeye salmon in the traditional
Alaska District 111 commercial drift gillnet fishery, 1983-2019.

| Year | Taku Lakes | Mainstem | D111 Gillnet harvest |  |  |  |  |  |  |  |  | Amalga Seine harvest <br> Taku |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Tatsamenie |  | Little Trapper Enhanced | King Salmon Enhanced | Taku <br> Wild | Total <br> Taku | Wild Snet/ Wild other | U.S. <br> Enhanced | Stikine <br> Enhanced |  |  |
|  |  |  | Wild | Enhanced |  |  |  |  |  |  |  | Wild | Enhance |
| 1983 |  |  |  |  |  |  | 0.755 | 0.755 |  |  |  |  |  |
| 1984 |  |  |  |  |  |  | 0.758 | 0.758 |  |  |  |  |  |
| 1985 |  |  |  |  |  |  | 0.838 | 0.838 |  |  |  |  |  |
| 1986 | 0.328 | 0.303 | 0.204 |  |  |  | 0.834 | 0.834 | 0.166 |  |  |  |  |
| 1987 | 0.312 | 0.376 | 0.031 |  |  |  | 0.720 | 0.720 | 0.280 |  |  |  |  |
| 1988 | 0.276 | 0.305 | 0.082 |  |  |  | 0.663 | 0.663 | 0.337 |  |  |  |  |
| $1989{ }^{\text {a }}$ |  |  |  |  |  |  | 0.849 | 0.849 | 0.152 |  |  |  |  |
| 1990 | 0.232 | 0.336 | 0.286 |  |  |  | 0.855 | 0.855 | 0.145 |  |  |  |  |
| 1991 | 0.337 | 0.373 | 0.232 |  |  |  | 0.941 | 0.941 | 0.059 |  |  |  |  |
| 1992 | 0.269 | 0.445 | 0.191 |  |  |  | 0.904 | 0.904 | 0.096 |  |  |  |  |
| 1993 | 0.391 | 0.308 | 0.123 |  |  |  | 0.822 | 0.822 | 0.178 |  |  |  |  |
| 1994 | 0.466 | 0.361 | 0.091 |  |  |  | 0.917 | 0.917 | 0.058 | 0.025 |  |  |  |
| 1995 | 0.260 | 0.428 | 0.153 | 0.029 | 0.010 |  | 0.841 | 0.880 | 0.093 | 0.026 |  |  |  |
| 1996 | 0.186 | 0.499 | 0.232 | 0.014 | 0.010 |  | 0.917 | 0.941 | 0.045 | 0.014 |  |  |  |
| 1997 | 0.237 | 0.282 | 0.286 | 0.011 | 0.011 |  | 0.805 | 0.826 | 0.053 | 0.120 |  |  |  |
| 1998 | 0.245 | 0.209 | 0.245 | 0.004 | 0.008 |  | 0.699 | 0.710 | 0.033 | 0.257 |  |  |  |
| 1999 | 0.436 | 0.235 | 0.119 | 0.005 | 0.003 |  | 0.790 | 0.797 | 0.072 | 0.131 |  |  |  |
| 2000 | 0.412 | 0.211 | 0.151 | 0.008 | 0.002 |  | 0.773 | 0.783 | 0.058 | 0.160 |  |  |  |
| 2001 | 0.206 | 0.268 | 0.207 | 0.031 | 0.000 |  | 0.682 | 0.713 | 0.046 | 0.241 |  |  |  |
| 2002 | 0.352 | 0.173 | 0.126 | 0.004 | 0.000 |  | 0.650 | 0.654 | 0.047 | 0.299 |  |  |  |
| 2003 | 0.328 | 0.398 | 0.033 | 0.004 | 0.000 |  | 0.759 | 0.763 | 0.056 | 0.181 |  |  |  |
| 2004 | 0.148 | 0.233 | 0.042 | 0.004 | 0.000 |  | 0.423 | 0.427 | 0.051 | 0.522 |  |  |  |
| 2005 | 0.125 | 0.456 | 0.040 | 0.008 | 0.000 |  | 0.621 | 0.629 | 0.145 | 0.226 |  |  |  |
| 2006 | 0.110 | 0.361 | 0.159 | 0.022 | 0.000 |  | 0.631 | 0.653 | 0.060 | 0.288 |  |  |  |
| 2007 | 0.124 | 0.355 | 0.089 | 0.034 | 0.000 |  | 0.568 | 0.603 | 0.106 | 0.291 |  |  |  |
| 2008 | 0.119 | 0.267 | 0.154 | 0.100 | 0.000 |  | 0.540 | 0.640 | 0.082 | 0.278 |  |  |  |
| 2009 | 0.114 | 0.343 | 0.109 | 0.004 | 0.000 |  | 0.566 | 0.570 | 0.140 | 0.288 | 0.002 |  |  |
| 2010 | 0.046 | 0.523 | 0.155 | 0.012 | 0.002 |  | 0.724 | 0.738 | 0.152 | 0.109 | 0.001 |  |  |
| 2011 | 0.118 | 0.397 | 0.135 | 0.040 | 0.016 |  | 0.651 | 0.707 | 0.045 | 0.246 | 0.003 |  |  |
| 2012 | 0.122 | 0.242 |  | 0.028 | 0.005 |  | 0.364 | 0.396 | 0.090 | 0.512 | 0.002 |  |  |
| 2013 | 0.322 | 0.292 |  | 0.090 | 0.003 |  | 0.614 | 0.707 | 0.135 | 0.154 | 0.004 | 0.238 | 0.084 |
| 2014 | 0.079 | 0.268 | 0.016 | 0.010 | 0.000 |  | 0.363 | 0.373 | 0.176 | 0.448 | 0.003 | 0.372 | 0.018 |
| 2015 | 0.219 | 0.575 | 0.004 | 0.004 | 0.000 |  | 0.798 | 0.801 | 0.063 | 0.131 | 0.005 |  |  |
| 2016 | 0.102 | 0.264 | 0.145 | 0.046 |  | 0.005 | 0.511 | 0.562 | 0.054 | 0.383 | 0.001 |  |  |
| 2017 | 0.093 | 0.245 | 0.270 | 0.050 |  | 0.004 | 0.608 | 0.662 | 0.042 | 0.293 | 0.003 |  |  |
| 2018 | 0.103 | 0.222 | 0.063 | 0.017 |  | 0.006 | 0.388 | 0.411 | 0.051 | 0.536 | 0.002 |  |  |
| 2019 | 0.113 | 0.578 | 0.016 | 0.011 |  | 0.002 | 0.708 | 0.722 | 0.085 | 0.192 | 0.002 |  |  |
| Averag |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 86-18 | 0.225 | 0.330 | 0.139 |  |  |  | 0.691 | 0.711 | 0.102 |  |  |  |  |
| 09-18 | 0.132 | 0.337 | 0.112 |  |  |  | 0.559 | 0.593 | 0.095 |  |  |  |  |
| 1983 |  |  |  |  |  |  | 23,460 | 23,460 |  |  |  |  |  |
| 1984 |  |  |  |  |  |  | 57,619 | 57,619 |  |  |  |  |  |
| 1985 |  |  |  |  |  |  | 73,367 | 73,367 |  |  |  |  |  |
| 1986 | 23,816 | 21,999 | 14,829 |  |  |  | 60,644 | 60,644 | 12,069 |  |  |  |  |
| 1987 | 23,851 | 28,724 | 2,388 |  |  |  | 54,963 | 54,963 | 21,414 |  |  |  |  |
| 1988 | 10,741 | 11,854 | 3,191 |  |  |  | 25,785 | 25,785 | 13,100 |  |  |  |  |
| $1989{ }^{\text {a }}$ |  |  |  |  |  |  | 62,804 | 62,804 | 11,210 |  |  |  |  |
| 1990 | 29,489 | 42,673 | 36,330 |  |  |  | 108,492 | 108,492 | 18,384 |  |  |  |  |
| 1991 | 37,359 | 41,376 | 25,736 |  |  |  | 104,471 | 104,471 | 6,531 |  |  |  |  |
| 1992 | 35,625 | 59,004 | 25,329 |  |  |  | 119,959 | 119,959 | 12,709 |  |  |  |  |
| 1993 | 66,952 | 52,820 | 21,116 |  |  |  | 140,888 | 140,888 | 30,485 |  |  |  |  |
| 1994 | 49,234 | 38,142 | 9,576 |  |  |  | 96,952 | 96,952 | 6,172 | 2,634 |  |  |  |
| 1995 | 26,893 | 44,271 | 15,765 | 3,049 | 1,017 |  | 86,929 | 90,994 | 9,641 | 2,727 |  |  |  |
| 1996 | 36,917 | 98,876 | 45,983 | 2,849 | 1,913 |  | 181,776 | 186,538 | 8,928 | 2,838 |  |  |  |
| 1997 | 22,389 | 26,621 | 27,033 | 1,003 | 1,028 |  | 76,043 | 78,074 | 5,054 | 11,358 |  |  |  |
| 1998 | 16,775 | 14,306 | 16,743 | 246 | 560 |  | 47,824 | 48,630 | 2,244 | 17,588 |  |  |  |
| 1999 | 33,780 | 18,231 | 9,194 | 358 | 241 |  | 61,205 | 61,804 | 5,556 | 10,155 |  |  |  |
| 2000 | 68,500 | 35,025 | 25,042 | 1,285 | 276 |  | 128,567 | 130,128 | 9,592 | 26,528 |  |  |  |
| 2001 | 58,736 | 76,418 | 58,937 | 8,880 | 0 |  | 194,091 | 202,971 | 13,166 | 68,649 |  |  |  |
| 2002 | 61,922 | 30,397 | 22,141 | 651 | 0 |  | 114,460 | 115,111 | 8,224 | 52,708 |  |  |  |
| 2003 | 58,280 | 70,801 | 5,876 | 767 | 0 |  | 134,957 | 135,724 | 9,983 | 32,196 |  |  |  |
| 2004 | 26,314 | 41,366 | 7,505 | 676 | 0 |  | 75,186 | 75,862 | 9,157 | 92,810 |  |  |  |
| 2005 | 8,909 | 32,591 | 2,860 | 579 | 0 |  | 44,360 | 44,939 | 10,371 | 16,161 |  |  |  |
| 2006 | 10,995 | 35,993 | 15,825 | 2,210 | 0 |  | 62,814 | 65,024 | 5,940 | 28,659 |  |  |  |
| 2007 | 13,311 | 38,084 | 9,484 | 3,684 | 0 |  | 60,879 | 64,563 | 11,353 | 31,213 |  |  |  |
| 2008 | 13,833 | 31,170 | 17,999 | 11,680 | 0 |  | 63,002 | 74,682 | 9,544 | 32,467 |  |  |  |
| 2009 | 7,050 | 21,275 | 6,796 | 240 | 0 |  | 35,121 | 35,361 | 8,674 | 17,888 | 148 |  |  |
| $2010^{\text {a }}$ | 2,833 | 32,407 | 9,597 | 760 | 150 |  | 44,837 | 45,747 | 9,390 | 6,759 | 79 |  |  |
| 2011 | 11,799 | 39,743 | 13,548 | 4,047 | 1,557 |  | 65,090 | 70,694 | 4,473 | 24,595 | 288 |  |  |
| 2012 | 15,221 | 30,189 | 0 | 3,453 | 587 |  | 45,410 | 49,449 | 11,210 | 63,963 | 208 |  |  |
| 2013 | 44,412 | 40,155 | 0 | 12,373 | 406 |  | 84,567 | 97,346 | 18,641 | 21,172 |  | 1,054 | 372 |
| 2014 | 6,694 | 22,622 | 1,356 | 859 | 0 |  | 30,672 | 31,531 | 14,868 | 37,880 |  | 536 | 26 |
| 2015 | 11,254 | 29,467 | 183 | 194 | 0 |  | 40,904 | 41,099 | 3,238 | 6,698 | 250 |  |  |
| 2016 | 13,357 | 34,570 | 19,053 | 6,039 |  | 671 | 66,980 | 73,690 | 7,027 | 50,150 | 154 |  |  |
| 2017 | 10,330 | 27,340 | 30,035 | 5,576 |  | 466 | 67,706 | 73,748 | 4,655 | 32,645 | 361 |  |  |
| 2018 | 9,517 | 20,486 | 5,781 | 1,550 |  | 542 | 35,784 | 37,876 | 4,656 | 49,430 | 223 |  |  |
| 2019 | 10,448 | 53,324 | 1,508 | 1,050 |  | 187 | 65,281 | 66,518 | 7,824 | 17,683 | 160 |  |  |
| Averag |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 86-18 | 27,096 | 37,156 | 15,789 |  |  |  | 79,519 | 82,016 | 10,232 | 29,595 |  |  |  |
| 09-18 | 13,247 | 29,825 | 8,635 | 3,509 | 386 |  | 51,707 | 55,654 | 8,683 | 31,118 |  |  |  |

Appendix D. 9. Proportion of wild Taku River sockeye salmon in the Alaskan District 111 commercial drift gillnet harvest by week, 1983-2019.

| Week |  |  |  |  |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 |  |
| 1983 |  | 0.996 | 0.842 | 0.819 | 0.663 | 0.527 | 0.836 | 0.534 | 0.719 | 0.759 | 0.755 |
| 1984 | 0.970 | 0.956 | 0.843 | 0.670 | 0.588 | 0.712 | 0.728 | 0.809 | 0.726 |  | 0.758 |
| 1985 | 0.999 | 0.986 | 0.928 | 0.974 | 0.868 | 0.706 | 0.737 | 0.826 | 0.801 |  | 0.838 |
| 1986 | 0.938 | 0.953 | 0.873 | 0.880 | 0.852 | 0.777 | 0.851 | 0.757 | 0.893 | 0.739 | 0.834 |
| 1987 |  | 0.982 | 0.901 | 0.884 | 0.948 | 0.414 | 0.619 | 0.689 | 0.841 | 0.731 | 0.720 |
| 1988 |  | 0.964 | 0.886 | 0.889 | 0.510 | 0.643 | 0.677 | 0.528 | 0.478 | 0.346 | 0.663 |
| 1989 | 0.943 | 0.989 | 0.979 | 0.852 | 0.835 | 0.641 | 0.681 | 0.919 | 0.676 |  | 0.848 |
| 1990 | 0.874 | 0.935 | 0.904 | 0.773 | 0.782 | 0.863 | 0.943 | 0.939 | 0.878 | 0.862 | 0.855 |
| 1991 | 0.988 | 0.979 | 0.953 | 0.979 | 0.951 | 0.933 | 0.936 | 0.890 | 0.885 | 0.875 | 0.941 |
| 1992 |  | 0.978 | 0.985 | 0.956 | 0.916 | 0.943 | 0.893 | 0.858 | 0.766 | 0.766 | 0.904 |
| 1993 |  | 0.961 | 0.901 | 0.837 | 0.856 | 0.781 | 0.790 | 0.829 | 0.738 | 0.706 | 0.822 |
| 1994 |  | 1.000 | 0.981 | 0.973 | 0.967 | 0.870 | 0.835 | 0.938 | 0.804 | 0.901 | 0.917 |
| 1995 | 0.942 | 0.889 | 0.903 | 0.858 | 0.872 | 0.868 | 0.761 | 0.759 | 0.705 | 0.740 | 0.841 |
| 1996 | 1.000 | 0.998 | 0.909 | 0.974 | 0.950 | 0.991 | 0.914 | 0.945 | 0.879 | 0.804 | 0.953 |
| 1997 | 0.992 | 0.970 | 0.910 | 0.926 | 0.951 | 0.939 | 0.939 | 0.925 | 0.872 | 0.906 | 0.938 |
| 1998 |  | 0.964 | 0.974 | 0.978 | 0.971 | 0.949 | 0.948 | 0.942 | 0.997 | 0.857 | 0.955 |
| 1999 |  | 0.966 | 0.988 | 0.953 | 0.934 | 0.917 | 0.878 | 0.833 | 0.732 | 0.665 | 0.917 |
| 2000 |  | 0.973 | 0.962 | 0.958 | 0.929 | 0.898 | 0.872 | 0.907 | 0.908 | 0.858 | 0.931 |
| 2001 | 0.995 | 0.998 | 0.948 | 0.888 | 0.908 | 0.930 | 0.961 | 0.945 | 0.858 | 0.858 | 0.936 |
| 2002 | 0.986 | 0.989 | 0.993 | 0.970 | 0.872 | 0.946 | 0.829 | 0.880 | 0.851 | 0.851 | 0.933 |
| 2003 | 1.000 | 0.987 | 0.961 | 0.994 | 0.970 | 0.929 | 0.883 | 0.795 | 0.236 | 0.236 | 0.931 |
| 2004 |  | 0.968 | 0.950 | 0.930 | 0.939 | 0.884 | 0.731 | 0.799 | 0.909 | 0.891 | 0.891 |
| 2005 | 0.973 | 0.973 | 0.953 | 0.947 | 0.932 | 0.924 | 0.881 | 0.885 | 0.786 | 0.767 | 0.905 |
| 2006 | 0.957 | 0.957 | 0.912 | 0.856 | 0.896 | 0.819 | 0.802 | 0.842 | 0.970 | 0.970 | 0.914 |
| 2007 | 1.000 | 0.992 | 0.934 | 0.807 | 0.716 | 0.821 | 0.879 | 0.824 | 0.812 | 0.786 | 0.925 |
| 2008 | 0.975 | 0.900 | 0.695 | 0.632 | 0.589 | 0.470 | 0.424 | 0.488 | 0.489 | 0.489 | 0.868 |
| 2009 | 0.902 | 0.902 | 0.715 | 0.683 | 0.552 | 0.542 | 0.528 | 0.416 | 0.382 | 0.382 | 0.566 |
| 2010 |  | 0.964 | 0.955 | 0.960 | 0.737 | 0.637 | 0.754 | 0.636 | 0.529 | 0.764 | 0.723 |
| 2011 |  | 0.988 | 0.943 | 0.797 | 0.766 | 0.699 | 0.683 | 0.606 | 0.365 | 0.228 | 0.651 |
| 2012 | 0.938 | 0.720 | 0.909 | 0.828 | 0.632 | 0.321 | 0.389 | 0.085 | 0.298 | 0.298 | 0.364 |
| 2013 | 0.960 | 0.927 | 0.865 | 0.794 | 0.467 | 0.477 | 0.457 | 0.457 | 0.457 | 0.457 | 0.614 |
| 2014 | 0.756 | 0.825 | 0.695 | 0.355 | 0.568 | 0.445 | 0.206 | 0.199 | 0.107 | 0.014 | 0.363 |
| 2015 | 0.000 | 0.910 | 0.969 | 0.927 | 0.830 | 0.815 | 0.823 | 0.723 | 0.693 | 0.693 | 0.798 |
| 2016 | 0.000 | 0.889 | 0.894 | 0.877 | 0.681 | 0.599 | 0.436 | 0.525 | 0.335 | 0.319 | 0.511 |
| 2017 | 0.914 | 0.930 | 0.656 | 0.640 | 0.709 | 0.608 | 0.591 | 0.512 | 0.450 | 0.510 | 0.608 |
| 2018 | 0.962 | 0.936 | 0.731 | 0.492 | 0.310 | 0.412 | 0.451 | 0.228 | 0.228 | 0.252 | 0.388 |
| 2019 | 0.574 | 0.829 | 0.888 | 0.797 | 0.714 | 0.644 | 0.805 | 0.651 | 0.573 | 0.302 | 0.708 |
| Average |  |  |  |  |  |  |  |  |  |  |  |
| 83-18 |  | 0.950 | 0.897 | 0.847 | 0.789 | 0.740 | 0.737 | 0.713 | 0.668 | 0.645 | 0.786 |
| 09-18 |  | 0.899 | 0.833 | 0.735 | 0.625 | 0.556 | 0.532 | 0.439 | 0.384 | 0.392 | 0.559 |

Appendix D. 10. Annual sockeye salmon harvest estimates of wild and enhanced fish in the Canadian fisheries in the Taku River, 1979-2019.

| Year | Total harvest |  |  |  |  | Natural Spawning |  |  | Enhanced |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Commercial |  | Aborginal | Test | test released | Commercial | Aboriginal | Test | Commercial | Aboriginal | Test |
|  | Allharvest | TakuOnly |  |  |  |  |  |  |  |  |  |
| 1979 | 13,578 |  |  |  |  | 13,578 |  |  |  |  |  |
| 1980 | 22,602 |  | 150 |  |  | 22,602 | 150 |  |  |  |  |
| 1981 | 10,922 |  |  |  |  | 10,922 |  |  |  |  |  |
| 1982 | 3,144 |  |  |  |  | 3,144 |  |  |  |  |  |
| 1983 | 17,056 |  | 0 |  |  | 17,056 | 0 |  |  |  |  |
| 1984 | 27,242 |  | 50 |  |  | 27,242 | 50 |  |  |  |  |
| 1985 | 14,244 |  | 167 |  |  | 14,244 | 167 |  |  |  |  |
| 1986 | 14,739 |  | 200 |  |  | 14,739 | 200 |  |  |  |  |
| 1987 | 13,554 |  | 96 | 237 |  | 13,554 | 96 | 237 |  |  |  |
| 1988 | 12,014 |  | 245 | 708 |  | 12,014 | 245 | 708 |  |  |  |
| 1989 | 18,545 |  | 53 | 207 |  | 18,545 | 53 | 207 |  |  |  |
| 1990 | 21,100 |  | 89 | 285 |  | 21,100 | 89 | 285 |  |  |  |
| 1991 | 25,067 |  | 150 | 163 |  | 25,067 | 150 | 163 |  |  |  |
| 1992 | 29,472 |  | 352 | 38 |  | 29,472 | 352 | 38 |  |  |  |
| 1993 | 33,217 |  | 140 | 166 |  | 33,217 | 140 | 166 |  |  |  |
| 1994 | 28,762 |  | 239 |  |  | 28,762 | 239 |  |  |  |  |
| 1995 | 32,640 |  | 71 |  |  | 31,306 | 68 |  | 1,334 | 3 | 0 |
| 1996 | 41,665 |  | 360 |  |  | 40,933 | 354 |  | 732 | 6 | 0 |
| 1997 | 24,003 |  | 349 |  | 1 | 23,346 | 339 |  | 657 | 10 | 0 |
| 1998 | 19,038 |  | 239 |  |  | 18,449 | 232 |  | 589 | 7 | 0 |
| 1999 | 20,681 |  | 382 | 88 |  | 20,384 | 377 | 87 | 297 | 5 | 1 |
| 2000 | 28,009 |  | 140 | 319 |  | 27,573 | 138 | 314 | 436 | 2 | 5 |
| 2001 | 47,660 |  | 210 | 247 | 82 | 45,792 | 202 | 237 | 1,868 | 8 | 10 |
| 2002 | 31,053 |  | 155 | 518 | 161 | 31,004 | 155 | 517 | 49 | 0 | 1 |
| 2003 | 32,730 |  | 267 | 27 | 197 | 32,463 | 265 | 27 | 267 | 2 | 0 |
| 2004 | 20,148 |  | 120 | 91 |  | 19,883 | 118 | 90 | 265 | 2 | 1 |
| 2005 | 21,697 |  | 161 | 244 |  | 21,440 | 159 | 241 | 257 | 2 | 3 |
| 2006 | 21,099 |  | 85 | 262 |  | 20,294 | 82 | 252 | 805 | 3 | 10 |
| 2007 | 16,714 | 16,589 | 159 | 376 |  | 14,988 | 143 | 337 | 1,726 | 16 | 39 |
| 2008 | 19,284 | 19,147 | 215 | 10 | 32 | 17,241 | 192 | 9 | 2,043 | 23 | 1 |
| 2009 | 10,980 | 10,955 | 106 | 174 |  | 10,875 | 105 | 172 | 105 | 1 | 2 |
| 2010 | 20,211 | 20,180 | 184 | 297 |  | 19,554 | 178 | 287 | 626 | 6 | 10 |
| 2011 | 24,032 | 23,898 | 124 | 521 |  | 22,145 | 114 | 480 | 1,753 | 10 | 41 |
| 2012 | 30,056 | 29,938 | 169 | 6 |  | 26,830 | 151 | 5 | 3,108 | 18 | 1 |
| 2013 | 25,125 | 25,074 | 99 | 0 |  | 21,107 | 83 | 0 | 3,966 | 16 | 0 |
| 2014 | 17,645 | 17,568 | 219 | 8 |  | 17,106 | 212 | 8 | 462 | 7 | 0 |
| 2015 | 19,747 | 19,715 | 85 | 49 |  | 19,592 | 84 | 49 | 123 | 1 | 0 |
| 2016 | 37,301 | 37,120 | 191 | 123 |  | 33,112 | 170 | 109 | 4,007 | 21 | 14 |
| 2017 | 30,209 | 30,150 | 229 | 0 |  | 27,345 | 207 | 0 | 2,805 | 22 | 0 |
| 2018 | 17,974 | 17,948 | 14 | 0 |  | 17,024 | 13 | 0 | 923 | 1 | 0 |
| 2019 | 21,395 | 21,376 | 105 | 0 |  | 20,952 | 103 | 0 | 423 | 2 | 0 |
| Averages |  |  |  |  |  |  |  |  |  |  |  |
| 86-18 | 24,429 |  | 179 |  |  | 23,523 | 173 |  |  |  |  |
| 09-18 | 23,328 | 23,254 | 142 | 118 |  | 21,469 | 132 | 111 | 1,788 | 10 | 7 |

Appendix D. 11. Annual sockeye salmon stock proportions and harvest by stock in the Canadian commercial fishery on the Taku River, 1986-2019.

| Year | Taku |  | Tatsamenie |  | Little Trapper Enhance | King Salmon Enhance | Taku |  | Stikine <br> Enhance | US <br> Enhance | Wild lake stocks based on SPA |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | King |  |  |  |  | Little Trapp |  |
|  | Lakes other | Mainstem |  |  | Wild |  | Enhance | Wild |  |  | Enhance | Kuthai | Salmon | Wild |
| 1986 | 0.508 | 0.350 | 0.143 |  |  |  |  | 1.000 |  |  |  |  | 0.111 |  | 0.397 |
| 1987 | 0.263 | 0.649 | 0.088 |  |  |  | 1.000 |  |  |  | 0.062 |  | 0.201 |
| 1988 | 0.559 | 0.343 | 0.098 |  |  |  | 1.000 |  |  |  | 0.143 |  | 0.417 |
| $1989{ }^{\text {a }}$ |  |  |  |  |  |  | 1.000 |  |  |  | 0.053 |  | ${ }^{\text {a }}$ |
| 1990 | 0.499 | 0.338 | 0.163 |  |  |  | 1.000 |  |  |  | 0.112 |  | 0.388 |
| 1991 | 0.372 | 0.452 | 0.176 |  |  |  | 1.000 |  |  |  | 0.064 |  | 0.308 |
| 1992 | 0.332 | 0.569 | 0.099 |  |  |  | 1.000 |  |  |  | 0.092 |  | 0.240 |
| 1993 | 0.519 | 0.432 | 0.049 |  |  |  | 1.000 |  |  |  | 0.126 |  | 0.392 |
| 1994 | 0.640 | 0.302 | 0.058 |  |  |  | 1.000 |  |  |  | 0.158 |  | 0.482 |
| 1995 | 0.474 | 0.373 | 0.112 | 0.031 | 0.010 |  | 0.959 | 0.041 |  |  | 0.047 |  | 0.427 |
| 1996 | 0.325 | 0.442 | 0.215 | 0.010 | 0.008 |  | 0.982 | 0.018 |  |  | 0.105 |  | 0.221 |
| 1997 | 0.402 | 0.277 | 0.294 | 0.008 | 0.019 |  | 0.973 | 0.027 |  |  | 0.120 |  | 0.282 |
| 1998 | 0.432 | 0.254 | 0.283 | 0.003 | 0.028 |  | 0.969 | 0.031 |  |  | 0.225 |  | 0.207 |
| 1999 | 0.694 | 0.145 | 0.147 | 0.006 | 0.008 |  | 0.986 | 0.014 |  |  | 0.389 |  | 0.305 |
| 2000 | 0.377 | 0.326 | 0.282 | 0.016 | 0.000 |  | 0.984 | 0.016 |  |  | 0.172 |  | 0.205 |
| 2001 | 0.352 | 0.364 | 0.246 | 0.039 | 0.000 |  | 0.961 | 0.039 |  |  | 0.184 |  | 0.168 |
| 2002 | 0.745 | 0.192 | 0.062 | 0.002 | 0.000 |  | 0.998 | 0.002 |  |  | 0.316 |  | 0.428 |
| 2003 | 0.633 | 0.271 | 0.089 | 0.008 | 0.000 |  | 0.992 | 0.008 |  |  | 0.231 | 0.023 | 0.378 |
| 2004 | 0.370 | 0.586 | 0.031 | 0.013 | 0.000 |  | 0.987 | 0.013 |  |  | 0.168 | 0.071 | 0.132 |
| 2005 | 0.340 | 0.505 | 0.143 | 0.012 | 0.000 |  | 0.988 | 0.012 |  |  | 0.098 | 0.038 | 0.204 |
| 2006 | 0.259 | 0.474 | 0.229 | 0.038 | 0.000 |  | 0.962 | 0.038 |  |  | 0.055 | 0.028 | 0.176 |
| 2007 | 0.203 | 0.524 | 0.170 | 0.096 | 0.000 |  | 0.897 | 0.096 | 0.007 |  | 0.102 | 0.000 | 0.101 |
| 2008 | 0.373 | 0.222 | 0.299 | 0.099 | 0.000 |  | 0.894 | 0.099 | 0.007 |  | 0.308 | 0.007 | 0.058 |
| 2009 | 0.569 | 0.276 | 0.145 | 0.007 | 0.000 |  | 0.990 | 0.007 | 0.002 |  | 0.155 | 0.000 | 0.414 |
| 2010 | 0.195 | 0.605 | 0.167 | 0.017 | 0.014 |  | 0.967 | 0.031 | 0.002 |  | 0.162 | 0.033 | ${ }^{\text {a }}$ |
| 2011 | 0.171 | 0.422 | 0.329 | 0.056 | 0.017 |  | 0.921 | 0.073 | 0.004 | 0.001 | 0.058 | 0.083 | 0.030 |
| 2012 | 0.175 | 0.570 | 0.148 | 0.095 | 0.009 |  | 0.893 | 0.103 | 0.004 |  |  |  |  |
| 2013 | 0.246 | 0.395 | 0.199 | 0.157 | 0.002 |  | 0.840 | 0.158 | 0.000 | 0.002 |  |  |  |
| 2014 | 0.259 | 0.679 | 0.032 | 0.026 | 0.000 |  | 0.969 | 0.026 | 0.004 | 0.001 |  |  |  |
| 2015 | 0.204 | 0.776 | 0.013 | 0.006 | 0.000 |  | 0.992 | 0.006 | 0.002 | 0.000 |  |  |  |
| 2016 |  |  |  | 0.090 |  | 0.017 | 0.888 | 0.107 | 0.002 | 0.003 |  |  |  |
| 2017 |  |  |  | 0.089 |  | 0.004 | 0.905 | 0.093 | 0.002 | 0.000 |  |  |  |
| 2018 |  |  |  | 0.028 |  | 0.023 | 0.947 | 0.051 | 0.001 | 0.000 |  |  |  |
| 2019 |  |  |  | 0.015 |  | 0.004 | 0.979 | 0.020 | 0.000 | 0.000 |  |  |  |
| Averages |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 86-18 |  |  |  |  |  |  | 0.965 |  |  |  |  |  |  |
| 09-18 |  |  |  | 0.057 |  |  | 0.931 | 0.066 |  |  |  |  |  |
| 1986 | 7,484 | 5,152 | 2,103 |  |  |  | 14,739 |  |  |  | 1,629 |  | 5,855 |
| 1987 | 3,562 | 8,793 | 1,199 |  |  |  | 13,554 |  |  |  | 834 |  | 2,728 |
| 1988 | 6,720 | 4,122 | 1,172 |  |  |  | 12,014 |  |  |  | 1,715 |  | 5,005 |
| $1989{ }^{\text {a }}$ | 0 |  | 0 |  |  |  | 18,545 |  |  |  | 990 |  |  |
| 1990 | 10,538 | 7,131 | 3,431 |  |  |  | 21,100 |  |  |  | 2,355 |  | 8,183 |
| 1991 | 9,322 | 11,327 | 4,418 |  |  |  | 25,067 |  |  |  | 1,601 |  | 7,721 |
| 1992 | 9,784 | 16,764 | 2,924 |  |  |  | 29,472 |  |  |  | 2,699 |  | 7,085 |
| 1993 | 17,229 | 14,347 | 1,641 |  |  |  | 33,217 |  |  |  | 4,192 |  | 13,036 |
| 1994 | 18,402 | 8,684 | 1,676 |  |  |  | 28,762 | 0 |  |  | 4,544 |  | 13,858 |
| 1995 | 15,462 | 12,185 | 3,659 | 1,003 | 331 |  | 31,306 | 1,334 |  |  | 1,528 |  | 13,934 |
| 1996 | 13,552 | 18,422 | 8,959 | 401 | 331 |  | 40,933 | 732 |  |  | 4,357 |  | 9,195 |
| 1997 | 9,649 | 6,637 | 7,060 | 201 | 456 |  | 23,346 | 657 |  |  | 2,891 |  | 6,758 |
| 1998 | 8,223 | 4,829 | 5,397 | 56 | 533 |  | 18,449 | 589 |  |  | 4,279 |  | 3,944 |
| 1999 | 14,358 | 2,992 | 3,034 | 126 | 171 |  | 20,384 | 297 |  |  | 8,044 |  | 6,314 |
| 2000 | 10,554 | 9,122 | 7,897 | 436 | 0 |  | 27,573 | 436 |  |  | 4,809 |  | 5,745 |
| 2001 | 16,753 | 17,330 | 11,709 | 1,868 | 0 |  | 45,792 | 1,868 |  |  | 8,748 |  | 8,005 |
| 2002 | 23,131 | 5,948 | 1,925 | 49 | 0 |  | 31,004 | 49 |  |  | 9,826 |  | 13,305 |
| 2003 | 20,706 | 8,855 | 2,902 | 267 | 0 |  | 32,463 | 267 |  |  | 7,568 | 755 | 12,383 |
| 2004 | 7,464 | 11,799 | 620 | 266 | 0 |  | 19,883 | 266 |  |  | 3,381 | 1,430 | 2,653 |
| 2005 | 7,382 | 10,950 | 3,108 | 257 | 0 |  | 21,440 | 257 |  |  | 2,120 | 829 | 4,433 |
| 2006 | 5,461 | 9,993 | 4,840 | 805 | 0 |  | 20,294 | 805 |  |  | 1,168 | 589 | 3,704 |
| 2007 | 3,391 | 8,759 | 2,838 | 1,602 | 0 |  | 14,988 | 1,602 | 125 |  | 1,697 | 0 | 1,694 |
| 2008 | 7,202 | 4,276 | 5,763 | 1,905 | 0 |  | 17,241 | 1,905 | 137 |  | 5,949 | 139 | 1,114 |
| 2009 | 6,252 | 3,035 | 1,588 | 80 | 0 |  | 10,875 | 80 | 25 |  | 1,703 | 0 | 4,549 |
| $2010^{\text {a }}$ | 3,950 | 12,235 | 3,369 | 334 | 290 |  | 19,554 | 624 | 31 | 0 | 3,274 | 676 |  |
| 2011 | 4,099 | 10,140 | 7,906 | 1,347 | 406 |  | 22,145 | 1,753 | 106 | 28 | 1,387 | 1,990 | 723 |
| 2012 | 5,254 | 17,143 | 4,434 | 2,852 | 257 |  | 26,830 | 3,109 | 118 | 0 |  |  |  |
| 2013 | 6,189 | 9,922 | 4,997 | 3,934 | 40 |  | 21,107 | 3,974 | 11 | 40 |  |  |  |
| 2014 | 4,570 | 11,981 | 565 | 462 | 0 |  | 17,106 | 462 | 66 | 11 |  |  |  |
| 2015 | 4,028 | 15,324 | 257 | 123 | 0 |  | 19,592 | 123 | 32 | 0 |  |  |  |
| 2016 |  |  |  | 3,361 | 0 | 646 | 33,112 | 4,007 | 57 | 124 |  |  |  |
| 2017 |  |  |  | 2,690 |  | 115 | 27,345 | 2,805 | 59 | 0 |  |  |  |
| 2018 |  |  |  | 508 |  | 416 | 17,024 | 923 | 26 | 0 |  |  |  |
| 2019 |  |  |  | 328 |  | 95 | 20,952 | 423 | 11 | 9 |  |  |  |
| Averages |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 86-18 |  |  |  |  |  |  | 23,523 |  |  |  |  |  |  |
| 09-18 |  |  |  | 1,569 | 124 |  | 21,469 | 1,786 |  |  |  |  |  |

Appendix D. 12. Annual sockeye salmon weir counts, escapements, and samples at the Tatsamenie Lake weir, 1984-2019.


Appendix D. 13. Annual sockeye salmon weir counts, escapements, and samples at the Little Trapper weir, 1983-2019.
Broodstock estimate is based on commercial ratio with Tatsamenie River weir data

| Year | Weir count oodstock ta |  | Natural spawning escapement |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total | wild | enhanced |
| 1983 | 7,402 | 0 | 7,402 | 7,402 |  |
| 1984 | 13,084 | 0 | 13,084 | 13,084 |  |
| 1985 | 14,889 | 0 | 14,889 | 14,889 |  |
| 1986 | 13,820 | 0 | 13,820 | 13,820 |  |
| 1987 | 12,007 | 0 | 12,007 | 12,007 |  |
| 1988 | 10,637 | 0 | 10,637 | 10,637 |  |
| 1989 | 9,606 | 0 | 9,606 | 9,606 |  |
| 1990 | 9,443 | 1,666 | 7,777 | 7,777 |  |
| 1991 | 22,942 | 1,941 | 21,001 | 21,001 |  |
| 1992 | 14,372 | 1,640 | 12,732 | 12,732 |  |
| 1993 | 17,432 | 747 | 16,685 | 16,685 |  |
| 1994 | 13,438 | 747 | 12,691 | 12,691 |  |
| 1995 | 11,524 | 0 | 11,524 | 11,067 | 457 |
| 1996 | 5,483 | 0 | 5,483 | 5,292 | 191 |
| 1997 | 5,924 | 0 | 5,924 | 5,543 | 381 |
| 1998 | 8,717 | 0 | 8,717 | 7,698 | 1,019 |
| 1999 | 11,805 | 0 | 11,805 | 11,760 | 45 |
| 2000 | 11,551 | 0 | 11,551 | 11,551 | 0 |
| 2001 | 16,860 | 0 | 16,860 | 16,860 | 0 |
| 2002 | 7,973 | 0 | 7,973 | 7,973 | 0 |
| 2003 | 31,227 | 0 | 31,227 | 31,227 | 0 |
| 2004 | 9,613 | 0 | 9,613 | 9,613 | 0 |
| 2005 | 16,009 | 0 | 16,009 | 16,009 | 0 |
| 2006 | 25,265 | 708 | 24,557 | 24,557 | 0 |
| 2007 | 7,153 | 813 | 6,340 | 6,340 | 0 |
| 2008 | 3,831 | 1,040 | 2,791 | 2,791 | 0 |
| 2009 | 5,552 | 109 | 5,443 | 5,443 | 0 |
| 2010 | 3,347 |  | 3,387 | 3,084 | 303 |
| 2011 | 3,809 |  | 3,809 | 3,521 | 288 |
| 2012 | 10,015 |  | 10,015 | 9,522 | 493 |
| 2013 | 4,840 |  | 4,840 | 4,809 | 31 |
| 2014 | 6,607 |  | 6,707 | 6,707 | 0 |
| 2015 | 13,253 |  | 13,253 | 13,253 |  |
| 2016 | 7,771 |  | 7,594 | 7,594 |  |
| 2017 | 6,552 |  | 6,376 | 6,376 |  |
| 2018 | 8,249 |  | 8,249 | 8,249 |  |
| 2019 | 6,382 | 304 | 5,938 | 5,938 |  |
| Averages |  |  |  |  |  |
| 83-18 | 11,167 |  |  |  |  |
| 09-18 | 7,000 |  |  |  |  |

Appendix D. 14. Annual sockeye salmon weir counts, escapements, and samples at the King Salmon weir, 1983-2019.
Spawning escapement is based harvest rates and projections of King Salmon inriver run estimate

|  |  | Natural spawning escapement |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Year | Weir count odstock ta | Total | wild | enhanced |
| 2004 | 5005 | 5,005 | 5,005 |  |
| 2005 | 1046 | 1,046 | 1,046 |  |
| 2006 | 2177 | 2,177 | 2,177 |  |
| 2007 | 5 | 5 | 5 |  |
| 2008 | 888 | 888 | 888 |  |
| 2009 | 1100 |  | 1,100 | 1,100 |
| 2010 | 2977 |  | 2,977 | 2,977 |
| 2011 | 2899 |  | 2,899 | 2,899 |
| 2012 | 6913 | 150 | 6,763 | 6,763 |
| 2013 | 470 |  | 470 | 470 |
| 2014 | 1061 | 151 | 910 | 910 |
| 2015 | 1683 |  | 1,683 | 1,683 |
| 2016 | 6404 |  | 6,404 | 3,378 |
| 2017 | 439 |  | $\mathbf{4 3 9}$ | 3,026 |
| 2018 | 3375 | $\mathbf{3 , 3 7 5}$ | $\mathbf{2 , 4 7 9}$ |  |
| 2019 | 4294 |  | 4,294 | 4,294 |

Appendix D. 15. Taku River sockeye salmon run size, 1984-2019.
Run estimate does not include spawning escapements below the U.S./Canada border.
MR estimates have been adjusted for dropout and size selectivity.

| Year | Above Border MR |  |  |  | Canadian harvest | Escape. | $\begin{gathered} \text { U.S. } \\ \text { Harvest } \end{gathered}$ | Terminal Run | Total <br> Harvest <br> Rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Confidence Intervals |  |  |  |  |  |  |
|  | Estimate | Start date | Lower | Upper |  |  |  |  |  |
| 1984 | 88,272 | 17-Jun | 70,894 | 105,650 | 27,292 | 60,980 | 57,619 | 145,891 | 58\% |
| 1985 | 84,479 | 16-Jun | 67,333 | 101,625 | 14,411 | 70,068 | 74,287 | 158,766 | 56\% |
| 1986 |  |  |  |  | 14,939 |  | 60,644 |  |  |
| 1987 | 56,362 | 21-Jun | 45,590 | 67,134 | 13,887 | 42,475 | 54,963 | 111,325 | 62\% |
| 1988 | 55,580 | 19-Jun | 44,648 | 66,512 | 12,967 | 42,613 | 25,785 | 81,365 | 48\% |
| 1989 | 80,997 | 18-Jun | 65,787 | 96,207 | 18,805 | 62,192 | 63,366 | 144,363 | 57\% |
| 1990 | 75,801 | 10-Jun | 61,839 | 89,763 | 21,474 | 54,327 | 109,285 | 185,086 | 71\% |
| 1991 | 104,895 | 9-Jun | 85,097 | 124,693 | 25,380 | 79,515 | 105,271 | 210,166 | 62\% |
| 1992 | 99,643 | 21-Jun | 81,401 | 117,885 | 29,862 | 69,781 | 121,176 | 220,819 | 68\% |
| 1993 | 92,933 | 13-Jun | 76,231 | 109,635 | 33,523 | 59,410 | 142,089 | 235,022 | 75\% |
| 1994 | 90,128 | 12-Jun | 73,666 | 106,590 | 29,001 | 61,127 | 98,063 | 188,191 | 68\% |
| 1995 | 104,242 | 11-Jun | 85,180 | 123,304 | 32,711 | 71,531 | 91,984 | 196,226 | 64\% |
| 1996 | 97,477 | 9-Jun | 79,901 | 115,053 | 42,025 | 55,452 | 187,727 | 285,204 | 81\% |
| 1997 | 73,255 | 3-May | 59,861 | 86,649 | 24,352 | 48,903 | 79,127 | 152,382 | 68\% |
| 1998 | 64,755 | 2-May | 52,617 | 76,893 | 19,277 | 45,478 | 49,832 | 114,587 | 60\% |
| 1999 | 83,588 | 14-May | 67,816 | 99,360 | 21,151 | 62,437 | 63,058 | 146,646 | 57\% |
| 2000 | 83,190 | 14-May | 68,024 | 98,356 | 28,468 | 54,722 | 131,262 | 214,452 | 74\% |
| 2001 | 132,502 | 27-May | 108,404 | 156,600 | 48,117 | 84,385 | 204,433 | 336,935 | 75\% |
| 2002 | 94,605 | 19-May | 77,331 | 111,879 | 31,726 | 62,879 | 116,400 | 211,005 | 70\% |
| 2003 | 133,593 | 20-May | 108,917 | 158,269 | 33,024 | 100,569 | 136,942 | 270,535 | 63\% |
| 2004 | 85,257 | 12-May | 69,601 | 100,913 | 20,359 | 64,898 | 77,012 | 162,269 | 60\% |
| 2005 | 87,496 | 5-May | 70,454 | 104,538 | 22,102 | 65,394 | 46,089 | 133,585 | 51\% |
| 2006 | 106,545 | 20-May | 86,195 | 126,895 | 21,446 | 85,099 | 65,828 | 172,373 | 51\% |
| 2007 | 60,320 | 19-May | 49,616 | 71,024 | 17,249 | 43,071 | 65,129 | 125,449 | 66\% |
| 2008 | 78,031 | 17-May | 62,737 | 93,325 | 19,509 | 58,522 | 75,692 | 153,723 | 62\% |
| 2009 | 59,817 | 12-May | 47,343 | 72,291 | 11,260 | 48,557 | 36,232 | 96,049 | 49\% |
| 2010 | 80,747 | 19-May | 64,679 | 96,815 | 20,661 | 60,086 | 46,767 | 127,514 | 53\% |
| 2011 | 82,116 | 25-Apr | 66,634 | 97,598 | 24,543 | 57,573 | 71,805 | 153,921 | 63\% |
| 2012 | 102,670 | 25-Apr | 83,602 | 121,738 | 30,113 | 72,557 | 50,736 | 153,406 | 53\% |
| 2013 | 88,535 | 15-May | 71,523 | 105,547 | 25,173 | 63,362 | 100,144 | 188,679 | 66\% |
| 2014 | 68,532 | 25-Apr | 55,818 | 81,246 | 17,795 | 50,737 | 33,226 | 101,758 | 50\% |
| 2015 | 102,506 | 25-Apr | 81,982 | 123,030 | 19,849 | 82,657 | 42,054 | 144,560 | 43\% |
| 2016 | 146,294 | 3-May | 119,726 | 172,862 | 37,434 | 108,860 | 74,874 | 221,168 | 51\% |
| 2017 | 91,164 | 18-May | 81,104 | 101,224 | 30,379 | 60,785 | 74,604 | 165,768 | 63\% |
| 2018 | 84,806 | 7-Jun | 74,394 | 95,218 | 17,962 | 66,844 | 27,514 | 112,320 | 40\% |
| 2019 | 98,203 | 15-May |  |  | 21,481 | 76,722 | 68,226 | 166,429 | 54\% |
| Average |  |  |  |  |  |  |  |  |  |
| 84-18 | 88,857 | 23-May |  |  | 24,521 | 64,054 | 81,743 | 171,221 | 61\% |
| 09-18 | 90,719 | 8-May |  |  | 23,517 | 67,202 | 55,795 | 146,514 | 54\% |

Appendix D. 16. The terminal run reconstruction of Taku River wild and enhanced sockeye salmon, 1984-2019.

| Year | Wild Terminal Run |  |  |  |  | Enhanced Terminal Run |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Canadian |  | escapement | $\begin{gathered} \text { US } \\ \text { harvest } \end{gathered}$ | Terminal <br> Run | Canadian |  | escapement | $\begin{gathered} \text { US } \\ \text { harvest } \end{gathered}$ | Terminal <br> Run |
|  | harvest | test |  |  |  | harvest | test |  |  |  |
| 1984 | 27,292 | 0 | 60,980 | 57,619 | 145,891 |  |  |  |  |  |
| 1985 | 14,411 | 0 | 70,068 | 74,287 | 158,766 |  |  |  |  |  |
| 1986 | 14,939 | 0 |  | 60,644 |  |  |  |  |  |  |
| 1987 | 13,650 | 237 | 42,475 | 54,963 | 111,325 |  |  |  |  |  |
| 1988 | 12,259 | 708 | 42,613 | 25,785 | 81,365 |  |  |  |  |  |
| 1989 | 18,598 | 207 | 62,192 | 63,366 | 144,363 |  |  |  |  |  |
| 1990 | 21,189 | 285 | 54,327 | 109,285 | 185,086 |  |  |  |  |  |
| 1991 | 25,217 | 163 | 79,515 | 105,271 | 210,166 |  |  |  |  |  |
| 1992 | 29,824 | 38 | 69,781 | 121,176 | 220,819 |  |  |  |  |  |
| 1993 | 33,357 | 166 | 59,410 | 142,089 | 235,022 |  |  |  |  |  |
| 1994 | 29,001 | 0 | 61,127 | 98,063 | 188,191 |  |  |  |  |  |
| 1995 | 31,374 | 0 | 69,831 | 87,878 | 189,083 | 1,337 | 0 | 1,700 | 4,106 | 7,143 |
| 1996 | 41,287 | 0 | 54,816 | 182,944 | 279,047 | 738 | 0 | 636 | 4,783 | 6,157 |
| 1997 | 23,685 | 0 | 48,291 | 77,067 | 149,043 | 667 | 0 | 612 | 2,060 | 3,339 |
| 1998 | 18,681 | 0 | 44,323 | 48,989 | 111,993 | 596 | 0 | 1,155 | 843 | 2,594 |
| 1999 | 20,761 | 87 | 62,355 | 62,441 | 145,643 | 302 | 1 | 82 | 617 | 1,003 |
| 2000 | 27,711 | 314 | 53,722 | 129,683 | 211,430 | 438 | 5 | 1,000 | 1,579 | 3,022 |
| 2001 | 45,994 | 237 | 80,632 | 195,496 | 322,358 | 1,876 | 10 | 3,753 | 8,938 | 14,577 |
| 2002 | 31,159 | 517 | 62,220 | 115,747 | 209,643 | 49 | 1 | 659 | 653 | 1,362 |
| 2003 | 32,728 | 27 | 99,229 | 136,165 | 268,149 | 269 | 0 | 1,340 | 777 | 2,386 |
| 2004 | 20,001 | 90 | 64,184 | 76,321 | 160,596 | 267 | 1 | 714 | 692 | 1,673 |
| 2005 | 21,599 | 241 | 64,725 | 45,496 | 132,061 | 259 | 3 | 669 | 593 | 1,524 |
| 2006 | 20,376 | 252 | 82,608 | 63,587 | 166,823 | 808 | 10 | 2,491 | 2,241 | 5,550 |
| 2007 | 15,131 | 337 | 39,883 | 61,387 | 116,737 | 1,742 | 39 | 3,188 | 3,742 | 8,712 |
| 2008 | 17,433 | 9 | 54,355 | 63,905 | 135,702 | 2,066 | 1 | 4,167 | 11,787 | 18,021 |
| 2009 | 10,980 | 172 | 48,204 | 35,984 | 95,340 | 106 | 2 | 353 | 248 | 709 |
| 2010 | 19,732 | 287 | 59,077 | 45,824 | 124,920 | 632 | 10 | 1,009 | 943 | 2,594 |
| 2011 | 22,259 | 480 | 55,212 | 66,113 | 144,065 | 1,762 | 41 | 2,362 | 5,691 | 9,856 |
| 2012 | 27,098 | 5 | 65,822 | 46,564 | 139,490 | 3,008 | 1 | 6,735 | 4,172 | 13,916 |
| 2013 | 21,259 | 0 | 58,633 | 86,777 | 166,669 | 3,914 | 0 | 4,729 | 13,367 | 22,010 |
| 2014 | 17,318 | 8 | 49,844 | 32,306 | 99,477 | 468 | 0 | 893 | 919 | 2,281 |
| 2015 | 19,676 | 49 | 81,988 | 41,852 | 143,565 | 124 | 0 | 669 | 202 | 995 |
| 2016 | 33,282 | 109 | 99,791 | 68,031 | 201,213 | 4,029 | 14 | 9,069 | 6,843 | 19,955 |
| 2017 | 27,552 | 0 | 55,571 | 68,480 | 151,603 | 2,827 | 0 | 5,214 | 6,123 | 14,164 |
| 2018 | 17,038 | 0 | 64,469 | 25,999 | 107,505 | 924 | 0 | 2,376 | 1,516 | 4,815 |
| 2019 | 21,055 | 0 | 74,854 | 66,953 | 162,863 | 426 | 0 | 1,868 | 1,273 | 3,566 |
| Averages |  |  |  |  |  |  |  |  |  |  |
| 84-18 | 23,539 | 144 | 62,420 | 79,359 | 166,269 |  |  |  |  |  |
| 09-18 | 21,620 | 111 | 63,861 | 51,793 | 137,385 | 1,779 | 7 | 3,341 | 4,003 | 9,130 |

Appendix D. 17. Annual sockeye salmon escapement estimates of Taku River and Port Snettisham sockeye salmon stocks, 1979-2019.

| Spawners equals escapement to the weir minus fish collected for brood stock. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Little Trapper |  | Little Tatsamenie |  | Tatsamenie |  | King Salmon |  | Kuthai <br> Lake <br> Weir | Nahlin <br> River <br> Weir | Crescent Lake |  | Speel Lake |  |
|  | Count | Escape. | Count | Escape. | Count | Escape. | count | escape |  |  | Count | Escape. | Count | Escape. |
| 1980 |  |  |  |  |  |  |  |  | 1,658 |  |  |  |  |  |
| 1981 |  |  |  |  |  |  |  |  | 2,299 |  |  |  |  |  |
| 1982 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1983 | 7,402 | 7,402 |  |  |  |  |  |  |  |  | 19,422 | 19,422 | 10,484 | 10,484 |
| 1984 | 13,084 | 13,084 |  |  |  |  |  |  |  |  | 6,707 | 6,707 | 9,764 | 9,764 |
| 1985 | 14,889 | 14,889 | 13,093 | 13,093 |  |  |  |  |  |  | 7,249 | 7,249 | 7,073 | 7,006 |
| 1986 | 13,820 | 13,820 | 11,446 | 11,446 |  |  |  |  |  |  | 3,414 | 3,414 | 5,857 | 5,457 |
| 1987 | 12,007 | 12,007 | 2,794 | 2,794 |  | 25 |  |  |  |  | 7,839 | 7,839 | 9,319 | 9,319 |
| 1988 | 10,637 | 10,637 | 2,063 | 2,063 |  |  |  |  |  | 138 | 1,199 | 1,199 | 969 | 710 |
| 1989 | 9,606 | 9,606 | 3,039 | 3,039 |  |  |  |  |  |  | 1,109 | 775 | 12,229 | 10,114 |
| 1990 | 9,443 | 7,777 | 5,736 | 4,929 |  |  |  |  |  | 2,515 | 1,262 | 757 | 18,064 | 16,867 |
| 1991 | 22,942 | 21,001 | 8,381 | 7,585 |  |  |  |  |  |  | 9,208 | 8,666 | 299 | 299 |
| 1992 | 14,372 | 12,732 | 6,576 | 5,681 |  |  |  |  | 1,457 | 297 | 22,674 | 21,849 | 9,439 | 8,136 |
| 1993 | 17,432 | 16,685 | 5,028 | 4,230 |  |  |  |  | 6,312 | 2,463 |  |  |  |  |
| 1994 | 13,438 | 12,691 | 4,371 | 3,578 |  |  |  |  | 5,427 | 960 |  |  |  |  |
| 1995 | 11,524 | 11,524 |  |  | 5,780 | 4,387 |  |  | 3,310 | 3,711 |  |  | 16,208 | 14,260 |
| 1996 | 5,483 | 5,483 |  |  | 10,381 | 8,026 |  |  | 4,243 | 2,538 |  |  | 20,000 | 18,610 |
| 1997 | 5,924 | 5,924 |  |  | 8,363 | 5,981 |  |  | 5,746 | 1,857 |  |  | 4,999 |  |
| 1998 | 8,717 | 8,717 |  |  | 5,997 | 4,735 |  |  | 1,934 | 345 |  |  | 13,358 |  |
| 1999 | 11,805 | 11,805 |  |  | 2,104 | 1,888 |  |  | 10,042 |  |  |  | 10,277 |  |
| 2000 | 11,551 | 11,551 |  |  | 7,575 | 5,570 |  |  | 4,096 |  |  |  | 6,764 |  |
| 2001 | 16,860 | 16,860 |  |  | 22,575 | 19,579 |  |  | 1,663 | 935 |  |  | 8,060 |  |
| 2002 | 7,973 | 7,973 |  |  | 5,495 | 4,379 |  |  | 7,697 |  |  |  | 5,016 |  |
| 2003 | 31,227 | 31,227 |  |  | 4,515 | 2,965 |  |  | 7,769 |  |  |  | 7,014 |  |
| 2004 | 9,613 | 9,613 |  |  | 1,951 | 1,357 | 5,005 | 5,005 | 1,578 |  | na | na | 7,813 |  |
| 2005 | 16,009 | 16,009 |  |  | 3,372 | 2,445 | 1,046 | 1,046 | 6,004 |  | na | na | 7,538 |  |
| 2006 | 25,265 | 24,557 |  |  | 22,475 | 19,820 | 2,177 | 2,177 | 1,015 |  | na | na | 4,163 |  |
| 2007 | 7,153 | 6,340 |  |  | 11,187 | 8,384 | 5 |  | 204 |  | na | na | 3,099 |  |
| 2008 | 3,831 | 2,791 |  |  | 8,976 | 6,176 | 888 | 888 | 1,547 |  | na | na | 1,763 |  |
| 2009 | 5,552 | 5,443 |  |  | 2,032 | 1,292 | 1,100 | 1,100 | 1,442 |  | na | na | 3,689 | 3,689 |
| 2010 | 3,347 | 3,387 |  |  | 3,513 | 2,113 | 2,977 | 2,977 | 1,626 |  | na | na | 5,643 | 5,643 |
| 2011 | 3,809 | 3,809 |  |  | 7,880 | 6,580 | 2,899 | 2,899 | 811 |  | na | na | 4,777 | 4,777 |
| 2012 | 10,015 | 10,015 |  |  | 15,605 | 14,305 | 6,913 | 6,746 | 182 |  | na | na | 5,681 | 5,681 |
| 2013 | 4,840 | 4,840 |  |  | 10,246 | 8,946 | 470 | 470 | 1,195 |  | na | na | 6,427 | 6,427 |
| 2014 | 6,607 | 6,707 |  |  | 2,106 | 1,348 | 1,061 | 894 | 208 |  |  |  | 5,062 | 5,062 |
| 2015 | 13,253 | 13,253 |  |  | 1,537 | 939 | 1,683 | 1,683 | 341 |  |  |  | 4,888 | 4,888 |
| 2016 | 7,771 | 7,594 |  |  | 32,934 | 31,434 | 6,404 | 6,404 | 1,476 |  |  |  | 5,538 | 5,538 |
| 2017 | 6,552 | 6,376 |  |  | 27,237 | 25,697 | 439 | 439 | 299 |  |  |  |  |  |
| 2018 | 8,249 | 8,249 |  |  | 5,086 | 3,386 | 3,375 | 3,375 | 13 |  |  |  |  |  |
| 2019 | 6,382 | 6,078 |  |  | 3,902 | 2,478 | 4,294 | 4,294 | 605 |  |  |  |  |  |
| Averages |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 83-18 | 11,167 | 10,899 |  |  |  |  |  |  |  |  |  |  | 7,540 |  |
| 09-18 | 7,000 | 6,967 |  |  | 10,818 | 9,604 | 2,732 | 2,699 | 759 |  |  |  | 5,213 |  |

## Appendix D. 18. Historical Taku River coho salmon harvested in D111 terminal

 fisheries, 1992-2019.| Sportfish estimate is based on all landings made in Juneau (not just District 111) |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | D111 Gillnet |  |  |  | Juneau Sport Fish |  | PU | Total |
|  | Harvest | SE | Before SW34 | SW34 to end | Harvest | SE |  |  |
| 1992 | 74,226 | 23,030 |  |  | 431 | 380 | 88 | 74,745 |
| 1993 | 32,456 | 8,515 |  |  | 3,222 | 3,048 | 25 | 35,703 |
| 1994 | 82,181 | 14,117 |  |  | 19,018 | 8,674 | 93 | 101,292 |
| 1995 | 51,286 | 7,263 |  |  | 7,857 | 2,920 | 97 | 59,240 |
| 1996 | 14,491 | 2,762 |  |  | 2,461 | 1,162 | 67 | 17,019 |
| 1997 | 1,489 | 412 |  |  | 4,963 | 1,674 | 27 | 6,479 |
| 1998 | 12,972 | 2,015 |  |  | 3,984 | 1,084 | 86 | 17,042 |
| 1999 | 5,572 | 913 |  |  | 3,393 | 997 | 44 | 9,009 |
| 2000 | 7,352 | 1,355 |  |  | 4,137 | 1,148 | 31 | 11,520 |
| 2001 | 9,212 | 1,523 |  |  | 2,505 | 813 | 22 | 11,739 |
| 2002 | 26,981 | 4,257 |  |  | 6,189 | 1,346 | 68 | 33,238 |
| 2003 | 19,659 | 6,937 |  |  | 5,421 | 1,727 | 59 | 25,139 |
| 2004 | 13,058 | 2,937 |  |  | 12,720 | 3,528 | 120 | 25,898 |
| 2005 | 18,011 | 5,679 |  |  | 3,573 | 1,830 | 134 | 21,718 |
| 2006 | 32,051 | 4,020 |  |  | 3,985 | 1,017 | 134 | 36,170 |
| 2007 | 15,753 | 2,416 |  |  | 804 | 488 | 60 | 16,617 |
| 2008 | 23,806 | 5,028 |  |  | 493 | 362 | 91 | 24,390 |
| 2009 | 36,757 | 5,033 |  |  | 5,949 | 2,445 | 240 | 42,946 |
| 2010 | 41,695 | 8,703 |  |  | 13,301 | 4,491 | 258 | 55,254 |
| 2011 | 4,829 | 1,237 |  |  | 4,340 | 977 | 224 | 9,393 |
| 2012 | 10,760 | 2,674 |  |  | 662 | 465 | 132 | 11,554 |
| 2013 | 23,269 | 3,330 |  |  | 1,793 | 716 | 238 | 25,300 |
| 2014 | 28,297 | 5,127 |  |  | 2,628 | 1,445 | 224 | 31,149 |
| 2015 | 6,239 | 2,163 |  |  | 3,063 | 1,699 | 256 | 9,558 |
| 2016 | 12,717 | 2,737 |  |  | 1,044 | 604 | 169 | 13,930 |
| 2017 | 7,446 | 2,724 |  |  | 5,892 | 2,424 | 178 | 13,516 |
| 2018 | 11,346 | 2,391 |  |  | 1,035 | 490 | 246 | 12,627 |
| 2019 | 4,928 | 1,301 | 632 | 4,296 | 2,712 | 1,176 | 306 | 7,946 |
| average |  |  |  |  |  |  |  |  |
| 09-19 | 18,833 | 3,741 |  |  | 3,655 | 1,465 | 205 | 22,692 |

Appendix D. 19. Historical coho salmon harvested in the Canadian fisheries in the Taku River, 1987-2019.

| Year | Commercial |  |  | Aboriginal | Test | Test released |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Before SW34 | SW34 to end |  |  |  |
| 1979 | 6,006 |  |  |  |  |  |
| 1980 | 6,405 |  |  | 0 |  |  |
| 1981 | 3,607 |  |  |  |  |  |
| 1982 | 51 |  |  |  |  |  |
| 1983 | 8,390 |  |  | 0 |  |  |
| 1984 | 5,357 |  |  | 15 |  |  |
| 1985 | 1,770 |  |  | 22 |  |  |
| 1986 | 1,783 |  |  | 50 |  |  |
| 1987 | 5,599 |  |  | 113 | 807 |  |
| 1988 | 3,123 |  |  | 98 | 422 |  |
| 1989 | 2,876 |  |  | 146 | 1,011 |  |
| 1990 | 3,207 |  |  | 6 | 472 |  |
| 1991 | 3,415 |  |  | 20 | 2,004 |  |
| 1992 | 4,077 |  |  | 187 | 1,277 |  |
| 1993 | 3,033 |  |  | 8 | 1,593 |  |
| 1994 | 14,531 |  |  | 162 |  |  |
| 1995 | 13,629 |  |  | 109 |  |  |
| 1996 | 5,028 |  |  | 24 |  | 39 |
| 1997 | 2,594 |  |  | 96 |  |  |
| 1998 | 5,090 |  |  | 0 |  |  |
| 1999 | 4,416 |  |  | 471 | 688 |  |
| 2000 | 4,395 |  |  | 342 | 710 |  |
| 2001 | 2,568 |  |  | 500 | 31 | 2,976 |
| 2002 | 3,082 |  |  | 688 | 32 | 3,767 |
| 2003 | 3,168 |  |  | 416 | 59 | 4,031 |
| 2004 | 5,966 | 2,387 | 3,579 | 450 | 3,268 |  |
| 2005 | 4,924 | 1,412 | 3,512 | 162 | 3,173 |  |
| 2006 | 8,567 | 4,947 | 3,620 | 300 | 2,802 |  |
| 2007 | 5,244 | 2,229 | 3,015 | 155 | 2,674 |  |
| 2008 | 3,906 | 2,802 | 1,104 | 67 | 0 | 1,012 |
| 2009 | 5,649 | 2,379 | 3,270 | 154 | 3,963 |  |
| 2010 | 10,349 | 3,283 | 7,066 | 59 | 4,000 |  |
| 2011 | 8,446 | 2,353 | 6,093 | 30 | 4,002 |  |
| 2012 | 11,548 | 2,883 | 8,665 | 324 | 2,200 |  |
| 2013 | 10,264 | 2,406 | 7,858 | 111 | 0 |  |
| 2014 | 14,464 | 2,696 | 11,768 | 104 | 2,000 |  |
| 2015 | 7,886 | 2,427 | 5,459 | 299 | 1,998 |  |
| 2016 | 9,466 | 1,983 | 7,483 | 47 | 2,007 |  |
| 2017 | 7,726 | 2,847 | 4,879 | 76 | 0 | 686 |
| 2018 | 9,503 | 2,258 | 7,245 | 2 | 0 | 244 |
| 2019 | 12,145 | 2,399 | 9,746 | 107 | 0 | 22 |
| Averages |  |  |  |  |  |  |
| 83-18 | 6,251 |  |  | 161 |  |  |
| 09-18 | 9,530 |  |  | 121 | 2,017 |  |

Appendix D. 20. Historic Taku River coho salmon run size, 1987-2019.

| Year | Above Border M-R |  | Expansion |  | Expanded <br> Estimate | Canadian <br> Harvest | Escape. | Terminal Run |  |  | TotalRun |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Run | End |  |  | U.S. <br> Harvest |  |  | Run | Harvest <br> Rate |  |
|  | Estimate | Date | Method | Factor |  |  |  |  |  |  |
| 1987 | 43,750 | 20-Sep | Test Fish CPUE | 1.42 | 61,976 | 6,519 | 55,457 |  |  |  |  |
| 1988 | 43,093 | 18-Sep |  | 1.00 | 43,093 | 3,643 | 39,450 |  |  |  |  |
| 1989 | 60,841 | 1-Oct |  | 1.00 | 60,841 | 4,033 | 56,808 |  |  |  |  |
| 1990 | 75,881 |  |  | 1.00 | 75,881 | 3,685 | 72,196 |  |  |  |  |
| 1991 | 132,923 |  |  | 1.00 | 132,923 | 5,439 | 127,484 |  |  |  |  |
| 1992 | 49,928 | 5-Sep | District 111-32 CPUE | 1.79 | 89,270 | 5,541 | 83,729 | 74,745 | 164,015 | 0.490 | 212,798 |
| 1993 | 67,448 | 11-Sep | District 111-32 CPUE | 1.84 | 123,964 | 4,634 | 119,330 | 35,703 | 159,667 | 0.253 | 249,320 |
| 1994 | 98,643 | 24-Sep | District 111-32 CPUE | 1.13 | 111,036 | 14,693 | 96,343 | 101,292 | 212,328 | 0.546 | 339,736 |
| 1995 | 61,738 | 30-Sep | District 111-32 CPUE | 1.12 | 69,448 | 13,738 | 55,710 | 59,240 | 128,688 | 0.567 | 181,116 |
| 1996 | 44,172 | 28-Sep | District 111-32 CPUE | 1.12 | 49,687 | 5,052 | 44,635 | 17,019 | 66,706 | 0.331 | 94,283 |
| 1997 | 35,035 | 27-Sep | District 111-32 CPUE | 1.00 | 35,035 | 2,690 | 32,345 | 6,479 | 41,514 | 0.221 | 50,886 |
| 1998 | 49,290 | 26-Sep | District 111-32 CPUE | 1.35 | 66,472 | 5,090 | 61,382 | 17,042 | 83,514 | 0.265 | 119,925 |
| 1999 | 59,052 | 3-Oct | Troll CPUE | 1.12 | 66,343 | 5,575 | 60,768 | 9,009 | 75,352 | 0.194 | 117,176 |
| 2000 | 70,147 | 2-Oct | no expansion | 1.00 | 70,147 | 5,447 | 64,700 | 11,520 | 81,667 | 0.208 | 109,148 |
| 2001 | 107,493 | $5-\mathrm{Oct}$ | no expansion | 1.00 | 107,493 | 3,099 | 104,394 | 11,739 | 119,232 | 0.124 | 162,777 |
| 2002 | 223,162 | 7-Oct | no expansion | 1.00 | 223,162 | 3,802 | 219,360 | 33,238 | 256,400 | 0.144 | 303,275 |
| 2003 | 186,755 | 8-Oct | no expansion | 1.00 | 186,755 | 3,643 | 183,112 | 25,139 | 211,894 | 0.136 | 265,090 |
| 2004 | 139,011 | 8-Oct | no expansion | 1.00 | 139,011 | 9,684 | 129,327 | 25,898 | 164,909 | 0.216 | 251,537 |
| 2005 | 143,817 | 8-Oct | no expansion | 1.00 | 143,817 | 8,259 | 135,558 | 21,718 | 165,535 | 0.181 | 222,997 |
| 2006 | 134,053 | 8-Oct | no expansion | 1.00 | 134,053 | 11,669 | 122,384 | 36,170 | 170,223 | 0.281 | 226,694 |
| 2007 | 82,319 | 8-Oct | no expansion | 1.00 | 82,319 | 8,073 | 74,246 | 16,617 | 98,936 | 0.250 | 133,301 |
| 2008 | 99,199 | 8-Oct | no expansion | 1.00 | 99,199 | 3,973 | 95,226 | 24,390 | 123,589 | 0.229 | 174,070 |
| 2009 | 113,716 | 8-Oct | no expansion | 1.00 | 113,716 | 9,766 | 103,950 | 42,946 | 156,662 | 0.336 | 224,010 |
| 2010 | 141,238 | 8-Oct | no expansion | 1.00 | 141,238 | 14,408 | 126,830 | 55,254 | 196,492 | 0.355 | 246,822 |
| 2011 | 83,349 | 9 -Oct | no expansion | 1.00 | 83,349 | 12,478 | 70,871 | 9,393 | 92,742 | 0.236 | 129,939 |
| 2012 | 61,797 | 15-Sep | CYI run timing | 1.37 | 84,847 | 14,072 | 70,775 | 11,554 | 96,401 | 0.266 | 112,947 |
| 2013 | 55,161 | 12-Sep | CYI run timing | 1.42 | 78,492 | 10,375 | 68,117 | 25,300 | 103,792 | 0.344 | 143,410 |
| 2014 | 140,739 | 9-Oct | no expansion | 1.00 | 140,739 | 16,568 | 124,171 | 31,149 | 171,888 | 0.278 | 189,655 |
| 2015 | 70,361 | 9 -Oct | no expansion | 1.00 | 70,361 | 10,183 | 60,178 | 9,558 | 79,919 | 0.247 | 104,344 |
| 2016 | 99,224 | $9-\mathrm{Oct}$ | no expansion | 1.00 | 99,224 | 11,520 | 87,704 | 13,930 | 113,154 | 0.225 | 125,323 |
| 2017 | 65,670 | 4-Oct | no expansion | 1.00 | 65,670 | 7,802 | 57,868 | 13,516 | 79,186 | 0.269 | 108,263 |
| 2018 | 60,678 | 3-Oct | no expansion | 1.00 | 60,678 | 9,505 | 51,173 | 12,627 | 73,305 | 0.302 | 82,675 |
| 2019 | 95,011 | 8-Oct | no expansion | 1.00 | 95,011 | 12,252 | 82,759 | 7,946 | 102,957 | 0.196 | 117,031 |
| Averages |  |  |  |  |  |  |  |  |  |  |  |
| 87-18 | 90,615 | 30-Sep |  |  | 97,195 | 7,958 | 89,237 | 27,859 | 129,174 | 0.28 | 171,377 |
| 09-18 | 89,193 | 2-Oct |  |  | 93,831 | 11,668 | 82,164 | 22,523 | 116,354 | 0.29 | 146,739 |

Appendix D. 21. Historical effort in the Alaskan District 111 and Subdistrict 111-32
(Taku Inlet) commercial drift gillnet fishery, 1960-2019.

| Days open are for the entire district and include openings to spawner chinook salmon, 1960-1975. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | D111 |  | D111-32 |  | $\begin{array}{r} \text { PU } \\ \text { Permits } \end{array}$ |
| Year | Boat Days | $\begin{aligned} & \text { Days } \\ & \text { Open } \end{aligned}$ | Boat Days | $\begin{aligned} & \text { Days } \\ & \text { Open } \end{aligned}$ |  |
| 1960 |  | 60.00 | 1,680 | 60.00 |  |
| 1961 |  | 62.00 | 2,901 | 62.00 |  |
| 1962 |  | 52.00 | 1,568 | 52.00 |  |
| 1963 |  | 54.00 | 1,519 | 51.00 |  |
| 1964 |  | 56.00 | 1,491 | 56.00 |  |
| 1965 |  | 63.00 | 1,332 | 60.00 |  |
| 1966 |  | 64.00 | 1,535 | 58.00 |  |
| 1967 |  | 53.00 | 1,663 | 50.00 |  |
| 1968 |  | 60.00 | 2,420 | 60.00 |  |
| 1969 | 1,518 | 41.50 | 1,413 | 42.00 |  |
| 1970 | 2,688 | 53.00 | 2,425 | 53.00 |  |
| 1971 | 3,053 | 55.00 | 2,849 | 55.00 |  |
| 1972 | 3,103 | 51.00 | 2,797 | 51.00 |  |
| 1973 | 3,286 | 41.00 | 3,135 | 41.00 |  |
| 1974 | 2,315 | 29.50 | 1,741 | 30.00 |  |
| 1975 | 1,084 | 15.50 | 986 | 15.00 |  |
| 1976 | 1,914 | 25.00 | 1,582 | 23.00 |  |
| 1977 | 2,258 | 27.00 | 1,879 | 27.00 |  |
| 1978 | 2,174 | 26.00 | 1,738 | 24.00 |  |
| 1979 | 2,269 | 28.83 | 2,011 | 29.00 |  |
| 1980 | 4,123 | 30.92 | 3,634 | 31.00 |  |
| 1981 | 2,687 | 30.00 | 1,740 | 22.00 |  |
| 1982 | 2,433 | 35.50 | 2,130 | 36.00 |  |
| 1983 | 1,274 | 33.00 | 1,065 | 31.00 |  |
| 1984 | 2,757 | 52.50 | 2,120 | 39.00 |  |
| 1985 | 3,264 | 48.00 | 2,116 | 37.00 | 54 |
| 1986 | 2,129 | 32.83 | 1,413 | 30.00 |  |
| 1987 | 2,514 | 34.75 | 1,517 | 30.00 |  |
| 1988 | 2,135 | 32.00 | 1,213 | 29.00 |  |
| 1989 | 2,333 | 41.00 | 1,909 | 36.00 | 75 |
| 1990 | 3,188 | 38.33 | 2,879 | 38.00 | 95 |
| 1991 | 4,145 | 57.00 | 3,324 | 52.00 | 88 |
| 1992 | 4,550 | 50.00 | 3,407 | 43.00 | 125 |
| 1993 | 3,827 | 43.00 | 3,372 | 43.00 | 128 |
| 1994 | 5,078 | 66.00 | 3,960 | 60.00 | 116 |
| 1995 | 4,034 | 49.00 | 3,061 | 45.00 | 106 |
| 1996 | 3,229 | 46.00 | 2,685 | 41.00 | 130 |
| 1997 | 2,107 | 33.00 | 1,761 | 30.00 | 123 |
| 1998 | 3,070 | 48.00 | 2,007 | 39.00 | 130 |
| 1999 | 2,841 | 59.00 | 2,563 | 58.00 | 147 |
| 2000 | 2,919 | 40.00 | 2,325 | 38.00 | 128 |
| 2001 | 4,731 | 54.00 | 3,635 | 55.00 | 163 |
| 2002 | 4,095 | 62.00 | 2,792 | 54.00 | 136 |
| 2003 | 3,977 | 73.50 | 2,685 | 64.50 | 133 |
| 2004 | 3,342 | 59.00 | 1,627 | 50.00 | 131 |
| 2005 | 3,427 | 68.00 | 2,947 | 65.00 | 132 |
| 2006 | 3,517 | 89.00 | 2,470 | 81.00 | 105 |
| 2007 | 3,505 | 64.00 | 2,941 | 64.00 | 91 |
| 2008 | 3,116 | 49.00 | 2,223 | 46.00 | 125 |
| 2009 | 3,438 | 62.00 | 2,524 | 57.00 | 113 |
| 2010 | 2,724 | 54.00 | 2,357 | 54.00 | 120 |
| 2011 | 3,303 | 46.00 | 2,669 | 46.00 | 133 |
| 2012 | 2,462 | 43.00 | 1,620 | 42.00 | 153 |
| 2013 | 3,311 | 62.00 | 2,375 | 61.00 | 158 |
| 2014 | 3,164 | 65.00 | 2,422 | 65.00 | 135 |
| 2015 | 2,132 | 44.00 | 1,745 | 43.00 | 119 |
| 2016 | 2,850 | 56.00 | 2,022 | 52.00 | 138 |
| 2017 | 3,388 | 43.00 | 1,986 | 36.00 | 106 |
| 2018 | 3,080 | 44.00 | 1,877 | 39.00 | 115 |
| 2019 | 2,544 | 62.00 | 1,552 | 52.00 | 124 |
| Averag |  |  |  |  |  |
| 60-18 | 2,997 | 48 | 2,234 | 45 |  |
| 09-18 | 2,985 | 52 | 2,160 | 50 | 129 |

Appendix D. 22. Historical effort in the Canadian commercial fishery in the Taku River, 1979-2019.

|  | Commercial |  |
| :---: | ---: | ---: |
| Year | Boat <br> Days | Days <br> Fished |
| 1979 | 599 | 50 |
| 1980 | 476 | 39 |
| 1981 | 243 | 31 |
| 1982 | 38 | 13 |
| 1983 | 390 | 64 |
| 1984 | 288 | 30 |
| 1985 | 178 | 16 |
| 1986 | 148 | 17 |
| 1987 | 280 | 26 |
| 1988 | 185 | 15 |
| 1989 | 271 | 25 |
| 1990 | 295 | 28 |
| 1991 | 284 | 25 |
| 1992 | 291 | 27 |
| 1993 | 363 | 34 |
| 1994 | 497 | 74 |
| 1995 | 428 | 51 |
| 1996 | 415 | 65 |
| 1997 | 394 | 47 |
| 1998 | 299 | 42 |
| 1999 | 300 | 34 |
| 2000 | 351 | 39 |
| 2001 | 382 | 42 |
| 2002 | 286 | 33 |
| 2003 | 275 | 44 |
| 2004 | 294 | 40 |
| 2005 | 561 | 68 |
| 2006 | 518 | 77 |
| 2007 | 313 | 55 |
| 2008 | 245 | 33 |
| 2009 | 459 | 98 |
| 2010 | 396 | 62 |
| 2011 | 440 | 63 |
| 2012 | 330 | 50 |
| 2013 | 346 | 53 |
| 2014 | 437 | 53 |
| 2015 | 271 | 35 |
| 2016 | 314 | 60 |
| 2017 | 260 | 37 |
| 2018 | 237 | 38 |
| 2019 | 226 | 60 |
| Averages |  |  |
| $79-18$ | 334 | 43 |
| $09-18$ | 349 | 55 |
|  |  |  |

## Appendix D. 23. Canyon Island fish wheel salmon counts and periods of operation on

 the Taku River, 1984-2019.| Total counts from both fish wheels and supplemental gillnets when water is low. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| In 2018 caution for comparisons to long-term average; fish wheels not run 24hrs due to change in sample methods to hourly checks with nightime fish wheel stops. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Year | Period of Operation | Traditional - CYI Fish Wheel 1 and 2 |  |  |  |  | Pink |  | Downriver Fish Wheel 3 |  |  |  |  | Steelhead |
|  |  | Chinook | Sockeye | Coho | Pink | Chum | even year | odd year | Chinook | Sockeye | Coho | Pink | Chum |  |
| 1984 | 6/15-9/18 | 138 | 2,334 | 889 | 20,751 | 316 | 20,751 |  |  |  |  |  |  |  |
| 1985 | 6/16-9/21 | 184 | 3,601 | 1,207 | 27,670 | 1,376 |  | 27,670 |  |  |  |  |  |  |
| 1986 | 6/14-8/25 | 571 | 5,808 | 758 | 7,256 | 80 | 7,256 |  |  |  |  |  |  |  |
| 1987 | 6/15-9/20 | 285 | 4,307 | 2,240 | 42,786 | 1,533 |  | 42,786 |  |  |  |  |  | 34 |
| 1988 | 5/11-9/19 | 1,436 | 3,292 | 2,168 | 3,982 | 1,089 | 3,982 |  |  |  |  |  |  | 34 |
| 1989 | 5/05-10/01 | 1,811 | 5,650 | 2,243 | 31,189 | 645 |  | 31,189 |  |  |  |  |  | 38 |
| 1990 | 5/03-9/23 | 1,972 | 6,091 | 1,860 | 13,358 | 748 | 13,358 |  |  |  |  |  |  | 43 |
| 1991 | 6/08-10/15 | 680 | 5,102 | 4,922 | 23,553 | 1,063 |  | 23,553 |  |  |  |  |  | 138 |
| 1992 | 6/20-9/24 | 212 | 6,279 | 2,103 | 9,252 | 189 | 9,252 |  |  |  |  |  |  | 22 |
| 1993 | 6/12-9/29 | 562 | 8,975 | 2,552 | 1,625 | 345 |  | 1,625 |  |  |  |  |  | 16 |
| 1994 | 6/10-9/21 | 906 | 6,485 | 4,792 | 27,100 | 367 | 27,100 |  |  |  |  |  |  | 107 |
| 1995 | 5/4-9/27 | 1,535 | 6,228 | 2,535 | 1,712 | 218 |  | 1,712 |  |  |  |  |  | 61 |
| 1996 | 5/3-9/20 | 1,904 | 5,919 | 1,895 | 21,583 | 388 | 21,583 |  |  |  |  |  |  | 68 |
| 1997 | 5/3-10/1 | 1,321 | 5,708 | 1,665 | 4,962 | 485 |  | 4,962 |  |  |  |  |  | 103 |
| 1998 | 5/2-9/15 | 894 | 4,230 | 1,777 | 23,347 | 179 | 23,347 |  |  |  |  |  |  | 119 |
| 1999 | 5/3-10/3 | 440 | 4,636 | 1,848 | 23,503 | 164 |  | 23,503 |  |  |  |  |  | 119 |
| 2000 | 4/23-10/3 | 1,211 | 5,865 | 1,877 | 6,529 | 423 | 6,529 |  |  |  |  |  |  | 160 |
| 2001 | 4/23-10/5 | 1,262 | 6,201 | 2,380 | 9,134 | 250 |  | 9,134 |  |  |  |  |  | 125 |
| 2002 | 4/24-10/7 | 1,578 | 5,812 | 3,766 | 5,672 | 205 | 5,672 |  |  |  |  |  |  | 87 |
| 2003 | 4/20-10/08 | 1,351 | 5,970 | 3,002 | 15,492 | 268 |  | 15,492 |  |  |  |  |  | 93 |
| 2004 | 4/30-10/06 | 2,234 | 6,255 | 3,163 | 8,464 | 414 | 8,464 |  |  |  |  |  |  | 63 |
| 2005 | 4/25-10/05 | 517 | 3,953 | 1,476 | 15,839 | 258 |  | 15,839 |  |  |  |  |  | 79 |
| 2006 | 4/27-10/03 | 544 | 5,296 | 2,811 | 21,725 | 466 | 21,725 |  |  |  |  |  |  | 47 |
| 2007 | 4/27-10/01 | 430 | 7,698 | 2,117 | 12,405 | 482 |  | 12,405 |  |  |  |  |  | 57 |
| 2008 | 4/23-10/03 | 1,298 | 3,736 | 2,213 | 4,704 | 350 | 4,704 |  |  |  |  |  |  |  |
| 2009 | 4/24-9/27 | 688 | 3,489 | 3,051 | 9,234 | 231 |  | 9,225 |  |  |  |  |  | 52 |
| 2010 | 4/24-9/27 | 778 | 3,244 | 2,123 | 8,868 | 94 | 8,868 |  |  |  |  |  |  | 176 |
| 2011 | 4/25-10/02 | 728 | 3,671 | 1,843 | 17,775 | 177 |  | 17,775 |  |  |  |  |  | 93 |
| 2012 | 5/21-9/15 | 598 | 4,441 | 965 | 5,826 | 232 | 5,826 |  |  |  |  |  |  | 24 |
| 2013 | 6/16-9/9 | 796 | 4,240 | 1,132 | 4,666 | 269 |  | 4,666 |  |  |  |  |  | 11 |
| 2014 | 4/25-10/3 | 609 | 5,342 | 3,646 | 2,436 | 310 | 2,436 |  |  |  |  |  |  |  |
| 2015 | 4/29-10/3 | 627 | 5,069 | 1,889 | 24,246 | 95 |  | 24,246 |  |  |  |  |  | 47 |
| 2016 | 5/3-9/27 | 142 | 4,942 | 981 | 1,369 | 66 | 1,369 |  | 164 | 1,419 | 148 | 1,838 | 15 |  |
| 2017 | 5/18-9/30 | 293 | 4,771 | 875 | 18,520 | 236 |  | 18,520 | 30 | 1,085 | 256 | 13,507 | 21 |  |
| 2018 | 6/3-9/23 | 155 | 3,239 | 798 | 1,604 | 32 | 1,604 |  |  |  |  |  |  | 12 |
| 2019 | 5/15-10/4 | 819 | 3,545 | 1,692 | 16,971 | 118 |  | 16,971 |  |  |  |  |  |  |
| Averages |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 84-18 |  | 877 | 5,082 | 2,159 | 13,661 | 401 | 10,768 | 16,724 |  |  |  |  |  |  |
| 09-18 |  | 541 | 4,245 | 1,730 | 9,454 | 174 | 4,021 | 14,886 |  |  |  |  |  |  |

Appendix E. 1. Weekly salmon harvest and effort in the lower Alsek River fisheries, 2019.

| SW | Chinook | Sockeye | Coho | Pink | Chum | Effort |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | Boats | Days Open | Boat Days |


| No Test fishery in 2019 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Commercial Fishery |  |  |  |  |  |  |  |  |
| 23 |  |  |  |  |  |  |  | 0.0 |
| 24 |  |  |  |  |  |  |  | 0.0 |
| 25 | 26 | 509 | 0 | 0 | 0 | 11 | 1.0 | 11.0 |
| 26 | 36 | 2,108 | 0 | 0 | 0 | 11 | 1.5 | 16.5 |
| 27 | 10 | 1,613 | 0 | 0 | 0 | 9 | 2.0 | 18.0 |
| 28 | 5 | 2,739 | 1 | 0 | 0 | 10 | 2.0 | 20.0 |
| 29 | 2 | 2,422 | 0 | 0 | 0 | 8 | 2.0 | 16.0 |
| 30-32 | 0 | 396 | 0 | 0 | 0 | 10 | 5.0 | 14.0 |
| 33 | 0 | 0 | 0 | 0 | 0 | 0 | 3.0 | 0.0 |
| 34 | 0 | 0 | 0 | 0 | 0 | 0 | 3.0 | 0.0 |
| 35 | 0 | 0 | 0 | 0 | 0 | 0 | 3.0 | 0.0 |
| 36 | 0 | 0 | 0 | 0 | 0 | 0 | 3.0 | 0.0 |
| 37 | 0 | 0 | 0 | 0 | 0 | 0 | 3.0 | 0.0 |
| 38 | 0 | 0 | 0 | 0 | 0 | 0 | 3.0 | 0.0 |
| 39 | 0 | 0 | 0 | 0 | 0 | 0 | 3.0 | 0.0 |
| 40 | 0 | 0 | 0 | 0 | 0 | 0 | 3.0 | 0.0 |
| 41 | 0 | 0 | 0 | 0 | 0 | 0 | 3.0 | 0.0 |
| Total | 79 | 9,787 | 1 | 0 | 0 |  | 40.5 | 96 |

Appendix E. 2. Weekly salmon harvest and effort in the Canadian Aboriginal and sport fisheries in the Alsek River, 2019.


## Appendix E. 3. Daily counts of salmon passing through Klukshu River weir, 2019.

| Date | All Chinook |  |  | Sockeye |  |  | Coho |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Daily | Cumulative |  | Daily | Cumulative |  | Daily | Cumulative |  |
|  |  | Daily | Prop. |  | Daily | Prop. |  | Daily | Prop. |
| 14-Jun | weir installed |  | 0.00 | weir installed |  | 0.00 | weir installed |  | 0.00 |
| 15-Jun | 0 | 0 | 0.00 | 0 | 0 | 0.00 |  | 0 | 0.00 |
| 16-Jun | 0 | 0 | 0.00 | 0 | 0 | 0.00 |  | 0 | 0.00 |
| 17-Jun | 0 | 0 | 0.00 | 0 | 0 | 0.00 |  | 0 | 0.00 |
| 18-Jun | 0 | 0 | 0.00 | 0 | 0 | 0.00 |  | 0 | 0.00 |
| 19-Jun | 0 | 0 | 0.00 | 0 | 0 | 0.00 |  | 0 | 0.00 |
| 20-Jun | 0 | 0 | 0.00 | 0 | 0 | 0.00 |  | 0 | 0.00 |
| 21-Jun | 0 | 0 | 0.00 | 0 | 0 | 0.00 |  | 0 | 0.00 |
| 22-Jun | 0 | 0 | 0.00 | 0 | 0 | 0.00 |  | 0 | 0.00 |
| 23-Jun | 0 | 0 | 0.00 | 2 | 2 | 0.00 |  | 0 | 0.00 |
| 24-Jun | 0 | 0 | 0.00 | 0 | 2 | 0.00 |  | 0 | 0.00 |
| 25-Jun | 1 | 1 | 0.00 | 0 | 2 | 0.00 |  | 0 | 0.00 |
| 26-Jun | 0 | 1 | 0.00 | 1 | 3 | 0.00 |  | 0 | 0.00 |
| 27-Jun | 2 | 3 | 0.00 | 2 | 5 | 0.00 |  | 0 | 0.00 |
| 28-Jun | 0 | 3 | 0.00 | 3 | 8 | 0.00 |  | 0 | 0.00 |
| 29-Jun | 4 | 7 | 0.00 | 1 | 9 | 0.00 |  | 0 | 0.00 |
| 30-Jun | 1 | 8 | 0.01 | 1 | 10 | 0.00 |  | 0 | 0.00 |
| 1-Jul | 7 | 15 | 0.01 | 5 | 15 | 0.00 |  | 0 | 0.00 |
| 2-Jul | 2 | 17 | 0.01 | 7 | 22 | 0.00 |  | 0 | 0.00 |
| 3-Jul | 3 | 20 | 0.01 | 3 | 25 | 0.00 |  | 0 | 0.00 |
| 4-Jul | 2 | 22 | 0.01 | 9 | 34 | 0.00 |  | 0 | 0.00 |
| 5-Jul | 17 | 39 | 0.02 | 22 | 56 | 0.00 |  | 0 | 0.00 |
| 6-Jul | 10 | 49 | 0.03 | 10 | 66 | 0.00 |  | 0 | 0.00 |
| 7-Jul | 14 | 63 | 0.04 | 15 | 81 | 0.00 |  | 0 | 0.00 |
| 8-Jul | 10 | 73 | 0.05 | 7 | 88 | 0.00 |  | 0 | 0.00 |
| 9-Jul | 56 | 129 | 0.08 | 16 | 104 | 0.01 |  | 0 | 0.00 |
| 10-Jul | 8 | 137 | 0.09 | 13 | 117 | 0.01 |  | 0 | 0.00 |
| 11-Jul | 11 | 148 | 0.09 | 7 | 124 | 0.01 |  | 0 | 0.00 |
| 12-Jul | 4 | 152 | 0.10 | 19 | 143 | 0.01 |  | 0 | 0.00 |
| 13-Jul | 6 | 158 | 0.10 | 6 | 149 | 0.01 |  | 0 | 0.00 |
| 14-Jul | 29 | 187 | 0.12 | 22 | 171 | 0.01 |  | 0 | 0.00 |
| 15-Jul | 37 | 224 | 0.14 | 11 | 182 | 0.01 |  | 0 | 0.00 |
| 16-Jul | 20 | 244 | 0.15 | 13 | 195 | 0.01 |  | 0 | 0.00 |
| 17-Jul | 17 | 261 | 0.16 | 7 | 202 | 0.01 |  | 0 | 0.00 |
| 18-Jul | 12 | 273 | 0.17 | 0 | 202 | 0.01 |  | 0 | 0.00 |
| 19-Jul | 44 | 317 | 0.20 | 3 | 205 | 0.01 |  | 0 | 0.00 |
| 20-Jul | 194 | 511 | 0.32 | 89 | 294 | 0.02 |  | 0 | 0.00 |
| 21-Jul | 84 | 595 | 0.37 | 36 | 330 | 0.02 |  | 0 | 0.00 |
| 22-Jul | 121 | 716 | 0.45 | 243 | 573 | 0.03 |  | 0 | 0.00 |
| 23-Jul | 85 | 801 | 0.50 | 102 | 675 | 0.04 |  | 0 | 0.00 |
| 24-Jul | 59 | 860 | 0.54 | 110 | 785 | 0.04 |  | 0 | 0.00 |
| 25-Jul | 70 | 930 | 0.59 | 148 | 933 | 0.05 |  | 0 | 0.00 |
| 26-Jul | 38 | 968 | 0.61 | 202 | 1,135 | 0.06 |  | 0 | 0.00 |
| 27-Jul | 74 | 1,042 | 0.66 | 225 | 1,360 | 0.07 |  | 0 | 0.00 |
| 28-Jul | 42 | 1,084 | 0.68 | 130 | 1,490 | 0.08 |  | 0 | 0.00 |
| 29-Jul | 65 | 1,149 | 0.72 | 165 | 1,655 | 0.09 |  | 0 | 0.00 |
| 30-Jul | 22 | 1,171 | 0.74 | 53 | 1,708 | 0.09 |  | 0 | 0.00 |
| 31-Jul | 78 | 1,249 | 0.79 | 168 | 1,876 | 0.10 |  | 0 | 0.00 |
| 1-Aug | 59 | 1,308 | 0.82 | 329 | 2,205 | 0.12 |  | 0 | 0.00 |
| 2-Aug | 24 | 1,332 | 0.84 | 61 | 2,266 | 0.12 |  | 0 | 0.00 |
| 3-Aug | 37 | 1,369 | 0.86 | 6 | 2,272 | 0.12 |  | 0 | 0.00 |
| 4-Aug | 49 | 1,418 | 0.89 | 107 | 2,379 | 0.12 |  | 0 | 0.00 |
| 5-Aug | 44 | 1,462 | 0.92 | 349 | 2,728 | 0.14 |  | 0 | 0.00 |
| 6-Aug | 39 | 1,501 | 0.94 | 104 | 2,832 | 0.15 |  | 0 | 0.00 |
| 7-Aug | 23 | 1,524 | 0.96 | 107 | 2,939 | 0.15 |  | 0 | 0.00 |
| 8-Aug | 15 | 1,539 | 0.97 | 83 | 3,022 | 0.16 |  | 0 | 0.00 |
| 9-Aug | 17 | 1,556 | 0.98 | 160 | 3,182 | 0.17 |  | 0 | 0.00 |
| 10-Aug | 8 | 1,564 | 0.98 | 186 | 3,368 | 0.18 |  | 0 | 0.00 |
| 11-Aug | 4 | 1,568 | 0.99 | 70 | 3,438 | 0.18 |  | 0 | 0.00 |
| 12-Aug | 0 | 1,568 | 0.99 | 86 | 3,524 | 0.18 |  | 0 | 0.00 |
| 13-Aug | 3 | 1,571 | 0.99 | 257 | 3,781 | 0.20 |  | 0 | 0.00 |
| 14-Aug | 2 | 1,573 | 0.99 | 258 | 4,039 | 0.21 |  | 0 | 0.00 |
| 15-Aug | 2 | 1,575 | 0.99 | 88 | 4,127 | 0.22 |  | 0 | 0.00 |

Appendix E.3. Page 2 of 2.

| Date | All Chinook |  |  | Sockeye |  |  | Coho |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Daily | Cumulative |  | Daily | Cumulative |  | Daily | Cumulative |  |
|  |  | Daily | Prop. |  | Daily | Prop. |  | Daily | Prop. |
| 16-Aug | 2 | 1,577 | 0.99 | 147 | 4,274 | 0.22 |  | 0 | 0.00 |
| 17-Aug | 4 | 1,581 | 0.99 | 213 | 4,487 | 0.24 |  | 0 | 0.00 |
| 18-Aug | 2 | 1,583 | 1.00 | 159 | 4,646 | 0.24 |  | 0 | 0.00 |
| 19-Aug | 1 | 1,584 | 1.00 | 144 | 4,790 | 0.25 |  | 0 | 0.00 |
| 20-Aug | 0 | 1,584 | 1.00 | 236 | 5,026 | 0.26 |  | 0 | 0.00 |
| 21-Aug | 1 | 1,585 | 1.00 | 521 | 5,547 | 0.29 |  | 0 | 0.00 |
| 22-Aug | 0 | 1,585 | 1.00 | 587 | 6,134 | 0.32 |  | 0 | 0.00 |
| 23-Aug | 0 | 1,585 | 1.00 | 890 | 7,024 | 0.37 |  | 0 | 0.00 |
| 24-Aug | 3 | 1,588 | 1.00 | 1,424 | 8,448 | 0.44 |  | 0 | 0.00 |
| 25-Aug | 0 | 1,588 | 1.00 | 967 | 9,415 | 0.49 |  | 0 | 0.00 |
| 26-Aug | 1 | 1,589 | 1.00 | 1,223 | 10,638 | 0.56 |  | 0 | 0.00 |
| 27-Aug |  | 1,589 | 1.00 | 801 | 11,439 | 0.60 |  | 0 | 0.00 |
| 28-Aug |  | 1,589 | 1.00 | 1,185 | 12,624 | 0.66 |  | 0 | 0.00 |
| 29-Aug |  | 1,589 | 1.00 | 1,043 | 13,667 | 0.72 |  | 0 | 0.00 |
| 30-Aug |  | 1,589 | 1.00 | 792 | 14,459 | 0.76 |  | 0 | 0.00 |
| 31-Aug |  | 1,589 | 1.00 | 845 | 15,304 | 0.80 |  | 0 | 0.00 |
| 1-Sep |  | 1,589 | 1.00 | 654 | 15,958 | 0.84 | 0 | 0 | 0.00 |
| 2-Sep |  | 1,589 | 1.00 | 434 | 16,392 | 0.86 | 0 | 0 | 0.00 |
| 3-Sep |  | 1,589 | 1.00 | 384 | 16,776 | 0.88 | 0 | 0 | 0.00 |
| 4-Sep |  | 1,589 | 1.00 | 317 | 17,093 | 0.90 | 0 | 0 | 0.00 |
| 5-Sep |  | 1,589 | 1.00 | 315 | 17,408 | 0.91 | 0 | 0 | 0.00 |
| 6-Sep |  | 1,589 | 1.00 | 238 | 17,646 | 0.93 | 0 | 0 | 0.00 |
| 7-Sep |  | 1,589 | 1.00 | 187 | 17,833 | 0.93 | 0 | 0 | 0.00 |
| 8-Sep |  | 1,589 | 1.00 | 116 | 17,949 | 0.94 | 0 | 0 | 0.00 |
| 9-Sep |  | 1,589 | 1.00 | 111 | 18,060 | 0.95 | 0 | 0 | 0.00 |
| 10-Sep |  | 1,589 | 1.00 | 112 | 18,172 | 0.95 | 0 | 0 | 0.00 |
| 11-Sep |  | 1,589 | 1.00 | 121 | 18,293 | 0.96 | 1 | 1 | 0.00 |
| 12-Sep |  | 1,589 | 1.00 | 106 | 18,399 | 0.96 | 0 | 1 | 0.00 |
| 13-Sep |  | 1,589 | 1.00 | 104 | 18,503 | 0.97 | 0 | 1 | 0.00 |
| 14-Sep |  | 1,589 | 1.00 | 65 | 18,568 | 0.97 | 0 | 1 | 0.00 |
| 15-Sep |  | 1,589 | 1.00 | 40 | 18,608 | 0.98 | 2 | 3 | 0.00 |
| 16-Sep |  | 1,589 | 1.00 | 58 | 18,666 | 0.98 | 1 | 4 | 0.00 |
| 17-Sep |  | 1,589 | 1.00 | 69 | 18,735 | 0.98 | 2 | 6 | 0.00 |
| 18-Sep |  | 1,589 | 1.00 | 51 | 18,786 | 0.98 | 2 | 8 | 0.00 |
| 19-Sep |  | 1,589 | 1.00 | 46 | 18,832 | 0.99 | 13 | 21 | 0.01 |
| 20-Sep |  | 1,589 | 1.00 | 27 | 18,859 | 0.99 | 14 | 35 | 0.02 |
| 21-Sep |  | 1,589 | 1.00 | 25 | 18,884 | 0.99 | 13 | 48 | 0.02 |
| 22-Sep |  | 1,589 | 1.00 | 18 | 18,902 | 0.99 | 22 | 70 | 0.03 |
| 23-Sep |  | 1,589 | 1.00 | 11 | 18,913 | 0.99 | 28 | 98 | 0.04 |
| 24-Sep |  | 1,589 | 1.00 | 12 | 18,925 | 0.99 | 39 | 137 | 0.06 |
| 25-Sep |  | 1,589 | 1.00 | 25 | 18,950 | 0.99 | 54 | 191 | 0.09 |
| 26-Sep |  | 1,589 | 1.00 | 14 | 18,964 | 0.99 | 26 | 217 | 0.10 |
| 27-Sep |  | 1,589 | 1.00 | 12 | 18,976 | 0.99 | 85 | 302 | 0.14 |
| 28-Sep |  | 1,589 | 1.00 | 13 | 18,989 | 1.00 | 116 | 418 | 0.19 |
| 29-Sep |  | 1,589 | 1.00 | 10 | 18,999 | 1.00 | 71 | 489 | 0.22 |
| 30-Sep |  | 1,589 | 1.00 | 9 | 19,008 | 1.00 | 154 | 643 | 0.29 |
| 1-Oct |  | 1,589 | 1.00 | 12 | 19,020 | 1.00 | 166 | 809 | 0.37 |
| 2-Oct |  | 1,589 | 1.00 | 10 | 19,030 | 1.00 | 218 | 1,027 | 0.47 |
| 3-Oct |  | 1,589 | 1.00 | 3 | 19,033 | 1.00 | 136 | 1,163 | 0.53 |
| 4-Oct |  | 1,589 | 1.00 | 6 | 19,039 | 1.00 | 121 | 1,284 | 0.59 |
| 5-Oct |  | 1,589 | 1.00 | 6 | 19,045 | 1.00 | 105 | 1,389 | 0.64 |
| 6-Oct |  | 1,589 | 1.00 | 4 | 19,049 | 1.00 | 165 | 1,554 | 0.71 |
| 7-Oct |  | 1,589 | 1.00 | 4 | 19,053 | 1.00 | 69 | 1,623 | 0.74 |
| 8-Oct |  | 1,589 | 1.00 | 0 | 19,053 | 1.00 | 22 | 1,645 | 0.75 |
| 9-Oct |  | 1,589 | 1.00 | 0 | 19,053 | 1.00 | 23 | 1,668 | 0.77 |
| 10-Oct |  | 1,589 | 1.00 | 1 | 19,054 | 1.00 | 44 | 1,712 | 0.79 |
| 11-Oct |  | 1,589 | 1.00 | 11 | 19,065 | 1.00 | 171 | 1,883 | 0.86 |
| 12-Oct |  | 1,589 | 1.00 | 2 | 19,067 | 1.00 | 115 | 1,998 | 0.92 |
| 13-Oct |  | 1,589 | 1.00 | 1 | 19,068 | 1.00 | 53 | 2,051 | 0.94 |
| 14-Oct |  | 1,589 | 1.00 | 3 | 19,071 | 1.00 | 22 | 2,073 | 0.95 |
| 15-Oct |  | 1,589 | 1.00 | 1 | 19,072 | 1.00 | 22 | 2,095 | 0.96 |
| 16-Oct |  | 1,589 | 1.00 | 0 | 19,072 | 1.00 | 45 | 2,140 | 0.98 |
| 17-Oct |  | 1,589 | 1.00 | 1 | 19,073 | 1.00 | 40 | 2,180 | 1.00 |
| Total Co |  | 1,589 |  |  | 19,073 |  |  | 2,180 |  |
| Adjustments |  |  |  |  |  |  |  |  |  |
| Harvest |  | 0 |  |  | 0 |  |  | 7 |  |
| Harvest |  | 16 |  |  | 324 |  |  | 0 |  |
| Total Es |  | 1,573 |  |  | 18,749 |  |  | 2,173 |  |

Appendix E. 4. Chinook salmon harvest in the U.S. fisheries in the Alsek River, 19602019.

| Year | Commercial | Test | Subsistence |
| :---: | :---: | :---: | :---: |
| 1960 |  |  |  |
| 1961 | 2,120 |  |  |
| 1962 |  |  |  |
| 1963 | 131 |  |  |
| 1964 | 591 |  |  |
| 1965 | 719 |  |  |
| 1966 | 934 |  |  |
| 1967 | 225 |  |  |
| 1968 | 215 |  |  |
| 1969 | 685 |  |  |
| 1970 | 1,128 |  |  |
| 1971 | 1,222 |  |  |
| 1972 | 1,827 |  |  |
| 1973 | 1,757 |  |  |
| 1974 | 1,162 |  |  |
| 1975 | 1,379 |  |  |
| 1976 | 512 |  | 13 |
| 1977 | 1,402 |  | 18 |
| 1978 | 2,441 |  |  |
| 1979 | 2,525 |  | 80 |
| 1980 | 1,382 |  | 57 |
| 1981 | 779 |  | 32 |
| 1982 | 532 |  | 87 |
| 1983 | 94 |  | 31 |
| 1984 | 60 |  |  |
| 1985 | 213 |  | 16 |
| 1986 | 481 |  | 22 |
| 1987 | 347 |  | 27 |
| 1988 | 223 |  | 13 |
| 1989 | 228 |  | 20 |
| 1990 | 78 |  | 85 |
| 1991 | 103 |  | 38 |
| 1992 | 301 |  | 15 |
| 1993 | 300 |  | 38 |
| 1994 | 805 |  | 60 |
| 1995 | 670 |  | 51 |
| 1996 | 772 |  | 60 |
| 1997 | 568 |  | 38 |
| 1998 | 550 |  | 63 |
| 1999 | 482 |  | 44 |
| 2000 | 677 |  | 73 |
| 2001 | 541 |  | 19 |
| 2002 | 700 |  | 60 |
| 2003 | 937 |  | 24 |
| 2004 | 656 |  | 51 |
| 2005 | 286 | 423 | 31 |
| 2006 | 530 | 135 | 47 |
| 2007 | 400 | 347 | 79 |
| 2008 | 128 | 465 | 34 |
| 2009 | 602 | 421 | 57 |
| 2010 | 273 |  | 70 |
| 2011 | 546 |  | 44 |
| 2012 | 510 | 251 | 63 |
| 2013 | 469 |  | 20 |
| 2014 | 1,074 |  | 40 |
| 2015 | 243 |  | 23 |
| 2016 | 132 |  | 11 |
| 2017 | 127 |  | 7 |
| 2018 | 88 |  | 28 |
| 2019 | 79 |  | 20 |
| Averages |  |  |  |
| 61-18 | 682 |  | 41 |
| 09-18 | 406 |  | 36 |

Appendix E. 5. Klukshu River counts, harvest, and escapement of Chinook salmon, 1976-2019.

| A portion of Klukshu River Chinook salmon harvested below weir are accounted for in drainagewide harvest estimate see E.6. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Year | Weir <br> Count | Harvest |  | Escapement |
|  |  | At weir | Above weir |  |
| 1976 | 1,278 |  | 125 | 1,153 |
| 1977 | 3,144 |  | 250 | 2,894 |
| 1978 | 2,976 |  | 300 | 2,676 |
| 1979 | 4,404 |  | 1,950 | 2,454 |
| 1980 | 2,637 |  | 150 | 2,487 |
| 1981 | 2,113 |  | 150 | 1,963 |
| 1982 | 2,369 |  | 400 | 1,969 |
| 1983 | 2,537 |  | 300 | 2,237 |
| 1984 | 1,672 |  | 100 | 1,572 |
| 1985 | 1,458 |  | 175 | 1,283 |
| 1986 | 2,709 |  | 102 | 2,607 |
| 1987 | 2,616 |  | 125 | 2,491 |
| 1988 | 2,037 |  | 43 | 1,994 |
| 1989 | 2,456 |  | 167 | 2,289 |
| 1990 | 1,915 |  | 173 | 1,742 |
| 1991 | 2,489 |  | 241 | 2,248 |
| 1992 | 1,367 |  | 125 | 1,242 |
| 1993 | 3,302 |  | 82 | 3,220 |
| 1994 | 3,727 |  | 99 | 3,628 |
| 1995 | 5,678 |  | 284 | 5,394 |
| 1996 | 3,599 |  | 217 | 3,382 |
| 1997 | 2,989 |  | 160 | 2,829 |
| 1998 | 1,364 |  | 17 | 1,347 |
| 1999 | 2,193 |  | 25 | 2,168 |
| 2000 | 1,365 |  | 44 | 1,321 |
| 2001 | 1,825 |  | 87 | 1,738 |
| 2002 | 2,240 |  | 106 | 2,134 |
| 2003 | 1,737 |  | 76 | 1,661 |
| 2004 | 2,525 |  | 80 | 2,445 |
| 2005 | 1,070 |  | 107 | 963 |
| 2006 | 568 |  | 2 | 566 |
| 2007 | 677 |  | 1 | 676 |
| 2008 | 466 |  | 0 | 466 |
| 2009 | 1,571 | 1 | 52 | 1,518 |
| 2010 | 2,358 | 0 | 99 | 2,259 |
| 2011 | 1,671 | 3 | 58 | 1,610 |
| 2012 | 693 | 0 | 0 | 693 |
| 2013 | 1,261 | 0 | 34 | 1,227 |
| 2014 | 841 | 0 | 9 | 832 |
| 2015 | 1,432 | 0 | 44 | 1,388 |
| 2016 | 651 | 0 | 5 | 646 |
| 2017 | 448 | 0 | 5 | 443 |
| 2018 | 1,087 | 0 | 0 | 1,078 |
| 2019 | 1,589 | 0 | 16 | 1,573 |
| Averages |  |  |  |  |
| 76-18 | 2,035 |  | 153 | 1,882 |
| 08-19 | 1,201 |  | 31 | 1,169 |

[^2]Appendix E. 6. Chinook salmon harvest in the Canadian Aboriginal and recreational fisheries in the Alsek River, 1976-2019.

| All Klukshu harvest is included in the Alsek River harvest totals. |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | Harvest |  |  |
|  | Aboriginal | Recreational | Total |
| 1976 | 150 | 200 | 350 |
| 1977 | 350 | 300 | 650 |
| 1978 | 350 | 300 | 650 |
| 1979 | 1,300 | 650 | 1,950 |
| 1980 | 150 | 200 | 350 |
| 1981 | 150 | 315 | 465 |
| 1982 | 400 | 224 | 624 |
| 1983 | 300 | 312 | 612 |
| 1984 | 100 | 475 | 575 |
| 1985 | 175 | 250 | 425 |
| 1986 | 102 | 165 | 267 |
| 1987 | 125 | 367 | 492 |
| 1988 | 43 | 249 | 292 |
| 1989 | 234 | 272 | 506 |
| 1990 | 202 | 555 | 757 |
| 1991 | 509 | 388 | 897 |
| 1992 | 148 | 103 | 251 |
| 1993 | 152 | 171 | 323 |
| 1994 | 289 | 197 | 486 |
| 1995 | 580 | 1,044 | 1,624 |
| 1996 | 448 | 650 | 1,098 |
| 1997 | 232 | 298 | 530 |
| 1998 | 171 | 175 | 346 |
| 1999 | 238 | 174 | 412 |
| 2000 | 65 | 77 | 142 |
| 2001 | 120 | 157 | 277 |
| 2002 | 120 | 197 | 317 |
| 2003 | 90 | 138 | 228 |
| 2004 | 139 | 46 | 185 |
| 2005 | 58 | 56 | 114 |
| 2006 | 2 | 17 | 19 |
| 2007 | 1 | 40 | 41 |
| 2008 | 0 | 7 | 7 |
| 2009 | 105 | 20 | 125 |
| 2010 | 197 | 97 | 294 |
| 2011 | 119 | 95 | 214 |
| 2012 | 0 | 85 | 85 |
| 2013 | 67 | 5 | 72 |
| 2014 | 17 | 26 | 43 |
| 2015 | 87 | 44 | 131 |
| 2016 | 10 | 80 | 90 |
| 2017 | 10 | 41 | 51 |
| 2018 | 0 | 0 | 0 |
| 2019 | 32 | 5 | 37 |
| Averages |  |  |  |
| 76-18 | 188 | 215 | 404 |
| 09-18 | 61 | 49 | 111 |

Appendix E. 7. Chinook salmon above border run and harvest in the Canadian
Aboriginal and recreational fisheries in the Alsek River, 1976-2019.

| All Klukshu harvest is included in the Alsek River harvest totals. |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | CI |  | Harvest |  |  | Escapement | $\begin{gathered} \hline \text { Total } \\ \text { Inriver run } \\ \hline \end{gathered}$ |
| Year | Above border run | Method ${ }^{\text {a }}$ | Lower | Upper | Aboriginal | Recreational | Total |  |  |
| 1998 | 7,179 | Mark-recapture | 3,027 | 9,765 | 171 | 175 | 346 | 6,833 | 7,929 |
| 1999 | 15,027 | Mark-recapture | 8,243 | 22,035 | 238 | 174 | 412 | 14,615 | 15,587 |
| 2000 | 8,047 | Mark-recapture | 6,805 | 14,308 | 65 | 77 | 142 | 7,905 | 8,807 |
| 2001 | 6,982 | Mark-recapture | 9,146 | 14,303 | 120 | 157 | 277 | 6,705 | 7,943 |
| 2002 | 5,886 | Mark-recapture | 8,345 | 10,790 | 120 | 197 | 317 | 5,569 | 6,593 |
| 2003 | 6,132 | Mark-recapture | 4,302 | 6,310 | 90 | 138 | 228 | 5,904 | 6,872 |
| 2004 | 7,268 | Mark-recapture |  |  | 139 | 46 | 185 | 7,083 | 7,980 |

Appendix E. 8. Aerial survey index counts of Alsek River Chinook salmon escapements, 1984-2019.

| Year | Blanchard River | Takhanne River | Goat Creek | Blanchard River Sonar (Large Fish) |
| :---: | :---: | :---: | :---: | :---: |
| 1984 | 304 | 158 | 28 |  |
| 1985 | 232 | 184 |  |  |
| 1986 | 556 | 358 | 142 |  |
| 1987 | 624 | 395 | 85 |  |
| 1988 | 437 | 169 | 54 |  |
| 1989 | No survey | 158 | 34 |  |
| 1990 | No survey | 325 | 32 |  |
| 1991 | 121 | 86 | 63 |  |
| 1992 | 86 | 77 | 16 |  |
| 1993 | 326 | 351 | 50 |  |
| 1994 | 349 | 342 | 67 |  |
| 1995 | 338 | 260 | a |  |
| 1996 | 132 | 230 | 12 |  |
| 1997 | 109 | 190 |  |  |
| 1998 | 71 | 136 | 39 |  |
| 1999 | 371 | 194 | 51 |  |
| 2000 | 163 | 152 | 33 |  |
| 2001 | 543 | 287 | 21 |  |
| 2002 | 351 | 220 | 86 |  |
| 2003 | 127 | 105 | 10 |  |
| 2004 | 84 | 46 | No survey |  |
| 2005 | 112 | 47 | 7 |  |
| 2006 | 98 | 28 | 9 |  |
| 2007 | 39 | 32 | 45 |  |
| 2008 | 65 | 41 | 11 |  |
| 2009 | No surveys |  |  |  |
| 2010 | No surveys |  |  |  |
| 2011 | No surveys |  |  |  |
| 2012 | No surveys |  |  |  |
| 2013 | No surveys |  |  |  |
| 2014 | No surveys |  |  |  |
| 2015 | No surveys |  |  |  |
| 2016 | No surveys |  |  |  |
| 2017 | No surveys |  |  |  |
| 2018 | No survey | 127 | No survey |  |
| 2019 | No survey | 150 | No survey | 1,408 |

[^3]Appendix E. 9. Sockeye salmon harvest in the U.S. fisheries in the Alsek River, 1960-

| 2019. |  |  |  |
| :---: | :---: | :---: | :---: |
| Year | Commercial | Test | Subsistence |
| 1960 |  |  |  |
| 1961 | 23,339 |  |  |
| 1962 |  |  |  |
| 1963 | 6,055 |  |  |
| 1964 | 14,127 |  |  |
| 1965 | 28,487 |  |  |
| 1966 | 29,091 |  |  |
| 1967 | 11,108 |  |  |
| 1968 | 26,918 |  |  |
| 1969 | 29,259 |  |  |
| 1970 | 22,654 |  |  |
| 1971 | 25,314 |  |  |
| 1972 | 18,717 |  |  |
| 1973 | 26,523 |  |  |
| 1974 | 16,747 |  |  |
| 1975 | 13,842 |  |  |
| 1976 | 19,741 |  | 51 |
| 1977 | 40,780 |  | 113 |
| 1978 | 50,580 |  |  |
| 1979 | 41,449 |  | 35 |
| 1980 | 25,522 |  | 41 |
| 1981 | 23,641 |  | 50 |
| 1982 | 27,443 |  | 75 |
| 1983 | 18,293 |  | 25 |
| 1984 | 14,326 |  |  |
| 1985 | 5,792 |  | 95 |
| 1986 | 24,791 |  | 241 |
| 1987 | 11,393 |  | 173 |
| 1988 | 6,286 |  | 148 |
| 1989 | 13,513 |  | 131 |
| 1990 | 17,013 |  | 144 |
| 1991 | 17,542 |  | 104 |
| 1992 | 19,298 |  | 37 |
| 1993 | 20,043 |  | 96 |
| 1994 | 19,639 |  | 47 |
| 1995 | 33,112 |  | 167 |
| 1996 | 15,182 |  | 67 |
| 1997 | 25,879 |  | 273 |
| 1998 | 15,007 |  | 158 |
| 1999 | 11,441 |  | 152 |
| 2000 | 9,522 |  | 146 |
| 2001 | 13,995 |  | 72 |
| 2002 | 16,918 |  | 232 |
| 2003 | 39,698 |  | 176 |
| 2004 | 18,030 |  | 224 |
| 2005 | 7,572 | 222 | 63 |
| 2006 | 9,842 | 224 | 272 |
| 2007 | 19,795 | 367 | 298 |
| 2008 | 2,815 | 55 | 200 |
| 2009 | 12,906 |  | 252 |
| 2010 | 12,668 |  | 259 |
| 2011 | 24,169 | 157 | 230 |
| 2012 | 18,217 | 90 | 275 |
| 2013 | 7,517 |  | 147 |
| 2014 | 33,668 |  | 179 |
| 2015 | 16,104 |  | 163 |
| 2016 | 6,709 |  | 181 |
| 2017 | 4,883 |  | 125 |
| 2018 | 1,363 |  | 142 |
| 2019 | 9,787 |  | 279 |
| Averages |  |  |  |
| 61-18 | 19,058 |  | 148 |
| 09-18 | 13,820 |  | 195 |

Appendix E. 10. Klukshu River sockeye salmon weir count, weir harvest, and escapement, 1976-2019.

| A portion of Klukshu River sockeye salmon harvested below weir are accounted for in drainagewide estimate see E.10. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year | Early (to August 16) | Late | Weir <br> Count | Harvest |  | Escapement |
|  |  |  |  | At weir | Above weir |  |
| 1976 | 181 | 11,510 | 11,691 |  | 3,750 | 7,941 |
| 1977 | 8,931 | 17,860 | 26,791 |  | 11,350 | 15,441 |
| 1978 | 2,508 | 24,359 | 26,867 |  | 7,850 | 19,017 |
| 1979 | 977 | 11,334 | 12,311 |  | 5,260 | 7,051 |
| 1980 | 1,008 | 10,742 | 11,750 |  | 900 | 10,850 |
| 1981 | 997 | 19,351 | 20,348 |  | 1,900 | 18,448 |
| 1982 | 7,758 | 25,941 | 33,699 |  | 4,800 | 28,899 |
| 1983 | 6,047 | 14,445 | 20,492 |  | 2,475 | 18,017 |
| 1984 | 2,769 | 9,958 | 12,727 |  | 2,500 | 10,227 |
| 1985 | 539 | 18,081 | 18,620 |  | 1,361 | 17,259 |
| 1986 | 416 | 24,434 | 24,850 |  | 1,914 | 22,936 |
| 1987 | 3,269 | 7,235 | 10,504 |  | 1,158 | 9,346 |
| 1988 | 585 | 8,756 | 9,341 |  | 1,604 | 7,737 |
| 1989 | 3,400 | 20,142 | 23,542 |  | 1,906 | 21,636 |
| 1990 | 1,316 | 24,679 | 25,995 |  | 1,388 | 24,607 |
| 1991 | 1,924 | 17,053 | 18,977 |  | 1,332 | 17,645 |
| 1992 | 11,339 | 8,428 | 19,767 |  | 1,498 | 18,269 |
| 1993 | 5,369 | 11,371 | 16,740 |  | 1,819 | 14,921 |
| 1994 | 3,247 | 11,791 | 15,038 |  | 1,146 | 13,892 |
| 1995 | 2,289 | 18,407 | 20,696 |  | 879 | 19,817 |
| 1996 | 1,502 | 6,818 | 8,320 |  | 429 | 7,891 |
| 1997 | 6,565 | 4,931 | 11,496 |  | 193 | 11,303 |
| 1998 | 597 | 12,994 | 13,591 |  | 11 | 13,580 |
| 1999 | 371 | 5,010 | 5,381 |  | 280 | 5,101 |
| 2000 | 237 | 5,314 | 5,551 |  | 129 | 5,422 |
| 2001 | 908 | 9,382 | 10,290 |  | 961 | 9,329 |
| 2002 | 11,904 | 13,807 | 25,711 |  | 2,124 | 23,587 |
| 2003 | 3,084 | 31,278 | 34,362 |  | 2,242 | 32,120 |
| 2004 | 3,464 | 11,884 | 15,348 |  | 1,627 | 13,721 |
| 2005 | 994 | 2,379 | 3,373 |  | 206 | 3,167 |
| 2006 | 247 | 13,208 | 13,455 |  | 565 | 12,890 |
| 2007 | 2,725 | 6,231 | 8,956 |  | 646 | 8,310 |
| 2008 | 43 | 2,698 | 2,741 |  | 0 | 2,741 |
| 2009 | 1,247 | 4,484 | 5,731 | 75 | 128 | 5,528 |
| 2010 | 5,073 | 13,887 | 18,960 | 91 | 323 | 18,546 |
| 2011 | 5,635 | 15,767 | 21,402 | 262 | 358 | 20,782 |
| 2012 | 5,969 | 11,725 | 17,694 | 214 | 304 | 17,176 |
| 2013 | 312 | 3,581 | 3,893 | 0 | 101 | 3,792 |
| 2014 | 2,732 | 9,652 | 12,384 | 10 | 226 | 12,148 |
| 2015 | 2,604 | 8,984 | 11,588 | 10 | 215 | 11,363 |
| 2016 | 1,405 | 6,179 | 7,584 | 37 | 156 | 7,391 |
| 2017 | 1,087 | 2,802 | 3,889 | 77 | 101 | 3,711 |
| 2018 | 97 | 7,046 | 7,143 | 0 | 0 | 7,143 |
| 2019 | 4,127 | 14,946 | 19,073 | 0 | 324 | 18,749 |
| Averages |  |  |  |  |  |  |
| 76-18 | 2,876 | 12,231 | 15,107 |  |  | 13,505 |
| 09-18 | 2,616 | 8,411 | 11,027 |  |  | 10,758 |

Appendix E. 11. Sockeye salmon harvest in the Canadian Aboriginal and recreational fisheries in the Alsek River, 1976-2019.
All Klukshu harvest is included in the Alsek River harvest totals.

| Year | Harvest |  |  |
| :---: | :---: | :---: | :---: |
|  | Aboriginal | Recreational | Total |
| 1976 | 4,000 | 600 | 4,600 |
| 1977 | 10,000 | 500 | 10,500 |
| 1978 | 8,000 | 500 | 8,500 |
| 1979 | 7,000 | 750 | 7,750 |
| 1980 | 800 | 600 | 1,400 |
| 1981 | 2,000 | 808 | 2,808 |
| 1982 | 5,000 | 755 | 5,755 |
| 1983 | 2,550 | 732 | 3,282 |
| 1984 | 2,600 | 289 | 2,889 |
| 1985 | 1,361 | 100 | 1,461 |
| 1986 | 1,914 | 307 | 2,221 |
| 1987 | 1,158 | 383 | 1,541 |
| 1988 | 1,604 | 322 | 1,926 |
| 1989 | 1,851 | 319 | 2,170 |
| 1990 | 2,314 | 392 | 2,706 |
| 1991 | 2,111 | 303 | 2,414 |
| 1992 | 2,592 | 582 | 3,174 |
| 1993 | 2,361 | 329 | 2,690 |
| 1994 | 1,745 | 261 | 2,006 |
| 1995 | 1,745 | 682 | 2,427 |
| 1996 | 1,204 | 157 | 1,361 |
| 1997 | 484 | 36 | 520 |
| 1998 | 567 | 18 | 585 |
| 1999 | 554 | 0 | 554 |
| 2000 | 745 | 0 | 745 |
| 2001 | 1,173 | 4 | 1,177 |
| 2002 | 2,194 | 61 | 2,255 |
| 2003 | 2,734 | 61 | 2,795 |
| 2004 | 1,875 | 247 | 2,122 |
| 2005 | 581 | 13 | 594 |
| 2006 | 1,321 | 6 | 1,327 |
| 2007 | 1,330 | 10 | 1,340 |
| 2008 | 0 | 0 | 0 |
| 2009 | 715 | 2 | 717 |
| 2010 | 1,704 | 12 | 1,716 |
| 2011 | 2,053 | 57 | 2,110 |
| 2012 | 1,734 | 52 | 1,786 |
| 2013 | 508 | 0 | 508 |
| 2014 | 1,140 | 0 | 1,140 |
| 2015 | 1,084 | 0 | 1,084 |
| 2016 | 815 | 0 | 815 |
| 2017 | 584 | 38 | 622 |
| 2018 | 0 | 0 | 0 |
| 2019 | 648 | 5 | 653 |
| Averages |  |  |  |
| 76-18 | 2,042 | 239 | 2,281 |
| 09-18 | 1,034 | 16 | 1,050 |

Appendix E. 12. Alsek

| Year | Above border Run Estimate | CI |  | Canadian Harvest | Spawning Escapement | U.S. <br> Harvest | Total <br> Inriver Run | Spawning Escapement Percent Klukshu |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Lower | Upper |  |  |  |  |  |
| 2000 | 37,887 | 23,410 | 52,365 | 745 | 37,142 | 9,668 | 47,555 | 14.6\% |
| 2001 | 31,164 | 23,143 | 39,185 | 1,177 | 29,987 | 14,067 | 45,231 | 31.1\% |
| 2002 | 95,427 | 55,893 | 134,961 | 2,255 | 93,172 | 17,150 | 112,577 | 25.3\% |
| 2003 | 103,507 | 74,350 | 132,664 | 2,795 | 100,712 | 39,874 | 143,381 | 31.9\% |
| 2004 | 83,703 | 39,566 | 127,841 | 2,122 | 81,581 | 18,254 | 101,957 | 16.8\% |
| 2005 | 57,817 | 21,907 | 93,727 | 594 | 57,223 | 7,857 | 65,674 | 5.5\% |
| 2006 | 48,901 | 41,234 | 56,569 | 1,327 | 47,574 | 10,338 | 59,239 | 27.1\% |
| 2011 | 86,009 | 72,970 | 99,049 | 2,110 | 83,899 | 24,556 | 110,565 | 24.8\% |
| 2012 | 78,384 | 64,311 | 92,456 | 1,786 | 76,598 | 18,582 | 96,966 | 22.4\% |
| 2013 | 84,279 | 16,466 | 152,091 | 508 | 83,771 | 7,664 | 91,943 | 4.5\% |
| 2014 | 88,233 | 69,508 | 106,958 | 1,140 | 87,093 | 33,847 | 122,080 | 13.9\% |
| 2015 | 64,793 | 47,474 | 82,111 | 1,084 | 63,709 | 16,267 | 81,060 | 17.8\% |
| 2016 | 59,651 | 43,558 | 75,743 | 815 | 58,836 | 6,890 | 66,541 | 12.6\% |
| 2017 | 102,186 | 57,832 | 146,540 | 622 | 101,564 | 10,066 | 112,252 | 3.7\% |
| 2018 | Not enough US fishing | t sufficie | les to pro | estimate--n | d to formalize | final repo |  |  |
| 2019 | 82,536 | 69,077 | 95,995 | 653 | 81,883 | 10,066 | 92,602 | 22.9\% |
| Averages |  |  |  |  |  |  |  |  |
| 11-17 | 80,505 |  |  | 1,152 | 79,353 | 16,839 | 97,344 | 14.2\% |

Appendix E. 13. Alsek River sockeye counts from U.S. and Canada, 1985-2019.
Surveys not made every year at each tributary. Canadian surveys-include several streams fromLo-Fog to Goat Creek.
Village Creek counter 1986-2013 conductivity counter; 2014 video counter

| Year | U.S. Aerial Surveys |  |  |  | Canada Aerial Surveys |  | Village Creek Counter |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Basin <br> Creek | Cabin Creek | Muddy Creek | Tanis <br> River | Tatshenshini River | $\begin{gathered} \text { Neskataheen } \\ \text { Lake } \\ \hline \end{gathered}$ |  |
| 1985 | 2,600 |  |  | 2,200 |  |  |  |
| 1986 | 100 |  | 300 | 2,700 | 536 | 750 | 1,490 |
| 1987 | 350 | 220 |  | 1,600 |  |  | 1,875 |
| 1988 | 500 |  |  | 750 | 433 | 456 | 433 |
| 1989 | 320 |  |  | 680 | 1,689 | 1,700 | 9,569 |
| 1990 | 275 | 300 |  | 3,500 |  |  | 5,313 |
| 1991 |  |  |  | 800 |  |  | 86 |
| 1992 | 1,000 | 10 |  | 50 |  |  | 7,447 |
| 1993 | 4,800 |  |  | 900 |  |  | 2,104 |
| 1994 | 250 |  |  | 600 | 366 |  | 3,921 |
| 1995 | 2,700 |  |  | 350 |  |  | 4,042 |
| 1996 | 325 |  |  | 650 |  |  | 1,583 |
| 1997 | 600 |  |  | 350 |  |  | 2,267 |
| 1998 |  |  |  | 130 |  |  | 826 |
| $1999{ }^{\text {a }}$ | 30 |  |  | 800 |  |  | NA |
| 2000 | 25 |  |  | 180 |  |  | 1,860 |
| 2001 |  |  |  | 700 |  |  | 1,897 |
| 2002 | No surveys flown |  |  |  |  |  | 2,765 |
| 2003 | No surveys flown |  |  |  |  |  | 2,778 |
| 2004 | No surveys flown |  |  |  |  |  | 1,968 |
| 2005 | No surveys flown |  |  |  |  |  | 1,408 |
| 2006 | No surveys flown |  |  |  |  |  | 979 |
| 2007 | No surveys flown |  |  |  |  |  | 10,254 |
| $2008{ }^{\text {a }}$ | No surveys flown |  |  |  |  | 1,000 | NA |
| 2009 | No surveys flown |  |  |  |  | 4,500 | 887 |
| 2010 | No surveys flown |  |  |  |  | 2,500 | 2,305 |
| 2011 | No surveys flown |  |  |  |  | 150 | 355 |
| 2012 | No surveys flown |  |  |  |  | 2,038 | 1,372 |
| 2013 | No surveys flown |  |  |  |  |  | 129 |
| 2014 | No surveys flown |  |  |  |  | 700 | 189 |
| 2015 | No surveys flown |  |  |  |  |  | Not conducted |
| 2016 | No surveys flown |  |  |  |  |  | 410 |
| 2017 | No surveys flown |  |  |  |  |  | 240 |
| 2018 |  |  |  |  |  |  | 97 |
| 2019 |  |  |  |  |  |  | 1,497 |
| Averages |  |  |  |  |  |  |  |
| 86-18 |  |  |  |  |  |  | 2,362 |
| 09-18 |  |  |  |  |  |  | 665 |

${ }^{a}$ No counts due to malfunction of the counter

Appendix E. 14. Coho, pink, and chum salmon harvest in the U.S. fisheries in the Alsek River, 1960-2019.

|  | Coho | Pink | Effort |  |  | Subsistence coho |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Chum | Boat Days | Days Open |  |
| 1960 |  |  |  |  |  |  |
| 1961 | 7,679 | 84 | 86 | 1,436 | 80.0 |  |
| 1962 |  |  |  |  |  |  |
| 1963 | 7,164 | 42 | 34 | 692 | 68.0 |  |
| 1964 | 9,760 | 144 | 367 | 592 | 68.0 |  |
| 1965 | 9,638 | 10 | 72 | 1,016 | 72.0 |  |
| 1966 | 2,688 | 22 | 240 | 500 | 64.0 |  |
| 1967 | 10,090 | 107 | 30 | 600 | 68.0 |  |
| 1968 | 10,586 | 82 | 240 | 664 | 68.0 |  |
| 1969 | 2,493 | 38 | 61 | 807 | 61.0 |  |
| 1970 | 2,188 | 6 | 26 | 670 | 52.3 |  |
| 1971 | 4,730 | 3 | 120 | 794 | 60.5 |  |
| 1972 | 7,296 | 37 | 280 | 640 | 65.0 |  |
| 1973 | 4,395 | 26 | 283 | 894 | 52.0 |  |
| 1974 | 7,046 | 13 | 107 | 699 | 46.0 |  |
| 1975 | 2,230 | 16 | 261 | 738 | 58.0 |  |
| 1976 | 4,883 | 0 | 368 | 550 | 58.5 | 5 |
| 1977 | 11,817 | 689 | 483 | 882 | 57.0 | 0 |
| 1978 | 13,913 | 59 | 233 | 929 | 57.0 |  |
| 1979 | 6,158 | 142 | 263 | 1,110 | 51.0 | 70 |
| 1980 | 7,863 | 21 | 1,005 | 773 | 42.0 | 62 |
| 1981 | 10,232 | 65 | 816 | 588 | 40.0 | 74 |
| 1982 | 6,534 | 6 | 358 | 552 | 33.0 | 50 |
| 1983 | 5,253 | 20 | 432 | 487 | 38.0 | 50 |
| 1984 | 7,868 | 24 | 1,610 | 429 | 33.0 |  |
| 1985 | 5,490 | 3 | 427 | 277 | 33.0 | 0 |
| 1986 | 1,344 | 13 | 462 | 517 | 34.0 | 45 |
| 1987 | 2,517 | 0 | 1,924 | 388 | 40.5 | 31 |
| 1988 | 4,986 | 7 | 908 | 324 | 34.0 | 9 |
| 1989 | 5,972 | 2 | 1,031 | 378 | 38.0 | 34 |
| 1990 | 1,437 | 0 | 495 | 374 | 38.0 | 12 |
| 1991 | 5,956 | 0 | 105 | 530 | 49.0 | 0 |
| 1992 | 3,116 | 1 | 120 | 372 | 46.0 | 44 |
| 1993 | 1,215 | 0 | 49 | 372 | 40.0 | 28 |
| 1994 | 4,182 | 0 | 32 | 403 | 61.0 | 20 |
| 1995 | 14,184 | 13 | 347 | 879 | 53.5 | 53 |
| 1996 | 5,514 | 0 | 165 | 419 | 51.0 | 28 |
| 1997 | 11,427 | 0 | 34 | 611 | 59.0 | 26 |
| 1998 | 4,925 | 1 | 145 | 358 | 41.0 | 42 |
| 1999 | 5,660 | 0 | 112 | 319 | 44.0 | 21 |
| 2000 | 5,103 | 5 | 130 | 307 | 37.0 | 31 |
| 2001 | 2,909 | 8 | 17 | 234 | 50.0 | 45 |
| 2002 | 9,525 | 0 | 1 | 270 | 73.0 | 35 |
| 2003 | 47 | 0 | 0 | 271 | 60.0 | 27 |
| 2004 | 2,475 | 0 | 2 | 280 | 76.5 | 21 |
| 2005 | 1,196 | 0 | 0 | 171 | 41.0 | 62 |
| 2006 | 701 | 2 | 3 | 248 | 45.0 | 23 |
| 2007 | 134 | 0 | 0 | 199 | 47.0 | 27 |
| 2008 | 2,668 | 0 | 0 | 177 | 34.0 | 28 |
| 2009 | 3,454 | 0 | 20 | 200 | 44.0 | 17 |
| 2010 | 1,884 | 0 | 9 | 192 | 37.0 | 24 |
| 2011 | 1,614 | 0 | 11 | 235 | 46.0 | 18 |
| 2012 | 536 | 0 | 1 | 459 | 39.0 | 22 |
| 2013 | 17 | 0 | 5 | 285 | 46.0 | 14 |
| 2014 | 3 | 0 | 12 | 239 | 47.0 | 10 |
| 2015 | 11 | 0 | 0 | 227 | 57.0 | 6 |
| 2016 | 655 | 0 | 3 | 296 | 65.5 | 18 |
| 2017 | 114 | 0 | 0 | 114 | 47.0 | 7 |
| 2018 | 2 | 0 | 0 | 39 | 32.5 | 0 |
| 2019 | 1 | 0 | 0 | 96 | 40.5 | 0 |
| Averages |  |  |  |  |  |  |
| 76-18 | 4,798 | 30 | 252 | 491 | 51 | 28 |
| 09-18 | 829 | 0 | 6 | 229 | 46 | 14 |

Appendix E. 15. Klukshu River weir counts, harvest, and escapement of coho salmon, 1976-2019.
Coho salmon counts are partial counts; weir is removed prior to the end of the run.

| Year | Count |
| :---: | :---: |
| 1976 | 1,572 |
| 1977 | 2,758 |
| 1978 | 30 |
| 1979 | 175 |
| 1980 | 704 |
| 1981 | 1,170 |
| 1982 | 189 |
| 1983 | 303 |
| 1984 | 1,402 |

1985350
$1986 \quad 71$
$1987 \quad 202$
1988 2,774

| 1989 | 2,219 |
| :--- | :---: |
| 1990 | 315 |


| 1991 | 8,540 | 62 | 8,478 |
| :---: | :---: | :---: | :---: |
| 1992 | 1,145 | 0 | 1,145 |
| 1993 | 788 | 0 | 788 |
| 1994 | 1,232 | 0 | 1,232 |


| 1995 | 3,614 | 50 | 3,564 |
| :---: | :---: | :---: | :---: |
| 1996 | 3,465 | 0 | 3,465 |


| 1997 | 307 | 5 | 302 |
| :---: | :---: | :---: | :---: |
| 1998 | 1,961 | 0 | 1,961 |


| 1999 | 2,531 | 0 | 2,531 |
| :---: | :---: | :---: | :---: |
| 2000 | 4,832 | 41 | 4,791 |


| 2001 | 748 | 2 | 746 |
| :--- | :--- | :--- | :--- |

$2002 \quad 9,921 \quad 0 \quad 9,921$

| 2003 | 3,689 | 0 | 3,689 |
| :---: | :---: | :---: | :---: |
| 2004 | 750 | 0 | 750 |

$2005 \quad 683 \quad 20 \quad 663$

| 2006 | 420 | 0 | 420 |
| :--- | :--- | :--- | :--- |
| 2007 | 300 | 1 | 299 |


| 2008 | 4,275 | 26 | 4,249 |
| :---: | :---: | :---: | :---: |
| 2009 | 424 | 3 | 421 |


| 2010 | 2,365 | 4 | 2,361 |
| :---: | :---: | :---: | :---: |
| 2011 | 2,119 | 9 | 2,110 |
| 2012 | 1,272 | 0 | 1,272 |
| 2013 | 7,462 | 140 | 7,322 |
| 2014 | 341 | 0 | 341 |
| 2015 | 1,810 | 0 | 1,810 |
| 2016 | 2,141 | 0 | 2,141 |
| 2017 | 966 | 0 | 966 |
| 2018 | 728 | 0 | 728 |
| 2019 | 2,180 | 7 | 2,180 |


| Averages |  |  |  |
| :--- | :--- | :--- | :--- |
| $76-18$ | 1,932 |  |  |
| $09-18$ | 1,963 | 16 | 1,947 |

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

Appendix F. 1. Tahltan Lake egg collection, fry plants, and survivals, 1989-2019.
Numbers for eggs and fry are millions.
Eggs collected from Tahltan broodstock are used for outplants to both Tahltan and Tuya Lakes.

| Brood Year | Egg Take |  | Designated <br> Tahltan | Fry Planted | Percent Survival |  |  | Thermal <br> Mark <br> Pattern |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Green to |  | Eyed Egg | Green |  |
|  | Target | Collected |  |  | Eyed Egg | to Fry | Egg to Fry |  |
| 1989 | 3.000 | 2.955 |  | 2.955 | 1.042 | 70\% | 0.501 | 0.353 | 1:1.4 |
| 1990 | 5.000 | 4.511 | 4.511 | 3.585 | 82\% | 0.964 | 0.795 | 1:1.3 |
| 1991 | 5.000 | 4.246 | 1.514 | 1.415 | 95\% | 0.759 | 0.935 | 1:1.4 |
| 1992 | 5.400 | 4.901 | 2.154 | 1.947 | 92\% | 0.869 | 0.904 | 1:1.4+2.3 |
| 1993 | 6.000 | 6.140 | 0.969 | 0.904 | 92\% | 0.994 | 0.933 | 1:1.6+2.5n |
| 1994 | 6.000 | 4.183 | 1.418 | 1.143 | 89\% | 0.916 | 0.806 | 1:1.6 |
| 1995 | 6.000 | 6.891 | 3.008 | 2.296 | 84\% | 0.821 | 0.763 | 1:1.7 |
| 1996 | 6.000 | 6.402 | 3.169 | 2.248 | 93\% | 0.818 | 0.709 | 1:1.6 |
| 1997 | 6.000 | 3.221 | 2.700 | 1.900 | 83\% | 0.875 | 0.704 | 2:1.6 |
| 1998 | 6.000 | 4.022 | 1.998 | 1.671 | 91\% | 0.891 | 0.836 | 1:1.7 |
| 1999 | 6.000 | 3.826 | 2.773 | 2.228 | 92\% | 0.883 | 0.804 | 2:1.6 |
| 2000 | 6.000 | 2.388 | 2.388 | 1.873 | 92\% | 0.853 | 0.784 | 1:1.7 |
| 2001 | 6.000 | 3.306 | 3.306 | 2.533 | 83\% | 0.924 | 0.766 | 2:1.6 |
| 2002 | 6.000 | 4.050 | 2.780 | 2.623 | 92\% | 1.006 | 0.943 | 1:1.7 |
| 2003 | 6.000 | 5.391 | 2.661 | 2.226 | 91\% | 0.949 | 0.836 | 1:1.6\& 1:1.5+2.4 |
| 2004 | 6.000 | 5.701 | 1.966 | 1.226 | 88\% | 0.882 | 0.624 | 1:1.6+2.6 |
| 2005 | 6.000 | 4.552 | 1.809 | 1.280 | 86\% | 0.872 | 0.708 | 1:1.4+2.2 |
| 2006 | 6.000 | 4.364 | 2.954 | 2.466 | 91\% | 0.923 | 0.835 | 1:1.3n, 2.2 |
| 2007 | 6.000 | 4.060 | 2.209 | 1.540 | 80\% | 0.946 | 0.697 | 1,2n,3H |
| 2008 | 6.000 | 3.386 | 2.398 | 1.395 | 85\% | 0.774 | 0.582 | 1,4H |
| 2009 | 6.000 | 4.469 | 2.609 | 1.830 | 78\% | 0.802 | 0.701 | 5,2H |
| 2010 | 6.000 | 5.949 | 3.097 | 1.230 | 82\% | 0.507 | 0.397 | 4,3H |
| 2011 | 6.000 | 6.481 | 3.383 | 2.130 | 86\% | 0.669 | 0.630 | 3,2n,2H |
| 2012 ${ }^{\text {a }}$ | 6.000 | 5.597 | 3.674 | 1.349 | 72\% | 0.525 | 0.367 | 1,4H |
| 2013 | 6.000 | 4.218 | 3.517 | 2.066 | 75\% | 0.794 | 0.587 | 4,3H\&6,3H |
| $2014{ }^{\text {b }}$ | 6.000 | 3.898 | 3.898 | 2.684 | 76\% | 0.911 | 0.689 | 3,2n,2H\&3,2n,2H3 |
| $2015^{\text {c }}$ | 6.000 | 4.509 | 4.509 | 3.399 | 84\% | 0.899 | 0.754 | $1,4 \mathrm{H} \& 14 \mathrm{H} 4$ |
| 2016 | 4.910 | 5.310 | 5.310 | 3.136 | 76\% | 0.780 | 0.591 | 4,3H \& 3n,3H |
| 2017 | 5.000 | 3.850 | 3.850 | 2.634 | 79\% | 0.792 | 0.684 | 3,2n,2H |
| 2018 | 5.000 | 2.251 | 2.251 | 1.858 | 94\% | 0.878 | 0.825 | 1,4H |
| 2019 | 4.500 | 3.524 | 3.524 | 2.685 | 80\% | 0.762 | 0.762 | 4,3H |
| Averages |  |  |  |  |  |  |  |  |
| 89-18 | 5.710 | 4.469 | 2.858 | 1.995 | 0.849 | 0.833 | 0.714 |  |
| 09-18 | 5.691 | 4.653 | 3.610 | 2.232 | 0.801 | 0.756 | 0.623 |  |

[^4]Appendix F. 2. Tuya Lake fry plants and survivals, 1991-2019.
Numbers for eggs and fry are millions.

|  | Egg Take <br> Designated <br> Tuya | Fry <br> Planted | Percent <br> Fertilized | Fertilized <br> Egg to Fry | Green <br> Egg to Fry | Thermal <br> Mark <br> Pattern |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| 1991 | 2.732 | 1.632 | 0.944 | 0.633 | 0.597 | $1: 1.6$ |
| 1992 | 2.747 | 1.990 | 0.929 | 0.780 | 0.724 | $1: 1.7$ |
| 1993 | 5.171 | 4.691 | 0.911 | 0.996 | 0.907 | $1: 1.4+2.5 \mathrm{n}$ |
| 1994 | 2.765 | 2.267 | 0.870 | 0.943 | 0.820 | $1: 1.4$ |
| 1995 | 3.883 | 2.474 | 0.795 | 0.802 | 0.637 | $1: 1.4+2.4$ |
| 1996 | 3.233 | 2.611 | 0.932 | 0.867 | 0.808 | $1: 1.4$ |
| 1997 | 0.521 | 0.433 | 0.911 | 0.912 | 0.830 | $2: 1.4$ |
| 1998 | 2.024 | 1.603 | 0.917 | 0.864 | 0.792 | $1: 1.4$ |
| 1999 | 1.053 | 0.867 | 0.960 | 0.857 | 0.823 | $2: 1.4$ |
| 2000 | All eggs collected in 2000 and 2001 were for backplant into Tahltan Lake. |  |  |  |  |  |
| 2001 |  |  |  |  |  |  |
| 2002 | 1.271 | 1.124 | 0.904 | 0.978 | 0.885 | $1: 1.7+2.3$ |
| 2003 | 2.730 | 2.445 | 0.927 | 0.966 | 0.895 | $1: 1.4$ |
| 2004 | 3.734 | 3.200 | 0.921 | 0.931 | 0.857 | $1: 1.6+2.4$ |
| 2005 | 2.744 | 2.138 | 0.900 | 0.866 | 0.779 | $1: 1.4+2.4$ |
| 2006 | 1.410 | 1.201 | 0.920 | 0.926 | 0.852 | $1: 1.3,2.3$ |
| 2007 | 1.852 | 1.537 | 0.856 | 0.970 | 0.830 | $2,1,3 \mathrm{H}$ |
| 2008 | 0.988 | 0.832 | 0.856 | 0.984 | 0.842 | 6 H |
| 2009 | 1.860 | 0.976 | 0.794 | 0.661 | 0.525 | $3,4 \mathrm{H}$ |
| 2010 | 2.852 | 1.240 | 0.819 | 0.531 | 0.435 | $3 \mathrm{n}, 3 \mathrm{H}$ |
| 2011 | 3.098 | 1.600 | 0.865 | 0.597 | 0.516 | 6 H |
| 2012 | 1.924 | 0.755 | 0.816 | 0.481 | 0.392 | $4 \mathrm{n}, 3 \mathrm{H}$ |
| 2013 | 0.701 | 0.462 | 0.737 | 0.894 | 0.659 | $3 \mathrm{n}, 3 \mathrm{H}$ |
| 2014 | Fry plants into Tuya Lake discontinued |  |  |  |  |  |
| Averages |  |  |  |  |  |  |
| $91-13$ | 2.347 | 1.718 | 0.880 | 0.830 | 0.734 |  |
| $04-13$ | 2.116 | 1.394 | 0.848 | 0.784 | 0.669 |  |

Appendix F. 3. Tatsamenie Lake egg collection, fry plants, and survivals, 1989-2019.


Appendix F.4. Trapper and King Salmon lakes egg collection, fry plants, and survivals, 1990-2019.

| Numbers for eggs and fry are millions. |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Brood Year | Lake |  |  |  | $\begin{array}{r} \text { Fry } \\ \text { Planted } \\ \hline \end{array}$ | Percent <br> Fertilized | Survival |  | Thermal <br> Mark <br> Pattern | LastDateReleased |
|  |  | Egg Take |  |  |  |  | Fertilized | Green |  |  |
|  |  | Target | Collect | Transport |  |  | Egg to Fry | Egg to Fry |  |  |
| 1990 | Trapper | 2.500 | 2.314 | 0.934 | 0.934 |  |  | 0.404 | 5H | 22-Jun |
| 1991 | Trapper | 2.500 | 2.953 | 1.811 | 1.811 |  |  | 0.613 | 6 H | 11-Jun |
| 1992 | Trapper | 2.500 | 2.521 | 1.113 | 1.113 |  |  | 0.442 | 7H3 | 22-Jun |
| 1993 | Trapper |  | 1.174 | 0.916 | 0.916 |  |  | 0.781 | 5H5n | 24-Jun |
| 1994 | Trapper |  | 1.117 | 0.773 | 0.773 |  |  | 0.692 | 7H | 3-Jul |
| 2006 | Trapper | 1.000 | 1.109 | 0.897 | 0.897 | 0.897 | 0.905 | 0.808 | 6 H | 20-Jun |
| 2007 | Trapper | 1.000 | 0.900 | 0.353 | 0.353 | 0.604 | 0.650 | 0.393 | 4,2nH | 5-Jun |
| 2012 | King Salmon | 0.250 | 0.238 | 0.197 | 0.197 | 0.896 | 0.949 | 0.850 | 6,2H3 | 2-Jun |
| 2014 | King Salmon | 0.250 | 0.199 | 0.169 | 0.169 | 0.893 | 0.930 | 0.893 | 6,3H | 23-May |
| 2016 | Trapper | 0.250 | 0.271 | 0.212 | 0.212 | 0.873 | 0.782 | 0.683 | 4,4n,3H | 29-May |
| 2017 | Trapper | 0.250 | 0.280 | 0.187 | 0.187 | 0.816 | 0.818 | 0.668 | 4,2,3H | 29-May |
| $2018^{\text {a }}$ | Trapper | 0.500 | 0.000 |  |  |  |  |  |  |  |
| 2019 | Trapper | 0.500 | 0.406 | 0.263 | 0.263 | 0.686 | 0.930 | 0.697 | 4,4n,3h | 11-Jun |

Appendix G. 1. Annual stock proportion estimates (mean) of Chinook salmon harvested in the Alaskan District 108 commercial drift gillnet, 2004-2019.

| Year | Sample Size |  | 2 Reporting Groups |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Taku/Stikine | Other |
| 2004 | 119 | Estimate | 0.299 | 0.701 |
|  |  | SD | 0.052 | 0.052 |
|  |  | Lo | 0.216 | 0.614 |
|  |  | Hi | 0.386 | 0.784 |
| 2005 | 254 | Estimate | 0.887 | 0.113 |
|  |  | SD | 0.026 | 0.026 |
|  |  | Lo | 0.842 | 0.073 |
|  |  | Hi | 0.927 | 0.158 |
| 2006 | 350 | Estimate | 0.642 | 0.358 |
|  |  | SD | 0.034 | 0.034 |
|  |  | Lo | 0.585 | 0.304 |
|  |  | Hi | 0.696 | 0.415 |
| 2007 | 292 | Estimate | 0.489 | 0.511 |
|  |  | SD | 0.036 | 0.036 |
|  |  | Lo | 0.430 | 0.451 |
|  |  | Hi | 0.549 | 0.570 |
| 2008 | 293 | Estimate | 0.387 | 0.613 |
|  |  | SD | 0.035 | 0.035 |
|  |  | Lo | 0.330 | 0.555 |
|  |  | Hi | 0.445 | 0.670 |
| 2009 | 177 | Estimate | 0.128 | 0.872 |
|  |  | SD | 0.031 | 0.031 |
|  |  | Lo | 0.080 | 0.817 |
|  |  | Hi | 0.183 | 0.920 |
| 2010 | 72 | Estimate | 0.215 | 0.785 |
|  |  | SD | 0.067 | 0.067 |
|  |  | Lo | 0.109 | 0.669 |
|  |  | Hi | 0.331 | 0.891 |
| 2011 | 70 | Estimate | 0.346 | 0.654 |
|  |  | SD | 0.067 | 0.067 |
|  |  | Lo | 0.239 | 0.540 |
| 2012 | 202 | Estimate | 0.248 | 0.752 |
|  |  | SD | 0.036 | 0.036 |
|  |  | Lo | 0.189 | 0.691 |
|  |  | Hi | 0.309 | 0.811 |
| 2013 | 164 | Estimate | 0.068 | 0.932 |
|  |  | SD | 0.029 | 0.029 |
|  |  | Lo | 0.025 | 0.879 |
|  |  | Hi | 0.121 | 0.975 |
| 2014 | 273 | Estimate | 0.043 | 0.957 |
|  |  | SD | 0.018 | 0.018 |
|  |  | Lo | 0.019 | 0.927 |
|  |  | Hi | 0.073 | 0.981 |
| 2015 | 272 | Estimate | 0.047 | 0.953 |
|  |  | SD | 0.021 | 0.021 |
|  |  | Lo | 0.016 | 0.916 |
|  |  | Hi | 0.084 | 0.984 |
| 2016 | 293 | Estimate | 0.220 | 0.780 |
|  |  | SD | 0.029 | 0.029 |
|  |  | Lo | 0.173 | 0.731 |
|  |  | Hi | 0.269 | 0.827 |
| 2017 | 246 | Estimate | 0.008 | 0.992 |
|  |  | SD | 0.010 | 0.010 |
|  |  | Lo | 0.000 | 0.971 |
|  |  | Hi | 0.029 | 1.000 |
| 2018 | 114 | Estimate | 0.006 | 0.994 |
|  |  | SD | 0.015 | 0.015 |
|  |  | Lo | 0.000 | 0.961 |
|  |  | Hi | 0.039 | 1.000 |
| 2019 | 58 | Estimate | 0.046 | 0.954 |
|  |  | SD | 0.049 | 0.049 |
|  |  | Lo | 0.000 | 0.862 |
|  |  | Hi | 0.138 | 1.000 |

Appendix G. 2. Annual stock proportion estimates (mean) of Chinook salmon harvested in the Alaskan District 108 sport fisheries, 2004-2019.

| Year | Sample Size |  | 2 Reporting Groups |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Taku/Stikine | Other |
| 2004 | 189 | Estimate | 0.655 | 0.345 |
|  |  | SD | 0.043 | 0.043 |
|  |  | Lo | 0.583 | 0.276 |
|  |  | Hi | 0.724 | 0.417 |
| 2005 | 226 | Estimate | 0.738 | 0.262 |
|  |  | SD | 0.038 | 0.038 |
|  |  | Lo | 0.674 | 0.201 |
|  |  | Hi | 0.799 | 0.326 |
| 2006 | 201 | Estimate | 0.718 | 0.282 |
|  |  | SD | 0.042 | 0.042 |
|  |  | Lo | 0.648 | 0.216 |
|  |  | Hi | 0.784 | 0.352 |
| 2007 | 200 | Estimate | 0.604 | 0.396 |
|  |  | SD | 0.043 | 0.043 |
|  |  | Lo | 0.532 | 0.326 |
|  |  | Hi | 0.674 | 0.468 |
| 2008 | 200 | Estimate | 0.614 | 0.386 |
|  |  | SD | 0.045 | 0.045 |
|  |  | Lo | 0.539 | 0.314 |
|  |  | Hi | 0.686 | 0.461 |
| 2009 | 190 | Estimate | 0.517 | 0.483 |
|  |  | SD | 0.044 | 0.044 |
|  |  | Lo | 0.445 | 0.412 |
|  |  | Hi | 0.588 | 0.555 |
| 2010 | 201 | Estimate | 0.546 | 0.454 |
|  |  | SD | 0.043 | 0.043 |
|  |  | Lo | 0.475 | 0.382 |
|  |  | Hi | 0.618 | 0.525 |
| 2011 | 199 | Estimate | 0.509 | 0.491 |
|  |  | SD | 0.050 | 0.050 |
|  |  | Lo | 0.427 | 0.407 |
|  |  | Hi | 0.593 | 0.573 |
| 2012 | 201 | Estimate | 0.423 | 0.577 |
|  |  | SD | 0.045 | 0.045 |
|  |  | Lo | 0.350 | 0.502 |
|  |  | Hi | 0.498 | 0.650 |
| 2013 | 223 | Estimate | 0.490 | 0.510 |
|  |  | SD | 0.042 | 0.042 |
|  |  | Lo | 0.422 | 0.442 |
|  |  | Hi | 0.558 | 0.578 |
| 2014 | 205 | Estimate | 0.354 | 0.646 |
|  |  | SD | 0.043 | 0.044 |
|  |  | Lo | 0.285 | 0.575 |
|  |  | Hi | 0.425 | 0.715 |
| 2015 | 297 | Estimate | 0.449 | 0.551 |
|  |  | SD | 0.036 | 0.036 |
|  |  | Lo | 0.390 | 0.492 |
|  |  | Hi | 0.508 | 0.610 |
| 2016 | 251 | Estimate | 0.304 | 0.696 |
|  |  | SD | 0.038 | 0.038 |
|  |  | Lo | 0.242 | 0.634 |
|  |  | Hi | 0.366 | 0.758 |
| 2017 | 182 | Estimate | 0.212 | 0.788 |
|  |  | SD | 0.040 | 0.040 |
|  |  | Lo | 0.148 | 0.721 |
|  |  | Hi | 0.279 | 0.852 |
| 2018 | 0 | Estimate |  |  |
|  |  | SD |  |  |
|  |  | Lo |  |  |
|  |  | Hi |  |  |
| 2019 | 29 | Estimate | 0.012 | 0.988 |
|  |  | SD | 0.025 | 0.025 |
|  |  | Lo | 0.000 | 0.940 |
|  |  | Hi | 0.060 | 1.000 |

Appendix G. 3. Annual stock proportion estimates (mean) of Chinook salmon harvested in the Alaskan District 108 commercial troll, 2019.

No estimates in 2019

Appendix G. 4. Annual stock proportion estimates (mean) of Chinook salmon harvested in the Alaskan District 111 commercial drift gillnet, 2019.

| Year | Sample Size |  | 2 Reporting Groups |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Taku/Stikine | Other |
| 2004 | 111 | Estimate | 0.859 | 0.141 |
|  |  | SD | 0.036 | 0.036 |
|  |  | Lo | 0.795 | 0.085 |
|  |  | Hi | 0.915 | 0.205 |
| 2005 | 247 | Estimate | 0.919 | 0.081 |
|  |  | SD | 0.021 | 0.021 |
|  |  | Lo | 0.882 | 0.050 |
|  |  | Hi | 0.950 | 0.118 |
| 2006 | 209 | Estimate | 0.905 | 0.095 |
|  |  | SD | 0.024 | 0.024 |
|  |  | Lo | 0.863 | 0.059 |
|  |  | Hi | 0.941 | 0.137 |
| 2007 | 96 | Estimate | 0.492 | 0.508 |
|  |  | SD | 0.054 | 0.054 |
|  |  | Lo | 0.404 | 0.419 |
|  |  | Hi | 0.581 | 0.596 |
| 2008 | 104 | Estimate | 0.483 | 0.517 |
|  |  | SD | 0.053 | 0.053 |
|  |  | Lo | 0.397 | 0.430 |
|  |  | Hi | 0.570 | 0.603 |
| 2009 | 257 | Estimate | 0.813 | 0.187 |
|  |  | SD | 0.027 | 0.027 |
|  |  | Lo | 0.766 | 0.145 |
|  |  | Hi | 0.855 | 0.234 |
| 2010 | 152 | Estimate | 0.539 | 0.461 |
|  |  | SD | 0.042 | 0.042 |
|  |  | Lo | 0.469 | 0.391 |
|  |  | Hi | 0.609 | 0.531 |
| 2011 | 70 | Estimate | 0.809 | 0.191 |
|  |  | SD | 0.052 | 0.052 |
|  |  | Lo | 0.718 | 0.113 |
|  |  | Hi | 0.887 | 0.282 |
| 2012 | 206 | Estimate | 0.876 | 0.124 |
|  |  | SD | 0.027 | 0.027 |
|  |  | Lo | 0.830 | 0.082 |
|  |  | Hi | 0.918 | 0.170 |
| 2013 | 86 | Estimate | 0.753 | 0.247 |
|  |  | SD | 0.051 | 0.051 |
|  |  | Lo | 0.666 | 0.167 |
|  |  | Hi | 0.833 | 0.334 |
| 2014 | 78 | Estimate | 0.635 | 0.365 |
|  |  | SD | 0.060 | 0.061 |
|  |  | Lo | 0.534 | 0.268 |
|  |  | Hi | 0.732 | 0.466 |
| 2015 | 88 | Estimate | 0.592 | 0.408 |
|  |  | SD | 0.055 | 0.055 |
|  |  | Lo | 0.500 | 0.319 |
|  |  | Hi | 0.681 | 0.500 |
| 2016 | 49 | Estimate | 0.749 | 0.251 |
|  |  | SD | 0.065 | 0.065 |
|  |  | Lo | 0.636 | 0.150 |
|  |  | Hi | 0.850 | 0.364 |
| 2017 | 48 | Estimate | 0.464 | 0.536 |
|  |  | SD | 0.077 | 0.077 |
|  |  | Lo | 0.338 | 0.407 |
|  |  | Hi | 0.593 | 0.662 |
| 2018 | 100 | Estimate | 0.118 | 0.882 |
|  |  | SD | 0.038 | 0.038 |
|  |  | Lo | 0.061 | 0.815 |
|  |  | Hi | 0.185 | 0.939 |
| 2019 | 110 | Estimate | 0.274 | 0.726 |
|  |  | SD | 0.046 | 0.046 |
|  |  | Lo | 0.201 | 0.648 |
|  |  | Hi | 0.352 | 0.799 |

Appendix G. 4. Annual stock proportion estimates (mean) of Chinook salmon harvested in the Alaskan District 111 sport fisheries, 2019.

| Year | Sample Size |  | 2 Reporting Groups |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Taku/Stikine | Other |
| 2004 | 159 | Estimate | 0.538 | 0.462 |
|  |  | SD | 0.043 | 0.043 |
|  |  | Lo | 0.467 | 0.392 |
|  |  | Hi | 0.608 | 0.533 |
| 2005 | 264 | Estimate | 0.578 | 0.422 |
|  |  | SD | 0.035 | 0.035 |
|  |  | Lo | 0.521 | 0.366 |
|  |  | Hi | 0.634 | 0.479 |
| 2006 | 269 | Estimate | 0.652 | 0.348 |
|  |  | SD | 0.032 | 0.032 |
|  |  | Lo | 0.599 | 0.295 |
|  |  | Hi | 0.705 | 0.401 |
| 2007 | 237 | Estimate | 0.451 | 0.549 |
|  |  | SD | 0.035 | 0.035 |
|  |  | Lo | 0.394 | 0.491 |
|  |  | Hi | 0.509 | 0.606 |
| 2008 | 218 | Estimate | 0.226 | 0.774 |
|  |  | SD | 0.032 | 0.032 |
|  |  | Lo | 0.176 | 0.720 |
|  |  | Hi | 0.280 | 0.824 |
| 2009 | 239 | Estimate | 0.255 | 0.745 |
|  |  | SD | 0.030 | 0.030 |
|  |  | Lo | 0.206 | 0.694 |
|  |  | Hi | 0.306 | 0.794 |
| 2010 | 200 | Estimate | 0.453 | 0.547 |
|  |  | SD | 0.038 | 0.038 |
|  |  | Lo | 0.391 | 0.484 |
|  |  | Hi | 0.516 | 0.609 |
| 2011 | 200 | Estimate | 0.454 | 0.546 |
|  |  | SD | 0.040 | 0.040 |
|  |  | Lo | 0.389 | 0.480 |
|  |  | Hi | 0.520 | 0.611 |
| 2012 | 200 | Estimate | 0.494 | 0.506 |
|  |  | SD | 0.039 | 0.039 |
|  |  | Lo | 0.429 | 0.441 |
|  |  | Hi | 0.559 | 0.571 |
| 2013 | 224 | Estimate | 0.125 | 0.875 |
|  |  | SD | 0.025 | 0.025 |
|  |  | Lo | 0.086 | 0.831 |
|  |  | Hi | 0.169 | 0.914 |
| 2014 | 221 | Estimate | 0.396 | 0.604 |
|  |  | SD | 0.036 | 0.037 |
|  |  | Lo | 0.338 | 0.544 |
|  |  | Hi | 0.456 | 0.662 |
| 2015 | 297 | Estimate | 0.486 | 0.514 |
|  |  | SD | 0.031 | 0.031 |
|  |  | Lo | 0.435 | 0.463 |
|  |  | Hi | 0.537 | 0.565 |
| 2016 | 211 | Estimate | 0.587 | 0.413 |
|  |  | SD | 0.036 | 0.036 |
|  |  | Lo | 0.527 | 0.354 |
|  |  | Hi | 0.646 | 0.473 |
| 2017 | 147 | Estimate | 0.031 | 0.969 |
|  |  | SD | 0.017 | 0.017 |
|  |  | Lo | 0.008 | 0.937 |
|  |  | Hi | 0.063 | 0.992 |
| 2018 | 178 | Estimate | 0.007 | 0.993 |
|  |  | SD | 0.011 | 0.011 |
|  |  | Lo | 0.000 | 0.971 |
|  |  | Hi | 0.029 | 1.000 |
| 2019 | 196 | Estimate | 0.036 | 0.964 |
|  |  | SD | 0.015 | 0.015 |
|  |  | Lo | 0.015 | 0.937 |
|  |  | Hi | 0.063 | 0.985 |

Appendix G. 5. Weekly stock proportion estimates (mean) of sockeye salmon harvested in the Alaskan Subdistrict 106-41/42 (Sumner Strait) commercial drift gillnet fishery, 2019.

| STATWEEK | Total | Genotyped | AgedOnly | OtolithMarked variable | EnhancedTahltan | EnhancedTuya | Non-Stikine | StikineTakuMainstem | Tahltan |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 25-26 | 121 | 87 | 6 | 28 MEAN | 0.184 | 0.008 | 0.213 | 0.155 | 0.440 |
| 25-26 | 121 | 87 | 6 | 28 SD | 0.045 | 0.010 | 0.054 | 0.052 | 0.062 |
| 25-26 | 121 | 87 | 6 | 28 CI5\% | 0.118 | 0.001 | 0.132 | 0.079 | 0.339 |
| 25-26 | 121 | 87 | 6 | 28 CI95\% | 0.268 | 0.025 | 0.311 | 0.248 | 0.543 |
| 25-26 | 121 | 87 | 6 | 28 P0 | 0.000 | 0.032 | 0.000 | 0.000 | 0.000 |
| 27 | 200 | 129 | 20 | 51 MEAN | 0.240 | 0.001 | 0.435 | 0.078 | 0.246 |
| 27 | 200 | 129 | 20 | 51 SD | 0.030 | 0.002 | 0.041 | 0.027 | 0.033 |
| 27 | 200 | 129 | 20 | 51 CI5\% | 0.191 | 0.000 | 0.369 | 0.037 | 0.194 |
| 27 | 200 | 129 | 20 | 51 CI95\% | 0.291 | 0.005 | 0.503 | 0.126 | 0.301 |
| 27 | 200 | 129 | 20 | 51 P0 | 0.000 | 0.564 | 0.000 | 0.000 | 0.000 |
| 28 | 299 | 173 | 89 | 37 MEAN | 0.121 | 0.001 | 0.650 | 0.108 | 0.121 |
| 28 | 299 | 173 | 89 | 37 SD | 0.019 | 0.001 | 0.040 | 0.033 | 0.023 |
| 28 | 299 | 173 | 89 | 37 CI5\% | 0.092 | 0.000 | 0.585 | 0.051 | 0.085 |
| 28 | 299 | 173 | 89 | 37 C195\% | 0.153 | 0.003 | 0.718 | 0.160 | 0.160 |
| 28 | 299 | 173 | 89 | 37 P0 | 0.000 | 0.620 | 0.000 | 0.000 | 0.000 |
| 29 | 227 | 164 | 41 | 22 MEAN | 0.093 | 0.001 | 0.685 | 0.120 | 0.101 |
| 29 | 227 | 164 | 41 | 22 SD | 0.019 | 0.002 | 0.047 | 0.041 | 0.022 |
| 29 | 227 | 164 | 41 | 22 CI5\% | 0.063 | 0.000 | 0.612 | 0.046 | 0.066 |
| 29 | 227 | 164 | 41 | 22 CI95\% | 0.126 | 0.004 | 0.768 | 0.182 | 0.139 |
| 29 | 227 | 164 | 41 | 22 P 0 | 0.000 | 0.611 | 0.000 | 0.000 | 0.000 |
| 30 | 299 | 167 | 124 | 8 MEAN | 0.017 | 0.001 | 0.854 | 0.115 | 0.013 |
| 30 | 299 | 167 | 124 | 8 SD | 0.007 | 0.001 | 0.040 | 0.039 | 0.008 |
| 30 | 299 | 167 | 124 | 8 CI5\% | 0.007 | 0.000 | 0.795 | 0.041 | 0.003 |
| 30 | 299 | 167 | 124 | 8 CI95\% | 0.031 | 0.003 | 0.930 | 0.172 | 0.029 |
| 30 | 299 | 167 | 124 | 8 P0 | 0.000 | 0.683 | 0.000 | 0.000 | 0.001 |
| 31 | 299 | 165 | 132 | 2 MEAN | 0.004 | 0.001 | 0.896 | 0.062 | 0.037 |
| 31 | 299 | 165 | 132 | 2 SD | 0.004 | 0.001 | 0.038 | 0.036 | 0.015 |
| 31 | 299 | 165 | 132 | $2 \mathrm{CI5} \mathrm{\%}$ | 0.000 | 0.000 | 0.837 | 0.000 | 0.017 |
| 31 | 299 | 165 | 132 | $2 \mathrm{Cl95} \mathrm{\%}$ | 0.011 | 0.003 | 0.964 | 0.116 | 0.064 |
| 31 | 299 | 165 | 132 | 2 P 0 | 0.076 | 0.712 | 0.000 | 0.063 | 0.000 |
| 32 | 240 | 164 | 74 | 2 MEAN | 0.005 | 0.001 | 0.884 | 0.102 | 0.007 |
| 32 | 240 | 164 | 74 | 2 SD | 0.005 | 0.002 | 0.031 | 0.030 | 0.007 |
| 32 | 240 | 164 | 74 | $2 \mathrm{CI5} \mathrm{\%}$ | 0.000 | 0.000 | 0.830 | 0.055 | 0.001 |
| 32 | 240 | 164 | 74 | $2 \mathrm{Cl95} \mathrm{\%}$ | 0.014 | 0.004 | 0.934 | 0.154 | 0.020 |
| 32 | 240 | 164 | 74 | 2 P0 | 0.041 | 0.653 | 0.000 | 0.000 | 0.030 |
| 34 | 242 | 160 | 82 | 0 MEAN | 0.001 | 0.001 | 0.929 | 0.068 | 0.001 |
| 34 | 242 | 160 | 82 | 0 SD | 0.002 | 0.002 | 0.024 | 0.024 | 0.003 |
| 34 | 242 | 160 | 82 | 0 CI5\% | 0.000 | 0.000 | 0.885 | 0.033 | 0.000 |
| 34 | 242 | 160 | 82 | 0 CI95\% | 0.004 | 0.004 | 0.964 | 0.111 | 0.006 |
| 34 | 242 | 160 | 82 | 0 P 0 | 0.785 | 0.772 | 0.000 | 0.000 | 0.728 |

Appendix G. 6. Weekly stock proportion estimates (mean) of sockeye salmon harvested in the Alaskan Subdistrict 106-30 (Clarence Strait) commercial drift
gillnet fishery, 2019.

| STATWEEK | Total | Genotyped | AgedOnly | OtolithMarked variable | EnhancedTahltan | EnhancedTuya | Non-Stikine | StikineTakuMainstem | Tahltan |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 25-28 | 100 | 92 | 8 | 0 MEAN | 0.006 | 0.006 | 0.783 | 0.115 | 0.090 |
| 25-28 | 100 | 92 | 8 | 0 SD | 0.007 | 0.008 | 0.056 | 0.049 | 0.029 |
| 25-28 | 100 | 92 | 8 | 0 CI5\% | 0.000 | 0.000 | 0.691 | 0.030 | 0.047 |
| 25-28 | 100 | 92 | 8 | 0 CI95\% | 0.021 | 0.021 | 0.878 | 0.195 | 0.142 |
| 25-28 | 100 | 92 | 8 | 0 P 0 | 0.123 | 0.121 | 0.000 | 0.000 | 0.000 |
| 29 | 300 | 160 | 140 | 0 MEAN | 0.001 | 0.001 | 0.880 | 0.105 | 0.014 |
| 29 | 300 | 160 | 140 | 0 SD | 0.002 | 0.001 | 0.047 | 0.046 | 0.009 |
| 29 | 300 | 160 | 140 | 0 CI5\% | 0.000 | 0.000 | 0.814 | 0.017 | 0.003 |
| 29 | 300 | 160 | 140 | 0 CI95\% | 0.004 | 0.003 | 0.970 | 0.169 | 0.031 |
| 29 | 300 | 160 | 140 | 0 P0 | 0.675 | 0.672 | 0.000 | 0.009 | 0.001 |
| 30 | 288 | 152 | 136 | 0 MEAN | 0.001 | 0.001 | 0.921 | 0.076 | 0.001 |
| 30 | 288 | 152 | 136 | 0 SD | 0.002 | 0.002 | 0.034 | 0.034 | 0.003 |
| 30 | 288 | 152 | 136 | 0 CI5\% | 0.000 | 0.000 | 0.868 | 0.013 | 0.000 |
| 30 | 288 | 152 | 136 | 0 CI95\% | 0.004 | 0.004 | 0.984 | 0.129 | 0.007 |
| 30 | 288 | 152 | 136 | 0 P0 | 0.665 | 0.670 | 0.000 | 0.004 | 0.591 |
| 31 | 298 | 170 | 128 | 0 MEAN | 0.001 | 0.001 | 0.930 | 0.068 | 0.001 |
| 31 | 298 | 170 | 128 | 0 SD | 0.001 | 0.001 | 0.035 | 0.035 | 0.003 |
| 31 | 298 | 170 | 128 | 0 CI5\% | 0.000 | 0.000 | 0.874 | 0.006 | 0.000 |
| 31 | 298 | 170 | 128 | 0 CI95\% | 0.003 | 0.003 | 0.992 | 0.122 | 0.006 |
| 31 | 298 | 170 | 128 | 0 P 0 | 0.627 | 0.639 | 0.000 | 0.020 | 0.565 |
| 32 | 300 | 159 | 141 | 0 MEAN | 0.001 | 0.001 | 0.963 | 0.034 | 0.001 |
| 32 | 300 | 159 | 141 | 0 SD | 0.001 | 0.002 | 0.023 | 0.023 | 0.003 |
| 32 | 300 | 159 | 141 | 0 CI5\% | 0.000 | 0.000 | 0.923 | 0.000 | 0.000 |
| 32 | 300 | 159 | 141 | 0 CI95\% | 0.003 | 0.004 | 0.998 | 0.075 | 0.007 |
| 32 | 300 | 159 | 141 | 0 P 0 | 0.729 | 0.726 | 0.000 | 0.075 | 0.645 |
| 33 | 287 | 158 | 129 | 0 MEAN | 0.001 | 0.001 | 0.931 | 0.067 | 0.001 |
| 33 | 287 | 158 | 129 | 0 SD | 0.002 | 0.002 | 0.031 | 0.031 | 0.003 |
| 33 | 287 | 158 | 129 | 0 CI5\% | 0.000 | 0.000 | 0.882 | 0.011 | 0.000 |
| 33 | 287 | 158 | 129 | 0 CI95\% | 0.003 | 0.004 | 0.986 | 0.115 | 0.007 |
| 33 | 287 | 158 | 129 | 0 P 0 | 0.703 | 0.695 | 0.000 | 0.008 | 0.628 |
| 34 | 134 | 129 | 5 | 0 MEAN | 0.001 | 0.001 | 0.946 | 0.050 | 0.002 |
| 34 | 134 | 129 | 5 | 0 SD | 0.003 | 0.003 | 0.024 | 0.023 | 0.003 |
| 34 | 134 | 129 | 5 | 0 CI5\% | 0.000 | 0.000 | 0.902 | 0.017 | 0.000 |
| 34 | 134 | 129 | 5 | 0 CI95\% | 0.008 | 0.008 | 0.980 | 0.093 | 0.008 |
| 34 | 134 | 129 | 5 | 0 P0 | 0.641 | 0.645 | 0.000 | 0.001 | 0.642 |
| 35 | 94 | 89 | 5 | $\bigcirc$ MEAN | 0.002 | 0.002 | 0.943 | 0.051 | 0.002 |
| 35 | 94 | 89 | 5 | 0 SD | 0.005 | 0.005 | 0.036 | 0.036 | 0.005 |
| 35 | 94 | 89 | 5 | 0 CI5\% | 0.000 | 0.000 | 0.879 | 0.000 | 0.000 |
| 35 | 94 | 89 | 5 | O CI95\% | 0.011 | 0.011 | 0.997 | 0.113 | 0.011 |
| 35 | 94 | 89 | 5 | 0 PO | 0.800 | 0.808 | 0.000 | 0.121 | 0.795 |

Appendix G. 7. Weekly stock proportion estimates (mean) of sockeye salmon harvested in the Alaskan District 108 commercial drift gillnet fishery, 2019.

| STATWEEK | Total | Genotyped | AgedOnly | OtolithMarked variable | EnhancedTahltan | EnhancedTuya | Non-Stikine | StikineTakuMainstem | Tahltan |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 26 | 318 | 180 | 15 | 123 MEAN | 0.386 | 0.001 | 0.053 | 0.206 | 0.354 |
| 26 | 318 | 180 | 15 | 123 SD | 0.027 | 0.002 | 0.015 | 0.024 | 0.027 |
| 26 | 318 | 180 | 15 | 123 CI5\% | 0.341 | 0.000 | 0.031 | 0.168 | 0.310 |
| 26 | 318 | 180 | 15 | 123 CI95\% | 0.431 | 0.005 | 0.079 | 0.246 | 0.400 |
| 26 | 318 | 180 | 15 | 123 P0 | 0.000 | 0.473 | 0.000 | 0.000 | 0.000 |
| 27 | 229 | 155 | 10 | 64 MEAN | 0.288 | 0.002 | 0.117 | 0.351 | 0.243 |
| 27 | 229 | 155 | 10 | 64 SD | 0.032 | 0.003 | 0.023 | 0.034 | 0.030 |
| 27 | 229 | 155 | 10 | 64 CI5\% | 0.237 | 0.000 | 0.081 | 0.295 | 0.196 |
| 27 | 229 | 155 | 10 | 64 CI95\% | 0.341 | 0.007 | 0.158 | 0.408 | 0.295 |
| 27 | 229 | 155 | 10 | 64 P0 | 0.000 | 0.378 | 0.000 | 0.000 | 0.000 |
| 28 | 351 | 245 | 23 | 83 MEAN | 0.213 | 0.001 | 0.189 | 0.338 | 0.258 |
| 28 | 351 | 245 | 23 | 83 SD | 0.023 | 0.002 | 0.025 | 0.030 | 0.025 |
| 28 | 351 | 245 | 23 | 83 CI5\% | 0.176 | 0.000 | 0.149 | 0.290 | 0.218 |
| 28 | 351 | 245 | 23 | 83 CI95\% | 0.251 | 0.005 | 0.232 | 0.388 | 0.301 |
| 28 | 351 | 245 | 23 | 83 P0 | 0.000 | 0.517 | 0.000 | 0.000 | 0.000 |
| 29 | 355 | 231 | 49 | 75 MEAN | 0.202 | 0.003 | 0.130 | 0.419 | 0.246 |
| 29 | 355 | 231 | 49 | 75 SD | 0.021 | 0.003 | 0.021 | 0.029 | 0.024 |
| 29 | 355 | 231 | 49 | 75 CI5\% | 0.169 | 0.000 | 0.099 | 0.371 | 0.206 |
| 29 | 355 | 231 | 49 | 75 C195\% | 0.238 | 0.009 | 0.167 | 0.465 | 0.286 |
| 29 | 355 | 231 | 49 | 75 P0 | 0.000 | 0.063 | 0.000 | 0.000 | 0.000 |
| 32 | 264 | 171 | 77 | 16 MEAN | 0.029 | 0.008 | 0.363 | 0.555 | 0.045 |
| 32 | 264 | 171 | 77 | 16 SD | 0.018 | 0.016 | 0.040 | 0.033 | 0.020 |
| 32 | 264 | 171 | 77 | 16 CI5\% | 0.011 | 0.000 | 0.289 | 0.504 | 0.022 |
| 32 | 264 | 171 | 77 | 16 CI95\% | 0.065 | 0.041 | 0.421 | 0.610 | 0.082 |
| 32 | 264 | 171 | 77 | 16 P0 | 0.000 | 0.401 | 0.000 | 0.000 | 0.000 |
| 33-35 | 58 | 52 | 6 | 0 MEAN | 0.012 | 0.012 | 0.230 | 0.731 | 0.014 |
| 33-35 | 58 | 52 | 6 | 0 SD | 0.014 | 0.014 | 0.059 | 0.060 | 0.015 |
| 33-35 | 58 | 52 | 6 | O Cl5\% | 0.000 | 0.000 | 0.141 | 0.628 | 0.000 |
| 33-35 | 58 | 52 | 6 | O CI95\% | 0.041 | 0.040 | 0.332 | 0.826 | 0.044 |
| 33-35 | 58 | 52 | 6 | 0 PO | 0.331 | 0.322 | 0.000 | 0.000 | 0.276 |

Appendix G. 8. Weekly stock proportion estimates (mean) of sockeye salmon harvested in the Alaskan District 111 traditional commercial drift gillnet fishery by week, 2019.

| STATWEEK | Total | Genotyped | AgedOnly | OtolithMarked variable | EnhancedKingSalmon | EnhancedSnettisham | EnhancedStikine | EnhancedTatsamenie | Other | Speel | StikineTakuM ainstem | TakuLakes | Tatsamenie |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 25 | 41 | 39 | 2 | 0 MEAN | 0.003 | 0.003 | 0.003 | 0.003 | 0.412 | 0.004 | 0.463 | 0.108 | 0.003 |
| 25 | 41 | 39 | 2 | 0 SD | 0.008 | 0.008 | 0.008 | 0.008 | 0.089 | 0.011 | 0.089 | 0.049 | 0.009 |
| 25 | 41 | 39 | 2 | 0 Cl5\% | 0.000 | 0.000 | 0.000 | 0.000 | 0.266 | 0.000 | 0.318 | 0.040 | 0.000 |
| 25 | 41 | 39 | 2 | o C195\% | 0.016 | 0.014 | 0.015 | 0.016 | 0.562 | 0.021 | 0.612 | 0.198 | 0.017 |
| 25 | 41 | 39 | 2 | 0 PO | 0.919 | 0.927 | 0.924 | 0.924 | 0.000 | 0.900 | 0.000 | 0.001 | 0.918 |
| 26 | 245 | 155 | 83 | 7 MEAN | 0.013 | 0.005 | 0.013 | 0.000 | 0.140 | 0.001 | 0.646 | 0.182 | 0.001 |
| 26 | 245 | 155 | 83 | 7 SD | 0.007 | 0.004 | 0.007 | 0.001 | 0.031 | 0.003 | 0.039 | 0.029 | 0.002 |
| 26 | 245 | 155 | 83 | $7 \mathrm{CL5} \mathrm{\%}$ | 0.004 | 0.000 | 0.004 | 0.000 | 0.092 | 0.000 | 0.580 | 0.137 | 0.000 |
| 26 | 245 | 155 | 83 | 7 C195\% | 0.026 | 0.013 | 0.026 | 0.003 | 0.194 | 0.006 | 0.708 | 0.232 | 0.004 |
| 26 | 245 | 155 | 83 | 7 P0 | 0.000 | 0.094 | 0.000 | 0.837 | 0.000 | 0.767 | 0.000 | 0.000 | 0.796 |
| 27 | 359 | 161 | 187 | 11 MEAN | 0.006 | 0.006 | 0.020 | 0.000 | 0.079 | 0.001 | 0.681 | 0.205 | 0.001 |
| 27 | 359 | 161 | 187 | 11 SD | 0.004 | 0.004 | 0.007 | 0.001 | 0.025 | 0.004 | 0.034 | 0.029 | 0.004 |
| 27 | 359 | 161 | 187 | $11 \mathrm{CL5} \mathrm{\%}$ | 0.001 | 0.001 | 0.009 | 0.000 | 0.041 | 0.000 | 0.625 | 0.157 | 0.000 |
| 27 | 359 | 161 | 187 | 11 C195\% | 0.014 | 0.014 | 0.033 | 0.002 | 0.124 | 0.007 | 0.736 | 0.253 | 0.008 |
| 27 | 359 | 161 | 187 | 11 P0 | 0.004 | 0.003 | 0.000 | 0.819 | 0.000 | 0.685 | 0.000 | 0.000 | 0.677 |
| 28 | 594 | 321 | 226 | 47 MEAN | 0.004 | 0.064 | 0.002 | 0.002 | 0.108 | 0.022 | 0.610 | 0.187 | 0.001 |
| 28 | 594 | 321 | 226 | 47 SD | 0.003 | 0.009 | 0.002 | 0.002 | 0.022 | 0.010 | 0.030 | 0.023 | 0.002 |
| 28 | 594 | 321 | 226 | $47 \mathrm{CL5} \mathrm{\%}$ | 0.001 | 0.049 | 0.000 | 0.000 | 0.075 | 0.008 | 0.560 | 0.150 | 0.000 |
| 28 | 594 | 321 | 226 | 47 C195\% | 0.009 | 0.080 | 0.006 | 0.006 | 0.146 | 0.041 | 0.658 | 0.225 | 0.004 |
| 28 | 594 | 321 | 226 | 47 P0 | 0.000 | 0.000 | 0.013 | 0.015 | 0.000 | 0.000 | 0.000 | 0.000 | 0.400 |
| 29 | 529 | 231 | 182 | 116 MEAN | 0.004 | 0.199 | 0.000 | 0.004 | 0.073 | 0.004 | 0.561 | 0.152 | 0.001 |
| 29 | 529 | 231 | 182 | 116 SD | 0.003 | 0.017 | 0.001 | 0.003 | 0.010 | 0.004 | 0.025 | 0.020 | 0.001 |
| 29 | 529 | 231 | 182 | 116 C15\% | 0.001 | 0.173 | 0.000 | 0.001 | 0.057 | 0.000 | 0.520 | 0.120 | 0.000 |
| 29 | 529 | 231 | 182 | 116 C195\% | 0.010 | 0.228 | 0.002 | 0.010 | 0.090 | 0.012 | 0.602 | 0.187 | 0.003 |
| 29 | 529 | 231 | 182 | 116 P0 | 0.000 | 0.000 | 0.432 | 0.000 | 0.000 | 0.085 | 0.000 | 0.000 | 0.399 |
| 30 | 580 | 304 | 126 | 150 MEAN | 0.000 | 0.248 | 0.001 | 0.011 | 0.074 | 0.021 | 0.525 | 0.107 | 0.011 |
| 30 | 580 | 304 | 126 | 150 SD | 0.001 | 0.019 | 0.001 | 0.004 | 0.021 | 0.011 | 0.028 | 0.017 | 0.005 |
| 30 | 580 | 304 | 126 | 150 C15\% | 0.000 | 0.217 | 0.000 | 0.005 | 0.038 | 0.005 | 0.480 | 0.081 | 0.005 |
| 30 | 580 | 304 | 126 | 150 C195\% | 0.002 | 0.279 | 0.004 | 0.020 | 0.108 | 0.041 | 0.571 | 0.136 | 0.020 |
| 30 | 580 | 304 | 126 | 150 P0 | 0.419 | 0.000 | 0.007 | 0.000 | 0.000 | 0.002 | 0.000 | 0.000 | 0.000 |
| 31 | 465 | 179 | 245 | 41 mean | 0.001 | 0.097 | 0.001 | 0.012 | 0.080 | 0.003 | 0.697 | 0.089 | 0.019 |
| 31 | 465 | 179 | 245 | 41 SD | 0.004 | 0.022 | 0.003 | 0.006 | 0.024 | 0.006 | 0.033 | 0.020 | 0.009 |
| 31 | 465 | 179 | 245 | $41 \mathrm{CL5} \mathrm{\%}$ | 0.000 | 0.065 | 0.000 | 0.005 | 0.043 | 0.000 | 0.643 | 0.059 | 0.008 |
| 31 | 465 | 179 | 245 | 41 C195\% | 0.007 | 0.135 | 0.007 | 0.022 | 0.122 | 0.013 | 0.752 | 0.123 | 0.035 |
| 31 | 465 | 179 | 245 | 41 P0 | 0.343 | 0.000 | 0.342 | 0.000 | 0.000 | 0.276 | 0.000 | 0.000 | 0.000 |
| 32 | 280 | 169 | 23 | 88 MEAN | 0.000 | 0.289 | 0.000 | 0.025 | 0.028 | 0.006 | 0.564 | 0.048 | 0.039 |
| 32 | 280 | 169 | 23 | 88 SD | 0.001 | 0.027 | 0.001 | 0.009 | 0.016 | 0.006 | 0.032 | 0.015 | 0.012 |
| 32 | 280 | 169 | 23 | $88 \mathrm{CL5} \mathrm{\%}$ | 0.000 | 0.245 | 0.000 | 0.012 | 0.004 | 0.000 | 0.510 | 0.026 | 0.022 |
| 32 | 280 | 169 | 23 | 88 C195\% | 0.002 | 0.334 | 0.002 | 0.043 | 0.057 | 0.019 | 0.617 | 0.074 | 0.060 |
| 32 | 280 | 169 | 23 | 88 P0 | 0.701 | 0.000 | 0.702 | 0.000 | 0.016 | 0.076 | 0.000 | 0.000 | 0.000 |
| 33 | 120 | 67 | 7 | 46 MEAN | 0.001 | 0.348 | 0.001 | 0.034 | 0.032 | 0.011 | 0.431 | 0.065 | 0.077 |
| 33 | 120 | 67 | 7 | 46 SD | 0.003 | 0.043 | 0.003 | 0.016 | 0.019 | 0.016 | 0.049 | 0.027 | 0.026 |
| 33 | 120 | 67 | 7 | $46 \mathrm{Cl5} \mathrm{\%}$ | 0.000 | 0.280 | 0.000 | 0.012 | 0.009 | 0.000 | 0.351 | 0.027 | 0.040 |
| 33 | 120 | 67 | 7 | 46 C195\% | 0.005 | 0.420 | 0.005 | 0.065 | 0.068 | 0.045 | 0.512 | 0.114 | 0.122 |
| 33 | 120 | 67 | 7 | 46 P0 | 0.685 | 0.000 | 0.688 | 0.000 | 0.000 | 0.343 | 0.000 | 0.000 | 0.000 |
| 34 | 150 | 58 | 3 | 89 MEAN | 0.001 | 0.580 | 0.001 | 0.008 | 0.054 | 0.053 | 0.229 | 0.027 | 0.046 |
| 34 | 150 | 58 | 3 | 89 SD | 0.003 | 0.039 | 0.003 | 0.007 | 0.019 | 0.019 | 0.034 | 0.014 | 0.018 |
| 34 | 150 | 58 | 3 | $89 \mathrm{CL5} \mathrm{\%}$ | 0.000 | 0.515 | 0.000 | 0.001 | 0.026 | 0.025 | 0.176 | 0.008 | 0.021 |
| 34 | 150 | 58 | 3 | 89 C195\% | 0.007 | 0.644 | 0.007 | 0.023 | 0.088 | 0.088 | 0.286 | 0.052 | 0.078 |
| 34 | 150 | 58 | 3 | 89 P0 | 0.579 | 0.000 | 0.580 | 0.030 | 0.000 | 0.000 | 0.000 | 0.000 | 0.000 |
| 35 | 49 | 28 | 2 | 19 MEAN | 0.002 | 0.362 | 0.002 | 0.022 | 0.006 | 0.058 | 0.412 | 0.007 | 0.128 |
| 35 | 49 | 28 | 2 | 19 SD | 0.007 | 0.067 | 0.006 | 0.021 | 0.015 | 0.040 | 0.075 | 0.015 | 0.047 |
| 35 | 49 | 28 | 2 | $19 \mathrm{Cl5} \mathrm{\%}$ | 0.000 | 0.254 | 0.000 | 0.002 | 0.000 | 0.008 | 0.290 | 0.000 | 0.060 |
| 35 | 49 | 28 | 2 | 19 C195\% | 0.013 | 0.477 | 0.013 | 0.064 | 0.033 | 0.136 | 0.534 | 0.039 | 0.215 |
| 35 | 49 | 28 | 2 | 19 PO | 0.877 | 0.000 | 0.878 | 0.158 | 0.779 | 0.026 | 0.000 | 0.705 | 0.000 |


[^0]:    ${ }^{\text {a }}$ Estimate includes approximately 30,000 mortalities from overcrowding on May 22, 1987.
    ${ }^{\mathrm{b}}$ Estimate of 595,147 on June 14 expanded by average $\%$ of outmigration by date ( $97.5 \%$ ) from historical data.
    ${ }^{\text {c }}$ Estimate of 1,439,673 on June 13 expanded by average \% of outmigration by date ( $96.8 \%$ ) from historical data.
    ${ }^{\text {d }}$ Estimate of $1,516,150$ on June 14 expanded by average \% of outmigration by date ( $97.5 \%$ ) fromhistorical data.

[^1]:    ${ }^{\text {a }}$ Stopped flying index area 4 on the Nakina after 2009.

[^2]:    2012 weir count was adjusted to account for high water years when weir was disabled

[^3]:    ${ }^{\mathrm{a}}$ Late survey date which missed the peak of spawning.

[^4]:    ${ }^{\text {a }}$ A low weir count resulted in a bilateral inseason adjustment of the egg take target to 5.5 million
    ${ }^{\mathrm{b}}$ The original goal of 6.0 million eggs at Tahltan Lake was reduced to 5.0 million by Canada due to domestic is sues
    ${ }^{\text {c }}$ The original goal of 6.0 million eggs at Tahltan Lake was reduced to 5.5 million by Canada due to domestic issues

