

TCTR 8705

November 13, 1987

PACIFIC SALMON COMMISSION  
TRANSBOUNDARY TECHNICAL COMMITTEE REPORT

REPORT TCTR (87)- 5

PRELIMINARY 1987 SALMON CATCHES AND ESCAPEMENTS  
TO THE TRANSBOUNDARY RIVERS

November 13, 1987

# TABLE OF CONTENTS

	<u>Page</u>
List of Tables .....	ii
List of Appendix Tables .....	iii
Introduction .....	1
Stikine River .....	1
Fishing Effort .....	1
Sockeye .....	2
Chinook .....	3
Coho .....	3
Chum and Pink .....	3
Taku River .....	4
Fishing Effort .....	4
Sockeye .....	4
Chinook .....	5
Coho .....	5
Chum .....	6
Pink .....	7
Alsek River .....	7
Sockeye .....	7
Chinook .....	8
Coho .....	8

## LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. Average catches, days of fishing and effort compared with 1987 values for the District 106, District 108, and Stikine River fisheries .....	9
2. Preliminary run reconstruction of Stikine River sockeye salmon .....	10
3. Average catches, days of fishing and effort compared with 1987 values for the District 111 and Taku River fisheries .....	11
4. Preliminary run reconstruction statistics for Taku River and Port Snettisham sockeye salmon .....	12
5. Historical average catches, number of days fished, and effort compared with 1987 values for the Alsek River fisheries .....	12

LIST OF APPENDIX TABLES

<u>Appendix Table</u>	<u>Page</u>
1. Catches and effort for the District 106 drift gill net fishery (excluding Blind Slough Hatchery) 1987 .....	13
2. Catches and effort for the District 108 drift gill net fishery (excluding Blind Slough hatchery) 1987 .....	13
3. Catches and effort for the Canadian lower river commercial fishery, 1987 .....	14
4. Catches and effort for the Canadian upper river commercial fishery, 1987 .....	14
5. Telegraph Creek food fishery catches .....	15
6. Catches and effort for the lower river Stikine Drift gill net and set gill net fishery, 1987 .....	16
7. Catches and effort for the District 106 test fishereis, 1987 .....	17
8. Catches and effort for the District 108 test fisheries, 1987 .....	17
9. Catches and effort for the mouth of the Stikine River set net test fishery, 1987 .....	18
10. Tahltan weir counts of sockeye salmon, 1987 .....	18
11. Catches and effort for the District 111 drift gill net fishery, 1987 .....	19
12. Catches and effort for the District 111 drift gill net test fishery, 1987 .....	19
13. Catches and effort for the Taku River gill net fishery, 1987 .....	20
14. Estimated proportion of Taku River sockeye salmon in the Alaskan District 111 harvest, based on scale pattern analysis, 1983-1987 .....	20
15. Salmon counts at Taku River and Port Snettisham weirs, 1983-1987 .....	21

LIST OF APPENDIX TABLES  
(Continued)

<u>Appendix Table</u>	<u>Page</u>
16. Peak escapement counts of chinook salmon in selected Taku River tributaries .....	21
17. Catches and effort for the Alaskan Alsek River set gill net fishery, 1987 .....	22
18. Klukshu River weir counts of chinook, sockeye, and coho salmon, 1976 to 1986 .....	23

## INTRODUCTION

This report presents preliminary data on the catches and escapements of Pacific salmon returning to the transboundary Stikine, Taku and Alsek Rivers during 1987. Information on catches and fishing effort reported herein are not expected to change significantly with completion of post-season updating of the data. Likewise, data on escapements through weirs or based on aerial surveys are unlikely to change significantly. However, data regarding the estimated stock composition of catches and escapement estimates based on test fisheries and mark-recapture experiments are considered very preliminary and subject to change. Data presented in this report will be updated prior to the February meeting of the Commission if warranted. Final data regarding stock composition of catches and estimates of escapements based on test fisheries and mark-recapture experiments will be reported in the spring of 1988.

## STIKINE RIVER

Stikine River salmon are harvested by Alaska's gill net fisheries in Districts 106 and 108, Canadian lower and upper river commercial fisheries and Canadian subsistence fisheries. Sport fisheries near Wrangell and Petersburg also harvest some Stikine River salmon. Additional catches of unknown quantity are also taken in Alaska troll fisheries. A limited sport fishery exists in the Canadian portion of the river. Catch and effort data for the fisheries in 1987 are compared with past years' averages in Table 1.

### Fishing Effort

In Districts 106 and 108 the total number of days the fishery was open during 1987 was below the yearly average over the past 10 years (Table 1). The fishing season started June 21 in both districts. The number of boats participating in the District 106 fishery was greater than usual in the early part of the season but fell below average towards the end of the season. Total boat-days for the season was less than the average over the last 10 years. Fishing in District 108 was restricted each week to conserve various stocks. Fishing effort in District 108 was lower than usual throughout the entire season, with total boat-days for the season being well below past years' average. Weekly fishing effort and catches are given in Appendix Tables 1 and 2.

The Canadian lower river commercial fishery commenced June 29 and was open for a total of 20 days during the season. This is about half the average of past seasons (Table 1). Weekly effort and catches are given in Appendix Table 3. Catch and effort for the upper river commercial fishery and the Indian food fishery are given in Appendix Tables 4 and 5, respectively.

A test fishery to assess stock strength and composition was conducted in Canada near the international border from mid-June to mid-October. Weekly catches are given in Appendix Table 6.

The U.S. operated test fisheries in District 106 in Sumner Strait and in District 108 in Frederick Sound to assess stock strength. These ran for six weeks from mid-June to late July. There was also a gill net efficiency evaluation test fishery conducted in District 106 during the months of July and August. Weekly catches from these test fisheries are given in Appendix Tables 7 and 8. The U.S. also operated a set net test fishery in the mouth of the Stikine River to collect stock composition data. Catches were very low (Appendix Table 9).

### Sockeye

Based upon a parent year (1982) escapement of 28,000 sockeye to Tahltan Lake, the total run to the Stikine River in 1987 was forecast to be slightly above average. The run which materialized was less than expected.

The 1987 District 106 sockeye harvest of 136,427 is approximately 65% above the 1960-1986 average but only 13% above the recent 10 year average (Table 1). In contrast, the District 108 sockeye harvest of 1,620 is far below the 1960-1986 average and approximately one-fifth the recent 10 year harvest. In-season analysis of scale patterns indicates that 4,586 (3.3%) of the 138,047 sockeye harvested in Districts 106 and 108 were of Stikine River origin. Of these, 1,321 were Tahltan fish and 3,485 were non-Tahltan stocks. A post season analysis of these data will be made when scale samples collected from this year's escapements are digitized. We expect the analysis to be completed in the spring of 1988.

The Canadian lower river commercial fishery caught 6,138 sockeye salmon compared to an average of 15,852 (Table 1). Preliminary data indicates that 1,408 (22.9%) of these were Tahltan stock. Total harvest of sockeye in the upper river commercial fishery and the Indian food fishery was 3,476. Ninety percent of the upper river harvest is assumed to be Tahltan stock giving a harvest of 3,128 for this stock.

Of the total estimated harvest of Stikine River sockeye (excluding test fishery catch and based on preliminary analysis of scale patterns) Canadian fishermen harvested 9,614 (68%) while U.S. fishermen harvested 4,586 (32%).

Using preliminary analysis of stock composition of the commercial catch and test fishery catch-per-unit-of-effort data, the escapement of non-Tahltan stocks was estimated to be 15,872 (Table 2). Thus, it appears the escapement for the non-Tahltan stock was less than the desired (green)<sup>1/</sup> range of 20,000 to 40,000 but still within the acceptable (yellow) range of from 15,000 to 20,000. However, the weir count of 6,958 for Tahltan sockeye is well below the lower limit (20,000) of the desired green range and also less than the lower limit (18,000) of the acceptable yellow range.

<sup>1/</sup> Escapement goals for Stikine River sockeye salmon are presented in "Stikine River Sockeye Salmon Management Plan, 1987," prepared by the Transboundary Technical Committee.

## Chinook

The total run of chinook salmon to the Stikine River in 1987 was predicted to be above average. The District 106 and 108 drift gill net fisheries harvested 836 and 149 chinook respectively. Both of these catches are far below the average of the past 10 years (Table 1). To minimize the incidental harvest of maturing spring-run chinooks the area around the river mouth was closed to fishing during the first two weeks. In District 106 immature chinook predominate in catches and are caught incidentally during fisheries directed at other species; these chinook originate from a variety of stocks.

Harvest of chinook salmon in the in-river fisheries was 444 jacks and 2,201 large adult fish. Catches of chinook were greater than the average (1979-1986) for each of the three fisheries (Table 1). Above average catches occurred in the commercial fishery despite a relatively late opening date, restricted mesh sizes and very limited fishing time early in the season. About 40% of the 909 large adults caught in the commercial fishery and about 40 fish caught in the test fishery were bought by a private firm and held in pens until ripe. Eggs were taken from these fish and shipped to a mariculture operation.

The aerial survey count of large adult chinook spawning in the Little Tahltan River was 2,706. This is 116% more fish than observed in 1986 and 40% above the 1981-1985 average. The corresponding weir counts for the Little Tahltan are 4,769 adults in 1987, 2,893 in 1986, and 3,146 in 1985.

## Coho

Management emphasis in Districts 106 and 108 changed from pink to coho salmon during statistical week 35 (August 23). A single day of fishing was permitted during the first week of coho management in both districts to test the strength of the return. In District 108 effort was low while catch per unit of effort was average to below average. In District 106, coho catch per unit of effort was average (excluding hatchery contribution). The total coho catch in District 106 of 34,534 is 30% below the 1960-86 average and 43% below the recent 10 year average. Most of this harvest (69%) occurred prior to directed management for coho. Preliminary in-season coded-wire tag information for District 106 indicates hatchery coho contributed 5,500 (16%) fish of the total harvest. The District 108 coho harvest of ~~34,534~~<sup>1,015</sup> was well below average (Table 1).

The coho harvest of 5,728 in the lower river commercial fishery was below average (Table 1). Preliminary observations from the test fishery suggest that the abundance of coho in the Stikine River was less than that of sockeye (Appendix Table 6).

## Chum and Pink

The District 108 chum salmon harvest of 949 is substantially below the long term (1960-1986) or recent year's (1977-1986 average (Table 1). The poor catch is primarily a result of restricted fishing time in Frederick Sound imposed to conserve sockeye salmon. Chum catches in the lower river



commercial fishery (432) were slightly below average of 592 for the period 1979-1986.

A below average pink salmon return was predicted for District 108. Pink salmon harvests in District 108 fell below both the 1960-86 and 1977-86 averages (Table 1). Escapements in Frederick Sound were near average while escapement throughout the remainder of District 108 fell below goals. Pink salmon catches in the lower river commercial fishery (646) were also below average.

## TAKU RIVER

Taku River salmon are taken in the Alaskan District 111 commercial and test drift gill net fisheries, troll fisheries and in the Juneau area sport fishery. Canadian fisheries for Taku River salmon include inriver commercial and test gill net fisheries and a sport fishery. Catch and effort data for District 111 and inriver commercial fisheries of 1987 are compared with past years' averages in Table 3.

### Fishing Effort

The District 111 drift gill net fishery was opened from 21 June to 28 September; fishing time totaled 32.8 days. This represents 90% of the average annual fishing time allowed from 1979-1986 (Table 3). Fishing effort (boat-days) for the season was 80.6% of the 1979-1986 average. The number of boats fishing during the summer season ( weeks 26 - 33) ranged from 50 to 97, while the number of boats in the fall fishery ( weeks 34 - 40) ranged from 5 to 153. A test fishery was conducted during the summer and fall fishing seasons to compare the efficiency of different types of gill nets. Two boats fished one day each week during weeks 28 - 31 and 35 - 38. Weekly fishing catch and effort for the District 111 commercial and test fisheries are given in Appendix Tables 11 and 12.

The Canadian inriver fishery was opened from 29 June to 24 September, fishing time totaled 26.2 days. The number of fishermen varied from 5 to 13 each week. Total effort was 15% below the historical average (Table 3). Weekly fishing effort and catches are listed in Appendix Table 13. A gill net test fishery was operated from 27 July to 16 October, to provide an index of coho and chum salmon abundance. A single fisherman made 10 standardized drifts each day when the commercial fishery was closed.

### Sockeye

Based on preliminary results from the Canyon Island mark-recapture program and scale pattern analysis of District 111 catches, the total Taku River sockeye return for 1987 was 138,762 fish (Table 4), 37% below the pre-season forecast of 221,000. The District 111 and Canadian inriver gill net fisheries harvested 47,338 (78%) and 13,554 (22%) sockeye salmon of Taku River origin respectively. These figures exclude Alaska's test fishery catches of 909 Taku sockeye and Canada's test fishery catch of 238. The total sockeye spawning escapement to the Taku River was estimated at 76,723. This falls within the upper end of the interim escapement goal range of 71-80,000 fish but 23% below the average 1984-1986 escapement of

100,170 sockeye. In addition to Taku River sockeye, the District 111 drift gill net commercial and test fisheries harvested an estimated 27,709 sockeye returning to Speel and Crescent Lakes in Port Snettisham. This estimate is based on in-season analysis of scale patterns and is subject to revision when escapement scales from 1987 are available to update classification models. This represents 36% of the total District 111 sockeye catch (Table 4).

Based on scale pattern analysis, four distinct sockeye stocks can be recognized within the Taku River. Of these, only the Trapper and Tatsamenie Lake escapements are counted through weirs. The Trapper Lake escapement of 12,007 compares closely with the 1983-1986 average of 12,324, but the Tatsamenie Lake count of only 2,794 is 77% below the 1985 and 1986 average of 12,192 (Appendix Table 15). The poor Tatsamenie sockeye run strength was reflected early in the season by scale samples taken in the District 111 gill net fishery and the Canyon Island fishwheels.

Despite a total closure of Port Snettisham to fishing from 21 June to 17 August, the combined Speel Lake and Crescent Lake sockeye escapement of 17,158 was only half of the escapement target of 34,000 (12,000 Speel plus 22,000 Crescent). The Speel Lake weir count of 9,319 was slightly better than the 1983-1986 average of 8,295, while the Crescent Lake count of 7,839 was 15% below the average weir count for the same period (Appendix Table 15).

### Chinook

During 1987 the District 111 drift gill net fishery harvested 2,060 chinook salmon. Although this is an average chinook harvest for the 1979-1986 period (Table 3), a larger than average proportion of the harvest was comprised of immature fish. Night closures were imposed during statistical weeks 28 and 29 to minimize these catches. In addition, the fishing area above Jaw Point was closed during the first two weeks of the fishery to protect mature Taku River chinooks. The Canadian harvest of 233 adult chinook salmon was below the 1979-1986 average harvest of 322 (Table 3). Incidental harvests were minimized by the relatively late fishery opening date, restricted mesh sizes, and limited fishing time allowed early in the season.

The maximum number of large adult chinook salmon observed during aerial surveys in the Nakina and Nahlin River was 4,028 fish. This escapement is 74% of that seen in these systems in 1986 but is approximately equal to the recent ten year average of 4,214 fish (Appendix Table 16).

### Coho

The District 111 drift gill net coho catch of 35,157 is slightly above the recent 1979-1986 average of 31,826 fish, but similar to the 1969-1978 average of 35,127 fish (Table 3). Maximum weekly coho catches occurred in Taku Inlet during statistical weeks 35 and 36 when effort levels were above average. Although weekly coho catches and catch per unit effort were average during this time, the test fishing vessels indicated very few coho and chums were passing through the District 111 gill net area during the

closed periods. Consequently, to conserve coho and chum salmon, area and time restrictions were imposed on the fishery from 6 to 29 September.

The Canadian harvest of 5,599 coho salmon exceeded the 1979-1986 average harvest of 4,760 fish (Table 3). Test fisheries conducted in District 111 and in Canadian portions of the Taku River took 542 and 815 coho salmon, respectively.

Escapement information is incomplete, but late-season aerial surveys of lower river spawning sites indicate an average to above-average escapement in these areas. A preliminary mark-recapture estimate for escapement into Canadian portions of the drainage was made, however this estimate is likely conservative because tagging was terminated prior to the end of the run. The estimated coho escapement past the Canadian fishery was approximately 35,000 to 40,000.

### Chum

The commercial chum salmon harvest in District 111 was 121,630 fish (Table 3), representing the third highest catch in the district since 1960. This harvest was comprised of summer and fall runs. Since 1984, the Snettisham hatchery has significantly increased its contribution of summer chum to the fishery. Preliminary tag return data indicate that of the 57,226 summer chum caught prior to statistical week 34 approximately 13,000 were of hatchery origin.

In statistical week 30, the large hatchery chum return migrating into the district triggered an additional 24 hour fishing period. During this extension, fishing was restricted to Stephens Passage, south of Graves Point, in order to minimize the catch of Taku origin sockeye.

The fall fishery harvests Taku origin chum and coho salmon and chum salmon returning to Port Snettisham. The total fall chum harvest 64,404 is the highest since 1980. However, 57% of the catch was taken in Stephens Passage and Port Snettisham, indicating the primary run strength was returning to Port Snettisham. Extremely poor test fish catches from inside Taku Inlet supports this conclusion. Consequently, fishing time was reduced to 24 hours per week, and Taku Inlet was closed north of a line from Greely to Cooper Points beginning in statistical week 37.

The Canadian commercial fishery harvested 2,270 chum salmon. This number is substantially below the 1979-1986 average of 5,583 fish (Table 3). District 111 and Canadian inriver test fisheries harvested 1,598 and 733 chum, respectively.

Escapement of chum salmon to the Taku River in 1987 is not known. High water conditions in the fall hampered aerial surveys and no population estimate was generated from the adult mark-recapture program. Further analysis of the Canadian test fishery data may produce an estimate of the chum salmon escapement.

## Pink

Based on the extremely large 1985 parent year escapement of pink salmon into the Taku River, the 1987 return was anticipated to be very good. This year's pink catch of 357,708 in District 111 is over twice the 1979-1986 average (Table 3). This catch is comprised of Taku River, Stephens Passage, and hatchery stocks. Additional fishing time or areas were not allowed in Taku Inlet or upper Stephens Passage to harvest this large return. Lower Stephens Passage was open however, during statistical weeks 31 and 32 for a total of nine days to harvest surplus pink salmon returns destined for streams in lower Stephens Passage and Seymour Canal.

Preliminary surveys indicate excellent escapements into the Taku River and Stephens Passage systems, with the Taku River far exceeding its escapement goal of 150,000 to 250,000 pink salmon. An estimate of escapement based on the Canyon Island mark-recapture program should be available prior to the February Commission meeting.

## ALSEK RIVER

Fisheries for Alsek River salmon include an Alaskan set net fishery in Dry Bay at the mouth of the Alsek and Canadian Indian food and sport fisheries in the upper Tatshenshini River drainage. Sockeye and coho salmon are the target species in the Dry Bay fishery with small numbers of chinook and chum salmon taken incidentally. Unknown but presumed small numbers of Alsek River salmon are taken incidentally in several small Yakutat area fisheries. Sockeye and chinook salmon are target species in Canadian fisheries.

### Sockeye

Management objectives for the Alsek River included rebuilding the early portion of the Klukshu River stock and to allow a total sockeye escapement to the Klukshu of 20,000 to 30,000 sockeye. Based on parent year escapements, the 1987 return of early and late run Alsek sockeye was expected to be above average.

The actual 1987 Alsek River return was very disappointing in view of parent year escapements. The 1987 Dry Bay set net catch of 11,299 sockeye was only 41% of the recent ten-year average (Table 5). Over half of the season's catch of sockeye was taken during the first three weeks of the fishery. Fishing time was restricted during most weeks of the sockeye season and the fishery was closed completely during the last week of July (Appendix Table 17).

The sockeye harvest in the Indian food and recreational fisheries in Canada were 1,158 and 383 fish respectively. This represents 30% and 77% of the most recent ten-year averages of 3,805 and 498 fish, respectively (Table 5).

The Klukshu River escapement of 10,504 sockeye was the lowest recorded since the weir was installed in 1976, and represented only 52% of the 1976 to 1986 average escapement (Appendix Table 18).

## Chinook

Chinook spawning escapements in the Klukshu index tributary of the Alsek River for the principal brood years of the 1987 return (1981-83) were about average. However since chinook returns to the Alsek have recently been well below expectations, the U.S. Alsek River fishery was restricted to improve the spawning escapement. The 1987 season opened on 8 June in the Dry Bay area. This opening was one week earlier than the fishery had opened since 1983, but one week later than provided for by regulation. The Dry Bay chinook catch was 345 fish, only 35% of the recent ten-year average (Table 5).

Chinook catches in the Canadian recreational and Indian food fisheries were 327 and 125 fish, respectively (Table 5).

The escapement of chinook salmon to the Klukshu River was 2,616 fish, slightly exceeding the 1976 to 1986 average of 2,478 (Appendix Table 18).

## Coho

The Alsek River coho harvest was extremely poor. The harvest of 2,537 fish was the second lowest since 1975 and represents only 33% of the recent ten-year average (Table 5). This does not necessarily reflect the actual run strength, however. Fishing effort during the fall season was extremely low because of good fishing in the nearby East River.

Table 1. Average catches, days of fishing and effort compared with 1987 values for the District 106, District 108, and Stikine River fisheries.

	Chinook	Sockeye	Coho	Pink	Chum	Days	Boat Days
<b>DISTRICT 106</b>							
1960-1986	1,442	82,162	49,015	278,949	41,672	37	2837
1977-1986	1,475	120,997	60,375	324,450	38,851	32	2260
1987	836	136,427	34,534	243,482	42,025	20	1767
<b>DISTRICT 108</b>							
1960-1986	2,562	13,066	12,218	16,793	49,814	32	820
1977-1986	422	8,807	11,147	8,052	2,968	19	315
1987	149	1,620	1,015	3,331	949	13	81
<b>CANADIAN LOWER RIVER COMMERCIAL</b>							
1979-1986 <sup>1/</sup>	1009	15,852	6,649	1,671	592	39	526
1987	1151	6,138	5,728	646	432	20	287
<b>CANADIAN UPPER RIVER COMMERCIAL</b>							
1972-1986 <sup>1/</sup>	126	866	10	2	0	*	*
1979-1986 <sup>1/</sup>	111	696	7	3	1	5	10
1987	128	498	0	0	19	7	20
<b>CANADIAN UPPER RIVER INDIAN FOOD</b>							
1972-1986	746	3,797	4	25	3		
1979-1986	881	4,603	7	47	5		
1987	1,366	2,979	3	0	8		

<sup>1/</sup> No fishery 1984, in 1979 both lower and upper river commercial catch attributed to lower river commercial catch.

\* Data not available.

Table 2. Preliminary run reconstruction of Stikine River sockeye salmon.

	Tahltan	Non-Tahltan	Total
Escapement	6,958	15,872	22,830
Harvest			
Indian Food	2,680	298	2,978
Upper Commercial	448	50	498
Lower Commercial	1,408	4,730	6,138
Total	4,537	5,077	9,614
% of Harvest	77%	61%	68%
Test Fishery Catch	566	1,100	1,666
Inriver Run	12,060	22,051	34,111
District Harvest			
106	1,030	2,325	3,355
108	292	939	1,231
Total	1,322	3,264	4,586
% of Harvest	23%	39%	32%
Test Fisheries Catch	122	220	342
Total Run	13,504	25,535	39,039
Escapement Goal Range	20,000-40,000	20,000-40,000	
Total Allowable Catch	0	0-5,535	

Table 3. Average catches, days of fishing and effort compared with 1987 values for the District 111 and Taku River fisheries.

	Chinook	Sockeye	-Coho	Pink	Chum	Days	Boat Days
<b>DISTRICT 111 COMMERCIAL</b>							
1969-1978	4,790	58,242	35,127	72,718	82,181 <sup>1/</sup>	32.1	2,529
1979-1986	2,330	81,025	31,826	168,902	79,344	36.5	2,881
1987	2,060	74,525	35,157	357,708	121,630	32.8	2,321
<b>DISTRICT 111 TEST</b>							
1987	0	1,431	542	4,935	1,598	8	16
<b>CANADIAN COMMERCIAL</b>							
1979-1986 <sup>2/</sup>	322 <sup>3/</sup>	17,198	4,760	9,075	5,583	35.3	331.7
1987	233 <sup>3/</sup>	13,554	5,599	6,503	2,270	26.2	281.0
<b>CANADIAN TEST</b>							
1986	0	42	1,292	0	25	44.0	44.0
1987	3	238	815	34	733	58.5	58.5

*includes released fish*

- 1/ Excludes 1975 when fall fishery was not opened.
- 2/ Excludes 1982 when fishery was restricted.
- 3/ Includes jacks.



Table 4. Preliminary run reconstruction statistics for Taku River and Port Snettisham sockeye salmon.

	Taku	Snettisham	Total	% Snett
<b>Harvest</b>				
Dist 111 commercial	47,338	27,187	74,525	36.5
Dist 111 testfish <sup>1/</sup>	909	522	1,431	
Inriver commercial	13,554	0	13,554	
Inriver testfish	238	0	244	
Escapement	76,723	17,158		
Total Run	138,762	44,867		
Escapement				
Goal Range	71-80,000	34,000		
T.A.C.	58,762-67,762	10,867		

1/ Stock composition estimates for commercial harvest were applied to test fishery harvest.

Table 5. Historical average catches, number of days fished, and effort compared with 1987 values for the Alsek River fisheries.

	Chinook	Sockeye	Coho	Pink	Chum	Days	Boat Days
<b>ALASKA COMMERCIAL</b>							
1967-1976	1,011	21,084	5,524	33	178	59.3	*
1977-1986	983	27,400	7,699	293	575	41.3	*
1987	345	11,299	2,537	0	1,922	38.5	379
<b>CANADIAN SPORT</b>							
1977-1986	258	498	115				
1987	327	383	23				
<b>CANADIAN SUBSISTENCE</b>							
1977-1986	125	3,805	5				
1987	125	1,158	0				

\* Data not available.

APPENDIX TABLES

Appendix Table 1. Catches and effort for the District 106 drift gill net fishery (excluding Blind Slough hatchery) 1987.

Week	Start Date	Catch					Effort	
		Chinook	Sockeye	Coho	Pink	Chum	Boats	Days
26	6/21	171	5,149	331	608	499	95	2
27	6/28	152	10,432	982	7,533	1,040	107	2
28	7/05	114	20,745	2,516	25,887	1,888	105	2
29	7/12	67	22,286	3,252	39,224	3,916	156	2
30	7/19	50	24,671	3,771	37,149	5,322	85	2
31	7/26	33	22,998	4,228	34,406	6,598	96	2
32	8/02	69	23,028	5,794	64,996	9,168	110	2
33	8/09	114	6,760	2,918	29,580	4,123	90	1
34	8/16	-	-	-	-	-	-	-
35	8/23	6	261	3,406	2,517	2,062	46	1
36	8/30	7	82	2,624	1,423	1,622	34	1
37	9/06	23	6	2,188	133	2,820	27	1
38	9/13	30	9	2,524	26	2,967	31	2
		836	136,427	34,534	243,482	42,025	20	

Appendix Table 2. Catches and effort for the District 108 drift gill net fishery (excluding Blind Slough hatchery) 1987.

Week	Start Date	Catch					Effort	
		Chinook	Sockeye	Coho	Pink	Chum	Boats	Days
26	6/21	32	189	6	4	15	7	2
27	6/28	13	245	3	84	46	5	2
28	7/05	93	759	7	348	39	10	2
29	7/12	6	423	4	2,889	603	5	2
30	7/19							
31	7/26							
32	8/02			---closed---				
33	8/09							
34	8/16							
35	8/23	0	2	49	2	18	1	1
36	8/30	1	1	218	3	18	4	1
37	9/06	3	1	239	0	11	4	1
38	9/13	1	0	489	1	199	9	2
		149	1,620	1,015	3,331	949	13	

Appendix Table 3. Catches and effort for the Canadian lower river commercial fishery, 1987.

Start Week Date	Catch						Effort		
	Chinook Jacks	Chinook Adults	Sockeye	Coho	Pink	Chum	Boats	Days	
26	6/21								
27	6/28	58	299	179	0	0	1	15	1
28	7/05	81	258	169	0	0	1	16	1
29	7/12	62	227	926	0	25	7	16	1
30	7/19	23	67	1084	0	171	9	16	1
31	7/26	2	22	441	3	63	15	16	1
32	8/02	14	28	2452	20	232	136	16	2
33	8/09	2	7	549	161	90	52	17	1
34	8/16	0	1	248	359	54	32	15	1
35	8/23	0	0	76	417	7	41	14	1
36	8/30	0	0	0	404	0	38	15	2
37	9/06	0	0	8	2287	4	79	15	3
38	9/13	0	0	6	1201	0	20	14	2
39	9/20	0	0	0	876	0	1	9	3
		242	909	6138	5728	646	432	20	

Appendix Table 4. Catches and effort for the Canadian upper river commercial fishery, 1987.

Start Week Date	Catch						Effort		
	Chinook Jacks	Chinook Adults	Sockeye	Coho	Pink	Chum	Boats	Days	
26	6/21								
27	6/28	0	25	1	0	0	0	2	1
28	7/05	0	21	0	0	0	0	2	1
29	7/12	19	24	31	0	0	0	2	1
30	7/19	0	14	209	0	0	0	4	1
31	7/26	0	20	99	0	0	0	4	1
32	8/02	0	1	137	0	0	19	2	1
33	8/09	0	4	21	0	0	0	4	1
34	8/16								
		19	109	498	0	0	19	7	

Appendix Table 5. Telegraph Creek food fishery catches.

Week	Start Date	Catch					Effort Days	
		Chinook Jacks	Chinook Adults	Sockeye	Coho	Pink		Chum
23	5/31	0	4	0	0	0	0	7
24	6/07	2	27	0	0	0	0	7
25	6/14	24	186	3	0	0	0	7
26	6/21	18	91	2	0	0	0	7
27	6/28	0	44	0	0	0	0	7
28	7/05	60	252	56	0	0	0	7
29	7/12	51	300	638	0	0	0	7
30	7/19	6	164	969	0	0	0	7
31	7/26	10	66	586	0	0	0	7
32	8/02	6	40	636	2	0	8	7
33	8/09	6	9	89	1	0	0	7
		183	1,183	2,979	3	0	8	

Appendix Table 6. Catches and effort for the lower river Stikine drift gill net and set gill net fishery, 1987.

Start Week Date	Catch					Effort
	Chinook	Sockeye	Coho	Pink	Chum	# Drifts or Sets
<b>DRIFT GILL NET</b>						
26 6/21	46	8				60
27 6/28	12	5				60
28 7/05	37	56				60
29 2512	25	76		1	6	60
30 7/19	5	100		44	7	60
31 7/26	22	69	1	13	13	60
32 8/02	1	38	2	22	8	50
33 8/09	1	31	12	22	8	60
34 8/16	0	6	25	1	6	60
35 8/23		1	32	7	8	60
36 8/30		0	30	1	3	50
37 9/06		0	19		2	40
38 9/13		0	25			50
39 9/20		0	16			40
40 9/27		0	1			30
41 10/04		0	1			35
<b>Total</b>	<b>149</b>	<b>390</b>	<b>164</b>	<b>111</b>	<b>61</b>	<b>845</b>
<b>SET GILL NET</b>						
26 6/21	9	24				4
27 6/28	17	24				9
28 7/05	28	153		5	2	10
29 7/12	14	218		18	4	10
30 7/19	7	195		172	13	10
31 7/26	1	214	4	177	40	10
32 8/02	2	232	19	121	43	8
33 8/09	3	132	83	53	48	10
34 8/16	1	78	124	30	26	10
35 8/23		12	100	12	4	10
36 8/30		4	187	3	8	10
37 9/06		1	108	2	5	8
<b>Total</b>	<b>72</b>	<b>1287</b>	<b>625</b>	<b>593</b>	<b>193</b>	<b>109</b>

Appendix Table 7. Catches and effort for the District 106 test fisheries, 1987.

Start Week Date	Catch					Effort	
	Chinook	Sockeye	Coho	Pink	Chum	Boats	Sets
25 6/14	1	102	7	8	2	1	2
26 6/21	4	135	5	63	11	1	2
27 6/28	4	424	18	370	33	1	2
28 7/05	4	503	62	1,461	29	1	4
29 7/12	2	485	94	700	91	1	4
30 7/19	2	498	68	617	115	1	4
31 7/26	0	466	80	826	144	1	4
32 8/02			No Fishing				
33 8/09			No Fishing				
34 8/16	0	15	165	11	75	1	2
35 8/23	1	6	268	12	138	1	2
36 8/30	0	0	86	3	91	1	2
	18	2,634	853	4,071	729		

Appendix Table 8. Catches and effort for the District 108 test fisheries, 1987.

Start Week Date	Catch					Effort	
	Chinook	Sockeye	Coho	Pink	Chum	Boats	Sets
25 6/14	1	8	0	0	0	1	1
26 6/21	7	19	0	0	4	1	1
27 6/28	2	30	0	36	32	1	1
28 7/05	2	72	0	180	35	1	1
29 7/12	1	75	0	471	81	1	2
30 7/19	0	31	2	423	175	1	1
31 7/26	0	36	9	367	93	1	2
32 8/02	0	0	0	75	0	1	1
	13	271	11	1,552	420		

Appendix Table 9. Catches and effort for the mouth of the Stikine River set net test fishery, 1987.

Week	Start Date	Catch					Effort
		Chinook	Sockeye	Coho	Pink	Chum	Hours
27	6/28	2	2	0	0	0	105
28	7/05	2	6	0	8	0	145
29	7/12	5	24	0	101	11	170.5
30	7/19	2	5	0	100	4	154.5
31	7/26	0	7	0	113	13	129.75
32	8/02	0	4	0	89	20	73
		11	48	0	411	49	777.75

Appendix Table 10. Tahltan weir counts of sockeye salmon, 1987.

Date	Daily Count	-Cumulative- Count	%	Date	Daily Count	-Cumulative- Count	%
07/21	1	1	0.0	08/09	423	5502	79.1
22	0	1	0.0	10	217	5719	82.2
23	6	7	0.1	11	208	5927	85.2
24	16	23	0.3	12	185	6112	87.8
25	714	737	10.6	13	177	6289	90.4
26	684	1421	20.4	14	132	6421	92.3
27	281	1702	24.5	15	177	6598	94.8
28	105	1807	26.0	16	76	6674	95.9
29	17	1824	26.2	17	25	6699	96.3
30	62	1886	27.1	18	45	6744	96.9
31	416	2302	33.1	19	18	6762	97.2
08/01	485	2787	40.1	20	76	6838	98.3
02	510	3297	47.4	21	50	6888	99.0
03	170	3467	49.8	22	12	6900	99.2
04	95	3562	51.2	23	24	6924	99.5
05	324	3886	55.8	24	11	6935	99.7
06	392	4278	61.5	25	10	6945	99.8
07	298	4576	65.8	26	5	6950	99.9
08	503	5079	73.0	27	8	6958	100.0

Appendix Table 11. Catches and effort for the District 111 drift gill net fishery, 1987.

Week	Start Date	Catch					Effort	
		Chinook	Sockeye	Coho	Pink	Chum	Boats	Days
26	6/21	494	2,611	99	893	328	50	3.0
27	6/28	510	6,195	287	17,477	2,184	54	3.0
28	7/05	155	5,331	220	35,931	6,158	68	2.3
29	7/12	15	13,578	127	47,392	2,958	69	1.5
30	7/19	249	15,457	1,309	118,446	25,521	82	3.0
31	7/26	122	14,035	2,064	92,419	13,551	97	3.0
32	8/02	73	9,521	1,687	28,109	3,135	56	3.0
33	8/09	59	4,142	2,878	10,846	3,391	52	3.0
34	8/16	102	1,990	2,416	5,046	5,785	86	2.0
35	8/23	149	1,414	9,239	1,076	25,039	121	2.0
36	8/30	84	211	8,491	72	19,057	153	2.0
37	9/06	41	34	4,731	1	11,021	66	2.0
38	9/13	7	3	824	0	2,109	19	1.0
39	9/20	0	3	626	0	1,273	10	1.0
40	9/27	0	0	159	0	120	5	1.0
		2,060	74,525	35,157	357,708	121,630	32.8	

Appendix Table 12. Catches and effort for the District 111 drift gill net test fishery, 1987.

Week	Start Date	Catch					Effort	
		Chinook	Sockeye	Coho	Pink	Chum	Boats	Days
28	7/05	0	166	4	1,218	77	2	1.0
29	7/12	0	544	22	1,152	160	2	1.0
30	7/19	0	392	8	1,663	166	2	1.0
31	7/26	0	317	35	902	74	2	1.0
35	8/23	0	5	35	0	177	2	1.0
36	8/30	0	4	178	0	217	2	1.0
37	9/06	0	2	104	0	245	2	1.0
38	9/13	0	1	156	0	482	2	1.0
		0	1,431	542	4,935	1,598	8.0	



Appendix Table 13. Catches and effort for the Taku River gill net fishery, 1987.

Week	Start Date	Catch					Effort		
		Chinook Jacks	Chinook Adults	Sockeye	Coho	Pink	Chum	Boats	Days
27	6/29	18	37	178	0	24	0	11	1.0
28	7/06	54	39	508	2	622	0	13	1.0
29	7/13	26	26	782	15	4,423	0	13	2.0
30	7/20	6	18	4,621	160	1,115	5	12	3.0
31	7/27	0	1	751	77	0	0	12	2.0
32	8/03	2	5	4,118	768	61	15	12	4.0
33	8/10	0	1	1,577	625	5	19	13	2.0
34	8/17	0	0	624	596	0	16	13	1.0
35	8/24	0	0	195	385	0	36	12	1.0
36	8/31	0	0	148	1,017	0	152	12	2.0
37	9/07	0	0	30	587	0	472	11	2.0
38	9/14	0	0	16	524	0	831	5	2.2
39	9/21	0	0	6	843	0	724	5	3.0
		106	127	13,554	5,599	6,250	2,270	26.2	

Appendix Table 14. Estimated proportion of Taku River sockeye salmon in the Alaskan District 111 harvest, based on scale pattern analysis, 1983 - 1987.

Stat Week	Year				
	1983	1984	1985	1986	1987 <sup>1/</sup>
25		0.970	0.999	0.938	
26	0.996	0.956	0.986	0.953	0.848
27	0.842	0.843	0.928	0.873	0.834
28	0.819	0.670	0.974	0.880	0.673
29	0.663	0.588	0.868	0.852	0.777
30	0.527	0.712	0.706	0.777	0.391
31	0.836	0.728	0.737	0.851	0.602
32	0.534	0.809	0.826	0.757	0.660
33	0.719	0.726	0.801	0.893	0.662
34-	0.759	0.726	0.801	0.739	0.629
Total	0.755	0.758	0.838	0.834	0.635

<sup>1/</sup> Preliminary data.

Appendix Table 15. Salmon counts at Taku River and Port Snettisham weirs, 1983-1987.

Species System	1983	1984	1985	1986	Average	1987
<b>Sockeye</b>						
Trapper Lake	7,502	13,084	14,889	13,820	12,324	12,007
Tatsamenie L.			13,015	11,368	12,192	2,794
Hackett River			2,309	1,004	1,657	910
Speel Lake	10,484	9,764	7,073	5,857	8,295	9,319
Crescent Lake	19,422	6,707	7,249	3,414	9,198	7,839
<b>Coho</b>						
Tatsamenie L. <sup>1/</sup>			106	80	93	173
Hackett River			1,031	2,723	1,877	1,715

<sup>1/</sup> Weir was removed prior to end of coho run.

Appendix Table 16. Peak escapement counts of chinook salmon in selected Taku River tributaries.

Year	Nakina	Nahlin	Combined
1977	3,850	650	4,500
1978	1,620	624	2,244
1979	2,110	857	2,967
1980	4,500	1,531	6,031
1981	5,110	2,945	8,055
1982	2,533	1,246	3,779
1983	968	391	1,359
1984	1,887	951	2,838
1985	2,647	2,236	4,883
1986	3,868	1,612	5,480
<b>Average</b>			
1977-1986	2,909	1,304	4,214
1987	2,906	1,122	4,028

Appendix Table 17. Catches and effort for the Alaskan Alsek River set gill net fishery, 1987.

Week	Start Date	Catch					Effort	
		Chinook	Sockeye	Coho	Pink	Chum	Boats	Days
24	6/07	16	407	0	0	0	18	0.5
25	6/14	206	3,578	0	0	0	24	2.0
26	6/21	106	2,326	0	0	0	27	3.0
27	6/28	17	1,292	0	0	0	23	2.0
28	7/05	0	1,256	0	0	1	18	1.0
29	7/12	0	1,128	0	0	0	18	2.0
30	7/19	0	0	0	0	0	0	0.0
31	7/26	0	388	0	0	0	3	1.0
32	8/02	0	427	0	0	0	4	1.0
33	8/09	0	341	5	0	4	7	1.0
34	8/16	0	115	26	0	5	4	3.0
35	8/23	0	29	68	0	3	5	3.0
36	8/30	0	8	56	0	4	4	3.0
37	9/06	0	1	2	0	1	1	4.0
38	9/13	0	2	741	0	440	9	4.0
39	9/20	0	0	960	0	752	7	4.0
40	9/27	0	1	679	0	712	5	4.0
		345	11,299	2,537	0	1,922	38.5	

Appendix Table 18. Klukshu River weir counts of chinook, sockeye, and coho salmon, 1976 to 1986.

Year	Chinook	Sockeye	Coho <sup>1/</sup>
1976	1,244	11,691	1,572
1977	3,144	26,791	2,758
1978	2,976	26,867	30
1979	4,403	12,311	175
1980	2,637	11,750	704
1981	2,113	20,348	1,170
1982	2,369	33,699	189
1983	2,537	20,492	303
1984	1,672	12,727	1,402
1985	1,458	18,620	350
1986	2,709	24,850	71
Average	2,478	20,014	793
1987	2,616	10,504	202

<sup>1/</sup> Weir was removed prior to end of coho run.