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A STUDY OF CHINOOK SALMON IN SOUTHEAST ALASKA

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ABSTRACT

The 1986 observed escapement of 18,206 chinook salmon (*Oncorhynchus tshawytscha* Walbaum) into the 11 index systems monitored annually in south-east Alaska was 12.9 percent over the escapement goal of 6,850 in index systems from the Stikine River south, but was 39.2 percent below the goal of 17,225 in index systems north of the Stikine River to Yakutat. In the transboundary rivers, chinook salmon index escapements during 1986 increased over 1985 levels in the Taku (+12 percent) and Alsek (+90 percent) Rivers, but decreased in the Stikine River (-22 percent). Escapements to the four Behm Canal index systems (Unuk, Chickamin, Keta, and Blossom Rivers) continued the pattern of good returns experienced since 1982, and management escapement goals were achieved.

Coded wire tag returns from chinook salmon tagged as juveniles indicate that most Taku River and upriver Stikine River chinook salmon rear offshore and are mostly available to southeast Alaska fisheries during the spring of their final year of life as they migrate towards the spawning grounds, while Chickamin and Unuk River chinook salmon are available to Southeast fisheries throughout their marine life history.

In the spring of 1986, 5,932 age 1 chinook salmon smolts were tagged in the Unuk River, 4,435 in the Chickamin River, and in the fall, 5,221 age 0 chinook were tagged in the Alsek River to determine their migration patterns, areas and timing of harvest, exploitation rates, and other general life history information. An additional 8,693 coho salmon smolts (*Oncorhynchus kisutch* Walbaum) were captured incidentally, adipose clipped, and micro-wire tagged in the Unuk and Chickamin Rivers.

KEY WORDS: Chinook, *Oncorhynchus tshawytscha*, escapement, juveniles, coded wire tagging, migration, status, Taku, Stikine, Alsek, Unuk, Chickamin, Situk, Chilkat, southeast Alaska.

INTRODUCTION

The chinook salmon research project commenced in 1971 to determine the status of southeast Alaska's wild chinook salmon stocks. Major emphasis has been placed on monitoring population dynamics, i.e., terminal gill net harvests, escapement enumeration, coded wire tagging, and fishery and spawning ground tag recoveries in major and medium producing chinook salmon systems.

By the mid-1970's, it was apparent that chinook salmon populations were generally depressed throughout Southeast and, during subsequent years, terminal gill net fisheries were either severely restricted or eliminated on the Taku, Stikine, and Alsek Rivers. Additional sport and commercial trolling restrictions have been made to protect mature chinook salmon during their spring spawning migration. These restrictive regulations have aided the rebuilding process and, in general, escapement levels have shown dramatic improvement. Eleven index areas in 10 chinook salmon systems have been monitored annually to determine escapement trends (Figure 1).

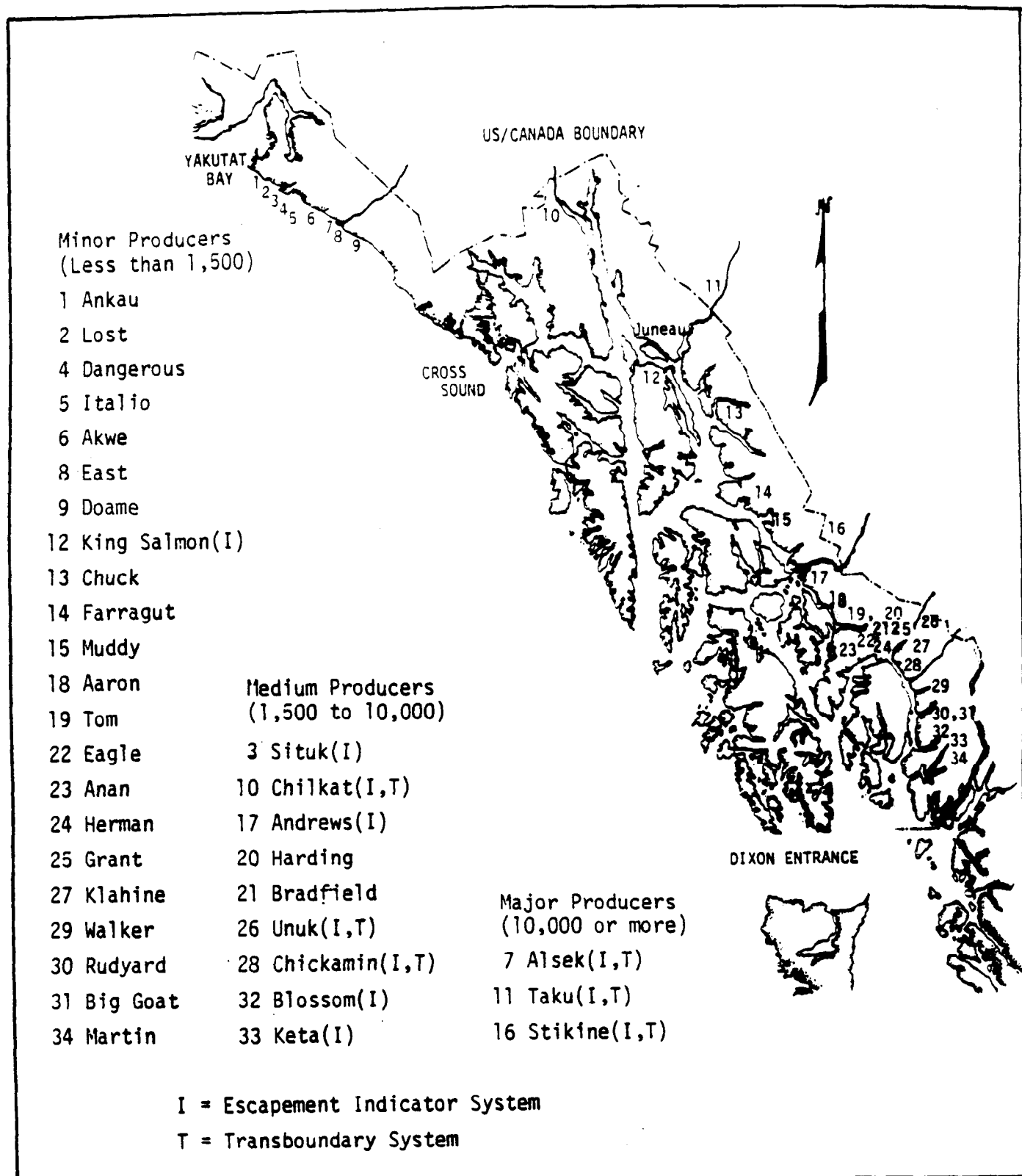


Figure 1. Approximate locations of natural chinook salmon systems in southeast Alaska and transboundary areas. (ADF&G 1/87)

The objectives of this report are to document (1) escapements of chinook salmon in the Taku River, Stikine River, Alsek River, Unuk River, Chickamin River, Situk River, and in six other systems in southeast Alaska, and (2) contributions of chinook salmon from the Taku, Stikine, Alsek, Unuk, Chickamin, and Situk rivers to southeast Alaska sport and commercial fisheries.

METHODS

Coded Wire Tagging of Juvenile Chinook Salmon

Fifty to 100 Gee minnow traps, baited with clusters of salmon roe, were used to capture juvenile salmonids in the Unuk, Chickamin, Klukshu, and Tatshenshini Rivers. Traps were checked, the juveniles removed, and the traps rebaited and reset on a daily basis. Salmon roe used as bait was disinfected with diluted betadyne at a ratio of one part betadyne per 90 parts water for 15 minutes. Captured juvenile chinook salmon were transported from capture sites to central tagging locations on each river in live-boxes, tagged, and released above or below the trapping areas to reduce the number of recaptures.

Chinook salmon smolts and rearing juveniles were anesthetized with tricaine methanesulfonate (MS-222), marked by removal of the adipose fin, and micro-wire tagged with a Northwest Marine Technology, Inc. (NMT) tag injector. The tagging unit was modified to function under remote conditions by conversion to a 24-volt battery system (Koerner 1977).

The micro-wire tags were made of type 302 stainless steel wire and were 0.25 mm in diameter and 1.0 mm in length. A binary code was etched into the surface of each wire to identify the agency conducting the tagging and the specific treatment of the individual.

The micro-wire tags must be implanted in the cartilaginous wedge of the fish's snout to obtain maximum retention. Thus, several fish were sampled daily to ensure proper tag placement. The fish's skull was bisected by a vertical incision through the dorsal median plane to the oral cavity. The tag was then readily observed in the snout. If the tag was improperly placed, adjustments in the depth of the head mold were made and several more fish were checked to ensure proper placement of the tag.

The micro-wire tags were magnetized by dropping the tagged fish head first through a ring magnet into a bucket of water. The fish were then passed through a NMT field sampling detector to check for the presence of a magnetized tag.

All juvenile salmonids recaptured without an adipose fin during tagging projects were checked with the NMT field sampling detector to determine the percentage that had retained a coded wire tag. The total number of chinook salmon tagged was then adjusted to account for this inriver tag loss percentage.

One hundred chinook and coho salmon juveniles were sampled for lengths during each tagging session. Fish were measured from the tip of the snout to the fork of the tail to the nearest millimeter.

Recovery of Adult Coded Wire Tagged Chinook Salmon

From 29 July to 25 August 1986, a tripod weir was operated by the Canadian Department of Fisheries and Oceans (CDFO) on the Nakina River, approximately 137 meters above its junction with the Silver Salmon River. Chinook salmon spawning above the weir were enumerated after they could no longer maintain station in the river and floated against the weir face. All species were enumerated and all chinook salmon were measured from post orbit to hypural (to the nearest millimeter) and the sex and flesh color determined. Since the type of length measurement used this year (post orbit to hypural) was different from that used in previous years (mid-eye to fork of tail), 200 chinook were measured using both types of measurements. Least squares linear regressions were then computed to convert the post orbit to hypural lengths into mid-eye to fork lengths. This allowed comparisons to length data from previous years.

Fifty scale samples were collected from both sexes for each 25 mm length increment beginning at 225 mm. The age composition of each 25 mm length interval for each sex was used to estimate the age of the remainder of the samples, where only a length measurement was secured. Chinook salmon were also examined for missing adipose fins, which indicated the presence of a coded wire tag. Foot surveys of the upper river were conducted daily to enumerate and sample spawned-out chinook salmon which had not floated downstream to the weir. The survey area extended approximately 2.4 kilometers above the Nakina weir.

The length frequency, age, and sex data from the 3- and 4-ocean adults sampled at the weir were used to apportion the age and sex of the large chinook salmon observed during the peak helicopter survey of the Nakina River index area (see next section). The total number of 1- and 2-ocean jacks spawning with the 3- and 4-ocean chinook salmon adults observed during the peak helicopter survey was derived by utilizing the ratio of 1- and 2-ocean jacks per large spawner data collected at the carcass weir.

Small carcass weirs constructed with metal pipe and hardware cloth were operated by project personnel on Cripple Creek, a major tributary to the Unuk River, from 3 August to 20 August. The weirs were checked and cleaned on a daily basis and dead or near dead chinook were sampled for length, sex, age, and coded wire tags at the weirs and during frequent upstream foot surveys. Additional foot surveys were conducted on Genes Lake Creek, Lake Creek, Clear Creek, and Eulachon Creek as time permitted.

Only dead or near dead fish were sampled during foot surveys on the spawning grounds to collect age, length, and sex data and to recover coded wire tagged chinook salmon. Chinook salmon of all sizes and ages were sampled.

Sampled chinook salmon were measured from mid-eye to fork of tail and scales were collected for age determination. Two scales were taken from the left side of the fish at the posterior edge of the dorsal fin, two rows above the lateral line. Because of the high occurrence of regeneration in

chinook salmon scales, two additional scales were removed from the same area on the other side of the fish and placed on numbered scale cards.

Enumeration of Adult Chinook Salmon

Escapement surveys were conducted on foot or from a Bell 206 or Hughes 500D helicopter during peak spawning based on historical timing data, including previous surveys and the timing of die-off observed at weirs. The helicopter flew 6 to 15 meters above the river bed at 8 to 16 kilometers per hour. The observer's door was removed and the helicopter hovered sideways with observations made from the open space. Wherever possible, the sun was kept behind the helicopter and the observer wore polaroid sunglasses to eliminate severe reflection. Only 3- and 4-ocean chinook salmon (i.e. adults which are usually > 660 mm in total length) were enumerated during aerial and foot surveys. Additional surveys were conducted if conditions were not rated excellent or good.

Adult chinook salmon were enumerated in 31 areas on nine river systems in southeast Alaska. In the Taku River system, aerial counts were conducted on the Nakina, Nahlin, Tatsamenie, Dudidontu, Kowatua, and Tseta Rivers. A carcass weir was also operated in the Nakina River, and the Nakina and Nahlin River counts were used as index counts for management of fisheries utilizing Taku River stocks.

In the Stikine River, aerial surveys were conducted on the Little Tahltan River, Beatty Creek, and on a section of the mainstem Tahltan River. A foot survey was conducted on Andrew Creek. A weir was also operated by the CDFO in the Little Tahltan River, and the Little Tahltan chinook salmon counts were used as an index of the escapements in the upper river, while the Andrew Creek count was used as an index for the lower part of the Stikine system.

In the Alsek River system, aerial surveys were conducted on the Takhanne River, Blanchard River, and Goat Creek; and a weir was operated on the Klukshu River by the CDFO. The Klukshu weir count was used as the index of chinook salmon escapement in the Alsek River system.

On the Unuk River system, aerial and/or foot surveys were conducted on Cripple Creek, Genes Lake Creek, Kerr Creek, Clear Creek, Lake Creek, and Eulachon River. The sum of these counts was used as an index of the chinook salmon escapement in the Unuk River.

On the Chickamin River system, aerial surveys were conducted in the South Fork of the Chickamin River, in the Leduc River, and in Barrier, Butler, Indian, King, and Clear Falls Creeks. The sum of these counts was used as an index of chinook escapement for the Chickamin River system.

Big Boulder Creek and Stonehouse Creek in the Chilkat River system were aerially surveyed and the Big Boulder Creek count was used as an index of chinook salmon escapement into the Chilkat system.

Aerial surveys covering entire river systems were conducted in the Blossom, the Keta, and the King Salmon Rivers. A weir was also operated in the King

Salmon River by the Alaska Department of Fish and Game's Fisheries Rehabilitation, Enhancement, and Development Division (FRED).

RESULTS

Taku River Studies

The Taku River (Figure 2), which discharges its flow into the Pacific Ocean approximately 48 kilometers east of Juneau, Alaska, originates in the high plateau country of northwestern British Columbia and drains an area of approximately 16,576 square kilometers. The drainage above the abandoned community of Tulsequah, British Columbia, remains in pristine condition as mining, logging, or other land use activities have never been permitted. The area is among the most remote in British Columbia, with no highway access and no year-around residents.

Two major clear-water tributaries, the Nakina and Nahlin Rivers, contribute less than 25% of the total discharge, with most of the remainder originating from ice fields on the eastern slope of the Coast Range.

Escapement:

The observed escapement of 7,520 3- and 4-ocean chinook salmon into index tributaries of the Taku River was the third largest observed since 1958. The sum of escapements (3,652 chinook salmon) to index tributaries in the Inklin drainage (Nahlin, Dudidontu, Tseta, Kowatua, and Tatsamenie Rivers) was about the same as the escapement to the Nakina River - 3,868 chinook salmon (Appendix Table 1).

Length information collected by the CDFO at the Nakina carcass weir during 1986 was converted from post orbit to hypural lengths to mid-eye to fork lengths by using standard regression analysis techniques (Snedecor and Cochran 1967) applied to a sample of 200 chinook salmon. Comparison of the regression lines for 146 male chinook and 54 female chinook using two-tailed F-tests indicated that the slopes of the two regression lines were significantly different at the 95% level. Hence, separate regression lines were used to convert male and female lengths, respectively. The regression equations used for the conversions were $Y = 1.145751 X + 2.572171$ ($n = 146$, $R\text{-squared} = 0.998$) for males, and $Y = 1.081053 X + 39.35662$ ($n = 54$, $R\text{-squared} = 0.909$) for females. The resulting length frequency distributions are compared to information from previous years in Figures 3 and 4 and Appendix Tables 2 and 3 and illustrate that the 1- and 2-ocean male chinook salmon (commonly called jacks and usually <660 mm) component of the escapement varies widely from one year to the next, while the female length distribution is less variable and more nearly approximates a normal distribution.

A subsample of chinook salmon scales was also collected to estimate the age composition by sex within 25 mm length intervals. The 1986 data for male and female chinook sampled are compared with data from previous years in Appendix Tables 4 and 6, respectively. Appendix Tables 5 and 7 compare the percent composition within each 25 mm length interval of the various age

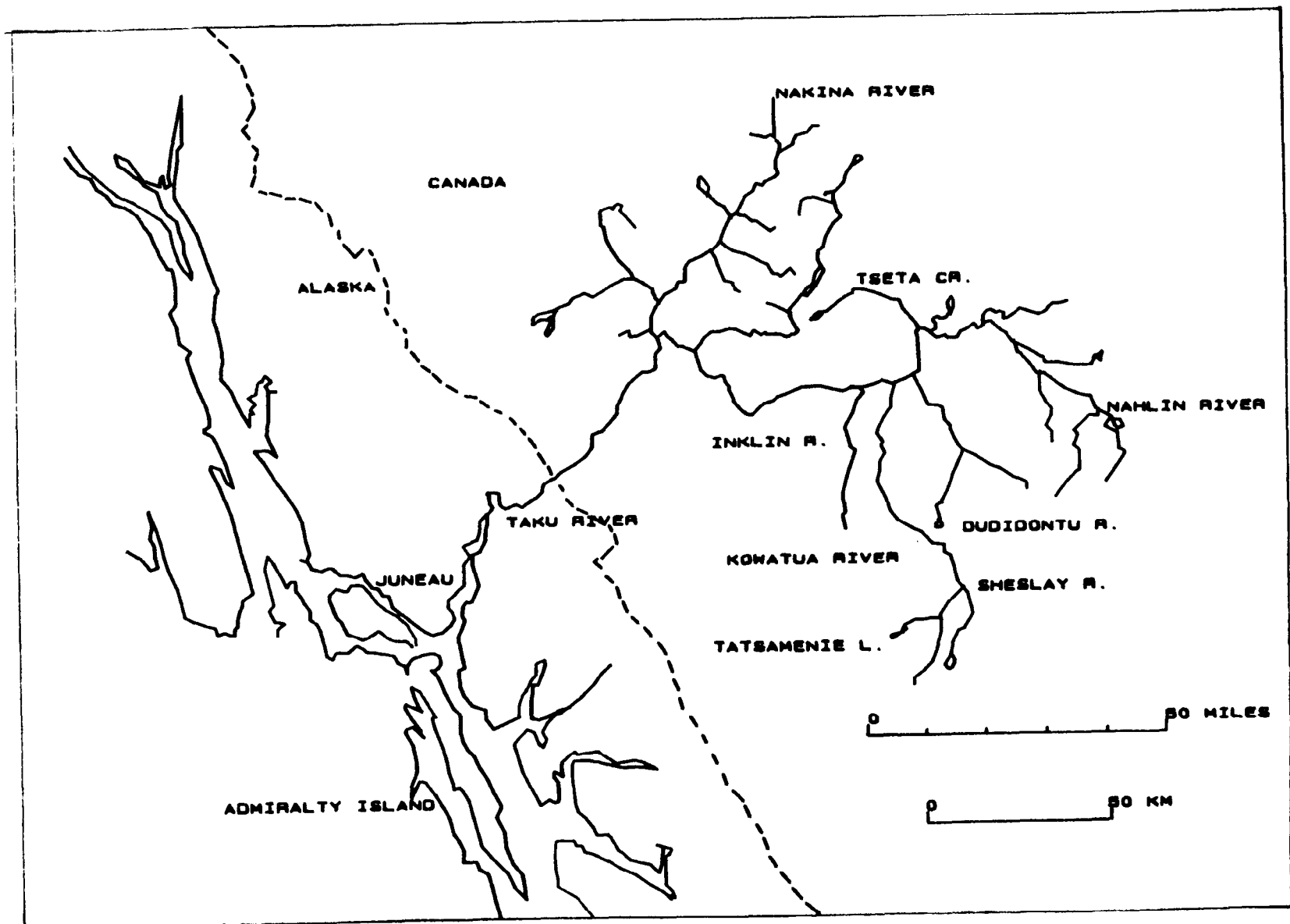


Figure 2. Taku River system.

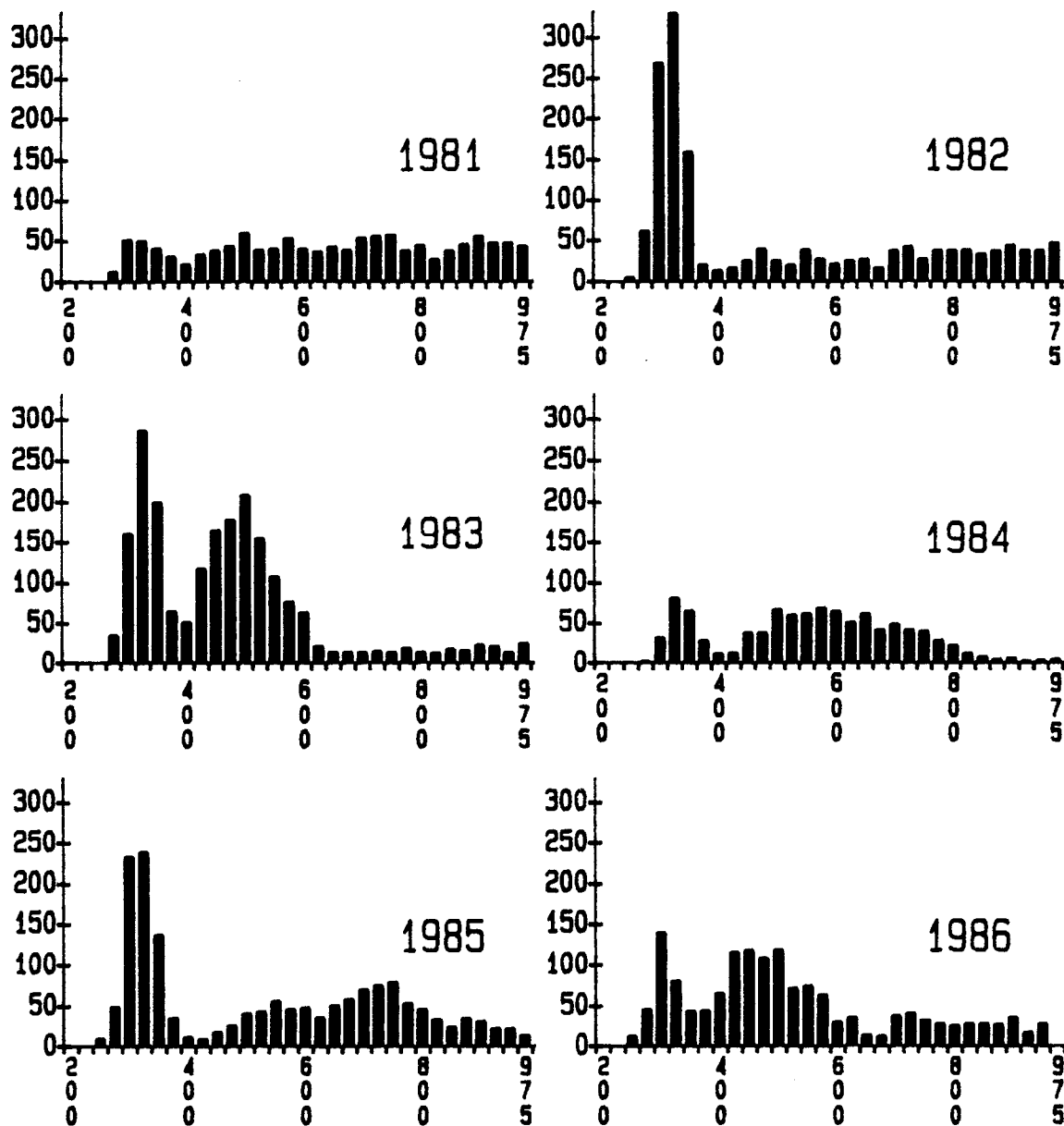


Figure 3. Length Frequency Distributions (25mm intervals from 200mm to 975mm) of Male Chinook Salmon Sampled at the Nakina Carcass Weir (1981 - 1986).

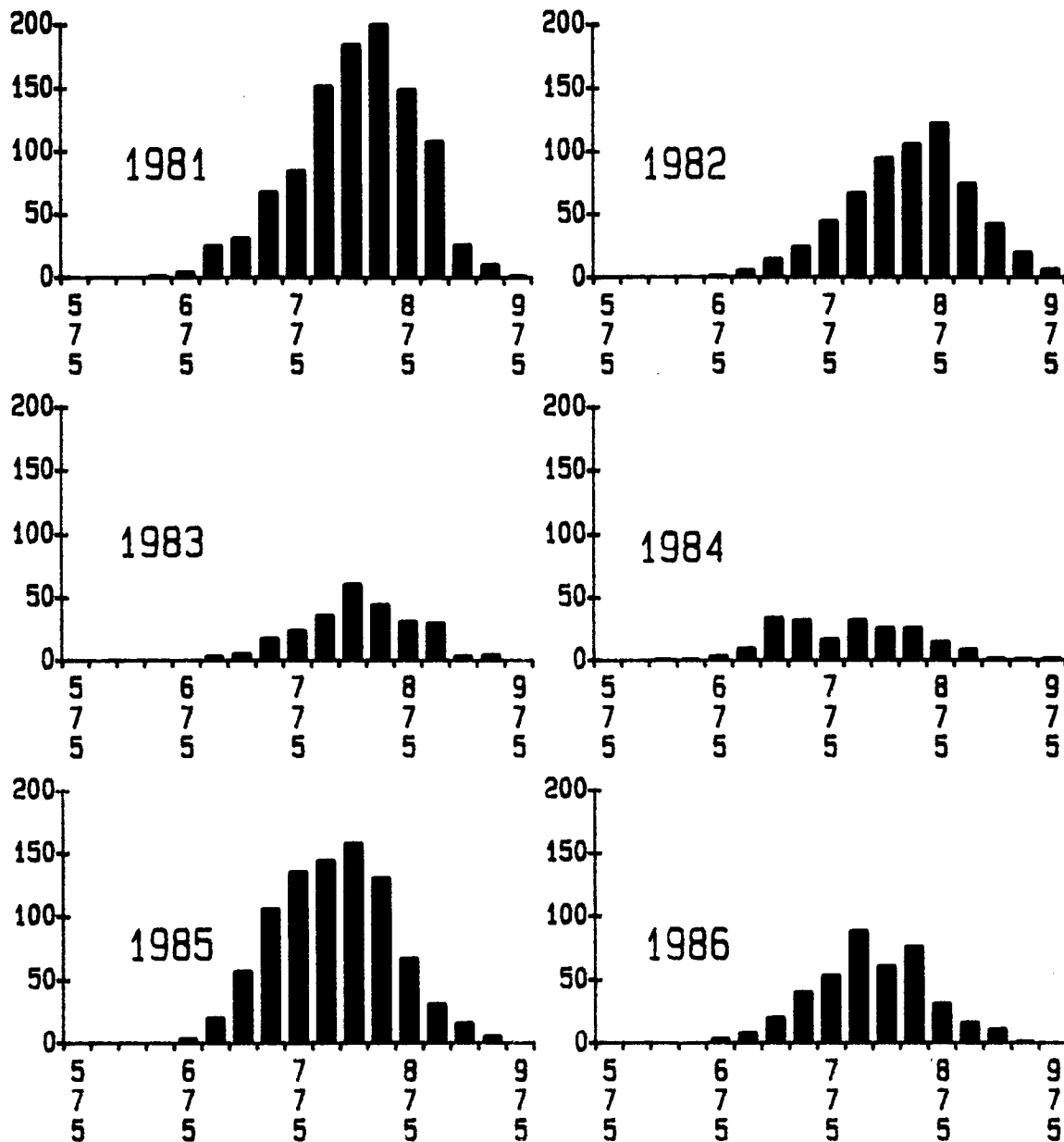


Figure 4. Length Frequency Distributions (25mm intervals from 575mm to 975mm) of Female Chinook Salmon Sampled at the Nakina Carcass Weir (1981 - 1986).

classes for male and female chinook salmon. The information from this subsample, which reflects the distribution of age classes within 25 mm length intervals, was then applied to the total length frequency distribution, which is assumed to be representative of the entire Nakina River escapement, to estimate the age composition by sex. Applying this age composition to the peak escapement count indicates that the 1986 chinook salmon escapement was comprised of 15.2% age 1.1 males (1983 brood year), 41.8% age 1.2 males (1982 brood year), 11.5% age 1.3 males (1981 brood year), 9.9% age 1.4 and older males, 4.4% age 1.3 females, and 17.2% age 1.4 and older females (Appendix Tables 8, 9, and 10). The strong return of 1982 brood males (41.8%) suggests that the 1987 return of 1982 brood chinook salmon will be above average, while the 1981 brood returning in 1987 will be about average or below.

Figures 5 and 6 illustrate the daily die-off rates of spawned-out male and female chinook salmon at the Nakina weir, 1981-1986, and the similarities between years. This information has been recorded from 1973 through 1986 and is presented in tabular form in Appendix Tables 11 and 12. Along with historical escapement data, die-off rates are used to determine the optimum times for escapement surveys, as well as to document that surveys were conducted during the peak of the escapement.

Coded Wire Tag Recovery:

Coded wire tagging of Taku River chinook salmon was conducted from 1977 through 1983 (1975 through 1981 broods). A total of 35,765 chinook salmon smolts and 162,513 young-of-the-year were adipose clipped and coded wire tagged (Appendix Table 13). A total of four Taku River chinook salmon that were coded wire tagged as juveniles were recovered in various sport and commercial fisheries during 1986, and five tags were recovered on the spawning grounds (Appendix Table 14). To date, 98 coded wire tagged Taku River chinook salmon have been recovered in various southeast Alaska commercial and sport fisheries, and 242 coded wire tags have been recovered on the spawning grounds (Table 1).

Sport and commercial coded wire tag recoveries have shown that Taku River chinook salmon are mostly available to southeast Alaska fisheries during the spring of their final year of life as they migrate back through the waters of southeast Alaska to return to their spawning grounds. Of all coded wire tag recoveries in various sport and commercial troll fisheries, 53% occurred in commercial fishing districts 111, 113, 114 or 116 (Figure 7). These districts are the approaches to Icy Strait, and the Juneau area. Spring troll closures of these areas during 1981 through 1986 have kept the exploitation rate at low levels. Small numbers of returning Taku chinook salmon appear to migrate by Cape Ommaney, north through Frederick Sound, and north through Stephens Passage to the Taku River.

The first recovery of a Taku River chinook salmon (age 6) in the northern British Columbia troll fishery occurred in 1985. In addition, one recovery of an age 6 chinook has occurred in commercial fishing district 104, which is off the west coast of Prince of Wales Island. There have been no coded wire tag recoveries of Taku River chinook salmon from other age classes in this area, thus, it is probable that these maturing fish have migrated far

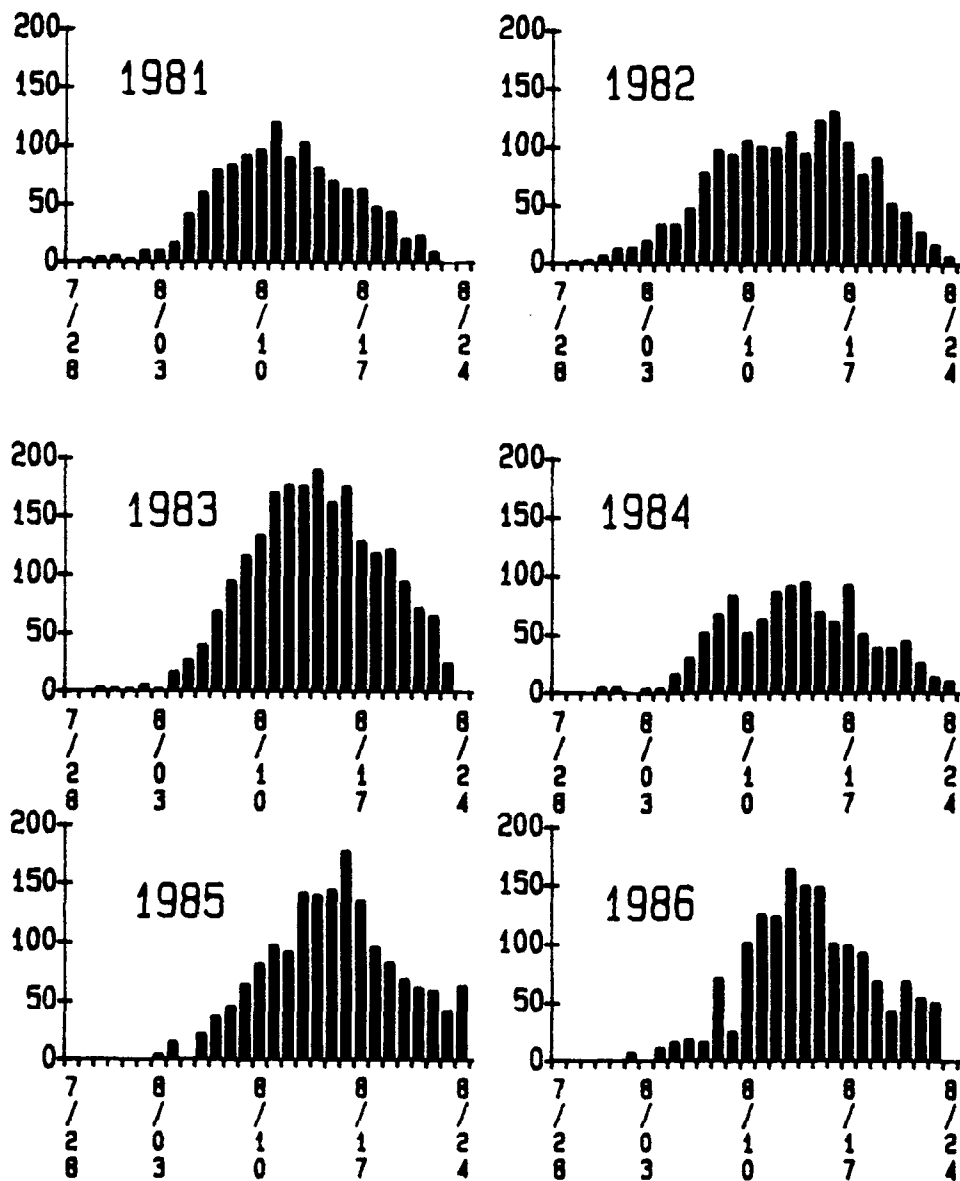


Figure 5. Timing of Die-off of Male Chinook Salmon at the Nakina Carcass Weir, July 28 - August 24, 1981 - 1986.

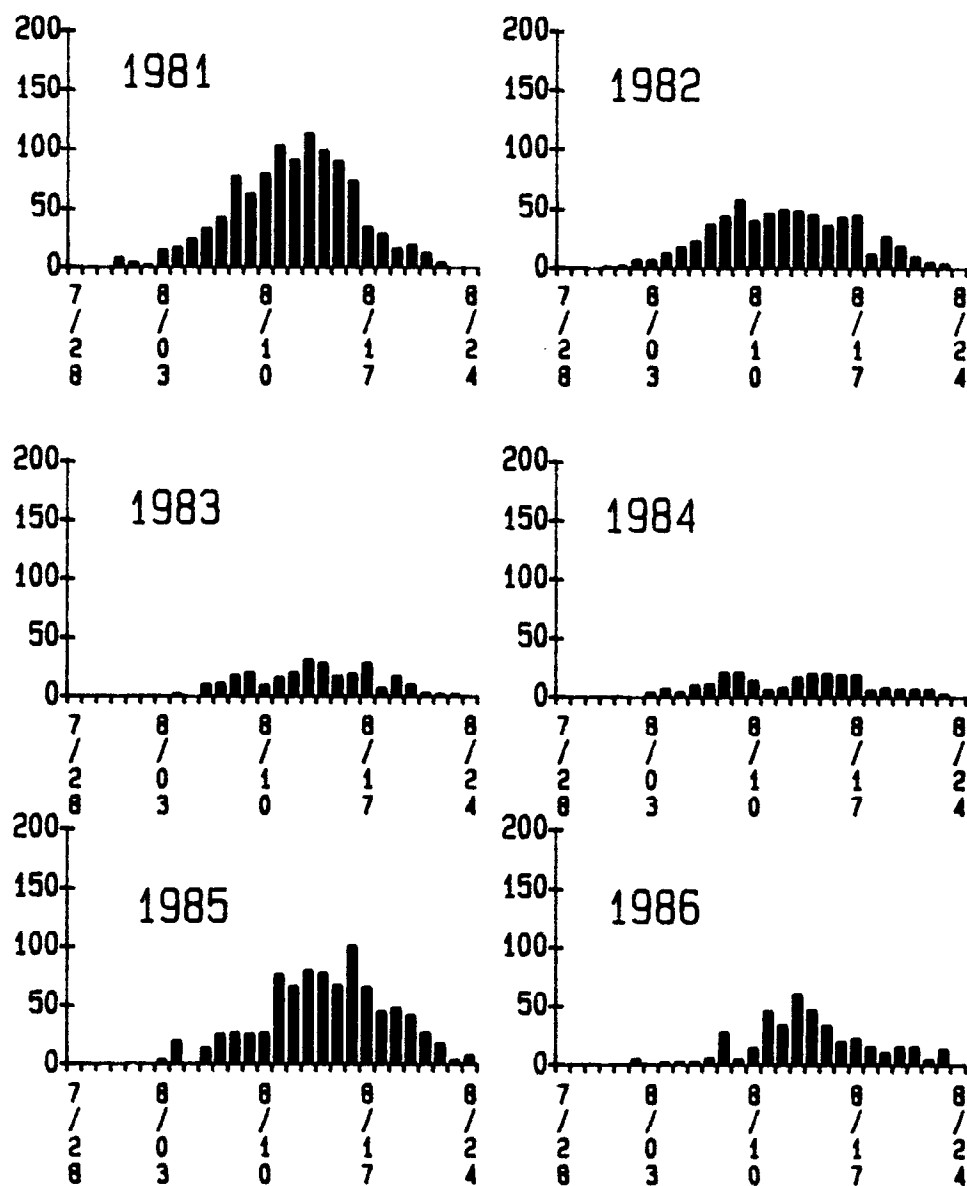


Figure 6. Timing of Die-off of Female Chinook Salmon at the Nakina Carcass Weir, July 28 - August 24, 1981 - 1986.

Table 1. Juvenile chinook salmon coded wire tagged in various tributaries of the Taku River by code, brood year, and fork length; and recovered during 1977 through 1986.

CODE	TAGGED BY	DATE	LENGTH	SITE	F10	F20	F30	F40	S10	S20	S30	S40	TOTAL
040508	4,616	75	05 77 79.7	LOD	0	2	7	3	5	4	4	4	29
040509	3,972	75	05 77 79.7	LOD	0	3	5	2	5	4	0	8	27
040510	46	75	05 77 79.7	LOD	0	0	0	0	0	0	0	0	0
041708	5,092	76	09 77 68.5	NAH	0	0	0	1	0	0	0	2	3
041709	3,402	76	09 77 68.5	NAH	0	1	0	0	0	0	1	2	4
041710	4,358	76	10 77 62.9	TSQ	0	1	0	1	0	0	0	1	3
041711	4,468	76	10 77 62.9	TSQ	0	0	1	0	0	0	1	0	2
041712	4,796	76	10 77 62.9	TSQ	0	0	0	0	0	0	0	0	0
041713	6,134	76	10 77 62.9	TSQ	0	0	1	2	0	0	0	0	3
041714	2,123	76	10 77 62.9	TSQ	0	0	0	0	0	0	0	0	0
041721	4,778	76	04 78 70.3	TSQ	0	0	3	1	3	1	1	5	14
041722	3,717	76	05 78 70.3	TSQ	0	0	3	3	0	1	0	1	8
041723	666	76	05 78 70.3	TSQ	0	0	0	1	0	0	0	0	1
041724	389	76	05 78 70.3	CAN	0	0	0	0	0	0	0	0	0
041728	28,897	77	10 78 63.9	TSQ	0	0	1	0	2	4	1	0	8
041730	7,129	77	10 78 63.9	TSQ	0	1	1	0	1	0	0	0	3
041662	2,337	77	04 79 66.2	TSQ	0	0	1	2	2	2	1	0	8
041658	4,609	78	09 79 64.8	TSQ	0	0	0	0	0	2	2	0	4
041659	878	78	10 79 68.2	NIJ	0	0	0	0	0	0	0	0	0
041660	3,973	78	10 79 64.8	MNT	0	0	1	0	0	0	0	0	1
041959	7,318	78	10 79 68.2	NIJ	0	0	1	0	4	2	0	1	8
041661	1,573	78	05 80 84.3	ILT	0	0	1	1	0	0	2	0	4
041663	3,366	79	09 80 68.4	NIJ	0	0	1	0	0	1	2	2	6
041960	10,135	79	09 80 68.7	NIJ	0	0	0	2	4	8	2	8	24
041961	9,554	79	09 80 68.7	NIJ	0	1	2	1	3	11	6	5	29
041655	10,227	79	10 80 68.7	NIJ	2	0	5	0	4	13	6	11	41
041656	3,925	79	10 80 68.4	NIJ	0	0	1	0	1	1	0	0	3
041657	1,434	79	11 80 68.7	NIJ	0	0	2	0	0	6	2	2	12
042001	1,553	79	05 81 73.5	TSQ	1	0	0	0	2	4	0	3	10
042003	4,011	79	05 81 67.7	TSQ	1	0	4	5	7	7	2	4	30
041920	3,397	79	06 81 83.8	ILT	2	0	7	1	2	10	1	6	29
042115	5,016	80	09 81 63.2	NAK	1	0	0	2	0	1	0	0	4
042120	10,065	80	09 81 63.2	NAK	0	1	1	0	3	1	2	0	8
042116	9,545	80	10 81 59.8	MAI	0	0	2	0	2	2	1	0	7
042117	10,091	80	10 81 59.8	MAI	0	0	0	0	1	1	0	0	2
042118	5,978	80	11 81 59.8	MAI	0	0	1	0	0	0	0	0	1
042056	4,710	81	06 83 87.9	ILT	0	0	1	0	0	3	0	0	4
Total 198,278					7	10	53	28	51	89	37	65	340

Note: Age classes 10, 20, 30 and 40 represent 1-ocean, 2-ocean, 3-ocean and 4-ocean chinook, respectively. F indicates chinook recovered in a fishery, and S indicates chinook recovered on the spawning grounds. Age 2.0 and 2.1 chinook were included with age 20, and aged 2.4 and 1.5 chinook were included with age 40.

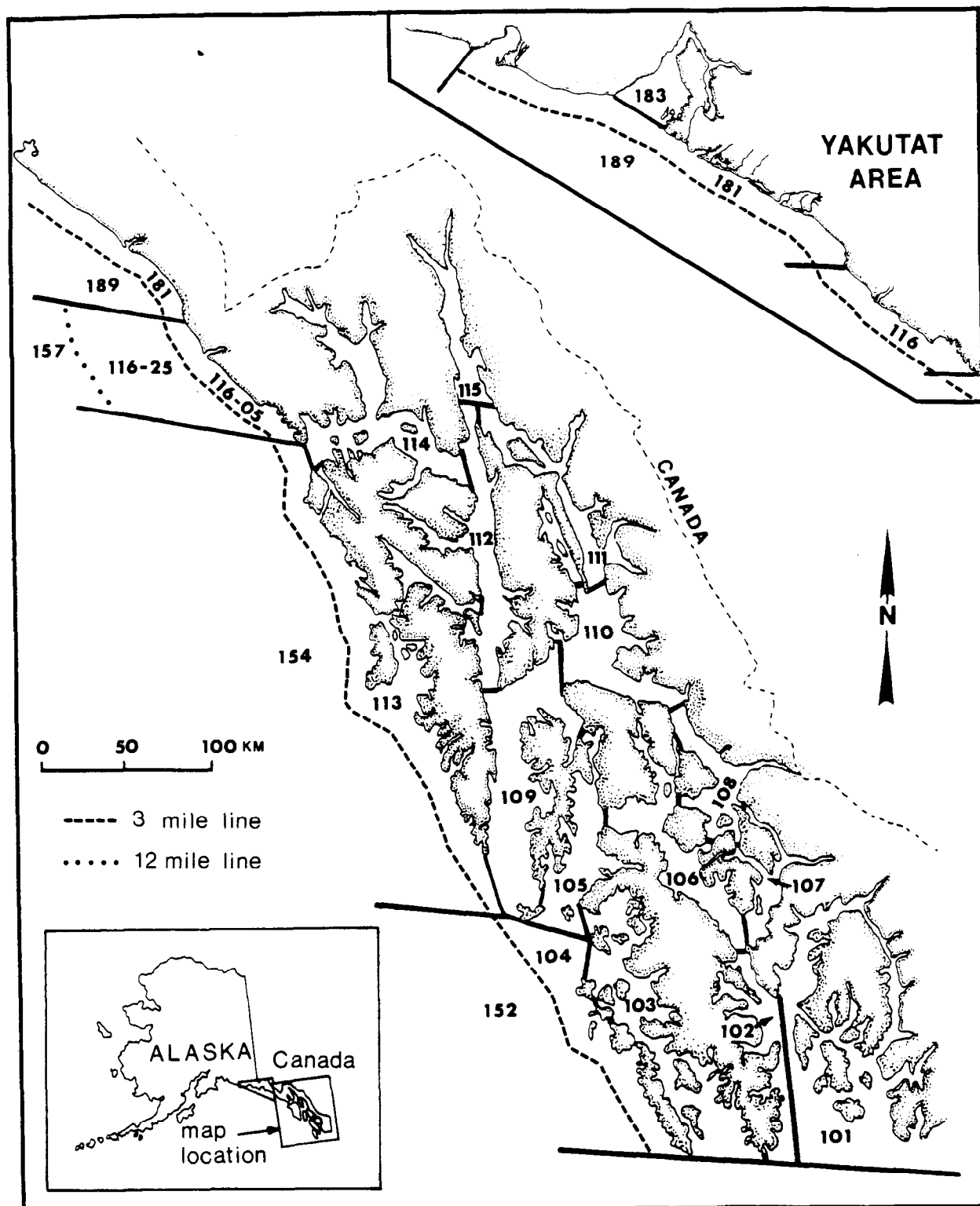


Figure 7. Commercial fishing districts in southeast Alaska.

offshore and, after approaching the outside coast, were migrating north towards the Taku River.

Stikine River Studies

The Stikine River (Figure 8), which is approximately 643 kilometers long and drains an area of about 50,246 square kilometers, discharges its flow into the Pacific Ocean 20 kilometers northeast of Wrangell, Alaska. This large transboundary river, with only the lower 64 kilometers in Alaska, has waterfalls, rock slides, and velocity blocks that prevent anadromous migration into well over 50% of the watershed.

Escapement:

Low level helicopter surveys have been conducted on the Little Tahltan River during the past 2 years without knowledge of the escapement of chinook salmon through the Little Tahltan River weir, which is operated by the CDFO. Visability was excellent during the 1 August survey, except that a mud slide approximately 1.5 km above the weir seriously reduced visability from that point downriver. During the 1 August survey, 50 chinook salmon were observed in this area, but fish could only be observed along the shallow margins of the stream. Above this area water clarity and counting conditions were excellent and 1,051 chinook salmon were observed to the upper limit of the index counting area. Above the index area to the stream's origin an additional 53 chinook salmon were enumerated. By the time of the second survey on 5 August, the die-off had commenced. The spawning distribution of chinook salmon enumerated during that survey was as follows:

Below weir: 100 chinook salmon schooled (preparing to migrate through weir).

From weir to mud slide: 50 chinook salmon (visability poor).

Slide to end of index area: 993 chinook salmon (conditions good).

The peak count of 1,201 chinook salmon (Table 2) was derived by adding the total chinook observed in the index area on 1 August (1,101) to the number observed schooled below the weir on 5 August (100).

The total number of 3- and 4-ocean chinook enumerated through the Little Tahltan River weir by the CDFO was 2,893 chinook salmon. Only 41.5% were observed during the peak aerial survey because a mud slide and resulting poor visibility affected the number of chinook observed in the lower area. During 1985, 50.8% of the total 3- and 4-ocean escapement were observed during the peak helicopter survey (Kissner and Hubartt 1986).

The observed chinook salmon escapements in other Stikine River tributaries monitored annually are presented in Tables 3 and 4. The minimum total run of chinook salmon to the Stikine River (inriver harvest plus escapement counts) is presented in Table 5, and was estimated to be 6,632 chinook salmon in 1986.

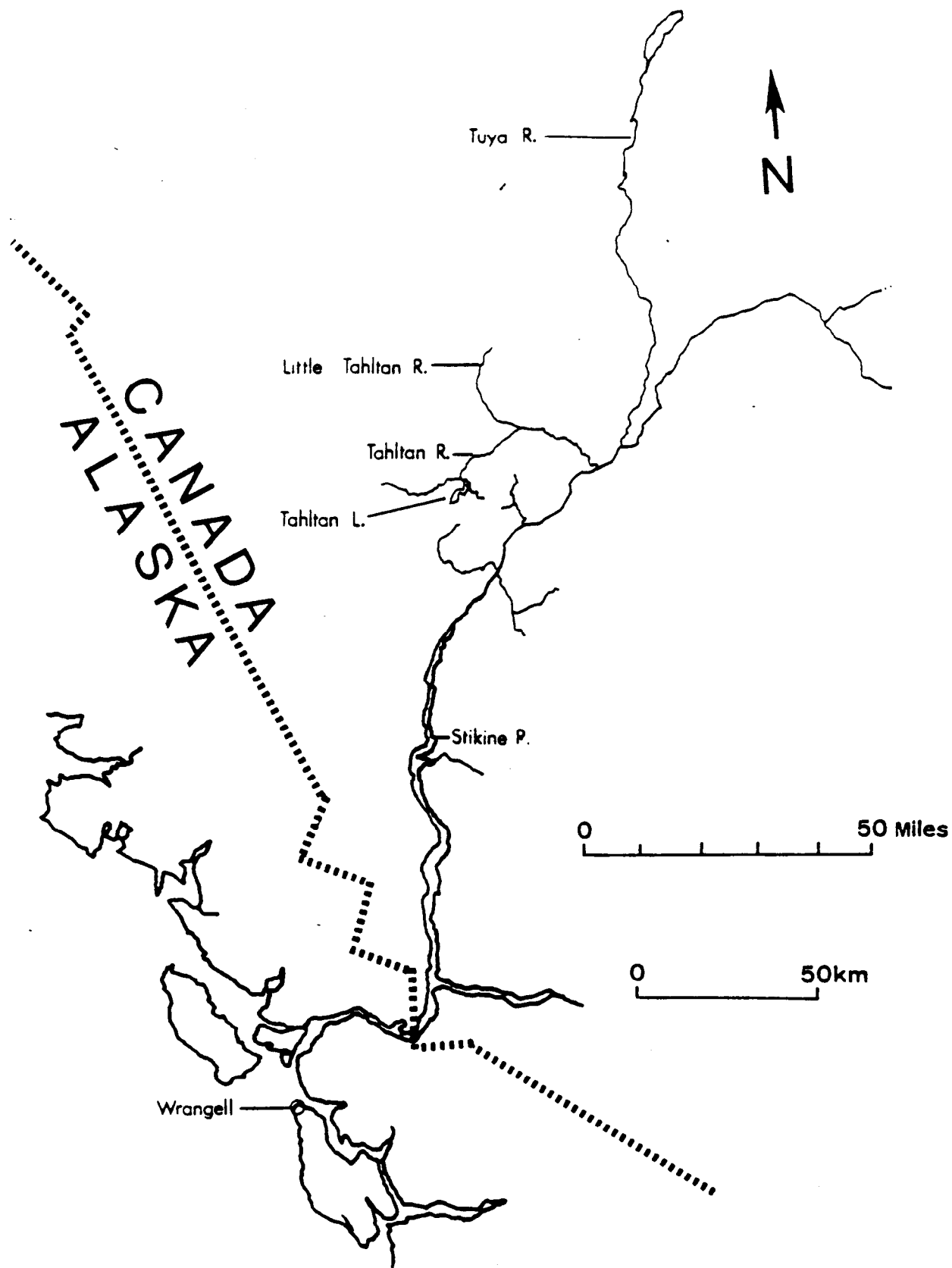


Figure 8. Stikine River drainage.

Table 2. Peak escapement counts of chinook salmon in the Little Tahltan River, 1956-1986.

Year	Date	Chinook	Remarks
LITTLE TAHLTAN RIVER			
1956	11 Aug	334 jacks 493 adults	Hyland Ranch to Tahltan River
1957	21 Jul	199	Too early - fish schooled
1958	06 Aug	790	3/4 mi. below Hyland to 1.5 mi. below Saloon
1959	07 Aug	198	Fish in poor condition Survey too late
1960	05 Aug	346	1/4 mi. below Hyland Ranch to a mile or two below Saloon
1967	...	800	Canadian survey
1975	13 Aug	700	Many spawned out
1976	07 Aug	400	Conditions fair
1977	30 Jul	800	Peak spawning
1978	26 Jul	632	Mostly schooled
1979	28 Jul - 01 Aug	1,166	Peak spawning
1980	29 Jul	2,137	Peak spawning
1981	28 Jul	3,334	Peak spawning
1982	05 Aug	2,830	Peak spawning
1983	05 Aug	594	Peak spawning
1984	31 Jul	1,294	30% schooled
1985	06 Aug	1,598	Peak spawning
1986	05 Aug	1,201	Peak spawning

Table 3. Peak escapement counts of chinook salmon in the mainstem
Tahltan River and in Beatty Creek.

Year	Date	Chinook	Remarks
MAINSTEM TAHLTAN RIVER			
1965	...	85	Air lifted over slide
1966	...	318	Air lifted over slide
...	...	...	...
1975	August 13	2,908	Clear
1976	August 20	120	Late
1977	July 30 & Aug. 18	0	Glacial
1978	August 08	756	Glacial
1979	August 10	2,118	Partly glacial
1980	July 29	960	Very glacial
1981	August 04	1,852	Partly glacial
1982	August 05	1,690	Partly glacial
1983	August 05	453	Partly glacial
1984	...	...	No survey
1985	August 06	1,490	Partly glacial
1986	August 05	1,400	Partly glacial
BEATTY CREEK			
1980	July 29	122	Peak spawning
1981	August 04	558	Peak spawning
1982	July 28	567	Partly schooled
1983	August 05	83	Peak spawning
1984	July 31	126	Conditions poor
1985	August 02	147	Peak spawning
1986	August 01	183	Peak spawning

Table 4. Andrew Creek chinook escapements, 1976-1986.

Year	Large Males through Weir	Large Spawned for Crystal Lake	Jacks through Weir	Females through Weir	Females spawned for Crystal Lake	Chinook below Weir	Large Adults at Andrew Creek	Total Adult Spawners	Date Weir removed or Stream Surveyed
1976	151	29	50	200	35	(53)	468	404	8/23
1977	224	24	36	172	47*	(60)	534	456	8/22
1978	165	5	75	178	7	(45)	400	388	8/09
1979**	154	27	89	135	28	38	382	327	8/06
1980***	80	39	272	160	42	(41)	362	281	8/13
1981	250	57	119	190	61	(71)	629	511	8/22
1982	224	109	124	300	166	111	910	635	8/21
1983	143	31	38	173	47	(50)	444	366	8/30
1984	124	0	200	191	0	40	355	355	8/25
1985	...	...	...	...	...	...	...	319f	8/11
1986	...	...	...	...	...	...	...	707f	8/14

* = excludes 7 mortalities.

** = weir out July 22-24, correction made via stream enumeration on 7/26.

*** = weir out for one day - August 1.

() = Actual number not recorded. Estimate made by comparison of large chinook through weir versus spawning below weir during years this information was collected.

f = Foot survey.

Table 5. Minimum total run of chinook salmon in the Stikine River drainage, 1956-1986.

Year	U. S. Gill Net Through Mid-June	Canadian Gill Net Comm & Food (Jack + Large)	Little Tahltan (Large)	Mainstem Tahltan (Large)	Beatty Creek (Large)	Andrew Creek (Large)	Total Run
1956	7,224	...	493	...	...	4,500	12,217
1957	5,703	...	199	...	...	3,000	8,902
1958	7,215	...	790	...	...	2,500	10,505
1959	8,410	...	198	...	...	150	8,758
1960	4,673	...	346	...	...	287	5,306
1961	5,222	...	...	...	...	103	5,325
1962	4,173	...	...	...	...	200	4,373
1963	203	...	...	...	...	402	605
1964	947	...	...	...	...	400	1,347
1965	1,683	...	...	85	...	...	1,768
1966	1,058	...	...	318	...	75	1,451
1967	3,466	...	800	...	...	30	4,296
1968	2,570	...	...	...	...	...	2,570
1969	1,965	...	...	...	...	...	1,965
1970	224	...	...	...	...	...	224
1971	2,078	...	...	...	...	350	2,428
1972	4,799	0	...	...	...	...	4,799
1973	5,649	200	...	...	...	61	5,910
1974	7,006	0	...	...	...	129	7,135
1975	1,534	1,024	700	2,908	...	260	6,426
1976	1,101	924	400	120	...	468	3,013
1977	274	100	800	0	...	534	1,708
1978	0	400	632	756	...	400	2,188
1979	0	1,625	1,166	2,118	...	382	5,291
1980	0	2,231	2,137	960	122	362	5,812
1981	0	1,558	3,334	1,852	558	629	7,931
1982	0	2,387	2,830	1,690	567	910	8,384
1983	0	2,063	594	453	83	444	3,637
1984	0	702	1,294	...	126	355	2,477
1985	0	2,380	1,598	1,490	147	319(F)	5,934
1986	0	3,088	1,201	1,400	183	707(F)	6,632

Coded Wire Tag Recovery:

Coded wire tagging has been conducted on Stikine River chinook salmon from 1978 through 1981 (1976-1980 broods). A total of 1,284 chinook salmon smolts and 101,470 young-of-the-year were adipose clipped and coded wire tagged (Kissner 1985). No juvenile chinook salmon were coded wire tagged on the Stikine River system during this reporting period.

Four coded wire tagged chinook salmon were recovered during 1986, and a summary of all the recoveries of coded wire tagged chinook salmon from the Stikine River is presented in Table 6.

Alsek River Studies

The Alsek River is a large glacial river system with headwaters in the Yukon Territory (Figure 9). It flows south through British Columbia and empties into the Gulf of Alaska about 96 kilometers southeast of Yakutat. Lowell Glacier, which has at times completely blocked the mainstem Alsek, has been the major barrier to anadromous migration to over 50% of the drainage. Kokanee salmon (*Oncorhynchus nerka* Walbaum) have been documented in areas above Lowell Glacier, thus suggesting that the area was open to anadromous salmonids in the past. The major chinook salmon spawning observed in the Alsek system occurs in the Klukshu, Blanchard, and Takhanne Rivers.

Drift Gill Net Fishery:

The Alsek River gill net fishery occurs completely within the river. Chinook salmon catches have been very low during the past 3 years because of closures of the upper fishing area to protect late entering and milling chinook. In December, 1985, the Alaska Board of Fisheries gave managers the emergency order authority to restrict the use of "king gear" (8 inch-9 inch mesh size) until the stock is rebuilt. The incidental harvest of chinook salmon in the East Alsek River is included in Table 7.

Escapement:

Limited escapement data have been collected on various tributaries of the Alsek River since 1962 (Table 7). Before 1976, escapement estimates were usually made utilizing fixed-wing aircraft. Since that time, the CDFO has operated a weir at the junction of the Klukshu and Tatshenshini Rivers to enumerate chinook and sockeye salmon into the Klukshu drainage. In addition, the Alaska Department of Fish and Game began enumerating chinook salmon in several index tributaries by helicopter in 1981.

Nearly complete protection of Alsek River maturing chinook salmon in the terminal area probably contributed to the 1986 escapement of 2,708 chinook salmon through the Klukshu weir. This escapement was 10.5% above the 10 year average of 2,452, and was 84.6% of the escapement goal of 3,200.

Juvenile Chinook Salmon Studies:

Reports of significant numbers of juvenile chinook salmon at the Klukshu River weir, coupled with a proposal for an interagency tagging operation at

Table 6. A listing of recoveries of coded wire tagged chinook salmon from the Stikine River, 1980-1986.

Recovery Information										Release Information			
Tag Code	Date	Length	Recovery Area	WK	PC	GC	A	B	C	BY	Tagged	YR	MO
04-16-33	05/24/82	925	0 NW COUT 113-	1	22	01	5	C	R	1	76	507	78 05
04-16-33	07/28/82		SE CIN 108-	1	31	72		E	S	1	76	507	78 05
04-16-35	04/12/82	990	0 NW CNTR 114-	1	16	11	5	C	R	7	75*	2,086	78 05
04-16-54	08/11/83	810	1 SE CIN 108-40	1	33	74		E	S	1	78	6,677	79 11
04-16-54	06/20/84	1003	0 NE -	1	25	05	5	C	R	1	78	6,677	79 11
04-17-17	06/04/82	830	0 NE SNTR 110-31	1	23	05	5	C	R	1	76	420	78 05
04-17-17	06/04/82	255	5 NW COUT 113-	1	23	03	5	C	S	1	76	420	78 05
04-17-20	08/11/83	820	1 SE CIN 108-40	1	33	74		E	S	1	77	5,223	78 09
04-17-20	08/11/83	965	1 SE CIN 108-40	1	33	74		E	S	1	77	5,223	78 09
04-17-25	06/07/83	930	0 NW COUT 113-	1	24	03	5	C	R	1	77	2,819	78 09
04-17-26	02/08/84	680	0 BERING SEA - Trawl								79	4,268	80 09
04-17-26	04/02/84	750	0 NW COUT 113-97	1	14	01	5	C	R	1	79	4,268	80 09
04-17-26	06/11/84	725	0 NE CNTR 112-	1	24	05	5	C	R	1	79	4,268	80 09
04-17-26	06/07/85	860	0 NE SNTR 109-	1	23	03	5	C	R	1	79	4,268	80 09
04-17-27	06/13/85	994	0 NE SNTR 109-62	1	24	05	5	C	R	1	79	4,469	80 10
04-19-63	07/08/83	810	0 NW COUT 113-	1	28	03	5	C	R	1	79	8,568	80 10
04-19-63	07/18/83	688	0 NE SNTR 109-10	1	30	08	5	C	R	1	79	8,568	80 10
04-19-63	04/15/84	800	0 NW CNTR 114-70	1	16	01	5	C	R	1	79	8,568	80 10
04-19-63	06/20/84	715	0 NE -	1	25	05	5	C	R	1	79	8,568	80 10
04-19-63	08/16/84	750	1 SE CIN 108-40	1	33	74		E	R	1	79	8,568	80 10
04-20-02	08/11/83	420	1 SE CIN 108-40	1	33	74		E	S	1	79	7,178	80 11
04-20-02	07/16/84	676	0 NE SNTR 109-45	1	29		5	C	R	1	79	7,178	80 11
04-20-02	08/09/84	785	1 SE CIN 108-40	1	32	74		E	R	1	79	7,178	80 11
04-20-02	07/02/85	772	0 SE CIN 106-	1	27	05	3	C	R	1	79	7,178	80 11
04-21-11	06/25/85	675	0 SE CIN 108-40	1	26	05	3	C	S	1	80	8,038	81 11
04-21-11	07/24/85	770	0 NE CNTR 112-	1	30	11	5	C	S	1	80	8,038	81 11
04-21-11	07/16/86		NW COUT 154-	1	29	03	15	C	S	1	80	8,038	81 11
04-21-13	06/13/85	670	0 NW COUT 113-	1	24	03	5	C	S	1	80	9,984	81 11

-Continued-

Table 6. A listing of recoveries of coded wire tagged chinook salmon from the Stikine River, 1980-1986.

Recovery Information										Release Information				
Tag Code	Date	Length	Recovery Area	WK	PC	GC	A	B	C	BY	Tagged	YR	MO	
04-21-13	05/23/86	914 3	SE CIN 108-40	1	21	12	S	S	1	80	9,984	81	11	
04-21-13	06/23/86	832 0	NE SNTR 110-	1	26	05	15	C	R	1	80	9,984	81	11
04-21-14	06/13/85	745 0	NE SNTR 110-16	1	24	05	5	C	R	1	80	9,463	81	11
04-21-14	06/17/85	195 5	-	1	25	03	5	C	S	1	80	9,463	81	11
04-21-14	07/07/86	801 0	NE STEP 111-50	1	28	04	S	R	1	80	9,463	81	11	
04-21-46	07/24/83	350 0	NE SNTR 110-31	1	31	05	1	C	R	1	80	3,209	81	11
11-16-25	10/01/82					03	S		1	78	17,487	79	10	
11-16-25	03/21/83	820 0	NE SNTR 109-10	1	13	03	5	C	R	1	78	17,487	79	10
11-16-25	06/07/83	850 0	NW COUT -	1	24	03	5	C	R	1	78	17,487	79	10
11-16-25	07/07/83	770 0	NW COUT 113-	1	28		5	C	R	1	78	17,487	79	10
11-16-25	07/08/83	184 5	-	1	28	03	C	S	1	78	17,487	79	10	
11-16-25	06/08/84	945 0	NW COUT 113-91	1	23	11	5	C	R	1	78	17,487	79	10
11-16-25	06/08/84	780 0	NE SNTR 110-31	1	23		5	C	R	1	78	17,487	79	10

Note: Length is in millimeters and is followed by a code for the type of length measurement (0 = tip of head to fork of tail, 1 = mid-eye to fork of tail, 3 = total length, 5 = head length).

WK = Statistical week.

A = Code for sample source

C = Commercial

PC = ADFG port code.

S = Sport

E = Escapement

GC = Code for gear used

T = Test Fishery.

0 = Fish Trap

1 = Seine

B = Code for sample type

3 = Gillnet

R = Random

5 = Troll

S = Select.

15 = Power Troll

98 = NMFS Test Troll.

C = Code for tag status

1 = ok

7 = nonsense (e.g. a chinook identified and tagged as a juvenile coho salmon).

BY = Brood year.

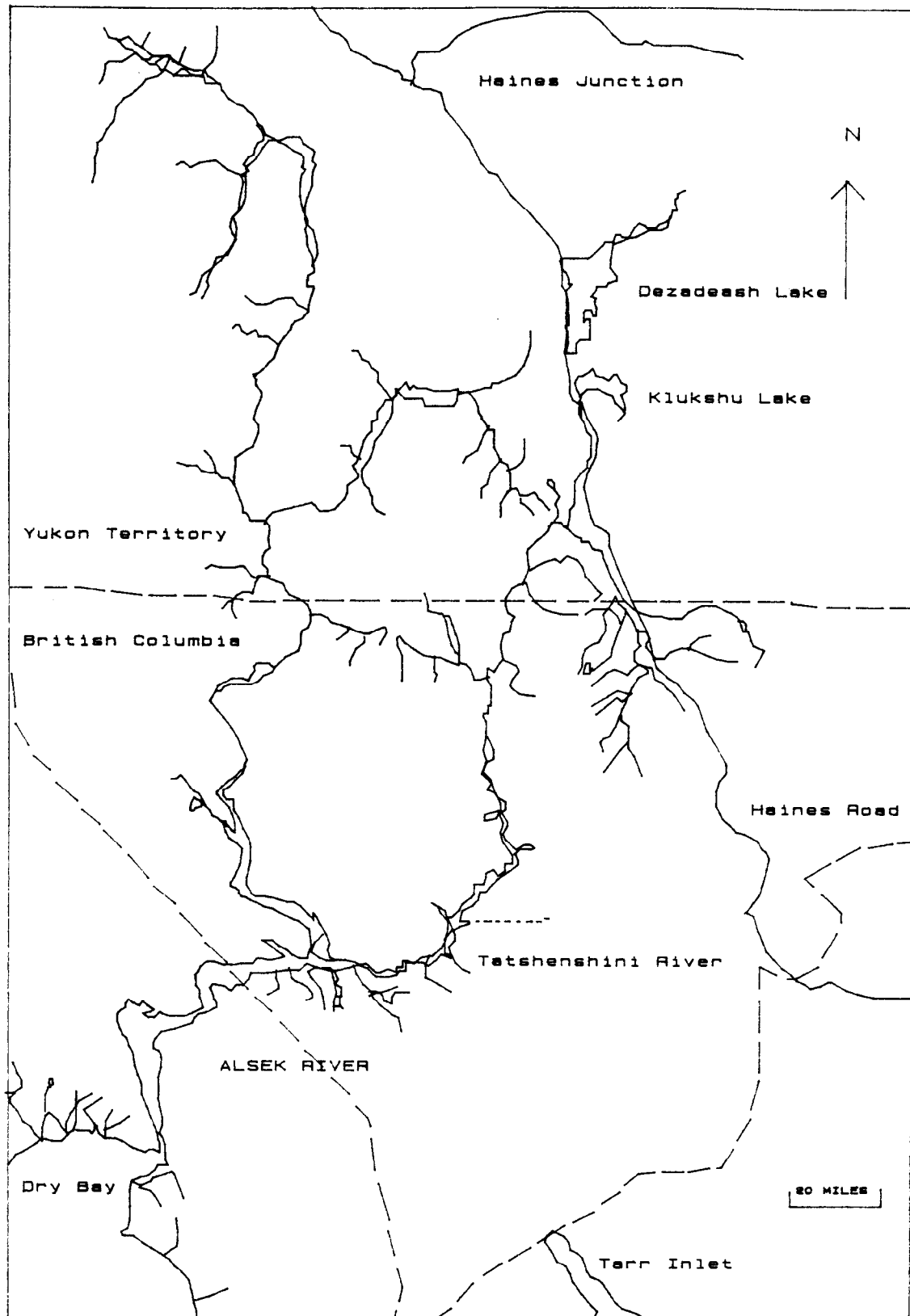


Figure 9. The Alsek River system.

Table 7. Gill net harvest and peak escapement counts of chinook salmon
in the Alsek River, 1962-1986.

U. S.								
Year	Village System	Mi. 112 Creek	Klukshu System	Blanchard System	Takhanne River	Goat Creek	Gill Net Harvest	Canadian Harvest

1962	...	...	86	...	...	...	2,276	...
1963	...	...	...	...	...	...	125	...
1964	...	...	20	1	...	...	591	...
1965	...	...	100	100	250	...	719	...
1966	...	...	1,000	100	200	...	934	...
1967	...	...	1,500	200	275	...	225	...
1968	...	...	1,700	425	225	...	215	...
1969	...	72	700	250	250	...	685	...
1970	100	...	500	100	100	...	1,128	...
1971	50	60	300	...	...	...	1,222	...
1972	...	32	1,100	...	250	...	1,827	...
1973	...	...	...	...	49	...	1,754	...
1974	14	183	62	52	132	...	1,162	...
1975	17	...	58	81	177	...	1,379	...
1976	...	...	1,244 weir	...	...	...	512	300
1977	...	...	3,144 weir	...	...	...	1,402	400
1978	...	...	2,976 weir	...	...	...	2,441	500
1979	...	...	4,403 weir	...	...	...	2,525	300
1980	...	...	2,637 weir	...	...	...	1,382	300
1981	0	...	2,113 weir	35	11	...	761	333
1982	...	...	2,369 weir	59	241	13	532	200
1983	...	...	2,537 weir	108	185	...	94	600
1984	...	...	1,672 weir	304	158	28	60	700
1985	...	...	1,425 weir	232	184	...	213	300
1986	...	...	2,708 weir	556	358	142	477	...

Index Escapement Goal = 3,200 (W)

the Klukshu weir, led to a cooperative tagging effort involving personnel from the National Marine Fisheries Service, Auke Bay Lab, Juneau, the Alaska Department of Fish and Game, Sport Fish Division, and the Canadian Department of Fisheries and Oceans.

To determine their migration routes, areas and timing of exploitation, exploitation rates, and contributions to various fisheries, 5,339 juvenile chinook salmon were captured and coded wire tagged near the confluence of the Klukshu and Tatshenshini Rivers from 18 September through 29 September, 1986. During this period, 251 adipose clipped juvenile chinook salmon were recaptured and 245 had retained the coded wire tags, yielding an inriver tag loss of 2.4%. Applying this tag loss to the total number of coded wire tagged chinook salmon produces an adjusted number of coded wire tagged chinook salmon released of 5,211. Table 8 summarizes the 1986 trapping and tagging efforts.

Situk River Studies

The Situk River system, which is located about 16 kilometers east of Yakutat, includes Mountain and Situk Lakes with a combined area of approximately 485 surface hectares and approximately 40 kilometers of river. The Situk River produces five species of Pacific salmon. It is classified as a medium producing chinook salmon system with the annual total return estimated to be from 1,500 to 10,000 adults.

Set Gill Net Fishery:

A set gill net fishery is concentrated at the mouth of the Situk River along the Mainland and Blacksand Spit. Most of the chinook salmon harvested are maturing Situk River fish. The chinook salmon are taken incidentally to the much larger returns of sockeye salmon. The chinook salmon catch has varied between 164 and 2,499. The recent 10-year average harvest is 665; 182 chinook salmon were caught during the 1986 fishing season.

Escapement:

A weir was operated in the lower Situk River at the upper limit of the intertidal area from 1928 until 1955 to enumerate all five species of Pacific salmon. Another weir, located below the 9-mile highway bridge, was operated during 1971 and from 1976 through 1986. Estimates of the minimum total return of chinook salmon (including sport and commercial harvest in the terminal area) have varied between 916 and 5,962 chinook salmon (Table 9). The chinook salmon escapement, by week through the Situk River weir, is presented in Appendix Table 15.

Coded Wire Tag Recovery:

To date, four adult coded wire tagged chinook salmon have been recovered from a 1984 release of 11,297 coded wire tagged juveniles (Table 10).

Data on coded wire tagged coho salmon recovered in various sport and commercial fisheries in 1985 and 1986 are presented in Appendix Table 16. These fish were incidentally tagged during chinook salmon coded wire tagging during 1984.

Table 8. Summary of chinook salmon sampling and tagging on the
Alsek River tributaries - Kluksu R. and Tatshenshini R.,
September, 1986.

Date	Number of Traps	Daily Catch	Recaptures*			Tag Code	Mean	
			Number Tagged	Tags Total	Retained		Length	n
091886								
091986	28	419						
092086	34	374					65.6	44(K)
092186	47	570	1571			042552		
092286	53	579	541	21	21	042552		
092386	58	817	652	96	92	042552	65.3	107(K)
092486	53	496	413	37	36	042552		
092586	40	438					66.4	55(K)
							66.3	108(T)
092686	29	286	647	36	35	042552		
092786	50	791	736	19	19	042552		
092886	34	414	389	24	24	042552		
092986	33	434	390	18	18	042552	65.7	100(K)
Total	459	5,618	5,339	251	245			

* Tag Retention = 97.6%

(K) = Kluksu River

(T) = Tatshenshini River

Table 9. Situk River catch, escapement, and minimum total run, 1915-1986.

Year	Commercial	Large	Jacks	Weir	Sport	Total
	Chinook	Chinook	Chinook	Escapement		Minimum Run
	Catch	Escapement	Escapement	(Large+Jacks)	Catch	
1915	836	...	...	...	...	...
1916	931	...	...	...	...	...
1917	2,499	...	...	...	...	...
1918	1,036	...	...	...	...	...
1919	316	...	...	...	...	...
1920	782	...	...	...	...	...
1921	1,952	...	...	...	...	...
1922	2,118	...	...	...	...	...
1923	1,761	...	...	...	...	...
1924	1,351	...	...	...	...	...
1925	1,087	...	...	...	...	...
1926	1,851	...	...	...	...	...
1927	1,687	...	...	...	...	...
1928	...	...	...	1,224	...	...
1929	...	...	...	3,559	...	...
1930	...	...	...	1,455	...	...
1931	...	...	...	2,967	...	...
1932	...	...	...	1,978	...	...
1933	267	...	...	...	...	...
1934	450	...	...	1,486	...	1,936
1935	558	...	...	638*	...	1,196
1936	...	...	...	816	...	...
1937	...	...	...	1,290*	...	...
1938	1,220	...	...	2,668*	...	3,888
1939	495	...	...	2,117	...	2,612
1940	164	...	...	903	...	1,067
1941	390	...	...	2,594	...	2,984
1942	430	...	...	2,543	...	2,973
1943	947	...	...	3,546*	...	4,493
1944	844	...	...	2,906	...	3,750
1945	692	...	...	1,458	...	2,150
1946	1,468	...	...	4,284	...	5,752
1947	885	...	...	5,077	...	5,962
1948	694	...	...	3,744	...	4,438
1949	410	...	...	1,978	...	2,388
1950	378	...	...	2,011	...	2,389
1951	948	...	...	2,780	...	3,728
1952	225	...	...	1,459	...	1,684
1953	378	...	...	1,040	...	1,418
1954	314	...	...	2,101	...	2,415
1955	740	...	...	1,571	...	2,311
1956	1,867	...	...	...	...	...

-Continued-

Table 9. Situk River catch, escapement, and minimum total run, 1915-1986.

Year	Commercial	Large	Jacks	Weir	Sport	Total
	Chinook Catch	Chinook Escapement	Chinook Escapement	Escapement (Large+Jacks)	Catch	Minimum Run
1957	1,796	...	...	1,500**	...	...
1958	187	...	...	300**	...	...
1959	426	...	...	...	...	...
1960	312	...	...	500**	...	...
1961	368	...	...	400**	...	...
1962	337	...	...	1,000**	...	...
1963	459	...	...	...	...	...
1964	706	...	...	725**	...	...
1965	442	...	...	1,500**	...	...
1966	410	...	...	800**	...	...
1967	203	...	...	200**	...	...
1968	312	...	...	700**	...	...
1969	1,020	...	...	2,500**	...	...
1970	927	...	...	1,100**	...	...
1971	473	...	...	964	...	1,437
1972	303	...	...	400f	...	703
1973	752	...	...	510f	...	1,262
1974	791	...	...	702f	...	1,493
1975	562	...	...	1,180f	...	1,742
1976	1,002	1,543a	390a	1,933	...	2,935
1977	833	1,732	148	1,880	353	3,066
1978	382	880a	223a	1,103	257	1,742
1979	1,028	1,400a	354a	1,754	445	3,227
1980	971	905	220	1,125*	439	2,535
1981	859	702	105	807*	162	1,828
1982	242	434	177	611	63	916
1983	349	592	257	849	...	1,198
1984	513	1,726	475	2,201	557	3,271
1985	472	1,521	461	1,982	529	2,983
1986	182	2,067	505	2,572	...	...

* Weir out part of the time (corrections made for the period that the weir was inoperable in 1980 and 1981).

** Peak aerial survey.

f Float survey.

a The separation of large versus jacks was not made during enumeration. An estimate was derived from 1977 and 1980-1984 average percentage of jacks versus large.

Table 10. A listing of recoveries of coded wire tagged chinook salmon from the Situk River, 1986.

Recovery Information										Release Information			
Tag Code	Date	Length	Recovery Area	WK	PC	GC	A	B	C	BY	Tagged	YR	MO
04-24-05	07/07/86	710 1	NW NOUT 182-40	1	28	14	4	C	R	1	83	9,485	84 07
04-24-05	07/11/86	680 0	NW NOUT 182-70	1	28	14		U	S	1	83	9,485	84 07
04-24-06	07/07/86	580 1	NW NOUT 182-70	1	28	14	4	C	R	1	83	1,812	84 07
04-24-06	07/14/86	605 0	NW NOUT 182-70	1	29	14	4	C	R	1	83	1,812	84 07

Note: Length is in millimeters and is followed by a code for the type of length measurement (0 = tip of head to fork of tail, 1 = mid-eye to fork of tail).

WK = Statistical week.

PC = ADFG port code (14 = Yakutat).

GC = Code for gear used (4 = Set Gillnet).

A = Code for sample source (C = commercial, U = unknown).

B = Code for sample type (R = random, S = select).

C = Code for tag status (1 = ok).

BY = Brood year.

Unuk River Studies

The Unuk River (Figure 10) is the largest chinook salmon system in Behm Canal and only three major transboundary rivers, the Taku, Stikine, and Alsek, have larger chinook salmon runs in southeastern Alaska. The 129-kilometer Unuk River drains an area of about 3,885 square kilometers of a very glaciated region of northern British Columbia and only the lower 39 kilometers are in Alaska. The river discharges its flow into Burroughs Bay, 85 kilometers northeast of Ketchikan.

Escapement:

Chinook salmon are enumerated annually in index tributaries (Kissner 1985) by foot and/or helicopter surveys during the peak of spawning activity. The 1986 observed chinook salmon escapement of 2,126 in the Unuk River was 15.4% above the escapement goal of 1,800 and 90.7% above the 9-year mean escapement of 1,115 (Appendix Table 17). Throughout the spawning period, dead or dying adult chinook salmon were sampled at the major tributaries (Cripple Creek, Gene's Lake Creek, Lake Creek, Clear Creek, and Eulachon Creek) for length, age, and coded wire tags. Appendix Table 18 and Figure 11 summarize this information.

Juvenile Chinook Salmon Studies:

Minnow trapping and coded wire tagging of chinook salmon smolts from the 1984 brood year were conducted on the mainstem Unuk River from 15 March through 15 April 1986. A total of 5,932 chinook salmon smolts, averaging 66.0 mm fork length, were captured and tagged (Table 11). All recaptured tagged fish had retained the coded wire tag, therefore, no adjustment for inriver tag loss was necessary. An additional 5,465 juvenile coho salmon were incidentally captured and coded wire tagged (Table 12). The inriver tag loss was estimated to be 0.8%. Therefore, the adjusted number of tagged juvenile coho salmon released was 5,421. A summary of coded wire tag releases of Unuk River chinook and coho salmon is presented in Appendix Tables 19 and 20. All capturing of juvenile chinook salmon occurred below First Canyon, and most of the trapping locations were the same as those trapped during 1985. Appendix Tables 21 and 22 summarize sampling efforts to date.

Coded Wire Tag Recovery:

Recoveries of 82 coded wire tagged chinook salmon during 1985 and 1986 indicate that Unuk River chinook salmon are contributing to various south-east Alaska fisheries as immature fish (Appendix Table 23).

A summary of recoveries of coho salmon coded wire tagged on the Unuk River is presented in Appendix Table 24.

Chickamin River Studies

The Chickamin River, a glacial mainland river which discharges its flow into Behm Canal about 32 kilometers southeast of Burroughs Bay, is the second largest chinook salmon system in Behm Canal (Figure 12). It ranks

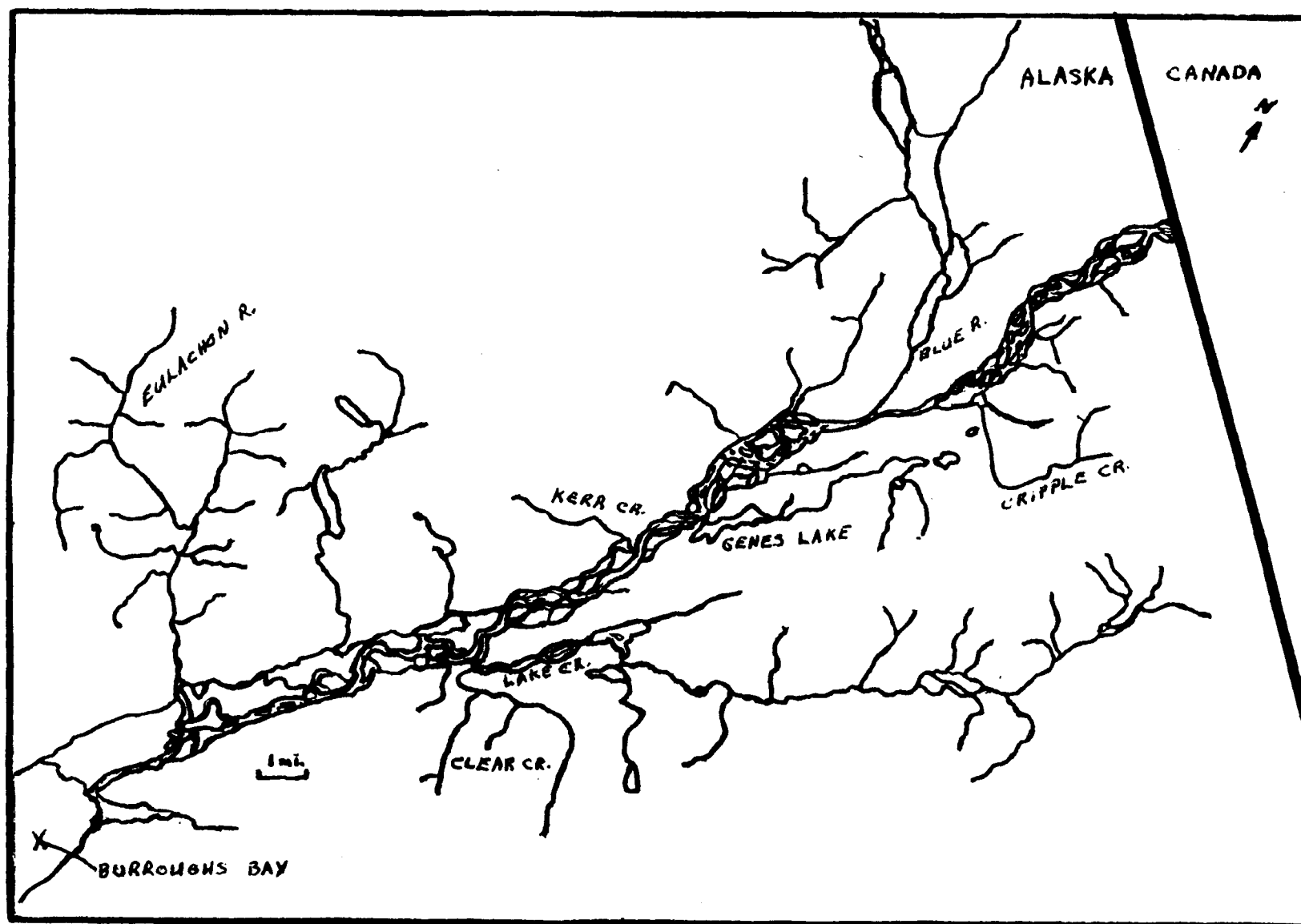


Figure 10. Unuk River system to the U.S./Canada border.

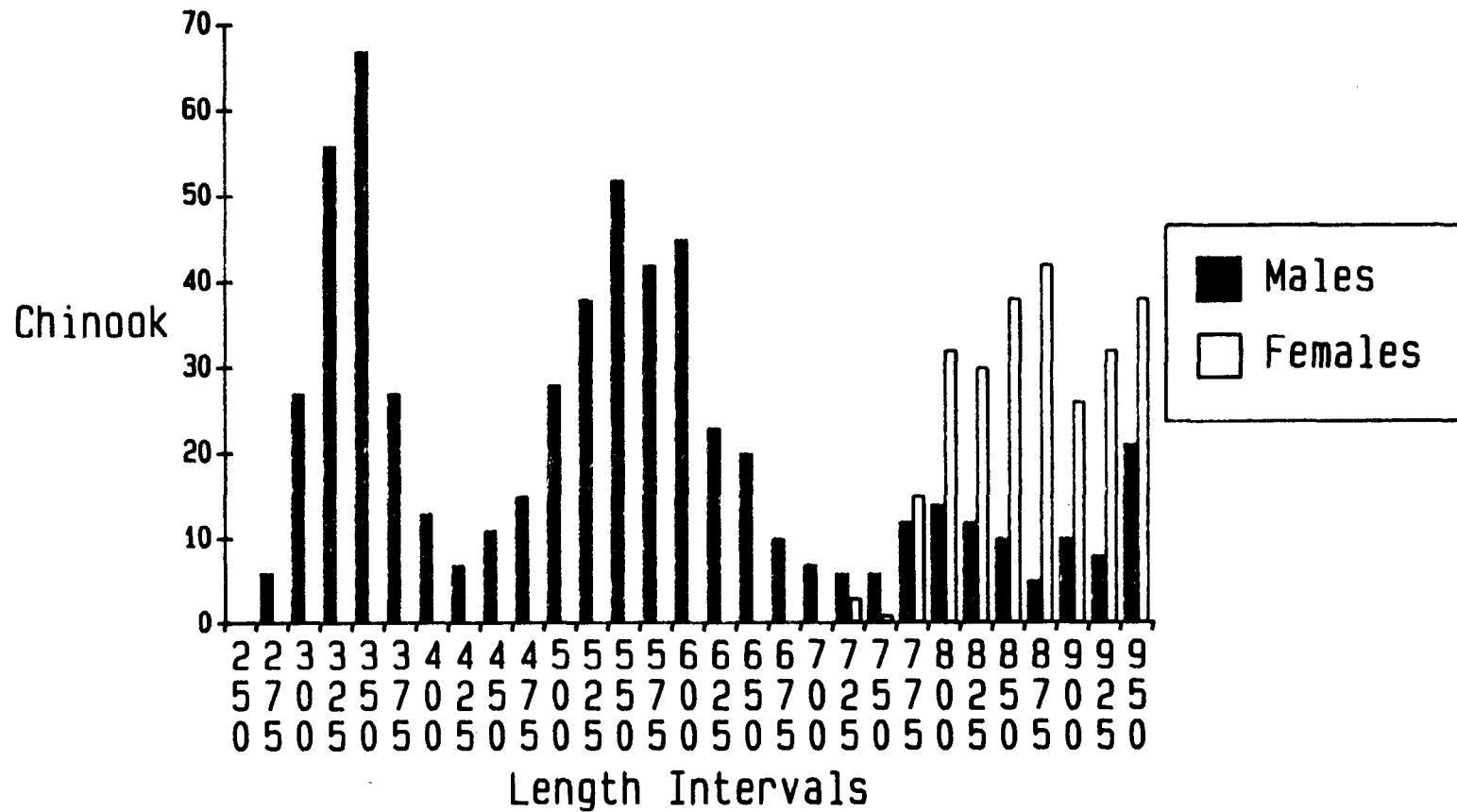


Figure 11. Length frequencies of male and female chinook sampled at Cripple Creek, Unuk River, August, 1986.

Table 11. Chinook salmon trapping and tagging on the Unuk River, spring, 1986.

Date	Sites	Traps	Recaptures		Tags	Data	Mean	
			Number	Number			Length	n
			Tagged	Total	Retained	Code		
031686	10	52						
031786	10	60						
031886	12	68	663	0	0	042529	66.7	100
031986	13	76						
032086	15	80						
032186	12	68	602	0	0	042529	...	...
032286	4	19						
032386	5	21						
032486	15	81	183	0	0	042529	...	...
032586	19	94						
032686	12	61	695	1	1	042529	64.8	100
032786	13	68						
032886	18	97						
032986	14	66	650	0	0	042529	...	...
033086	0	0						
033186	16	80						
040186	17	82						
040286	19	87	907	2	2	042529	...	...
040386	20	91						
040486	11	54						
040586	19	87						
040686	23	109						
040786	24	89						
040886	12	34						
040986	0	0	1098	11	11	042529	66.1	100
041086	16	64						
041186	21	88						
041286	10	42						
041386	19	78	523	11	11	042529	...	...
041486	19	82						
041586	20	74	611	6	6	042529	66.3	100
Total	438	2052	5932	31	31		66.0	400

Table 12. Coho salmon trapping and tagging on the Unuk River, spring, 1986.

Date	Sites	Recaptures		Data Code	Mean Length	n
		Number Traps	Tags Tagged			
031686	10	52				
031786	10	60				
031886	12	68	348	0 0	042546	75.7 100
031986	13	76				
032086	15	80				
032186	12	68	1036	0 0	042546	
032286	4	19				
032386	5	21				
032486	15	81	202	1 1	042546	
032586	19	94				
032686	12	61	885	10 10	042546	
032786	13	68				
032886	18	97				
032986	14	66	814	14 14	042546	72.4 100
033086	0	0				
033186	16	80				
040186	17	82				
040286	19	87	717	23 23	042546	
040386	20	91				
040486	11	54				
040586	19	87				
040686	23	109				
040786	24	89				
040886	12	34				
040986	0	0	608	33 32	042546	77.0 100
041086	16	64				
041186	21	88				
041286	10	42				
041386	19	78	443	31 31	042546	
041486	19	82				
041586	20	74	412	14 14	042546	70.2 100

Total	438	2052	5465	126 125		73.8 400

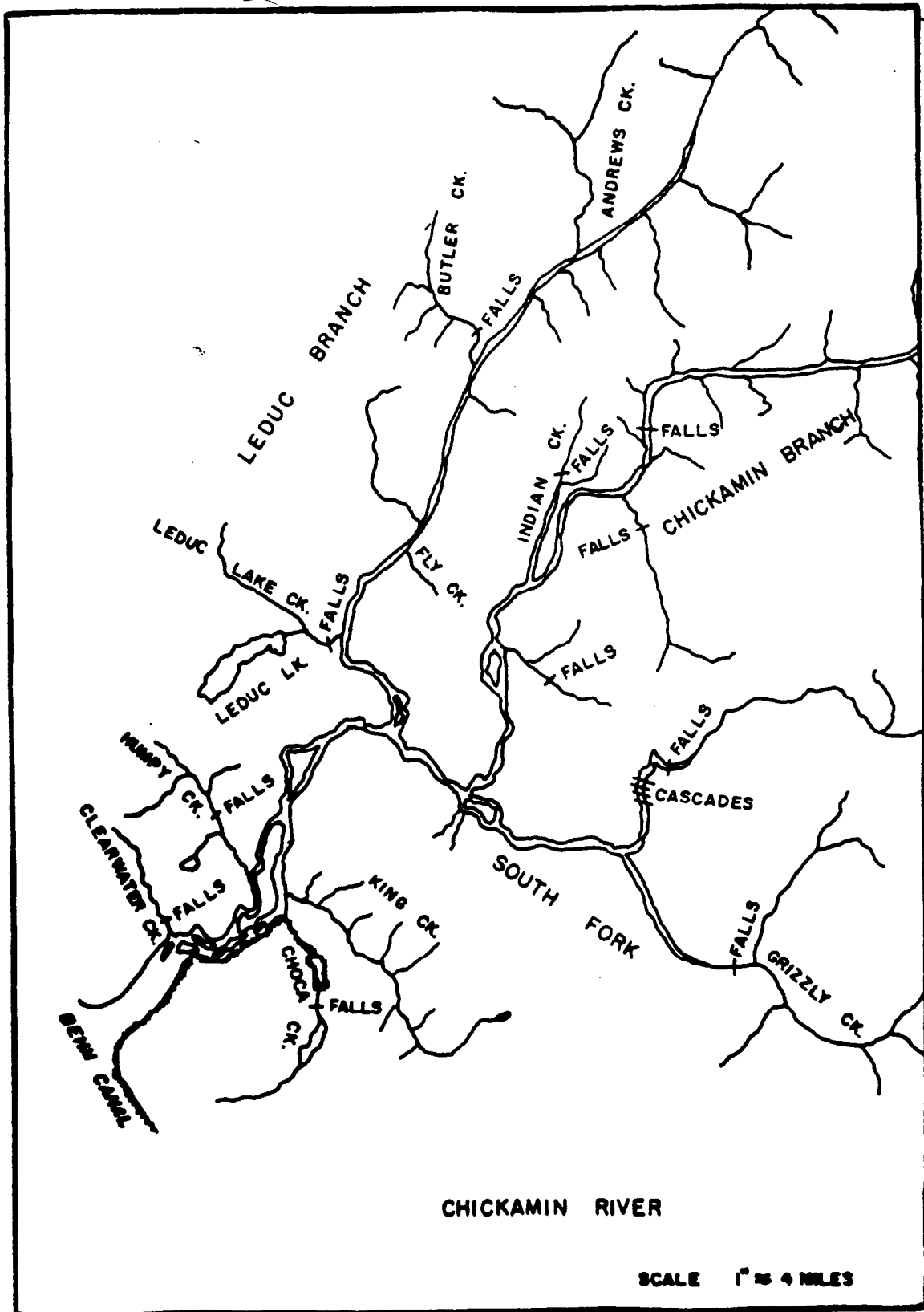


Figure 12. Chickamin River drainage.

fifth in chinook salmon production in Southeast, behind the Stikine, Taku, Alsek, and Unuk Rivers.

Escapement:

Chinook salmon are enumerated annually in the Chickamin River index tributaries (Kissner, 1985) by foot and/or helicopter surveys during the peak of spawning. The 1986 observed escapement of 1,677 chinook salmon was 86% above the index escapement goal of 900 and 292% above the 11-year mean escapement of 428 (Appendix Table 25).

Juvenile Chinook Salmon Studies:

Trapping and coded wire tagging of chinook salmon smolts from the 1984 brood was conducted on the mainstem Chickamin River from 15 March through 15 April 1986. A total of 4,498 chinook salmon smolts, averaging 66.0 mm fork length, were captured and tagged (Table 13). Inriver tag loss was estimated at 1.4%, which yields an adjusted number of 4,435 tagged chinook salmon smolts released. An additional 3,430 juvenile coho salmon were incidentally captured and coded wire tagged (Table 14). Their inriver tag loss was estimated at 4.6%. Thus, the adjusted number of tagged coho salmon juveniles released was 3,272.

Capturing juvenile chinook salmon occurred from about 1 kilometer above the junction of the mainstem and South Fork of the Chickamin downriver for approximately 15 kilometers. The highest densities of rearing chinook salmon were observed in the first 2.4 kilometers below the Leduc and South Fork junction, based on distribution studies conducted to date (Appendix Table 26). Mean fork lengths and sample sizes of juvenile chinook trapped on the Chickamin River are presented in Appendix Table 27.

A summary of chinook and coho salmon coded wire tagged in the Chickamin River to date is presented in Appendix Tables 28 and 29.

Coded Wire Tag Recovery:

Based on 52 coded wire tag recoveries of the 1981 brood and four from the 1982 brood (all recovered during the 1985 and 1986 fisheries), Chickamin River chinook salmon are contributing to Southeast fisheries at various life history stages (Table 15).

A summary of recoveries of coho salmon coded wire tagged on the Chickamin River is presented in Appendix Table 30.

Escapement in Other Areas

The 1986 peak observed escapement counts of chinook salmon in other index tributaries monitored annually are as follows: Blossom River - 1,278, Keta River - 690, Chilkat River - 29, and King Salmon River - 199. These counts, as well as historical counts, are presented in Appendix Tables 31 through 34.

Table 13. Summary of chinook salmon trapping and tagging on the
Chickamin River, spring, 1986.

Date	Sites	Traps	Recaptures		Tags	Data	Mean	n
			Number	Number				
			Tagged	Total	Retained	Code	Length	
031686	10	50						
031786	8	55						
031886	9	57	128	0	0	042548	...	...
031986	7	44	886	0	0	042548	66.8	50
032086	7	50						
032186	7	47						
032286	0	0	520	3	2	042548	63.2	50
032386	7	37						
032486	12	73						
032586	12	76						
032686	0	0	508	3	2	042548	65.2	49
032786	13	63						
032886	12	59						
032986	12	61						
033086	18	70	411	25	25	042548	64.4	50
033186	17	67						
040186	17	67						
040286	20	75	496	14	14	042548	65.1	50
040386	19	68						
040486	18	72						
040586	20	75						
040686	20	74	586	30	30	042548	68.3	50
040786	21	76						
040886	21	75						
040986	0	0	237	15	15	042548	68.1	51
041086	3	3						
041186	25	73						
041286	26	74						
041386	22	71						
041486	23	70	483	34	34	042548	67.8	50
041586	24	75	243	19	19	042548	...	...
TOTAL	430	1757	4498	143	141		66.0	400

Table 14. Summary of coho salmon trapping and tagging on the
Chickamin River, spring, 1986.

Date	Sites	Traps	Recaptures			Data Code	Mean Length	n
			Number	Tags				
			Tagged	Total	Retained			
031686	10	50						
031786	8	55						
031886	9	57						
031986	7	44	225	11	10	042547	80.0	50
032086	7	50						
032186	7	47						
032286	0	0	289	10	9	042547	78.9	50
032386	7	37						
032486	12	73						
032586	12	76						
032686	0	0	489	23	23	042547	79.1	50
032786	13	63						
032886	12	59						
032986	12	61						
033086	18	70						
033186	17	67	342	24	23	042547	79.9	50
040186	17	67						
040286	20	75	574	31	28	042547	80.6	50
040386	19	68						
040486	18	72						
040586	20	75						
040686	20	74	549	66	61	042547	85.6	50
040786	21	76						
040886	21	75						
040986	0	0	220	36	36	042547	78.9	50
041086	3	3						
041186	25	73						
041286	26	74						
041386	22	71						
041486	23	70	540	71	70	042547	78.6	50
041586	24	75	202	53	50	042547	...	...
TOTAL	430	1757	3430	325	310		80.2	400

Table 15. A listing of coded wire tag recoveries of chinook salmon from the Chickamin River, 1985-1986.

Recovery Information										Release Information			
Tag Code	Date	Length	Recovery Area	WK	PC	GC	A	B	C	BY	Tagged	YR	MO
04-20-55	08/ /85	693	Central B.C., Canada				3	C	R	1	81	2,352	83 04
04-20-55	07/05/85	610	0 SE SIN 101-	1	27	09	0	C	R	1	81	2,352	83 04
04-20-55	07/06/85	155	2 SE SIN 101-95	1	28	06	3	C	R	1	81	2,352	83 04
04-20-55	07/08/85			1	28	06	5	C	R	1	81	2,352	83 04
04-20-55	07/08/85	633	0 SE SIN 102-10	1	28	06	5	C	R	1	81	2,352	83 04
04-20-55	07/12/85	672	0 NE CNTR 112-	1	28	05	5	C	R	1	81	2,352	83 04
04-20-55	07/15/85	670	0	1	29	06	5	C	R	1	81	2,352	83 04
04-20-55	07/16/85	655	0 NW COUT 113-	1	29	03	5	C	R	1	81	2,352	83 04
04-20-55	07/16/85	615	0 NE STEP 111-32	1	29	04	3	C	R	1	81	2,352	83 04
04-20-55	07/21/85		SE SIN 101-90	1	30	06		S	S	1	81	2,352	83 04
04-20-55	07/24/85	610	0	1	30	06	1	C	R	1	81	2,352	83 04
04-20-55	08/10/85	595	0 SE SIN 101-71	1	33	06		E	S	1	81	2,352	83 04
04-20-55	10/04/85	690	0 NE SNTR 110-	1	40	05	5	C	R	1	81	2,352	83 04
04-20-55	10/04/85	723	0 NE SNTR 110-	1	40	05	5	C	R	1	81	2,352	83 04
04-20-55	10/07/85	720	0 SE	1	41	06	5	C	S	1	81	2,352	83 04
04-20-55	10/15/85	740	0 SE SIN 102-	1	42	06	5	C	R	1	81	2,352	83 04
04-20-55	07/03/86	780	0 NE CNTR 112-	1	27	05	15	C	R	1	81	2,352	83 04
04-20-55	07/11/86	740	0 SE SIN 101-	1	28	06	15	C	R	1	81	2,352	83 04
04-20-55	07/12/86	730	0 NE -	1	28	05	15	C	R	1	81	2,352	83 04
04-20-55	07/15/86		SE SIN 101-45	1	29	06		S	S	1	81	2,352	83 04
04-20-55	07/16/86	755	0 SE CIN 106-10	1	29	06	15	C	R	1	81	2,352	83 04
04-20-55	07/16/86	870	0 NW COUT 113-	1	29	03	15	C	R	1	81	2,352	83 04
04-20-55	08/25/86	825	0 NE SNTR 109-	1	35	05	15	C	R	1	81	2,352	83 04
04-20-55	09/10/86	768	0 SE CIN 106-	1	37	05	15	C	R	1	81	2,352	83 04
04-20-55	10/06/86		NW COUT 113-41	1	41	03	5	C	S	1	81	2,352	83 04
04-20-62	05/31/85	406	0 SE SIN 101-90	1	22	06		S	S	1	82	5,474	84 04
04-20-62	07/18/85	427	0 SE SIN 101-25	1	29	06	5	C	S	1	82	5,474	84 04
04-20-62	07/ /86	696	CANADA - Northern Troll								82	5,474	84 04
04-20-62	05/15/86	670	0 SE SIN 101-90	1	20	06	15	T	R	1	82	5,474	84 04
04-20-62	05/30/86	635	0 SE SIN 101-85	1	22	06	15	T	R	1	82	5,474	84 04
04-20-62	05/31/86	584	0 SE SIN 102-50	1	22	06		S	S	1	82	5,474	84 04
04-20-62	06/06/86	600	0 SE SIN 101-15	1	23	06	15	T	R	1	82	5,474	84 04
04-20-62	06/07/86	675	0 SE SIN 101-90	1	23	06		S	R	1	82	5,474	84 04
04-20-62	06/07/86	680	0 SE SIN 101-46	1	23	06		S	R	1	82	5,474	84 04
04-20-62	06/13/86	585	0 SE SNTR 105-50	1	24	06	15	T	R	1	82	5,474	84 04
04-20-62	06/13/86	665	0 SE SIN 101-27	1	24	06	15	T	R	1	82	5,474	84 04
04-20-62	06/14/86	615	0 SE SIN 101-90	1	24	06	15	T	R	1	82	5,474	84 04
04-20-62	06/18/86	600	0 SE SIN 102-50	1	25	06	15	T	R	1	82	5,474	84 04
04-20-62	07/17/86	770	0 SE SIN 101-11	1	29	06	3	C	R	1	82	5,474	84 04
04-20-62	08/23/86	685	0 SE SIN 101-41	1	34	06	5	C	R	1	82	5,474	84 04

-Continued-

Table 15. A listing of coded wire tag recoveries of chinook salmon from the Chickamin River, 1985-1986.

Recovery Information										Release Information			
Tag Code	Date	Length	Recovery Area	WK	PC	GC	A	B	C	BY	Tagged	YR	MO
04-20-62	08/25/86	710 0 SE	SIN 102-60	1	35	09	15	C	S	1	82	5,474	84 04
04-20-62	08/25/86	728 0	-	1	35	05	15	C	R	1	82	5,474	84 04
04-20-62	08/26/86	708 0 NE	CNTR 112-	1	35	05	15	C	R	1	82	5,474	84 04
04-20-62	09/10/86	635 0 SE	CIN 106-	1	37	06	3	C	R	1	82	5,474	84 04
04-20-62	09/10/86	724 0 SE	CIN 106-41	1	37	05	15	C	R	1	82	5,474	84 04
04-20-62	09/10/86	730 0 SE	SIN 102-10	1	37	06	15	C	R	1	82	5,474	84 04
04-20-62	10/05/86		-	1	41	06	15	C	S	1	82	5,474	84 04
04-20-62	10/11/86	800 0 SE	SIN 101-45	1	41	06	15	C	R	1	82	5,474	84 04
04-20-62	11/17/86	720 0 NE	SNTR 110-	1	47	05	15	C	R	1	82	5,474	84 04
04-20-62		SE	SIN 101-45	1	06			S	S	1	82	5,474	84 04
04-20-63	08/01/85	468 0 SE	SIN 101-	1	31	05	3	C	R	7	81	3,790	84 04
04-20-63	06/26/86	700 0 SW	SOUT -	1	26	06	5	C	R	7	81	3,790	84 04
04-25-24	06/06/86	415 0 SE	SIN 101-	1	23	06	15	T	R	1	83	2,426	85 05
04-25-24	08/01/86	420 0 SE	SIN 101-	1	31	06	1	C	S	1	83	2,426	85 05
04-25-24	09/22/86	415 0 SE	SIN 101-44	1	39	06	1	C	S	1	83	2,426	85 05
04-25-47	09/29/86	280 0 SE	SIN 101-46	1	46		98	T	S	7	84	3,272	86 04
04-25-48	09/27/86	240 0 SE	SIN 101-53	1	39		98	T	S	1	84	4,435	86 04

Note: Length is in millimeters and is followed by a code for the type of length measurement (0 = tip of head to fork of tail, 1 = mid-eye to fork of tail, 2 = head length).

WK = Statistical week.	B = Code for sample type
PC = ADFG port code.	R = Random
GC = Code for gear used	S = Select
0 = Fish Trap	C = Code for tag status
1 = Seine	1 = ok
3 = Gillnet	7 = nonsense- e.g. a chinook
5 = Troll	identified and tagged as
15 = Power Troll	a juvenile coho salmon
98 = NMFS Test Troll	
A = Code for sample source	
C = Commercial	
S = Sport	
E = Escapement	
T = Test Fishery	

RECOMMENDATIONS

1. Sampling the commercial and sport harvests of chinook salmon and the spawning grounds should continue in order to recover coded wire tags. Recovery of chinook salmon tagged in the Taku, Stikine, Alsek, Unuk, Chickamin, and Situk Rivers will permit determination of their marine migration patterns, areas and timing of harvest at various life history stages, and rates of harvest.
2. Sampling for age, length, and sex ratio data of spawning chinook salmon in the major and medium producing rivers should be conducted to determine the status of the various escapements and to forecast future returns.
3. Determine the current status of chinook salmon in the major and medium chinook producing systems in Southeast by monitoring their escapements by aerial, ground, and/or weir enumeration. This is necessary to determine if the various closures designed to aid depressed Southeast chinook salmon are effective.
4. Continue to determine the percentage of the total escapement of 3- and 4-ocean age chinook salmon observed during the peak low level helicopter and/or ground surveys by comparison with known escapements through various weirs.

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Appendix Table 1. Peak escapement counts of chinook salmon in the Taku River tributaries.

Year	Nakina	Kowatua	Tatsamenie	Dudidontu	Tseta	Nahlin	Total
1951	5,000	...	...	400	100	1,000	6,500
1952	9,000	...	...	...	...	...	9,000
1953	7,500	...	...	...	...	...	7,500
1954	6,000	...	...	...	...	...	6,000
1955	3,000	...	...	...	...	...	3,000
1956	1,380	...	...	...	...	...	1,380
1957	1,500*	...	...	...	...	...	1,500
1958	2,500*	...	...	4,500	...	2,500	9,500
1959	4,000*	...	...	...	...	...	4,000
1960	Poor	...	...	...	...	...	Poor
1961	Poor	...	...	...	...	...	Poor
1962	...	...	...	25	81	216	322
1963	...	...	...	...	...	...	...
1964	...	...	...	...	...	...	...
1965	3,050	200 G	50 G	100	18	37	3,455
1966	...	14 G	150 G	267	150	300	881
1967	...	250 G	...	600	350	300	1,500
1968	...	1,100 E	800 E	640	230	450	3,220
1969	...	3,300 E	800 E	...	...	...	4,100
1970	...	1,200 E	530 E	10	25	26	1,791
1971	...	1,400 E	320 E	165	...	473	2,358
1972	1,000	130 G	170 G	103	80	280	1,763
1973	2,000	100 G	200 G	200	...	300	2,800
1974	1,800	235 G	120 G	20	4	900	3,079
1975	1,800	...	...	15	...	274	2,089
1976	3,000	341 G	620 E	40	...	725	4,726
1977	3,850	580 G	573 E	18	...	650	5,671
1978	1,620	490 G	550 E	...	21	624	3,305
1979	2,110	430 G	750 E	9	...	857	4,156
1980	4,500	450 G	905 E	158	...	1,531	7,544
1981	5,110	560 G	839 E	74	258	2,945	9,786
1982	2,533	289 E	387 E	130	228	1,246	4,813
1983	968	171 E	236 E	117	179	391	2,062
1984	1,887	279 E	616 E	...	176a	951b	3,909
1985	2,647	699 E	848 E	476	303	2,236	7,209
1986	3,868	548 E	886 E	413	193	1,612	7,520

a = surveyed only upper 2 miles - partial survey.

b = surveyed only above beaver dam valley - total enumerated = 521 -
adjustment made for total area, using spawner distribution data
collected in past years as follows: above dams = 54.8%, in dams = 23.2%,
and below dams to Telegraph Trail = 22.0%.

G = water glacial.

E = water clear.

* = counts of total river not conducted - comparison made from carcass weir
enumeration.

Appendix Table 2. Length frequencies of male chinook salmon sampled at the Nakina carcass weir, 1956-1986.

Length																		
Interval	1956	1957	1958	1959*	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986**

<225	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
225-249	3	1	3	3	1	0	1	0	0	1	0	0	0	0	0	0	0	0
250-274	34	26	46	20	7	10	1	3	2	1	1	6	1	7	2	1	11	14
275-299	141	96	162	132	24	100	31	7	54	36	24	35	14	64	37	4	51	47
300-324	235	168	289	328	114	274	73	27	290	462	134	102	52	270	163	34	235	141
325-349	362	305	301	275	108	254	80	16	432	853	267	175	51	330	288	82	241	82
350-374	82	66	262	120	97	143	52	10	343	616	180	107	42	161	201	66	139	45
375-399	57	64	192	41	68	41	32	12	142	239	65	39	32	22	66	30	37	46
400-424	83	144	202	61	71	56	63	15	46	86	48	18	23	15	53	14	13	67
425-449	129	131	215	98	99	68	81	28	44	36	94	25	35	19	119	15	11	118
450-474	330	365	207	111	120	110	76	32	50	63	188	47	39	27	167	40	19	120
475-499	146	141	271	132	94	107	72	57	35	100	204	64	45	41	180	40	27	111
500-524	140	165	262	170	100	94	57	57	41	150	288	99	62	27	210	68	43	121
525-549	103	113	202	148	91	68	46	71	32	162	208	88	40	22	156	61	45	73
550-574	138	136	145	182	93	55	28	69	28	147	168	86	42	40	109	63	58	76
575-599	46	60	86	99	78	44	31	52	21	97	97	80	54	29	77	70	48	65
600-624	36	30	70	100	49	49	18	39	15	102	81	60	41	23	64	66	50	31
625-649	56	77	68	71	38	31	14	35	24	33	34	52	38	27	23	52	38	38
650-674	22	30	89	90	39	36	14	34	22	18	36	59	44	29	16	63	53	15
675-699	17	26	69	86	27	25	9	28	33	14	36	49	40	18	16	43	60	14
700-724	44	43	67	87	35	42	9	34	48	8	40	48	55	39	16	50	72	40
725-749	21	16	35	68	34	37	10	32	52	9	58	48	57	44	17	43	77	43
750-774	24	18	29	66	37	45	9	22	67	10	53	49	59	29	16	41	81	34
775-799	46	56	29	62	28	21	12	26	62	4	37	30	39	39	21	30	55	29
800-824	19	27	27	58	27	23	12	16	50	5	34	43	46	39	16	24	48	27
825-849	19	24	22	81	28	21	8	21	26	10	22	20	29	40	15	14	35	29
850-874	11	8	29	66	35	16	13	13	48	13	22	27	39	35	20	10	25	29
875-899	7	7	12	68	39	21	5	14	42	10	8	25	47	39	18	6	37	28
900-924	1	0	9	37	49	17	13	11	57	11	7	27	57	46	25	8	32	38
925-949	0	0	3	14	35	16	7	12	46	20	14	25	49	40	23	3	23	18
950-974	0	0	2	4	24	8	7	11	46	9	7	28	49	39	16	5	23	29
>974	0	0	0	1	22	11	3	6	41	20	8	27	45	49	27	6	15	...

TOTAL	2,353	2,343	3,405	2,879	1,711	1,843	887	810	2,239	3,344	2,463	1,588	1,266	1,649	2,177	1,052	1,702	1,568

* No data collected between 1960 and 1972.

** Lengths were converted from post orbit - hypural to mid-eye - fork using $Y = 2.572171 + 1.145751 X$ ($n = 146$, $R\text{-squared} = 0.998$).

Appendix Table 3. Length frequencies of female chinook salmon sampled at the Nakina carcass weir, 1956-1986.

Length																		
Interval	1956	1957	1958	1959*	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986**

<600	7	3	0	3	0	0	0	1	0	0	0	0	0	0	0	0	0	0
600-624	3	5	2	6	0	0	0	2	0	0	0	0	0	0	0	0	0	0
625-649	6	3	9	10	0	2	0	2	0	0	0	1	0	0	0	2	0	1
650-674	16	20	13	17	2	2	0	4	2	0	2	1	3	0	0	2	0	0
675-699	29	17	38	42	3	1	3	9	4	1	5	14	6	3	1	5	5	5
700-724	44	28	66	93	10	22	8	21	13	6	12	27	27	7	5	11	22	10
725-749	46	49	55	142	17	21	3	25	38	1	34	47	33	16	7	35	59	22
750-774	69	56	76	192	43	53	12	60	66	8	39	69	69	26	19	33	108	42
775-799	66	52	67	197	59	52	4	51	112	13	44	82	86	46	25	18	137	55
800-824	87	125	87	238	112	90	16	71	175	28	51	99	153	68	37	33	146	90
825-849	28	29	36	156	108	64	11	56	203	26	34	77	186	96	62	27	160	63
850-874	15	13	21	71	150	70	7	51	219	36	19	98	201	107	46	27	132	78
875-899	4	2	5	18	77	28	4	22	171	41	17	75	150	124	32	16	69	33
900-924	3	1	2	5	22	11	0	6	96	33	8	49	109	76	31	10	33	18
925-949	0	0	0	1	6	4	1	3	34	11	5	9	28	44	5	3	18	13
950-974	1	0	1	0	3	0	0	0	8	2	1	6	12	21	6	2	7	2
>974	0	0	0	0	2	0	0	1	2	1	0	0	3	8	0	3	1	0

TOTAL	424	403	478	1,191	614	420	69	385	1,143	207	271	654	1,066	642	276	227	897	432

* No data collected between 1960 and 1972.

** Lengths were converted from post orbit - hypural to mid-eye - fork using $Y = 39.35662 + 1.081053 X$ ($n = 54$, $R\text{-squared} = 0.909$).

Appendix Table 4. Length frequency distributions by age class by year of male chinook salmon sampled at the Nakina carcass weir, 1980-1986.

	1986*				1985				1984				1983				1982				1981				1980			
	Age Classes				Age Classes				Age Classes				Age Classes				Age Classes				Age Classes				Age Classes			

Length																												
Interval	1.1	1.2	1.3	1.4	1.1	1.2	1.3	1.4	1.1	1.2	1.3	1.4	1.1	1.2	1.3	1.4	1.1	1.2	1.3	1.4	1.1	1.2	1.3	1.4	1.1	1.2	1.3	1.4
≤275	3				7				1				1				7				1				3			
275-299	7				20	1			4				33				44				12				26			
300-324	17	2			6				34				23				47				39				29			
325-349	12				5				82				46	1			40				49				35			
350-374	1	2			18	2			66				42				43	1			27	3			39	1		
375-399	2	6			13	8	1		28	2			34	9			18	1			10	12			17	3		
400-424		10			2	6	1		8	6			8	28			4	6			2	12			3	4		
425-449	1	12				7	1			15			1	37	1		1	13				24			3	7		
450-474		12				14	1		3	37				39				14				35			1	21		
475-499		10		1		19	3			39	1		40	1			33			3	35			2	30			
500-524		19	2			24	2			68			44				20				38	1		4	40			
525-549		7	1			30				57	4		42	2			17				28	3			34			
550-574		16				26	4			56	7		41				28	1			30	4		31	7			
575-599		36	1	1		28	5			58	12		39	4			17	3			29	5		31	6			
600-624		17	12			23	8			50	16		35	3	1		6	9			27	4		18	7			
625-649		20	16	1		14	12			26	26		14	4			7	8			10	17		13	11			
650-674		7	6	1		8	21	1		19	44		2	12			8	14	1		9	21	4	3	10			
675-699			14			1	1	1		4	39		2	11			1	9	1		3	30	2	1	34			
700-724		1	32	3		2	14			1	46	3		12			1	22	1		1	42	1		22	1		
725-749			37	2		1	20	2			43			1	8	1		23	3			44	1		23	3		
750-774			28	3			20	4			40	1		10	4			19	4			37	3		22			
775-799			17	12			23	4			28	2		11	4			15	5			27	4		12			
800-824			13	12		1	22	5			23	1		2	8			18	8			21	15		15	2		
825-849			6	23			8	8			13	1		3	8			10	15			10	13		4	3		
850-874			9	20		1	5	9			7	3		2	13			8	11			7	21		3	6		
875-899			4	23			5	11			1	5			12			5	24			4	36			9		
900-924				33			5	14			5	3			16			3	36				38			11		
≥924		1	1	45			5	29			2	12			53				86			2	110			53		

Totals	43	178	199	180	71	217	204	88	226	438	357	31	188	374	86	120	204	173	167	196	143	296	279	248	162	237	176	88
	n = 600				n = 580				n = 1,052				n = 768				n = 739				n = 966				n = 663			

Note: Small numbers (less than 10 in any age class in any year) of 0 check, 2 check and age 1.5 chinook were sampled. Age 1.5 chinook were included with age 1.4, and 0 and 2 check chinook were not included in this table.

* Lengths were converted from post orbit - hypural to mid-eye - fork.

Appendix Table 5. Percentage age composition within 25 mm length intervals of male chinook salmon sampled at the Nakina carcass weir, 1980-1986.

	1986*				1985				1984				1983				1982				1981				1980			
	Age Classes				Age Classes				Age Classes				Age Classes				Age Classes				Age Classes				Age Classes			
Length																												
Interval	1.1	1.2	1.3	1.4	1.1	1.2	1.3	1.4	1.1	1.2	1.3	1.4	1.1	1.2	1.3	1.4	1.1	1.2	1.3	1.4	1.1	1.2	1.3	1.4	1.1	1.2	1.3	1.4
≤275	100				100				100				100				100				100				100			
275-299	100				95	5			100				100				100				100				100			
300-324	89	11			100				100				100				100				100				100			
325-349	100				100				100				98	2			100				100				100			
350-374	33	67			90	10			100				100				97	2			90	10			98	2		
375-399	25	75			59	36	5		93	7			79	21			95	5			45	55			85	15		
400-424		100			22	67	11		57	43			22	78			40	60			14	86			43	57		
425-449	8	92				87	13			100			3	94	3		7	93				100			30	70		
450-474		100				93	7		8	92				100				100				100			5	95		
475-499		91		9		86	14			97	3			98	2			100			8	92			6	94		
500-524		90	10			92	8			100				100				100				97	3		9	91		
525-549		88	12			100				93	7			95	5			100				90	10			100		
550-574		100				87	13			89	11			100				97	3			88	12			82	18	
575-599		94	3	3		85	15			83	17			91	9			85	15			85	15			84	16	
600-624		59	41			74	26			76	24			90	7	3		40	60			87	13			72	28	
625-649		54	43	3		54	46			50	50			78	22			47	53			37	63			54	46	
650-674		50	43	7		27	70	3		30	70			14	86			35	61	4		26	62	12		23	77	
675-699			100			33	33	33		9	91			15	85			9	82	9		8	86	6		3	97	
700-724		3	89	8		13	87			2	92	6			100			4	92	4		2	96	2			96	4
725-749			95	5		4	87	9			100			10	80	10			88	12			98	2			88	12
750-774			90	10			83	17			98	2			71	29			83	17			93	7			100	
775-799			59	41			85	15			93	7			73	27			75	25			87	13			100	
800-824			52	48		4	78	18			96	4			20	80			69	31			58	42			88	12
825-849			21	79			50	50			93	7			27	73			40	60			43	57			57	43
850-874			31	69		7	33	60			71	29			13	87			42	58			25	75			33	67
875-899			15	85			31	69			70	30				100			17	83			10	90				100
900-924				100			26	74			62	38				100			8	92				100				100
≥924		2	2	96			15	85			14	86				100				100			2	98				100

Note: Small numbers (less than 10 in any age class in any year) of 0 check, 2 check and age 1.5 chinook were sampled. Age 1.5 chinook were included with age 1.4, and 0 and 2 check chinook were not included in this table.

* Lengths were converted from post orbit - hypural to mid-eye - fork.

Appendix Table 6. Length frequency distribution by age class by year of female chinook salmon sampled at the Nakina carcass weir, 1980-1986.

Length Interval	1986* Age Classes		1985 Age Classes		1984 Age Classes		1983 Age Classes		1982 Age Classes		1981 Age Classes		1980 Age Classes	
	1.3	1.4	1.3	1.4	1.3	1.4	1.3	1.4	1.3	1.4	1.3	1.4	1.3	1.4
625-649		1												
650-674					4						2			
675-699	4	1	3		5		1		1	1	4		5	
700-724	5	3	13		10	1	3	1	5	1	22	1	9	
725-749	15	5	27	7	33	2	4		7	2	24	5	16	1
750-774	18	20	15	9	28	5	8	4	11	3	27	12	21	1
775-799	22	31	7	6	15	3	5	12	18	15	15	23	19	9
800-824	14	74	7	10	17	16	7	17	5	31	9	28	9	19
825-849	1	57	4	8	12	15	2	35	4	31	5	41	3	26
850-874	1	71	1	17	3	24	2	32	1	39		52	1	34
875-899	1	26	2	24	2	14	1	17		38		45		31
900-924		16	1	16	4	6		17	1	35		40	2	22
>924		14		14		8		10		57		35		10
Total	81	319	80	111	133	94	33	145	53	253	106	284	85	153
	n = 400		n = 191		n = 227		n = 178		n = 306		n = 390		n = 238	

Note: Small numbers (less than 10 in any age class in any year) of 0 check, 2 check and age 1.5 chinook were sampled. Age 1.5 chinook were included with age 1.4, and 0 and 2 check chinook were not included in this table.

* Lengths were converted from post orbit - hypural to mid-eye fork.

Appendix Table 7. Percentage age composition within 25 mm length intervals of female chinook salmon sampled at the Nakina carcass weir, 1980-1986.

Length Interval	1986*		1985		1984		1983		1982		1981		1980	
	Age Classes		Age Classes		Age Classes		Age Classes		Age Classes		Age Classes		Age Classes	
	1.3	1.4	1.3	1.4	1.3	1.4	1.3	1.4	1.3	1.4	1.3	1.4	1.3	1.4
625-649		100												
650-674					100						100			
675-699	80	20	100		100		100		50	50	100		100	
700-724	63	37	100		91	9	75	25	83	17	96	4	100	
725-749	75	25	79	21	94	6	100		78	22	83	17	94	6
750-774	47	53	62	38	85	15	67	33	79	21	69	31	95	5
775-799	42	58	54	46	83	17	29	71	55	45	39	61	68	32
800-824	16	84	41	59	52	48	29	71	14	86	24	76	32	68
825-849	2	98	33	67	44	56	5	95	11	89	11	89	10	90
850-874	1	99	6	94	11	89	6	94	3	97		100	3	97
875-899	4	96	8	92	13	87	6	94		100		100		100
900-924		100	6	94	40	60		100	3	97		100	8	92
≥924		100		100		100		100		100		100		100

Note: Small numbers (less than 10 in any age class in any year) of 0 check, 2 check and age 1.5 chinook were sampled. Age 1.5 chinook were included with age 1.4, and 0 and 2 check chinook were not included in this table.

* Lengths were converted from post orbit - hypural to mid-eye to fork.

Appendix Table 8. Number of male and female chinook salmon sampled at the Nakina carcass weir assigned to age classes by year.

Year	MALE						FEMALE			
	Age	Age	Age	Age	Age	Total	Age	Age	Age	Total
	1.1	1.2	1.3	1.4	1.5	Total	1.3	1.4	1.5	Total
1956	958	1,118	242	35	0	2,353	270	154	0	424
1957	789	1,245	270	39	0	2,343	244	159	0	403
1958	1,716	2,106	513	88	0	4,423	413	231	0	644
1959	950	1,090	615	224	0	2,879	665	526	0	1,191
1973	446	772	283	203	7	1,711	167	447	0	614
1974	845	636	260	99	3	1,843	163	257	0	420
1975*	297	445	94	50	1	887	14	55	0	69
1976**	85	419	226	77	4	811	151	234	0	385
1977	1,269	306	327	330	7	2,239	182	950	11	1,143
1978	2,192	930	140	74	8	3,344	41	159	7	207
1979	675	1,352	375	59	2	2,463	185	82	4	271
1980	486	542	388	172	0	1,588	258	396	0	654
1981	178	401	365	322	0	1,266	198	862	6	1,066
1982	856	248	263	274	8	1,649	90	537	15	642
1983	752	1,134	126	163	2	2,177	50	225	1	276
1984	226	438	357	31	0	1,052	133	89	5	227
1985	670	359	491	182	0	1,702	320	575	2	897
1986	305	836	230	195	2	1,568	87	339	6	432

* = Partial barrier to migration at Village Falls.
 ** = Partial weir at Grizzly Bar.

Appendix Table 9. Number of male and female chinook salmon enumerated in the Nakina River (age classes 1.3 and older) assigned to age classes by year.

Year	MALE						FEMALE			
	Age	Age	Age	Age	Age	Total	Age	Age	Age	Total
	1.1	1.2	1.3	1.4	1.5		1.3	1.4	1.5	
1956	1,886	2,201	476	69	0	4,632	532	303	0	835
1957	1,662	2,623	569	82	0	4,936	514	335	0	849
1958	3,446	4,229	1,030	177	0	8,882	829	464	0	1,293
1959	1,872	2,148	1,212	441	0	5,673	1,310	1,037	0	2,347
1973	806	1,395	511	367	13	3,092	302	807	0	1,109
1974	1,945	1,464	599	228	7	4,243	375	591	0	966
1975*	2,498	3,743	790	420	9	7,460	118	463	0	581
1976**	368	1,816	980	334	17	3,515	654	1,014	0	1,668
1977	2,704	652	696	703	15	4,770	388	2,024	23	2,435
1978	8,277	3,512	528	279	30	12,626	155	601	27	783
1979	2,014	4,035	1,119	176	6	7,350	552	245	12	809
1980	1,801	2,009	1,438	637	0	5,885	957	1,468	0	2,425
1981	519	1,169	1,064	939	0	3,691	577	2,512	18	3,107
1982	1,823	528	560	584	17	3,512	192	1,144	32	1,368
1983	1,284	1,936	215	278	4	3,717	85	384	2	471
1984	693	1,344	1,096	94	0	3,227	408	274	15	697
1985	1,130	607	829	308	0	2,874	538	969	4	1,515
1986	1,372	3,763	1,037	880	10	7,062	393	1,523	25	1,941

* = Partial barrier to migration at Village Falls.

** = Partial weir at Grizzly Bar.

Appendix Table 10. Number of male and female chinook salmon enumerated in the Nakina River assigned to age classes by brood year.

Brood Year	MALE						FEMALE			
	Age	Age	Age	Age	Age		Age	Age	Age	
	1.1	1.2	1.3	1.4	1.5	Total	1.3	1.4	1.5	Total
1951	...	...	476	82	0	...	532	335	0	867
1952	...	2,201	569	177	0	...	514	464	0	978
1953	1,886	2,623	1,030	441	...	5,980	829	1,037	...	1,866
1954	1,662	4,229	1,212	...	...	...	1,310	...	...	...
1968	...	...	511	228	9	...	302	591	0	893
1969	...	1,395	599	420	17	...	375	463	0	838
1970	806	1,464	790	334	15	3,409	118	1,014	23	1,155
1971	1,945	3,743	980	703	30	7,401	654	2,024	27	2,705
1972	2,498	1,816	696	279	6	5,295	388	601	12	1,001
1973	368	652	528	176	0	1,724	155	245	0	400
1974	2,704	3,512	1,119	637	0	7,972	552	1,468	18	2,038
1975	8,277	4,035	1,438	939	17	14,706	957	2,512	32	3,501
1976	2,014	2,009	1,064	584	4	5,675	577	1,144	2	1,723
1977	1,801	1,169	560	278	0	3,808	192	384	15	591
1978	519	528	215	94	...	1,356	85	274	4	363
1979	1,823	1,936	1,096	308	10	5,173	408	969	25	1,402
1980	1,284	1,344	829	880	...	...	538	1,523	...	...
1981	693	607	1,037	...	...	...	393	...	...	...
1982	1,130	3,763	...	...	...	...	...	...	...	...
1983	1,372	...	...	...	...	...	...	...	...	...

Appendix Table 11. Timing of the die-off of male chinook salmon at the Nakina carcass weir, 1973-1986.

DATE	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
July 27	...	...	...	...	...	7	...	...	...	...	...	...	...	...
28	...	...	...	...	4	2	...	3	...	1	0	...	...	...
29	...	...	...	...	7	5	...	0	4	3	2	...	...	...
30	...	...	...	...	8	7	1	1	5	4	4	0	...	...
31	...	...	...	...	17	3	6	3	6	8	3	6	...	...
Aug. 1	...	...	...	...	14	15	9	4	4	14	3	6	...	...
2	...	...	...	...	28	20	3	7	11	15	7	0	2	8
3	4	...	1	...	38	32	9	7	11	21	3	5	5	1
4	8	...	1	...	56	59	9	11	18	36	18	5	16	12
5	15	...	1	...	94	54	14	23	43	36	28	18	0	17
6	41	27	2	...	134	85	17	35	61	49	41	32	23	19
7	55	18	8	...	155	100	33	59	80	79	70	53	38	17
8	86	28	6	63	213	152	46	69	85	99	96	69	47	72
9	95	29	13	78	147	142	55	90	93	95	118	85	66	26
10	116	66	16	146	194	243	74	119	98	107	135	53	83	102
11	94	101	20	114	204	208	109	139	121	102	171	65	99	126
12	133	89	35	152	187	274	109	145	91	101	178	88	93	124
13	141	159	27	84	188	233	130	139	104	114	177	93	143	165
14	133	177	64	27	116	227	212	106	82	96	191	96	141	150
15	138	183	63	34	126	246	195	123	71	124	163	71	146	149
16	92	206	60	46	89	222	212	89	64	132	177	63	180	101
17	116	202	87	36	78	212	197	125	64	106	130	94	137	99
18	83	168	81	24	38	214	207	75	49	78	120	52	97	93
19	123	147	73	29	44	138	219	87	45	93	123	40	84	69
20	72	123	69	19	24	108	186	51	21	54	95	40	70	43
21	100	65	62	10	20	94	146	43	24	46	73	46	63	69
22	46	54	60	19	8	84	131	26	10	30	67	27	61	55
23	22	...	57	4	9	107	109	9	...	18	26	15	43	51
24	...	...	58	...	...	51	28	...	...	8	...	12	65	...
	1,713	1,842	864	885	2,240	3,344	2,466	1,588	1,265	1,669	2,219	1,134	1,702	1,568

Appendix Table 12. Timing of the die-off of female chinook salmon at the Nakina carcass weir, 1973-1986.

DATE	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986
July 27	...	...	...	...	...	2	...	...	...	...	...	...	...	...
28	...	...	...	...	3	1	...	...	...	1	0	...	...	...
29	...	...	...	...	4	0	...	...	0	0	0	...	...	...
30	...	...	...	...	3	2	2	1	1	1	0	1	...	...
31	...	...	...	...	2	1	2	3	9	2	1	1	...	...
Aug. 1	...	...	...	...	8	1	0	1	5	3	1	1	...	...
2	...	...	...	...	12	5	0	1	2	8	0	0	1	6
3	5	...	...	...	13	7	0	4	16	8	0	5	5	1
4	5	...	...	...	35	9	5	8	18	14	3	8	21	3
5	3	...	...	...	40	11	4	8	25	19	1	5	2	4
6	5	1	...	...	53	11	2	14	34	24	11	11	15	4
7	10	2	1	...	69	12	6	27	43	38	12	12	27	7
8	17	8	1	28	141	16	3	30	78	45	19	22	28	29
9	17	8	1	29	113	17	10	40	63	59	21	22	27	6
10	37	6	1	41	126	26	10	30	80	41	10	15	28	16
11	37	13	3	46	135	17	9	63	104	48	17	7	78	47
12	36	16	8	43	57	27	18	64	91	51	21	9	68	35
13	42	26	2	36	89	17	20	63	114	50	33	18	81	62
14	44	21	5	14	53	5	26	68	99	46	30	21	79	48
15	54	52	1	39	70	6	15	63	90	37	18	21	69	35
16	30	38	7	29	39	4	22	34	74	44	20	20	102	21
17	49	70	8	23	35	3	25	56	35	46	30	20	67	24
18	31	33	5	20	18	3	25	21	29	13	8	7	46	17
19	57	64	5	14	12	2	10	36	17	28	18	9	49	12
20	33	28	8	19	2	0	19	12	20	20	11	8	43	17
21	54	20	3	5	9	1	13	3	13	11	4	8	28	17
22	36	14	3	15	2	0	14	4	5	6	3	8	19	6
23	15	...	3	2	1	1	12	0	...	5	3	4	5	15
24	...	...	4	...	...	0	2	...	...	0	...	2	9	...
	617	420	69	403	1,144	207	274	654	1,066	668	296	265	897	432

Appendix Table 13. A listing of coded wire tag releases of Taku River chinook salmon, 1977-1983.

Data Code	Young-of-the-Year Released	Smolts Released	Brood Year	Mean Size in mm	Capture Location	% Tag Retention
040508		4,616**	1975	79.7	Mainstem Taku, Tagged April-May, 1977 at Taku Lodge	87.2
040509		3,972**	1975	79.7	Mainstem Taku, Tagged May, 1977 at Taku Lodge	87.2
040510		46**	1975	79.7	Mainstem Taku, Tagged May, 1977 at Taku Lodge	87.2
041655	10,227*		1979	68.7	Glacial Nakina River, Tagged at Inklin Jct., Oct. 1980	95.7
041656	3,925*		1979	68.4	Taku River, Tagged at Inklin Jct., Oct. 1980	95.7
041657	1,434*		1979	68.7	Glacial Nakina River, Tagged at Inklin Jct., Nov. 1980	95.7
041658	4,609*		1978	64.8	Mainstem Taku, Tagged at Tulsequah, Sept. 1979	82.4
041659	878*		1978	68.2	Glacial Nakina River, Tagged at Inklin Jct., Oct. 1979	82.4

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Appendix Table 13. A listing of coded wire tag releases of Taku River chinook salmon, 1977-1983.

Data Code	Young-of-the-Year Released	Smolts Released	Brood Year	Mean Size in mm	Capture Location	% Tag Retention
041660	3,973*		1978	64.8	Mainstem Taku & Glacial Nakina Tagged at Inklin Jct. & Tulsequah, Oct. 1979	82.4
041661		1,573	1978	84.3	Taku Inlet Tagged at Juneau, May 1980	...
041662		2,337*	1977	66.2	Mainstem Taku, Tagged at Tulsequah, April 1979	91.7
041663	3,366*		1979	68.4	Mainstem Taku, Tagged at Inklin Jct., Nov. 1980	95.7
041708	5,092		1976	68.5	Nahlin River, Tagged Sept. 1977	...
041709	3,402		1976	68.5	Nahlin River, Tagged Sept. 1977	...
041710	4,358		1976	62.9	Mainstem Taku, Tagged at Tulsequah, Oct. 1977	...
041711	4,468		1976	62.9	Mainstem Taku, Tagged at Tulsequah, Oct. 1977	...
041712	4,796		1976	62.9	Mainstem Taku, Tagged at Tulsequah, Oct. 1977	...

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Appendix Table 13. A listing of coded wire tag releases of Taku River chinook salmon, 1977-1983.

Data Code	Young-of-the-Year Released	Smolts Released	Brood Year	Mean Size in mm	Capture Location	% Tag Retention
041713	6,134		1976	62.9	Mainstem Taku, Tagged at Tulsequah, Oct. 1977	...
041714	2,123		1976	62.9	Mainstem Taku, Tagged at Tulsequah, Oct. 1977	...
041721		4,778	1976	70.3	Mainstem Taku, Tagged at Tulsequah, April 1978	...
041722		3,717	1976	70.3	Mainstem Taku, Tagged at Tulsequah, May 1978	...
041723		666	1976	70.3	Mainstem Taku, Tagged at Tulsequah, May 1978	...
041724		389	1976	70.3	Mainstem Taku, Tagged at Canyon Island, May 1978	...
041728	28,897*		1977	63.9	Mainstem Taku, Tagged at Tulsequah, Oct. 1978	92.1
041730	7,129*		1977	63.9	Mainstem Taku, Tagged at Tulsequah, Oct. 1978	92.1

-Continued-

Appendix Table 13. A listing of coded wire tag releases of Taku River chinook salmon, 1977-1983.

Data Code	Young-of-the-Year Released	Smolts Released	Brood Year	Mean Size in mm	Capture Location	% Tag Retention
041920		3,397*	1979	83.8	Taku Inlet Seining May & June 1981	96.2
041959	7,318*		1978	68.2	Glacial Nakina River, Tagged at Inklin Jct., Oct. 1979	82.4
041960	10,135*		1979	68.7	Glacial Nakina River, Tagged at Inklin Jct., Sept. 1980	95.7
041961	9,554*		1979	68.7	Glacial Nakina River, Tagged at Inklin Jct., Sept. 1980	95.7
042001		1,553*	1979	73.5	Tulsequah, May 1981	95.1
042003		4,011*	1979	67.7	Tulsequah, March through May 1981	95.1
042056		4,710	1981	87.9	Taku Inlet, May and June, 1983	...
042115	5,016*		1980	63.2	Glacial Nakina River, Sept. 1981	95.5
042116	9,545*		1980	59.8	Mainstem Taku, Sept. & Oct. 1981	95.5
042117	10,091*		1980	59.8	Mainstem Taku, Oct. 1981	95.5

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Appendix Table 13. A listing of coded wire tag releases of Taku River chinook salmon, 1977-1983.

Data Code	Young-of-the-Year Released	Smolts Released	Brood Year	Mean Size in mm	Capture Location	% Tag Retention
042118	5,978*		1980	59.8	Mainstem Taku, Oct. & Nov. 1981	95.5
042120	10,065*		1980	63.2	Glacial Nakina River, Sept. 1981	95.5
TOTAL	162,513	35,765				

* Corrected for juvenile inriver tag loss

** Tag loss corrected for based on adult returns

Appendix Table 14. A listing of coded wire tag recoveries of Taku River chinook salmon, 1978-1986.

Tag Code	Date	Age	Sex	Length (mm)	Lgth Type	Recovery Location	Recovery Type	Sample Type
040508	08 10 78	1.1	M	360	(MF)	Nakina Weir	Escapement	R
040508	08 13 78	1.1	M	330	(MF)	Nakina Weir	Escapement	R
040508	08 18 78	1.1	M	295	(MF)	Nakina Weir	Escapement	R
040508	08 23 78	1.1	M	355	(MF)	Nakina Weir	Escapement	R
040508	05 17 79	1.2		683	(FL)	District 113,114 or 116	Comm. Troll	R
040508	07 12 79	1.2		659	(FL)	District 111	Comm. Gillnet	R
040508	08 13 79	1.2	M	575	(MF)	Nakina Weir	Escapement	R
040508	08 16 79	1.2	M	480	(MF)	Nakina Weir	Escapement	R
040508	08 18 79	1.2	M	420	(MF)	Nakina Weir	Escapement	R
040508	08 18 79	1.2	M	545	(MF)	Nakina Weir	Escapement	R
040508	05 20 80	1.3		175	(HL)	District 113,114 or 116	Comm. Troll	S
040508	05 21 80	1.3		175	(HL)	District 113,114 or 116	Comm. Troll	S
040508	05 30 80	1.3		885	(FL)	District 113	Comm. Troll	R
040508	06 10 80	1.3		780	(FL)	District 113,114 or 116	Comm. Troll	R
040508	06 18 80	1.3		170	(HL)	District 113,114 or 116	Comm. Troll	S
040508	06 20 80	1.3		850	(FL)	District 111	Comm. Gillnet	R
040508	06 26 80	1.3		853	(FL)	District 111	Comm. Gillnet	R
040508	08 14 80	1.3	F	760	(MF)	Nakina Weir	Escapement	R
040508	08 15 80	1.3	M	735	(MF)	Nakina Weir	Escapement	R
040508	08 15 80	1.3	M	755	(MF)	Nakina Weir	Escapement	R
040508	08 16 80	1.3		660	(MF)	Nakina Weir	Escapement	R
040508	05 10 81	1.4		997	(FL)	District 111	Sport	
040508	05 20 81	1.4		900	(FL)	District 113	Comm. Troll	R
040508	06 13 81	1.4		996	(FL)	District 109	Comm. Troll	R
040508	08 03 81	1.4				Nahlin Weir	Escapement	R
040508	08 14 81	1.4	F	865	(MF)	Nakina Weir	Escapement	R
040508	08 18 81	1.4	F	790	(MF)	Nakina Weir	Escapement	R
040508	08 19 81	1.4	F	855	(MF)	Nakina Weir	Escapement	R
040508	08 15 78	2.1	M	410	(MF)	Nakina Weir	Escapement	R
040509	07 27 78	1.1	M	330	(MF)	Nakina Weir	Escapement	R
040509	08 04 78	1.1	M	310	(MF)	Nakina Weir	Escapement	R
040509	08 15 78	1.1	M	335	(MF)	Nakina Weir	Escapement	R
040509	08 16 78	1.1	M	310	(MF)	Nakina Weir	Escapement	R
040509	08 20 78	1.1	M	330	(MF)	Nakina Weir	Escapement	R
040509	07 05 79	1.2	M	579	(FL)	District 111	Comm. Gillnet	R
040509	07 05 79	1.2	M	595	(FL)	District 111	Comm. Gillnet	R
040509	07 12 79	1.2	M	650	(FL)	District 111	Comm. Gillnet	R
040509	08 12 79	1.2	M	535	(MF)	Nakina Weir	Escapement	R
040509	08 15 79	1.2	M	515	(MF)	Nakina Weir	Escapement	R

-Continued-

Appendix Table 14. A listing of coded wire tag recoveries of Taku River chinook salmon, 1978-1986.

Tag Code	Date	Age	Sex	Length (mm)	Lgth Type	Recovery Location	Recovery Type	Sample Type
040509	08 16 79	1.2	M	570	(MF)	Nakina Weir	Escapement	R
040509	08 18 79	1.2	M	420	(MF)	Nakina Weir	Escapement	R
040509	05 20 80	1.3		765	(FL)	District 114	Comm. Troll	S
040509	05 20 80	1.3	M	853	(FL)	District 113,114 or 116	Comm. Troll	R
040509	05 21 80	1.3		175	(HL)	District 113,114 or 116	Comm. Troll	S
040509	06 18 80	1.3		790	(FL)	District 111	Comm. Gillnet	R
040509	06 19 80	1.3		730	(FL)	District 111	Comm. Gillnet	R
040509	05 10 81	1.4		914	(FL)	District 111	Sport	
040509	05 21 81	1.4		915	(FL)	Northwest Quadrant	Comm. Troll	R
040509	08 03 81	1.4				Nahlin Weir	Escapement	R
040509	08 05 81	1.4	F	850	(MF)	Nakina Weir	Escapement	R
040509	08 07 81	1.4	F	890	(MF)	Nakina Weir	Escapement	R
040509	08 08 81	1.4	F	860	(MF)	Nakina Weir	Escapement	R
040509	08 11 81	1.4	M	895	(MF)	Nakina Weir	Escapement	R
040509	08 11 81	1.4	F	815	(MF)	Nakina Weir	Escapement	R
040509	08 12 81	1.4	M	780	(MF)	Nakina Weir	Escapement	R
040509	08 13 81	1.4	F	870	(MF)	Nakina Weir	Escapement	R
041655	07 28 82	1.1		410	(FL)	District 112	Comm. Seine	R
041655	08 03 82	1.1		390	(FL)	Northeast Quadrant	Comm. Seine	R
041655	08 10 82	1.1	M	295	(MF)	Nakina Weir	Escapement	R
041655	08 10 82	1.1	M	330	(MF)	Nakina Weir	Escapement	R
041655	08 11 82	1.1	M	290	(MF)	Nakina Weir	Escapement	R
041655	08 12 82	1.1	M	335	(MF)	Nakina Weir	Escapement	R
041655	08 11 83	1.2	M	485	(MF)	Nakina Weir	Escapement	R
041655	08 11 83	1.2	M	625	(MF)	Little Tahltan	Escapement	R
041655	08 14 83	1.2	M	500	(MF)	Nakina Weir	Escapement	R
041655	08 14 83	1.2	M	550	(MF)	Nakina Weir	Escapement	R
041655	08 15 83	1.2	M	450	(MF)	Nakina Weir	Escapement	R
041655	08 16 83	1.2	M	490	(MF)	Nakina Weir	Escapement	R
041655	08 17 83	1.2	M	445	(MF)	Nakina Weir	Escapement	R
041655	08 18 83	1.2	M	450	(MF)	Nakina Weir	Escapement	R
041655	08 18 83	1.2	M	510	(MF)	Nakina Weir	Escapement	R
041655	08 18 83	1.2	M	520	(MF)	Nakina Weir	Escapement	R
041655	08 19 83	1.2	M	400	(MF)	Nakina Weir	Escapement	R
041655	08 21 83	1.2	M	450	(MF)	Nakina Weir	Escapement	R
041655	08 22 83	1.2	M	355	(MF)	Nakina Weir	Escapement	R
041655	05 20 84	1.3	M	740	(FL)	District 112	Test Troll	R
041655	06 14 84	1.3		790	(FL)	District 114	Comm. Troll	R
041655	06 15 84	1.3		750	(FL)	Landed at Excursion Inlet	Comm. Troll	S

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Appendix Table 14. A listing of coded wire tag recoveries of Taku River chinook salmon, 1978-1986.

Tag Code	Date	Age	Sex	Length (mm)	Lgth Type	Recovery Location	Recovery Type	Sample Type
041655	06 27	84	1.3	790	(FL)	District 111	Comm. Gillnet	R
041655	07	84	1.3			Nakina	Sport	S
041655	07 31	84	1.3	M 650	(MF)	Nakina Weir	Escapement	R
041655	08 10	84	1.3	M 695	(MF)	Nakina Weir	Escapement	R
041655	08 10	84	1.3	F 665	(MF)	Nakina Weir	Escapement	R
041655	08 11	84	1.3	M 600	(MF)	Nakina Weir	Escapement	R
041655	08 12	84	1.3	M 735	(MF)	Nakina Weir	Escapement	R
041655	08 16	84	1.3	M 610	(MF)	Nakina Weir	Escapement	R
041655	08 11	85	1.4	F 795	(MF)	Nakina Weir	Escapement	R
041655	08 12	85	1.4	M 740	(MF)	Nakina Weir	Escapement	R
041655	08 12	85	1.4	F 830	(MF)	Nakina Weir	Escapement	R
041655	08 13	85	1.4	F 730	(MF)	Nakina Weir	Escapement	R
041655	08 15	85	1.4	F 830	(MF)	Nakina Weir	Escapement	R
041655	08 16	85	1.4	M 940	(MF)	Nakina Weir	Escapement	R
041655	08 16	85	1.4	F 865	(MF)	Nakina Weir	Escapement	R
041655	08 16	85	1.4	M 999	(MF)	Nakina Weir	Escapement	R
041655	08 18	85	1.4	F 820	(MF)	Nakina Weir	Escapement	R
041655	08 18	85	1.4	M 905	(MF)	Nakina Weir	Escapement	R
041655	08 19	85	1.4	F 870	(MF)	Nakina Weir	Escapement	R
041656	08 15	82	1.1	M 305	(MF)	Nakina Weir	Escapement	R
041656	09 04	83	1.2	M 535	(MF)	Tatsamenie	Escapement	R
041656	06 19	84	1.3	625	(FL)	District 111	Comm. Gillnet	R
041657	08 04	83	1.2	M 585	(MF)	Nakina Weir	Escapement	R
041657	08 10	83	1.2	M 495	(MF)	Nakina Weir	Escapement	R
041657	08 13	83	1.2	M 490	(MF)	Nakina Weir	Escapement	R
041657	08 13	83	1.2	M 555	(MF)	Nakina Weir	Escapement	R
041657	08 16	83	1.2	M 455	(MF)	Nakina Weir	Escapement	R
041657	08 18	83	1.2	M 450	(MF)	Nakina Weir	Escapement	R
041657	04 12	84	1.3	760	(FL)	District 116	Comm. Troll	R
041657	08 11	84	1.3	M 700	(MF)	Nakina Weir	Escapement	R
041657	08 17	84	1.3	M 605	(MF)	Nakina Weir	Escapement	R
041657	07	84	1.3			Nakina	Sport	S
041657	08 07	85	1.4	M 880	(MF)	Nakina Weir	Escapement	R
041657	08 15	85	1.4	F 865	(MF)	Nakina Weir	Escapement	R
041658	08 07	82	1.2	M 500	(MF)	Nakina Weir	Escapement	R
041658	08 20	82	1.2	M 455	(MF)	Nakina Weir	Escapement	R
041658	08 12	83	1.3	M 625	(MF)	Nakina Weir	Escapement	R

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Appendix Table 14. A listing of coded wire tag recoveries of Taku River chinook salmon, 1978-1986.

Tag Code	Date	Age	Sex	Length (mm)	Lgth Type	Recovery Location	Recovery Type	Sample Type
041658	08 13 83	1.3	F	750	(MF)	Nakina Weir	Escapement	R
041660	07 29 83	1.3		171	(HL)	Landed at Petersburg	Comm. Troll	S
041661	07 05 83	1.3		850	(FL)	District 111	Comm. Gillnet	R
041661	08 09 83	1.3		580	(MF)	Nakina Weir	Escapement	R
041661	08 09 83	1.3		610	(MF)	Nakina Weir	Escapement	R
041661	05 01 84	1.4				District 183	Comm. Troll	S
041662	08 12 80	1.1	M	345	(MF)	Nakina Weir	Escapement	R
041662	08 12 80	1.1	M	350	(MF)	Nakina Weir	Escapement	R
041662	08 15 81	1.2	M	520	(MF)	Nakina Weir	Escapement	R
041662	08 16 81	1.2	M	485	(MF)	Nakina Weir	Escapement	R
041662	05 27 82	1.3		890	(FL)	Landed at Sitka	Comm. Troll	R
041662	08 14 82	1.3	M	775	(MF)	Nakina Weir	Escapement	R
041662	06 02 83	1.4		1005	(FL)	Northwest Quadrant	Comm. Troll	R
041662	06 05 83	1.4		917	(FL)	District 113	Comm. Troll	R
041663	08 13 83	1.2	M	485	(MF)	Nakina Weir	Escapement	R
041663	07 14 84	1.3		705	(FL)	District 114	Comm. Troll	R
041663	08 07 84	1.3	M	655	(MF)	Nakina Weir	Escapement	R
041663	08 14 84	1.3	M	780	(MF)	Nakina Weir	Escapement	R
041663	08 08 85	1.4	F	785	(MF)	Nakina Weir	Escapement	R
041663	08 14 85	1.4	F	765	(MF)	Nakina Weir	Escapement	R
041708	05 28 82	1.4		858	(FL)	Landed at Pelican	Comm. Troll	R
041708	07 29 82	1.4	F	820	(MF)	Nahlin	Escapement	R
041708	08 04 82	1.4	F	925	(MF)	Nahlin	Escapement	R
041709	09 04 80	1.2		156	(HL)	Landed at Sitka		S
041709	08 03 81	1.3				Nahlin	Escapement	R
041709	07 29 82	1.4	F	810	(MF)	Nahlin	Escapement	R
041709	08 04 82	1.4	F	880	(MF)	Nahlin	Escapement	R
041710	05 16 80	1.2		610	(TL)	District 111	Sport	
041710	06 08 82	1.4		1000	(FL)	District 104	Comm. Troll	R
041710	08 16 82	1.4	F	865	(MF)	Nakina Weir	Escapement	R

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Appendix Table 14. A listing of coded wire tag recoveries of Taku River chinook salmon, 1978-1986.

Tag Code	Date	Age	Sex	Length (mm)	Lgth Type	Recovery Location	Recovery Type	Sample Type
041711	05 28 81	1.3		996	(FL)	District 111-116,154-189	Comm. Troll	R
041711	08 08 81	1.3	M	700	(MF)	Nakina Weir	Escapement	R
041713	06 05 81	1.3		875	(FL)	District 113,114 or 116	Comm. Troll	R
041713	05 09 82	1.4		965	(FL)	District 111	Sport	S
041713	05 27 82	1.4		812	(FL)	District 113	Comm. Troll	R
041721	08 11 79	1.1	M	310	(MF)	Nakina Weir	Escapement	R
041721	08 13 79	1.1	M	310	(MF)	Nakina Weir	Escapement	R
041721	08 20 79	1.1	M	310	(MF)	Nakina Weir	Escapement	R
041721	08 15 80	1.2	M	520	(MF)	Nakina Weir	Escapement	R
041721	05 21 81	1.3		880	(FL)	Northwest Quadrant	Comm. Troll	R
041721	05 27 81	1.3		835	(FL)	District 113	Comm. Troll	R
041721	06 03 81	1.3		860	(FL)	District 116	Comm. Troll	R
041721	07 29 81	1.3	M	760	(MF)	Nakina Weir	Escapement	R
041721	05 31 82	1.4		979	(FL)	Landed at Hoonah	Comm. Troll	R
041721	08 08 82	1.4	F	825	(MF)	Nakina Weir	Escapement	R
041721	08 09 82	1.4	M	890	(MF)	Nakina Weir	Escapement	R
041721	08 12 82	1.4	M	920	(MF)	Nakina Weir	Escapement	R
041721	08 19 82	1.4	F	835	(MF)	Nakina Weir	Escapement	R
041721	08 14 83	2.4	M	975	(MF)	Nakina Weir	Escapement	R
041722	08 12 80	1.2	M	565	(MF)	Nakina Weir	Escapement	R
041722	04 14 81	1.3		864	(TL)	District 114	Comm. Troll	S
041722	05 02 81	1.3		813	(FL)	District 111	Sport	
041722	06 04 81	1.3		748	(FL)	Northwest Quadrant	Comm. Troll	R
041722	05 24 82	1.4		1003	(FL)	District 110	Comm. Troll	R
041722	06 14 82	1.4		950	(FL)	District 111	Comm. Gillnet	R
041722	06 23 82	1.4		950	(FL)	District 111	Comm. Gillnet	R
041722	08 10 82	1.4	F	930	(MF)	Nakina Weir	Escapement	R
041723	06 27 82	1.4		1020	(FL)	District 113	Comm. Troll	R
041728	08 14 80	1.1	M	360	(MF)	Nakina Weir	Escapement	R
041728	08 15 80	1.1	M	350	(MF)	Nakina Weir	Escapement	R
041728	07 17 81	1.2	M	550	(MF)	Nakina Weir	Escapement	R
041728	08 13 81	1.2	M	590	(MF)	Nakina Weir	Escapement	R
041728	08 17 81	1.2	M	440	(MF)	Nakina Weir	Escapement	R
041728	08 18 81	1.2	M	605	(MF)	Nakina Weir	Escapement	R
041728	06 15 82	1.3		699	(FL)	District 111	Sport	S

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Appendix Table 14. A listing of coded wire tag recoveries of Taku River chinook salmon, 1978-1986.

Tag Code	Date	Age	Sex	Length (mm)	Lgth Type	Recovery Location	Recovery Type	Sample Type
041728	08 11 82	1.3	M	775	(MF)	Nakina Weir	Escapement	R
041730	08 10 80	1.1	M	355	(MF)	Nakina Weir	Escapement	R
041730	06 27 81	1.2				Landed at Sitka	Comm. Troll	S
041730	07 12 82	1.3		718	(FL)	Landed at Excursion Inlet	Comm. Troll	R
041920	08 03 82	1.1		344	(FL)	District 109	Comm. Seine	R
041920	08 07 82	1.1	M	285	(MF)	Nakina Weir	Escapement	R
041920	08 17 82	1.1	M	370	(MF)	Nakina Weir	Escapement	R
041920	09 05 82	1.1		387	(FL)	District 111	Sport	S
041920	06 22 83	1.2	M	600	(MF)	Canyon Island		R
041920	08 11 83	1.2	M	520	(MF)	Nakina Weir	Escapement	R
041920	08 12 83	1.2	M	475	(MF)	Nakina Weir	Escapement	R
041920	08 15 83	1.2	M	480	(MF)	Nakina Weir	Escapement	R
041920	08 16 83	1.2	M	450	(MF)	Nakina Weir	Escapement	R
041920	08 16 83	1.2	M	500	(MF)	Nakina Weir	Escapement	R
041920	08 17 83	1.2	M	480	(MF)	Nakina Weir	Escapement	R
041920	08 17 83	1.2	M	500	(MF)	Nakina Weir	Escapement	R
041920	08 18 83	1.2	M	500	(MF)	Nakina Weir	Escapement	R
041920	08 19 83	1.2	M	465	(MF)	Nakina Weir	Escapement	R
041920	03 31 84	1.3		800	(FL)	District 114	Comm. Troll	R
041920	04 15 84	1.3		750	(FL)	District 114	Comm. Troll	R
041920	06 14 84	1.3		165	(HL)	Landed at Pelican	Comm. Troll	R
041920	06 27 84	1.3		743	(FL)	District 111	Comm. Gillnet	R
041920	06 27 84	1.3		935	(FL)	District 111	Comm. Gillnet	R
041920	07 04 84	1.3		721	(FL)	District 111	Comm. Gillnet	R
041920	07 29 84	1.3		165	(HL)	Landed at Excursion Inlet		S
041920	08 12 84	1.3	M	650	(MF)	Nakina Weir	Escapement	R
041920	08 07 85	1.4	F	845	(MF)	Nakina Weir	Escapement	R
041920	08 11 85	1.4	F	860	(MF)	Nakina Weir	Escapement	R
041920	08 12 85	1.4	F	855	(MF)	Nakina Weir	Escapement	R
041920	08 13 85	1.4	F	845	(MF)	Nakina Weir	Escapement	R
041920	08 15 85	1.4	M	875	(MF)	Nakina Weir	Escapement	R
041920	08 19 85	1.4	M	815	(MF)	Nakina Weir	Escapement	R
041920	05 26 86	1.5		1020	(FL)	District 112	Sport	R
041959	08 11 81	1.1	M	300	(MF)	Nakina Weir	Escapement	R
041959	08 16 81	1.1	M	310	(MF)	Nakina Weir	Escapement	R
041959	08 12 82	1.2	M	600	(MF)	Nakina Weir	Escapement	R

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Appendix Table 14. A listing of coded wire tag recoveries of Taku River chinook salmon, 1978-1986.

Tag Code	Date	Age	Sex	Length (mm)	Lgth Type	Recovery Location	Recovery Type	Sample Type
041959	08 19 82	1.2	M	500	(MF)	Nakina Weir	Escapement	R
041959	06 01 83	1.3	M	205	(HL)	Landed at Pelican	Comm. Troll	S
041959	08 14 84	1.4	M	865	(MF)	Nakina Weir	Escapement	R
041959	08 14 82	2.1	M	325	(MF)	Nakina Weir	Escapement	R
041959	08 19 82	2.1	M	330	(MF)	Nakina Weir	Escapement	R
041960	08 13 82	1.1	M	300	(MF)	Nakina Weir	Escapement	R
041960	08 14 82	1.1	M	355	(MF)	Nakina Weir	Escapement	R
041960	08 15 82	1.1	M	345	(MF)	Nakina Weir	Escapement	R
041960	08 16 82	1.1	M	320	(MF)	Nakina Weir	Escapement	R
041960	08 07 83	1.2	M	600	(MF)	Nakina Weir	Escapement	R
041960	08 08 83	1.2	M	470	(MF)	Nakina Weir	Escapement	R
041960	08 12 83	1.2	M	470	(MF)	Nakina Weir	Escapement	R
041960	08 14 83	1.2	M	475	(MF)	Nakina Weir	Escapement	R
041960	08 16 83	1.2	M	445	(MF)	Nakina Weir	Escapement	R
041960	08 18 83	1.2	M	450	(MF)	Nakina Weir	Escapement	R
041960	08 18 83	1.2	M	585	(MF)	Nakina Weir	Escapement	R
041960	08 19 83	1.2	M	530	(MF)	Nakina Weir	Escapement	R
041960	08 10 84	1.3	M	660	(MF)	Nakina Weir	Escapement	R
041960	08 12 84	1.3	M	800	(MF)	Nakina Weir	Escapement	R
041960	05 01 85	1.4		971	(FL)	Northern B. C., Canada	Comm. Troll	R
041960	05 19 85	1.4		965	(TL)		Sport	S
041960	08 11 85	1.4	M	880	(MF)	Nakina Weir	Escapement	R
041960	08 12 85	1.4	F	810	(MF)	Nakina Weir	Escapement	R
041960	08 14 85	1.4	F	815	(MF)	Nakina Weir	Escapement	R
041960	08 15 85	1.4	M	850	(MF)	Nakina Weir	Escapement	R
041960	08 15 85	1.4	F	800	(MF)	Nakina Weir	Escapement	R
041960	08 16 85	1.4	M	930	(MF)	Nakina Weir	Escapement	R
041960	08 18 85	1.4	F	860	(MF)	Nakina Weir	Escapement	R
041960	08 19 85	1.4	F	850	(MF)	Nakina Weir	Escapement	R
041961	08 13 82	1.1	M	345	(MF)	Nakina Weir	Escapement	R
041961	08 23 82	1.1	M	315	(MF)	Nakina Weir	Escapement	R
041961	08 23 82	1.1	M	330	(MF)	Nakina Weir	Escapement	R
041961	07 06 83	1.2	M	552	(MF)	Nakina Weir	Sport	S
041961	08 09 83	1.2	M	355	(MF)	Nakina Weir	Escapement	R
041961	08 09 83	1.2	M	565	(MF)	Nakina Weir	Escapement	R

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Appendix Table 14. A listing of coded wire tag recoveries of Taku River chinook salmon, 1978-1986.

Tag Code	Date	Age	Sex	Length (mm)	Lgth Type	Recovery Location	Recovery Type	Sample Type
041961	08 10	83	1.2	M	435 (MF)	Nakina Weir	Escapement	R
041961	08 11	83	1.2	M	475 (MF)	Nakina Weir	Escapement	R
041961	08 14	83	1.2	M	530 (MF)	Nakina Weir	Escapement	R
041961	08 15	83	1.2	M	420 (MF)	Nakina Weir	Escapement	R
041961	08 17	83	1.2	M	450 (MF)	Nakina Weir	Escapement	R
041961	08 20	83	1.2	M	465 (MF)	Nakina Weir	Escapement	R
041961	08 21	83	1.2	M	465 (MF)	Nakina Weir	Escapement	R
041961	08 22	83	1.2	M	450 (MF)	Nakina Weir	Escapement	R
041961	08 22	83	1.2	M	510 (MF)	Nakina Weir	Escapement	R
041961	06 15	84	1.3		755 (FL)	District 114	Comm. Troll	R
041961	06 27	84	1.3		795 (FL)	District 116	Comm. Troll	R
041961	08 05	84	1.3	F	735 (MF)	Nakina Weir	Escapement	R
041961	08 07	84	1.3	M	625 (MF)	Nakina Weir	Escapement	R
041961	08 11	84	1.3	M	640 (MF)	Nakina Weir	Escapement	R
041961	08 15	84	1.3	M	725 (MF)	Nakina Weir	Escapement	R
041961	08 17	84	1.3	M	660 (MF)	Nakina Weir	Escapement	R
041961	08 20	84	1.3	F	810 (MF)	Nakina Weir	Escapement	R
041961	06 09	85	1.4		889 (FL)	District 111	Sport	S
041961	08 13	85	1.4	F	765 (MF)	Nakina Weir	Escapement	R
041961	08 14	85	1.4	F	825 (MF)	Nakina Weir	Escapement	R
041961	08 14	85	1.4	M	880 (MF)	Nakina Weir	Escapement	R
041961	08 15	85	1.4	F	770 (MF)	Nakina Weir	Escapement	R
041961	08 18	85	1.4	F	825 (MF)	Nakina Weir	Escapement	R
042001	06 06	82	1.1	M	331 (FL)	District 111	Sport	S
042001	08 19	82	1.1	M	290 (MF)	Nakina Weir	Escapement	R
042001	08 19	82	1.1	M	355 (MF)	Nakina Weir	Escapement	R
042001	08 13	83	1.2	M	490 (MF)	Nakina Weir	Escapement	R
042001	08 21	83	1.2	M	440 (MF)	Nakina Weir	Escapement	R
042001	08 22	83	1.2	M	420 (MF)	Nakina Weir	Escapement	R
042001	09 01	83	1.2	M	510 (MF)	Tatsamenie	Escapement	R
042001	08 08	85	1.4	F	850 (MF)	Nakina Weir	Escapement	R
042001	08 14	85	1.4	F	780 (MF)	Nakina Weir	Escapement	R
042001	08 14	85	1.4	F	855 (MF)	Nakina Weir	Escapement	R
042003	08 01	82	1.1	M	340 (MF)	Nakina Weir	Escapement	R
042003	08 02	82	1.1		393 (FL)	District 111	Comm. Seine	R
042003	08 15	82	1.1	M	335 (MF)	Nakina Weir	Escapement	R
042003	08 16	82	1.1	M	310 (MF)	Nakina Weir	Escapement	R

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Appendix Table 14. A listing of coded wire tag recoveries of Taku River chinook salmon, 1978-1986.

Tag Code	Date	Age	Sex	Length (mm)	Lgth Type	Recovery Location	Recovery Type	Sample Type
042003	08 16 82	1.1	M	320	(MF)	Nakina Weir	Escapement	R
042003	08 17 82	1.1	M	345	(MF)	Nakina Weir	Escapement	R
042003	08 21 82	1.1	M	350	(MF)	Nakina Weir	Escapement	R
042003	08 21 82	1.1	M	410	(MF)	Nakina Weir	Escapement	R
042003	08 08 83	1.2	M	470	(MF)	Nakina Weir	Escapement	R
042003	08 11 83	1.2	M	420	(MF)	Nakina Weir	Escapement	R
042003	08 11 83	1.2	M	460	(MF)	Nakina Weir	Escapement	R
042003	08 15 83	1.2	M	555	(MF)	Nakina Weir	Escapement	R
042003	08 19 83	1.2	M	435	(MF)	Nakina Weir	Escapement	R
042003	08 28 83	1.2	M	525	(MF)	Tatsamenie	Escapement	R
042003	09 02 83	1.2	M	580	(MF)	Tatsamenie	Escapement	R
042003	04 13 84	1.3		710	(FL)	District 114	Comm. Troll	R
042003	06 18 84	1.3		690	(FL)	District 114	Comm. Troll	R
042003	06 18 84	1.3		880	(FL)	Landed at Excursion Inlet		S
042003	06 27 84	1.3		840	(FL)	District 113	Comm. Troll	R
042003	08 15 84	1.3	M	730	(MF)	Nakina Weir	Escapement	R
042003	08 21 84	1.3	M	540	(MF)	Nakina Weir	Escapement	R
042003	03 24 85	1.4		820	(FL)	District 113	Comm. Troll	S
042003	06 07 85	1.4		845	(FL)	109,110,111,112 or 115	Comm. Troll	R
042003	06 07 85	1.4		930	(FL)	District 113	Comm. Troll	R
042003	06 12 85	1.4		987	(FL)	District 110	Comm. Troll	R
042003	06 13 85	1.4		850	(FL)	Northwest Quadrant	Comm. Troll	R
042003	08 05 85	1.4	F	750	(MF)	Nahlin Weir	Escapement	R
042003	08 07 85	1.4	F	820	(MF)	Nakina Weir	Escapement	R
042003	08 11 85	1.4	F	780	(MF)	Nakina Weir	Escapement	R
042003	08 14 85	1.4	F	815	(MF)	Nakina Weir	Escapement	R
042056	08 19 85	1.2	M	465	(MF)	Nakina Weir	Escapement	R
042056	08 19 85	1.2	M	580	(MF)	Nakina Weir	Escapement	R
042056	08 19 85	1.2	M	575	(MF)	Nakina Weir	Escapement	R
042056	08 17 86	1.3	M	640	(PH)	Nakina Weir	Escapement	R
042056	09 10 86	1.3		890	(FL)	District 114	Comm. Troll	R
042115	06 02 83	2.0		90	(FL)	Taku Inlet		R
042115	08 14 84	1.2	M	540	(MF)	Nakina Weir	Escapement	R
042115	06 01 86	1.4				District 112	Sport	S
042115	06 05 86	1.4				District 111	Sport	S
042115	08 02 86	1.4	M	775	(PH)	Nakina Weir	Escapement	R
042115	08 03 86	1.4	M	575	(PH)	Nakina Weir	Escapement	R

-Continued-

Appendix Table 14. A listing of coded wire tag recoveries of Taku River chinook salmon, 1978-1986.

Tag Code	Date	Age	Sex	Length (mm)	Lgth Type	Recovery Location	Recovery Type	Sample Type
042116	08 12	83	1.1	M	360 (MF)	Nakina Weir	Escapement	R
042116	09 04	83	1.1	M	380 (MF)	Tatsamenie	Escapement	R
042116	08 13	84	1.2	M	490 (MF)	Nakina Weir	Escapement	R
042116	08 15	84	1.2	M	580 (MF)	Nakina Weir	Escapement	R
042116	04 20	85	1.3		740 (FL)	District 111	Sport	R
042116	06 18	85	1.3		838 (FL)		Sport	S
042116	08 07	85	1.3	M	700 (MF)	Nakina Weir	Escapement	R
042117	08 09	83	1.1	M	320 (MF)	Nakina Weir	Escapement	R
042117	08 16	84	1.2	M	610 (MF)	Nakina Weir	Escapement	R
042117	08 11	86	1.4	M	825 (PH)	Nakina Weir	Escapement	R
042118	05 25	85	1.3		760 (FL)	109,110,111,112 or 115	Sport	R
042120	08 09	83	1.1	M	305 (MF)	Nakina Weir	Escapement	R
042120	08 10	83	1.1	M	330 (MF)	Nakina Weir	Escapement	R
042120	08 15	83	1.1	M	360 (MF)	Nakina Weir	Escapement	R
042120	06 19	84	1.2	M	513 (FL)	District 111	Comm. Gillnet	R
042120	08 13	84	1.2	M	570 (MF)	Nakina Weir	Escapement	R
042120	06 03	85	1.3		915 (FL)	District 111	Sport	S
042120	08 15	85	1.3	M	730 (MF)	Nakina Weir	Escapement	R
042120	08 19	85	1.3	F	770 (MF)	Nakina Weir	Escapement	R
042120	08 10	86	1.4	M	665 (PH)	Nakina Weir	Escapement	R
999999	08 06	78	1.1	M	335 (MF)	Nakina Weir	Escapement	R
999999	08 10	78	1.1	M		Nakina Weir	Escapement	R
999999	08 10	78	1.1	M	335 (MF)	Nakina Weir	Escapement	R
999999	08 12	78	1.1	M		Nakina Weir	Escapement	R
999999	08 24	78	1.1	M	380 (MF)	Nakina Weir	Escapement	R
999999	08 06	79	1.2	M		Nakina Weir	Escapement	R
999999	08 18	79	1.2	M	545 (MF)	Nakina Weir	Escapement	R
999999	08 20	79	1.2	M	470 (MF)	Nakina Weir	Escapement	R
999999	08 20	79	1.2	M	470 (MF)	Nakina Weir	Escapement	R
999999	08 14	80	1.1	M	325 (MF)	Nakina Weir	Escapement	R
999999	08 14	80	1.3		700 (MF)	Nakina Weir	Escapement	R
999999	08 12	80			560 (MF)	Nakina Weir	Escapement	R
999999	08 14	80			600 (MF)	Nakina Weir	Escapement	R
999999	08 07	81	1.4		900 (MF)	Nakina Weir	Escapement	R
999999	08 07	81			740 (MF)	Nakina Weir	Escapement	R
999999	08 11	81			520 (MF)	Nakina Weir	Escapement	R
999999	08 11	81			680 (MF)	Nakina Weir	Escapement	R

-Continued-

Appendix Table 14. A listing of coded wire tag recoveries of Taku River chinook salmon, 1978-1986.

Tag Code	Date	Age	Sex	Length Lgth (mm) Type	Recovery Location	Recovery Type	Sample Type
999999	08 15 81			740 (MF)	Nakina Weir	Escapement	R
999999	08 19 81			760 (MF)	Nakina Weir	Escapement	R
999999	08 08 82	1.2	M	550 (MF)	Nakina Weir	Escapement	R
999999	07 29 82	1.4	F	875 (MF)	Nakina Weir	Escapement	R
999999	08 04 82	1.4		870 (MF)	Nakina Weir	Escapement	R
999999	08 05 82	1.4		895 (MF)	Nakina Weir	Escapement	R
999999	08 09 83	1.2	M	460 (MF)	Nakina Weir	Escapement	R
999999	08 20 83	1.2	M	490 (MF)	Nakina Weir	Escapement	R
999999	08 17 84	1.3	F	755 (MF)	Nakina Weir	Escapement	R
999999	08 10 85		F	835 (MF)	Nakina Weir	Escapement	R
999999	08 13 85		F	755 (MF)	Nakina Weir	Escapement	R
999999	08 16 85		F	850 (MF)	Nakina Weir	Escapement	R
999999	08 18 85		F	760 (MF)	Nakina Weir	Escapement	R
999999	08 19 85		F	725 (MF)	Nakina Weir	Escapement	R
999999	08 21 85		F	755 (MF)	Nakina Weir	Escapement	R
999999	08 14 86	1.4	M	790 (PH)	Nakina Weir	Escapement	R

Tag Code 999999 indicates adipose clipped fish with no coded wire tag.

(MF) = mid-eye to fork length.

(FL) = fork length.

(HL) = head length.

(PH) = post orbit to hypural length

Appendix Table 15. Escapement of chinook salmon through the Situk River weir (including jacks), by week, 1934-1986.

Year	June		July					August				Total
	17	24	1	8	15	22	29	5	12	19	26	
1934	27	104	328	531	251	163	82	0	*	...	...	1,486
1935	12	24	140	87	203	69	67	36	...	...	...	638
1936	24	80	181	281	134	84	32	...	...	...	...	816
1937	29	113	221	444	483	*	...	...	...	...	...	1,290
1938	11*	39	330	778	786	544	180	...	...	...	...	2,668
1939	24	72	250	343	947	313	168	...	...	...	...	2,117
1940	37	76	276	163	78	8	...	...	...	...	...	903
1941	41	61	439	845	617	353	143	61	34	...	...	2,594
1942	...	35	216	464	562	762	378	126	...	...	...	2,543
1943	24	74	*	768	1,398	589	481	164	48	...	...	3,546
1944	28	137	474	859	735	297	194	175	7	...	...	2,906
1945	17	31	146	221	335	184	274	179	71	...	...	1,458
1946	...	85	269	535	1,216	961	783	393	42	...	...	4,284
1947	21	131	528	761	1,312	1,408	631	268	17	...	...	5,077
1948	144	232	617	1,092	876	404	248	51	68	33	...	3,744
1949	...	...	...	...	...	...	...	...	...	...	...	1,978
1950	...	...	...	...	...	...	...	...	...	...	...	2,011
1951	158	611	958	520	266	44	84	71	22	13	33	2,780
1952	59	327	447	303	231	38	34	12	8	...	...	1,459
1953	40	91	212	337	240	58	62	...	...	...	...	1,040
1954	...	...	...	...	...	...	...	...	...	...	...	2,101
1955	42	153	435	189	365	207	169	7	2	2	...	1,571
...	...	...	...	...	...	...	...	...	...	...	...	...
1971	4	13	59	62	54	93	57	180	442	...	...	964
...	...	...	...	...	...	...	...	...	...	...	...	...
1976	14	32	252	236	443	304	353	96	180	31	...	1,941
1977	47	162	219	294	288	324	184	311	51	...	...	1,880
1978	13	36	108	102	147	160	244	212	81	...	...	1,103
1979	2	25	212	38	187	264	282	357	387	...	...	1,754
1980	1	48	51	52	105	277	159	...	...	...	...	693a
1981	15	41	11	121	122	97	106	146	25	...	...	684b
1982	2	12	33	52	39	92	42	165	80	94	...	611
1983	3	39	22	15	57	214	112	332	55	...	...	849
1984	11	40	85	359	108	331	590	638	39	...	...	2,201
1985	0	40	147	109	285	284	331	554	232	...	...	1,982
1986	5	1	69	44	145	155	720	656	568	209	...	2,572

* Weir out - no adjustment made.

a Weir out - correction factor made for total escapement in 1980 corrected total of 1,125.

b Weir out - correction factor made for total escapement in 1981 corrected total of 807.

Appendix Table 16. A listing of coded wire tag recoveries of coho salmon from the Situk River, 1985-1986.

Recovery Information										Release Information			
Tag Code	Date	Length	Recovery Area	WK	PC	GC	A	B	C	BY	Tagged	YR	MO
04-24-01	07/11/85		NW		1	28	1	5	C S 1	81	9,699	84	06
04-24-01	07/15/85		NW		1	29	1	5	C S 1	81	9,699	84	06
04-24-01	07/15/85		NW		1	29	1	5	C S 1	81	9,699	84	06
04-24-01	07/21/85	675 0			1	30	10	5	C S 1	81	9,699	84	06
04-24-01	07/22/85		NW		1	30	1	5	C S 1	81	9,699	84	06
04-24-01	07/23/85		NW		1	30	1	5	C S 1	81	9,699	84	06
04-24-01	07/24/85		NW NOUT	183-10	1	30	14	5	C S 1	81	9,699	84	06
04-24-01	07/24/85		NW NOUT	183-10	1	30	14	5	C S 1	81	9,699	84	06
04-24-01	07/25/85	630 0	NW NOUT	183-10	1	30	14	5	C R 1	81	9,699	84	06
04-24-01	07/25/85	635 0	NW COUT	113-91	1	30	1	5	C R 1	81	9,699	84	06
04-24-01	07/25/85	640 0	NW NOUT	183-10	1	30	14	5	C R 1	81	9,699	84	06
04-24-01	07/25/85	660 0	NW NOUT	183-10	1	30	14	5	C R 1	81	9,699	84	06
04-24-01	07/29/85			-	1	31	1	5	C S 1	81	9,699	84	06
04-24-01	07/29/85			-	1	31	1	5	C S 1	81	9,699	84	06
04-24-01	07/29/85	133 2		-	1	31	1	5	C S 1	81	9,699	84	06
04-24-01	07/31/85	660 0		-	1	31	10	5	C R 1	81	9,699	84	06
04-24-01	08/02/85	625 0	NW COUT	113-71	1	31	3	5	C R 1	81	9,699	84	06
04-24-01	08/02/85	770 0	NW COUT	113-	1	31	1	5	C R 1	81	9,699	84	06
04-24-01	08/02/85	100 2	NW	-	1	31	1	5	C S 1	81	9,699	84	06
04-24-01	08/03/85	635 0	NW NOUT	-	1	31	3	5	C R 1	81	9,699	84	06
04-24-01	08/05/85	650 0	NW NOUT	183-10	1	32	14	5	C R 1	81	9,699	84	06
04-24-01	08/05/85	660 0	NW NOUT	183-10	1	32	14	5	C R 1	81	9,699	84	06
04-24-01	08/06/85		NW NOUT	181-60	1	32	14	5	C S 1	81	9,699	84	06
04-24-01	08/07/85	715 0	NW	-	1	32	10	5	C R 1	81	9,699	84	06
04-24-01	08/10/85	581 0	NW NOUT	189-	1	32	1	5	C R 1	81	9,699	84	06
04-24-01	08/11/85	550 0	NW NOUT	181-	1	33	3	5	C R 1	81	9,699	84	06
04-24-01	08/11/85	655 0	NW NOUT	181-	1	33	3	5	C R 1	81	9,699	84	06
04-24-01	08/11/85	710 0	NW NOUT	181-	1	33	3	5	C R 1	81	9,699	84	06
04-24-01	08/13/85	580 0	NW	-	1	33	10	5	C R 1	81	9,699	84	06
04-24-01	08/16/85	745 0	NW	-	1	33	10	5	C R 1	81	9,699	84	06
04-24-01	08/19/85	090 2		-	1	34	3	5	C S 1	81	9,699	84	06
04-24-01	08/22/85		NW NOUT	182-70	1	34	14		S S 1	81	9,699	84	06
04-24-01	08/22/85		NW NOUT	182-70	1	34	14		S S 1	81	9,699	84	06
04-24-01	08/28/85	600 0	NW NOUT	183-10	1	35	14	5	C R 1	81	9,699	84	06
04-24-01	08/28/85	620 0	NW NOUT	183-10	1	35	14	5	C R 1	81	9,699	84	06
04-24-01	08/30/85	105 2	NW	-	1	35	1	5	C S 1	81	9,699	84	06
04-24-01	09/03/85		NW	-	1	36	14	5	C S 1	81	9,699	84	06
04-24-01	09/04/85		NW	-	1	36	14		C S 1	81	9,699	84	06
04-24-01	09/04/85		NW	-	1	36	14		C S 1	81	9,699	84	06
04-24-01	09/04/85		NW	-	1	36	14		C S 1	81	9,699	84	06
04-24-01	09/04/85	717 0	NW NOUT	189-	1	36	1	5	C R 1	81	9,699	84	06

-Continued-

Appendix Table 16. A listing of coded wire tag recoveries of coho salmon
from the Situk River, 1985-1986.

Recovery Information										Release Information			
Tag Code	Date	Length	Recovery Area	WK	PC	GC	A	B	C	BY	Tagged	YR	MO
04-24-01	09/05/85	724 0	NW NOUT	-	1	36	1	5	C R 1	81	9,699	84	06
04-24-01	09/05/85	104 2	NW	-	1	36	1	5	C S 1	81	9,699	84	06
04-24-01	09/06/85	659 0	NW CNTR	114-21	1	36	1	5	C R 1	81	9,699	84	06
04-24-01	09/07/85	630 0	NW NOUT	182-70	1	36	3	3	C R 1	81	9,699	84	06
04-24-01	09/07/85	680 0	NW NOUT	182-70	1	36	3	3	C R 1	81	9,699	84	06
04-24-01	09/07/85	715 0	NW NOUT	182-70	1	36	3	3	C R 1	81	9,699	84	06
04-24-01	09/07/85	735 0	NW NOUT	182-70	1	36	3	3	C R 1	81	9,699	84	06
04-24-01	09/07/85	780 0	NW NOUT	182-70	1	36	3	3	C R 1	81	9,699	84	06
04-24-01	09/07/85	800 0	NW NOUT	182-70	1	36	3	3	C R 1	81	9,699	84	06
04-24-01	09/07/85	104 2	NW	-	1	36	5	1	C S 1	81	9,699	84	06
04-24-01	09/07/85	106 2	NW	-	1	36	5	1	C S 1	81	9,699	84	06
04-24-01	09/09/85	680 1	NW NOUT	182-70	1	37	3	14	C R 1	81	9,699	84	06
04-24-01	09/10/85		NW NOUT	182-70	1	37	3	14	C R 1	81	9,699	84	06
04-24-01	09/10/85		NW NOUT	182-70	1	37	3	14	C R 1	81	9,699	84	06
04-24-01	09/10/85	650 0	NW NOUT	182-70	1	37	3	14	C R 1	81	9,699	84	06
04-24-01	09/10/85	675 0	NW NOUT	182-70	1	37	3	14	C R 1	81	9,699	84	06
04-24-01	09/10/85	680 0	NW NOUT	182-70	1	37	3	14	C R 1	81	9,699	84	06
04-24-01	09/10/85	680 0	NW NOUT	182-70	1	37	3	14	C R 1	81	9,699	84	06
04-24-01	09/10/85	700 0	NW NOUT	182-70	1	37	3	14	C R 1	81	9,699	84	06
04-24-01	09/10/85	555 1	NW NOUT	182-70	1	37	3	14	C R 1	81	9,699	84	06
04-24-01	09/10/85	640 1	NW NOUT	182-70	1	37	3	14	C R 1	81	9,699	84	06
04-24-01	09/10/85	685 1	NW NOUT	182-70	1	37	3	14	C R 1	81	9,699	84	06
04-24-01	09/10/85	099 2	NW	-	1	37	5	1	C S 1	81	9,699	84	06
04-24-01	09/11/85		NW NOUT	182-70	1	37	3	14	C R 1	81	9,699	84	06
04-24-01	09/11/85	610 1	NW NOUT	182-70	1	37	3	14	C R 1	81	9,699	84	06
04-24-01	09/11/85	645 1	NW NOUT	182-70	1	37	3	14	C R 1	81	9,699	84	06
04-24-01	09/11/85	655 1	NW NOUT	182-70	1	37	3	14	C R 1	81	9,699	84	06
04-24-01	09/11/85	660 1	NW NOUT	182-70	1	37	3	14	C R 1	81	9,699	84	06
04-24-01	09/13/85		NW NOUT	182-70	1	37	3	14	C S 1	81	9,699	84	06
04-24-01	09/13/85	770	NW NOUT	181-	1	37	5	1	C R 1	81	9,699	84	06
04-24-01	09/14/85	095 2	NW NOUT	183-10	1	37	5	3	C R 1	81	9,699	84	06
04-24-01	09/14/85	100 2	NW NOUT	183-10	1	37	3	3	C R 1	81	9,699	84	06
04-24-01	09/14/85	100 2	NW NOUT	183-10	1	37	3	3	C R 1	81	9,699	84	06
04-24-01	09/16/85	625 0	NW NOUT	181-25	1	38	5	10	C R 1	81	9,699	84	06
04-24-01	09/16/85	635 0	NW NOUT	182-70	1	38	3	14	C R 1	81	9,699	84	06
04-24-01	09/16/85	695 0	NW	-	1	38	5	3	C R 1	81	9,699	84	06
04-24-01	09/17/85	630 0	NW NOUT	182-70	1	38	3	14	C R 1	81	9,699	84	06
04-24-01	09/17/85	630 0	NW NOUT	182-70	1	38	3	14	C R 1	81	9,699	84	06

-Continued-

Appendix Table 16. A listing of coded wire tag recoveries of coho salmon
from the Situk River, 1985-1986.

Recovery Information										Release Information			
Tag Code	Date	Length	Recovery Area	WK	PC	GC	A	B	C	BY	Tagged	YR	MO
04-24-01	09/17/85	650 0	NW NOUT 182-70	1	38	3	14	C	R	1	81	9,699	84 06
04-24-01	09/17/85	650 0	NW NOUT 182-70	1	38	3	14	C	R	1	81	9,699	84 06
04-24-01	09/17/85	655 0	NW NOUT 182-70	1	38	3	14	C	R	1	81	9,699	84 06
04-24-01	09/17/85	655 0	NW NOUT 182-70	1	38	3	14	C	R	1	81	9,699	84 06
04-24-01	09/17/85	675 0	NW NOUT 182-70	1	38	3	14	C	R	1	81	9,699	84 06
04-24-01	09/17/85	675 0	NW NOUT 182-70	1	38	3	14	C	R	1	81	9,699	84 06
04-24-01	09/17/85	690 0	NW NOUT 183-10	1	38	5	14	C	R	1	81	9,699	84 06
04-24-01	09/17/85	690 0	NW NOUT 182-70	1	38	3	14	C	R	1	81	9,699	84 06
04-24-01	09/17/85	690 0	NW NOUT 182-70	1	38	3	14	C	R	1	81	9,699	84 06
04-24-01	09/17/85	715 0	NW NOUT 182-70	1	38	3	14	C	R	1	81	9,699	84 06
04-24-01	09/17/85	125 2	NW -	1	38	5	1	C	S	1	81	9,699	84 06
04-24-01	09/18/85	640 1	NW NOUT 182-70	1	38	3	14	C	R	1	81	9,699	84 06
04-24-01	09/18/85	650 1	NW NOUT 182-70	1	38	3	14	C	R	1	81	9,699	84 06
04-24-01	09/18/85	670 1	NW NOUT 182-70	1	38	3	14	C	R	1	81	9,699	84 06
04-24-01	09/18/85	675 1	NW NOUT 182-70	1	38	3	14	C	R	1	81	9,699	84 06
04-24-01	09/19/85	610 0	NW NOUT 182-70	1	38	3	14	C	R	1	81	9,699	84 06
04-24-01	09/19/85	640 0	NW NOUT 182-70	1	38	3	14	C	R	1	81	9,699	84 06
04-24-01	09/19/85	670 0	NW NOUT 182-70	1	38	3	14	C	R	1	81	9,699	84 06
04-24-01	09/19/85	695 0	NW NOUT 182-70	1	38	3	14	C	R	1	81	9,699	84 06
04-24-01	09/20/85		-	1	38	5	3	C	S	1	81	9,699	84 06
04-24-01	09/20/85	695 0	NW NOUT 182-70	1	38	3	14	C	R	1	81	9,699	84 06
04-24-01	09/20/85	710 0	NW NOUT 182-70	1	38	3	14	C	R	1	81	9,699	84 06
04-24-01	09/20/85	720 0	NW NOUT 182-70	1	38	3	14	C	R	1	81	9,699	84 06
04-24-01	09/24/85		NW NOUT 182-70	1	39	3	14	C	R	1	81	9,699	84 06
04-24-01	09/24/85	495 0	NW NOUT 182-70	1	39	3	14	C	R	1	81	9,699	84 06
04-24-01	09/24/85	550 0	NW NOUT 182-70	1	39	3	14	C	R	1	81	9,699	84 06
04-24-01	09/24/85	640 0	NW NOUT 182-70	1	39	3	14	C	R	1	81	9,699	84 06
04-24-01	09/24/85	660 0	NW NOUT 182-70	1	39	3	14	C	R	1	81	9,699	84 06
04-24-01	09/24/85	695 0	NW NOUT 182-70	1	39	3	14	C	R	1	81	9,699	84 06
04-24-01	09/24/85	700 0	NW NOUT 182-70	1	39	3	14	C	R	1	81	9,699	84 06
04-24-01	09/24/85	700 0	NW NOUT 182-70	1	39	3	14	C	R	1	81	9,699	84 06
04-24-01	09/24/85	710 0	NW NOUT 182-70	1	39	3	14	C	R	1	81	9,699	84 06
04-24-01	09/24/85	710 0	NW NOUT 182-70	1	39	3	14	C	R	1	81	9,699	84 06
04-24-01	09/24/85	770 0	NW NOUT 182-70	1	39	3	14	C	R	1	81	9,699	84 06
04-24-01	09/26/85	665 0	NW NOUT 182-70	1	39	3	14	C	R	1	81	9,699	84 06
04-24-01	09/26/85	675 0	NW NOUT 182-70	1	39	3	14	C	R	1	81	9,699	84 06
04-24-01	09/26/85	710 0	NW NOUT 182-70	1	39	3	14	C	R	1	81	9,699	84 06
04-24-01	09/27/85	635 0	NW NOUT 182-70	1	39	3	14	C	R	1	81	9,699	84 06
04-24-01	09/27/85	640 0	NW NOUT 182-70	1	39	3	14	C	R	1	81	9,699	84 06

-Continued-

Appendix Table 16. A listing of coded wire tag recoveries of coho salmon from the Situk River, 1985-1986.

Recovery Information										Release Information			
Tag Code	Date	Length	Recovery Area	WK	PC	GC	A	B	C	BY	Tagged	YR	MO
04-24-01	09/27/85	650 0	NW NOUT 182-70	1	39	3	14	C	R	1	81	9,699	84 06
04-24-01	09/27/85	685 0	NW NOUT 182-70	1	39	3	14	C	R	1	81	9,699	84 06
04-24-01	09/27/85	700 0	NW NOUT 182-70	1	39	3	14	C	R	1	81	9,699	84 06
04-24-01	09/27/85	715 0	NW NOUT 182-70	1	39	3	14	C	R	1	81	9,699	84 06
04-24-01	08/11/86	760 0	NW NOUT 183-10	1	33	14	4	C	R	1	81	9,699	84 06

Note: Length is in millimeters and is followed by a code for the type of length measurement (0 = tip of head to fork of tail, 1 = mid-eye to fork of tail, 2 = head length).

WK = Statistical week.

PC = ADFG port code.

GC = Code for gear used

0 = Fish Trap

1 = Seine

3 = Gillnet

5 = Troll

15 = Power Troll

98 = NMFS Test Troll.

A = Code for sample source

C = Commercial

S = Sport

E = Escapement

T = Test Fishery.

B = Code for sample type

R = Random

S = Select.

C = Code for tag status

1 = ok

7 = nonsense (e.g. a coho identified and tagged as a juvenile chinook salmon).

BY = Brood year.

Appendix Table 17. Chinook salmon escapement into various tributaries of the Unuk River system, 1977-1986.

Year	Genes						Total
	Cripple Creek	Lake Creek	Eulachon Creek	Clear Creek	Lake Creek	Kerr Creek	
1977	585	339	57	34	...	15	1,030
1978	483	369	218	85	20	15	1,190
1979	363	101	48	14	30	20	576
1980	748	158	95	28	5	18	1,052
1981	324	112	196	54	20	25	731
1982	538	329	384	24	48	28	1,351
1983	441	337	288	24	12	4	1,106
1984	644	647	350	113	32	51	1,837
1985	270	553	269	37	22	13	1,164
1986	532	838	486	183	25	62	2,126

Index Escapement Goal = 1,800 (aerial)

Total Escapement Goal = 2,880

Appendix Table 18. Length frequency distribution and timing of die-off of male and female chinook salmon sampled at the Unuk River, Cripple Creek, August, 1986.

Length Interval	Number of Males	Number of Females			
<200	0	0			
200-224	0	0			
225-249	0	0			
250-274	0	0			
275-299	6	0			
300-324	27	0	TIMING OF DIE-OFF		
325-349	56	0			
350-374	67	0			
375-399	27	0			
400-424	13	0			
425-449	7	0			
450-474	11	0			
475-499	15	0			
500-524	28	0			
525-549	38	0			
550-574	52	0			
575-599	42	0			
600-624	45	0			
625-649	23	0			
650-674	20	0			
675-699	10	0			
700-724	7	0			
725-749	6	3			
750-774	6	1			
775-799	12	15			
800-824	14	32			
825-849	12	30			
850-874	10	38			
875-899	5	42			
900-924	10	26			
925-949	8	32			
>950	21	38			
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TOTAL	598	257			

Appendix Table 19. A summary of coded wire tag releases of Unuk River chinook salmon, 1983-1986.

Data Code	Young-of-the-Year Released	Smolts Released	Brood Year	Mean Size in mm	Capture Location	% Tag Retention
042057	9,272*		1982	63.8	Mainstem Unuk, Oct. 1983	97.6
042058	9,502*		1982	63.8	Mainstem Unuk, Nov. 1983	97.6
042061	1,757*		1982	63.8	Mainstem Unuk, Nov. 1983	97.6
042149		681*	1982	67.4	Mainstem Unuk, April, 1984	94.9
042158		8,231*	1982	67.4	Mainstem Unuk, March & April 1984	94.9
042151		1,897*	1983	69.0	Mainstem Unuk, March, 1985	95.6
042154		2,052*	1983	69.0	Mainstem Unuk, March & April 1985	95.6
042520		3,525*	1983	69.0	Mainstem Unuk, April & May 1985	95.6
042529		5,932*	1984	66.0	Mainstem Unuk, March & April 1986	100.0
TOTAL	20,531	22,318				

* Corrected for juvenile inriver tag loss

Appendix Table 20. A summary of coded wire tag releases of Unuk River coho salmon, 1983-1986.

Data Code	Young-of-the-Year Released	Smolts Released	Brood Year	Mean Size in mm	Capture Location	% Tag Retention
042060	5,696*		81-82	75.0	Mainstem Unuk, 10/05 - 11/17 1983	96.2
042147		6,085*	81-82	90.0	Mainstem Unuk, 03/16 - 04/28 1984	93.5
042155		2,392*	82-83	79.9	Mainstem Unuk, 03/19 - 03/28 1985	97.8
042521		8,708*	82-83	79.9	Mainstem Unuk, 03/28 - 05/03 1985	97.8
042546		5,421*	83-84	73.8	Mainstem Unuk, 03/16 - 04/15 1986	99.2
TOTAL	5,696	22,606				

* Corrected for juvenile inriver tag loss

Appendix Table 21. Summary of minnow traps set, catch per trap, sample size and mean fork length of juvenile chinook salmon captured in various areas of the Unuk River, 1977-1986.

Date	Number of Traps	Catch per Trap	Sample Size	Mean Fork Length
05/05/77	20	0.20	...	...
05/25/77	20	0.65	...	...
12/01/78-12/02/78	68	4.56	50	64.7
03/27/80-03/28/80	65	5.28	...	...
12/13/82-12/14/82	70	3.51	246	68.2
10/05/83-11/20/83	2,232	9.42	500	63.8
03/16/84-04/28/84	2,500	3.76	650	67.4
03/19/85-05/05/85	2,273	3.44	703	69.0
03/16/86-04/15/86	2,052	2.97	400	66.0

Appendix Table 22. Sample size/mean fork length in mm by brood year and month of juvenile chinook salmon sampled on the Unuk River, 1977-1984.

Brood Year	Sept	Oct	Nov	Dec	March	April	May
1977	...	...	... 50/64.7	...	...	...	...
1981	...	...	... 246/68.2	...	...	...	...
1982	... 200/63.8	300/63.8	...	...	... 650/67.4	...	...
1983	...	...	...	... 203/68.3	450/69.0	50/71.6	...
1984	...	...	...	... 200/65.8	200/66.2	...	...

Appendix Table 23. A listing of coded wire tag recoveries of chinook salmon from the Unuk River, 1985-1986.

Recovery Information										Release Information			
Tag Code	Date	Length	Recovery Area	WK	PC	GC	A	B	C	BY	Tagged	YR	MO
04-20-57	07/01/85	395 0	SE SIN 101-11	1	27	06	3	C	S	1	82	9,272	83 10
04-20-57	07/24/85	405 0	NE SNTR 110-24	1	30	05	1	C	R	1	82	9,272	83 10
04-20-57	08/26/85	530 0	SE SIN 101-	1	35	09	1	C	R	1	82	9,272	83 10
04-20-57	05/22/86	550 0	SE SIN 101-90	1	21	06	15	T	R	1	82	9,272	83 10
04-20-57	06/01/86	660 0	SE SIN 101-90	1	23	06		S	R	1	82	9,272	83 10
04-20-57	06/04/86	616 0	SE SIN 101-29	1	23	06		S	S	1	82	9,272	83 10
04-20-57	07/10/86	680 0	SW SOUT 104-40	1	28	06	15	C	R	1	82	9,272	83 10
04-20-57	07/13/86	611 0	SE SIN 102-70	1	29	06		S	S	1	82	9,272	83 10
04-20-57	07/28/86		SE CIN 106-30	1	31	12	3	C	S	1	82	9,272	83 10
04-20-57	08/15/86	485 1	SE SIN 101-75	1	33	93		E	R	1	82	9,272	83 10
04-20-57	08/15/86	555 1	SE SIN 101-75	1	33	93		E	R	1	82	9,272	83 10
04-20-57	08/16/86	510 1	SE SIN 101-75	1	33	93		E	R	1	82	9,272	83 10
04-20-57	08/18/86	615 1	SE SIN 101-75	1	34	93		E	R	1	82	9,272	83 10
04-20-57	08/19/86	535 1	SE SIN 101-75	1	34	93		E	R	1	82	9,272	83 10
04-20-57	08/26/86	705 0	NW COUT 113-91	1	35	01	15	C	R	1	82	9,272	83 10
04-20-57	08/27/86	730 0	SE CIN 106-10	1	35	06	15	C	R	1	82	9,272	83 10
04-20-57	09/05/86	770 0	NW -	1	36	10	5	C	R	1	82	9,272	83 10
04-20-57	09/10/86	755 0	NW CNTR 114-70	1	37	11	5	C	R	1	82	9,272	83 10
04-20-57	09/ /86	640 0	CANADA - Northern Troll								82	9,272	83 10
04-20-57	10/07/86	775 0	NE SNTR 109-10	1	41	03	15	C	R	1	82	9,272	83 10
04-20-58	08/02/85	420 0	SE SIN 101-	1	31	09	1	C	R	1	82	9,502	83 11
04-20-58	08/09/85	485 0	SE SIN 102-10	1	32	05	1	C	R	1	82	9,502	83 11
04-20-58	07/ /86	605 0	CANADA - Northern Net								82	9,502	83 11
04-20-58	05/15/86	655 0	SE SIN 101-90	1	20	06	15	T	R	1	82	9,502	83 11
04-20-58	05/15/86	735 0	SE SIN 102-10	1	20	06	15	T	R	1	82	9,502	83 11
04-20-58	06/01/86	740 0	SE SIN 102-50	1	23	06		S	R	1	82	9,502	83 11
04-20-58	06/09/86	792 0	SE CIN 106-44	1	24	05	5	C	R	1	82	9,502	83 11
04-20-58	06/14/86		SE SIN 102-50	1	24	06		S	S	1	82	9,502	83 11
04-20-58	06/16/86	660 0	SE SIN 101-45	1	25	06		S	S	1	82	9,502	83 11
04-20-58	06/26/86	722 0	SW SOUT 103-90	1	26	05	5	C	R	1	82	9,502	83 11
04-20-58	07/10/86		-	1	28	03	15	C	S	1	82	9,502	83 11
04-20-58	07/14/86	695 0	SE SIN 101-25	1	29	06	15	C	R	1	82	9,502	83 11
04-20-58	07/17/86	650 0	SE SIN 101-11	1	29	06	3	C	R	1	82	9,502	83 11
04-20-58	08/03/86	720 0	NE STEP 111-50	1	32	04		S	R	1	82	9,502	83 11
04-20-58	08/11/86	475 1	SE SIN 101-75	1	33	93		E	R	1	82	9,502	83 11
04-20-58	08/11/86	495 1	SE SIN 101-75	1	33	93		E	R	1	82	9,502	83 11
04-20-58	08/18/86	525 1	SE SIN 101-75	1	34	93		E	R	1	82	9,502	83 11
04-20-58	08/18/86	570 1	SE SIN 101-75	1	34	93		E	R	1	82	9,502	83 11

-Continued-

Appendix Table 23. A listing of coded wire tag recoveries of chinook salmon from the Unuk River, 1985-1986.

Recovery Information										Release Information			
Tag Code	Date	Length	Recovery Area	WK	PC	GC	A	B	C	BY	Tagged	YR	MO
04-20-58	08/18/86	580	1 SE SIN 101-75	1	34	93		E	R	1	82	9,502	83 11
04-20-58	08/19/86		SE SIN 101-29	1	34	06		S	S	1	82	9,502	83 11
04-20-58	08/22/86	685	0 NW CNTR 114-27	1	34	11	5	C	R	1	82	9,502	83 11
04-20-58	08/27/86	690	0 SE CIN 106-10	1	35	06	15	C	R	1	82	9,502	83 11
04-20-58	08/30/86	600	1 SE SIN 101-75	1	35	93		E	R	1	82	9,502	83 11
04-20-58	11/17/86	710	0 NE SNTR 110-	1	47	05	15	C	R	1	82	9,502	83 11
04-20-60	06/05/86	680	0 SE SIN 101-	1	23		15	T	R	7	81	5,696	83 11
04-20-61	10/04/85	480	0 SE CIN 108-30	1	40		98	T	S	1	82	1,757	83 11
04-20-61	08/28/86	645	1 SE SIN 101-75	1	35	93		E	R	1	82	1,757	83 11
04-21-49	06/20/86	645	0 SE SIN 101-11	1	25		3	C	R	1	82	681	84 04
04-21-51	08/10/86	380	1 SE SIN 101-75	1	33	93		E	R	1	83	1,896	85 03
04-21-54			-	1	06			S	S	1	83	2,052	85 04
04-21-54	08/15/86	345	1 SE SIN 101-75	1	33	93		E	R	1	83	2,052	85 04
04-21-54	08/19/86	340	1 SE SIN 101-75	1	34	93		E	R	1	83	2,052	85 04
04-21-58	06/16/85	305	0 SE SIN 101-45	1	25	06		S	S	1	82	8,231	84 04
04-21-58	07/23/85	387	0 NE SNTR 110-	1	30	05	1	C	R	1	82	8,231	84 04
04-21-58	07/23/85	406	0 NW COUT 113-41	1	30	03		S	S	1	82	8,231	84 04
04-21-58	07/30/85	400	0 NW -	1	31	03	15	C	S	1	82	8,231	84 04
04-21-58	09/03/85	435	1 SE SIN 101-75	1	36	06		E	S	1	82	8,231	84 04
04-21-58	09/05/85		SE SIN 101-90	1	36	06		S	S	1	82	8,231	84 04
04-21-58	09/16/85	479	0 NW CNTR 114-21	1	38	01	15	C	S	1	82	8,231	84 04
04-21-58	09/26/85	560	0 NW COUT 113-91	1	39		98	T	S	1	82	8,231	84 04
04-21-58	05/22/86	540	0 SE SIN 102-80	1	21	06	15	T	R	1	82	8,231	84 04
04-21-58	05/22/86	605	0 SE SIN 102-50	1	21	06	15	T	R	1	82	8,231	84 04
04-21-58	05/31/86	705	0 SE SIN 102-50	1	22	06		S	S	1	82	8,231	84 04
04-21-58	06/01/86		SE SIN 101-85	1	23	06		S	S	1	82	8,231	84 04
04-21-58	06/01/86	880	0 SE SIN 102-30	1	23	06		S	R	1	82	8,231	84 04
04-21-58	06/04/86	749	0 SE SIN 101-	1	23	06		S	S	1	82	8,231	84 04
04-21-58	06/18/86	555	0 SE SIN 102-80	1	25	06	15	T	R	1	82	8,231	84 04
04-21-58	07/12/86	700	0 SW SOUT -	1	28	07	15	C	R	1	82	8,231	84 04
04-21-58	07/19/86	508	0 SE SIN 102-70	1	29	06		S	S	1	82	8,231	84 04
04-21-58	08/16/86	555	1 SE SIN 101-75	1	33	93		E	R	1	82	8,231	84 04
04-21-58	08/19/86	500	1 SE SIN 101-75	1	34	93		E	R	1	82	8,231	84 04
04-21-58	08/19/86	500	1 SE SIN 101-75	1	34	93		E	R	1	82	8,231	84 04
04-21-58	08/19/86	625	1 SE SIN 101-75	1	34	93		E	R	1	82	8,231	84 04

-Continued-

Appendix Table 23. A listing of coded wire tag recoveries of chinook salmon from the Unuk River, 1985-1986.

Recovery Information											Release Information			
Tag Code	Date	Length	Recovery	Area	WK	PC	GC	A	B	C	BY	Tagged	YR	MO
04-21-58	08/20/86	710 0	SE	CIN 106-30	1	34	05	3	C	R	1	82	8,231	84 04
04-21-58	08/26/86	570 1	SE	SIN 101-75	1	35	93		E	R	1	82	8,231	84 04
04-21-58	08/26/86	680 0	NW	COU 113-22	1	35	03	15	C	R	1	82	8,231	84 04
04-21-58	08/27/86	685 0	SE	CIN 106-10	1	35	06	15	C	R	1	82	8,231	84 04
04-21-58	08/27/86	700 0	NW	COU 113-	1	35	03	15	C	R	1	82	8,231	84 04
04-21-58	09/03/86	685 0	NW	NOUT 157-	1	36	03	15	C	R	1	82	8,231	84 04
04-21-58	09/10/86	677 0	SE	SIN 102-80	1	37	05	15	C	R	1	82	8,231	84 04
04-25-20	07/ /86	393 0	CANADA - Northern Net								83	3,527	85 05	
04-25-20	08/18/86	350 1	SE	SIN 101-75	1	34	93		E	R	1	83	3,527	85 05
04-25-20	08/19/86	320 1	SE	SIN 101-75	1	34	93		E	R	1	83	3,527	85 05

Note: Length is in millimeters and is followed by a code for the type of length measurement (0 = tip of head to fork of tail, 1 = mid-eye to fork of tail).

WK = Statistical Week.

PC = ADFG port code.

GC = Code for gear used

1 = Seine

3 = Gillnet

5 = Troll

15 = Power Troll

98 = NMFS Test Troll.

A = Code for sample source

C = Commercial

S = Sport

E = Escapement

T = Test Fishery.

B = Code for sample type

R = Random

S = Select.

C = Code for tag status

1 = ok

7 = nonsense (e.g. a chinook identified and tagged as a juvenile coho salmon).

BY = Brood year.

Appendix Table 24. A listing of coded wire tag recoveries of Unuk River
coho salmon, 1985-1986.

Recovery Information										Release Information			
Tag Code	Date	Length	Recovery Area	WK	PC	GC	A	B	C	BY	Tagged	YR	MO
04-20-60	07/03/85	610 0	SW SOUT 104-30	1	27	07	5	C	R	1	81-82	5,696	83 11
04-20-60	07/12/85	669 0	NW COUT 154-	1	28	01	5	C	R	1	81-82	5,696	83 11
04-20-60	07/15/85	650 0	SW SOUT	1	29	06	5	C	R	1	81-82	5,696	83 11
04-20-60	07/16/85	690 0	NW COUT 113-	1	29	01	5	C	R	1	81-82	5,696	83 11
04-20-60	07/19/85	580 0	SE SIN 101-21	1	29	06	5	C	R	1	81-82	5,696	83 11
04-20-60	07/19/85	700 0	SE SIN 101-	1	29	06	5	C	R	1	81-82	5,696	83 11
04-20-60	07/20/85	730 0	SE SIN 101-25	1	30	06	5	C	R	1	81-82	5,696	83 11
04-20-60	07/21/85	700 0		1	30	10	5	C	S	1	81-82	5,696	83 11
04-20-60	07/22/85	600 0	SE SIN 101-21	1	30	06	5	C	R	1	81-82	5,696	83 11
04-20-60	07/25/85	620 0	NW COUT 113-91	1	30	01	5	C	R	1	81-82	5,696	83 11
04-20-60	07/29/85	615 0	SW SOUT 104-	1	31	07	5	C	R	1	81-82	5,696	83 11
04-20-60	07/30/85	707 0	SW SOUT 103-90	1	31	05	5	C	R	1	81-82	5,696	83 11
04-20-60	07/31/85	700 0	SW SOUT 104-40	1	31	07	5	C	R	1	81-82	5,696	83 11
04-20-60	07/31/85	100 2	NW	1	31	01	5	C	S	1	81-82	5,696	83 11
04-20-60	08/02/85	094 2	NW	1	31	01	5	C	S	1	81-82	5,696	83 11
04-20-60	08/05/85	685 0	NW	1	32	01	5	C	R	1	81-82	5,696	83 11
04-20-60	08/05/85	705 0	SE SIN 101-	1	32	05	1	C	R	1	81-82	5,696	83 11
04-20-60	08/06/85	560 0	SE SIN 101-85	1	32	06	1	C	R	1	81-82	5,696	83 11
04-20-60	08/09/85	434 0	SE SNTR 105-10	1	32	05	1	C	R	1	81-82	5,696	83 11
04-20-60	08/09/85	585 0	SE SIN	1	32	06	1	C	R	1	81-82	5,696	83 11
04-20-60	08/12/85	590 0		1	33	09	5	C	R	1	81-82	5,696	83 11
04-20-60	08/13/85	690 0	NW	1	33	10	5	C	R	1	81-82	5,696	83 11
04-20-60	08/14/85	670 0	SE SIN 101-	1	33	06	5	C	R	1	81-82	5,696	83 11
04-20-60	08/15/85	560 0	SE SIN 101-28	1	33	09	0	E	R	1	81-82	5,696	83 11
04-20-60	08/15/85	600 0	SE SIN	1	33	06	5	C	R	1	81-82	5,696	83 11
04-20-60	08/20/85	660 0	SE SIN 101-29	1	34	06	1	C	R	1	81-82	5,696	83 11
04-20-60	08/20/85	743 0	SE SIN 101-	1	34	06	1	C	R	1	81-82	5,696	83 11
04-20-60	08/23/85	670 0	SE SIN 101-	1	34	06	1	C	R	1	81-82	5,696	83 11
04-20-60	08/23/85	680 0	SE SIN 101-	1	34	06	1	C	R	1	81-82	5,696	83 11
04-20-60	08/25/85	660 0	SE SIN 101-28	1	35	09	0	E	R	1	81-82	5,696	83 11
04-20-60	08/26/85	660 0	SE SIN 101-	1	35	06	1	C	R	1	81-82	5,696	83 11
04-20-60	08/26/85	750 0	SE SIN 101-	1	35	06	1	C	R	1	81-82	5,696	83 11
04-20-60	08/27/85	640 0	SE SIN 101-28	1	35	09	0	E	R	1	81-82	5,696	83 11
04-20-60	08/27/85	705 0	SE SIN 101-29	1	35	06	1	C	R	1	81-82	5,696	83 11
04-20-60	08/27/85	725 0	SE SIN 101-29	1	35	06	1	C	R	1	81-82	5,696	83 11
04-20-60	08/28/85	657 0	SE CIN 106-41	1	35	05	3	C	R	1	81-82	5,696	83 11
04-20-60	08/28/85	750 0	SE SIN	1	35	06	1	C	R	1	81-82	5,696	83 11
04-20-60	09/02/85	770 0	SE SIN 101-	1	36	09	3	C	R	1	81-82	5,696	83 11
04-20-60	09/03/85	765 0	SE CIN 106-30	1	36	05	3	C	R	1	81-82	5,696	83 11
04-20-60	09/05/85	675 0	SW SOUT 104-	1	36	09	5	C	R	1	81-82	5,696	83 11
04-20-60	09/05/85	100 2		1	36	03	5	C	S	1	81-82	5,696	83 11

-Continued-

Appendix Table 24. A listing of coded wire tag recoveries of Unuk River coho salmon, 1985-1986.

Recovery Information										Release Information			
Tag Code	Date	Length	Recovery Area	WK	PC	GC	A	B	C	BY	Tagged	YR	MO
04-20-60	09/08/85	710 0	NW COUT 113-91	1	37	01	5	C	R	1	81-82	5,696	83 11
04-20-60	/ /85		CANADA - NORTHERN TROLL							81-82	5,696	83 11	
04-20-60	/ /85		CANADA - NORTHERN TROLL							81-82	5,696	83 11	
04-20-60	/ /85		CANADA - NORTHERN TROLL							81-82	5,696	83 11	
04-21-47	07/05/85	645 0		1	27	03	5	C	R	1	81-82	6,085	84 04
04-21-47	07/07/85	515 0	NW COUT 113-41	1	28	01	5	C	R	1	81-82	6,085	84 04
04-21-47	07/10/85	665 0	SE SIN 101-21	1	28	06	5	C	R	1	81-82	6,085	84 04
04-21-47	07/13/85	700 0	SW SOUT 104-40	1	29	07	5	C	R	1	81-82	6,085	84 04
04-21-47	07/14/85		NW COUT 113-	1	29	03	5	C	R	1	81-82	6,085	84 04
04-21-47	07/15/85		NW	1	29	01	5	C	S	1	81-82	6,085	84 04
04-21-47	07/15/85		NW	1	29	01	5	C	S	1	81-82	6,085	84 04
04-21-47	07/15/85	555 0	SE SIN 101-21	1	29	06	5	C	R	1	81-82	6,085	84 04
04-21-47	07/15/85	675 0	SW SOUT 103-	1	29	07	5	C	R	1	81-82	6,085	84 04
04-21-47	07/16/85	700 0	NW COUT 113-95	1	29	10	1	C	S	1	81-82	6,085	84 04
04-21-47	07/18/85	645 0	SW SOUT 103-90	1	29	05	5	C	R	1	81-82	6,085	84 04
04-21-47	07/19/85		NE SNTR 109-62	1	29	05	5	C	R	1	81-82	6,085	84 04
04-21-47	07/19/85	652 0	NE SNTR 109-62	1	29	05	5	C	R	1	81-82	6,085	84 04
04-21-47	07/21/85	690 0	SW SOUT 103-90	1	30	05	5	C	R	1	81-82	6,085	84 04
04-21-47	07/22/85		NW	1	30	01	5	C	S	1	81-82	6,085	84 04
04-21-47	07/22/85	620 0	SE SIN 101-21	1	30	06	5	C	R	1	81-82	6,085	84 04
04-21-47	07/23/85	595 0	NW	1	30	03	5	C	R	1	81-82	6,085	84 04
04-21-47	07/23/85	615 0	NW COUT 113-	1	30	03	5	C	R	1	81-82	6,085	84 04
04-21-47	07/23/85	640 0	SE SIN 101-21	1	30	06	5	C	R	1	81-82	6,085	84 04
04-21-47	07/23/85	660 0	NW	1	30	01	5	C	R	1	81-82	6,085	84 04
04-21-47	07/23/85	660 0	NW COUT 113-	1	30	03	5	C	R	1	81-82	6,085	84 04
04-21-47	07/24/85	625 0	NW COUT 113-91	1	30	03	5	C	R	1	81-82	6,085	84 04
04-21-47	07/24/85	675 0		1	30	06	1	C	R	1	81-82	6,085	84 04
04-21-47	07/25/85		NW	1	30	01	5	C	S	1	81-82	6,085	84 04
04-21-47	07/25/85	580 0	NE SNTR 109-	1	30	05	5	C	R	1	81-82	6,085	84 04
04-21-47	07/25/85	670 0	NW COUT 113-91	1	30	01	5	C	R	1	81-82	6,085	84 04
04-21-47	07/27/85	080 2		1	31	03	5	C	S	1	81-82	6,085	84 04
04-21-47	07/28/85	690 0	NE SNTR 109-61	1	31	05	5	C	R	1	81-82	6,085	84 04
04-21-47	07/29/85	550 0	SE SIN 102-10	1	31	09	5	C	R	1	81-82	6,085	84 04
04-21-47	07/29/85	710 0	NW COUT 113-	1	31	03	5	C	R	1	81-82	6,085	84 04
04-21-47	07/29/85	143 2		1	31	01	5	C	S	1	81-82	6,085	84 04
04-21-47	07/30/85	070 2	NW	1	31	01	5	C	S	1	81-82	6,085	84 04
04-21-47	07/30/85	090 2	NW	1	31	01	5	C	S	1	81-82	6,085	84 04
04-21-47	07/31/85	620 0	NW	1	31	10	5	C	R	1	81-82	6,085	84 04
04-21-47	07/31/85	686 0	NW COUT 113-91	1	31	01	5	C	R	1	81-82	6,085	84 04
04-21-47	08/02/85		NW	1	31	01	5	C	S	1	81-82	6,085	84 04

-Continued-

Appendix Table 24. A listing of coded wire tag recoveries of Unuk River coho salmon, 1985-1986.

Recovery Information										Release Information			
Tag Code	Date	Length	Recovery Area	WK	PC	GC	A	B	C	BY	Tagged	YR	MO
04-21-47	08/03/85	725 0	NW COUT 113-91	1	32	01	5	C	R	1	81-82	6,085	84 04
04-21-47	08/06/85	595 0	SE SIN	1	32	06	1	C	R	1	81-82	6,085	84 04
04-21-47	08/06/85	610 0	NW NOUT	1	32	14	5	C	R	1	81-82	6,085	84 04
04-21-47	08/07/85	700 0	NW COUT	1	32	01	5	C	S	1	81-82	6,085	84 04
04-21-47	08/07/85	085 2		1	32	06	1	C	S	1	81-82	6,085	84 04
04-21-47	08/09/85	600 0	SW SOUT 104-	1	32	07	1	C	R	1	81-82	6,085	84 04
04-21-47	08/09/85	674 0	SW SOUT 104-	1	32	07	1	C	R	1	81-82	6,085	84 04
04-21-47	08/10/85	510 0		1	33	06	5	C	R	1	81-82	6,085	84 04
04-21-47	08/10/85	735 0	SW SOUT 104-10	1	33	06	1	C	R	1	81-82	6,085	84 04
04-21-47	08/11/85	645 0	NW NOUT 181-	1	33	03	5	C	R	1	81-82	6,085	84 04
04-21-47	08/14/85	635 0	SE SIN 101-90	1	33	06	1	C	R	1	81-82	6,085	84 04
04-21-47	08/14/85	640 0	SE CIN 106-41	1	33	05	3	C	R	1	81-82	6,085	84 04
04-21-47	08/14/85	765 0	SW SOUT 104-	1	33		1	C	R	1	81-82	6,085	84 04
04-21-47	08/15/85	107 2	NW	1	33	01	5	C	S	1	81-82	6,085	84 04
04-21-47	08/19/85	665 0	SE SIN 101-90	1	34	06	1	C	R	1	81-82	6,085	84 04
04-21-47	08/19/85	705 0		1	34	06	1	C	R	1	81-82	6,085	84 04
04-21-47	08/20/85	716 0	SE CIN 106-41	1	34	05	3	C	R	1	81-82	6,085	84 04
04-21-47	08/23/85	520 0	SE SIN 101-28	1	34	09	3	C	R	1	81-82	6,085	84 04
04-21-47	08/23/85	710 0	SE SIN 101-	1	34	06	1	C	R	1	81-82	6,085	84 04
04-21-47	08/23/85	730 0	SE SIN 101-	1	34	06	1	C	R	1	81-82	6,085	84 04
04-21-47	08/24/85	680 0	SE SIN 101-29	1	35	06	1	C	R	1	81-82	6,085	84 04
04-21-47	08/25/85	695 0		1	35	06	1	C	R	1	81-82	6,085	84 04
04-21-47	08/26/85	790 0	SE SIN 101-	1	35	09	1	C	R	1	81-82	6,085	84 04
04-21-47	08/28/85	650 0	SE SIN	1	35	06	1	C	R	1	81-82	6,085	84 04
04-21-47	08/29/85	631 0	SE SIN 101-	1	35	05	1	C	R	1	81-82	6,085	84 04
04-21-47	08/29/85	707 0	SE CIN 106-30	1	35	05	3	C	R	1	81-82	6,085	84 04
04-21-47	08/29/85	735 0	SE SIN 101-	1	35	05	1	C	R	1	81-82	6,085	84 04
04-21-47	08/30/85	108 2	NW	1	35	01	5	C	S	1	81-82	6,085	84 04
04-21-47	09/01/85	690 0	SE SIN 102-50	1	36	06	1	C	R	1	81-82	6,085	84 04
04-21-47	09/03/85	680 0		1	36	06	5	C	R	1	81-82	6,085	84 04
04-21-47	09/03/85	760 0	SE SIN	1	36	06	1	C	R	1	81-82	6,085	84 04
04-21-47	09/04/85	705 0		1	36	06	5	C	S	1	81-82	6,085	84 04
04-21-47	09/06/85	720 0		1	36	06	5	C	R	1	81-82	6,085	84 04
04-21-47	09/09/85	727 0		1	37	05	5	C	R	1	81-82	6,085	84 04
04-21-47	09/10/85	690 0	SW SOUT 104-	1	37	06	5	C	R	1	81-82	6,085	84 04
04-21-47	09/12/85	664 0		1	37	05	5	C	R	1	81-82	6,085	84 04
04-21-47	09/18/85	760 0	SE SIN 101-29	1	38	06	5	C	R	1	81-82	6,085	84 04
04-21-47	09/19/85	650 0	SE SIN 102-80	1	38	06	5	C	R	1	81-82	6,085	84 04
04-21-47	/ /85		CANADA - NORTHERN TROLL								6,085	84 04	

-Continued-

Appendix Table 24. A listing of coded wire tag recoveries of Unuk River
coho salmon, 1985-1986.

Recovery Information										Release Information		
Tag Code	Date	Length	Recovery Area	WK	PC	GC	A	B	C	BY	Tagged	YR MO
04-21-47	/ /85		CANADA - NORTHERN TROLL								6,085	84 04
04-21-55	/ /86		CANADA - NORTHERN TROLL							82	2,392	85 03
04-21-55	/ /86		CANADA - NORTHERN TROLL							82	2,392	85 03
04-21-55	/ /86		CANADA - NORTHERN TROLL							82	2,392	85 03
04-21-55	/ /86		CANADA - NORTHERN TROLL							82	2,392	85 03
04-21-55	/ /86		CANADA - NORTHWEST TROLL							82	2,392	85 03
04-21-55	07/09/86	565 0	NW -	1	28	03	15	C	R 1	82	2,392	85 03
04-21-55	07/11/86	615 0	NW COUT 113-	1	28	11	15	C	R 1	82	2,392	85 03
04-21-55	07/11/86	630 0	NW COUT 113-	1	28	11	15	C	R 1	82	2,392	85 03
04-21-55	07/18/86	550 0	NW COUT 113-	1	29	03	15	C	R 1	82	2,392	85 03
04-21-55	07/18/86	614 0	NE SNTR 109-	1	29	05	15	C	R 1	82	2,392	85 03
04-21-55	07/19/86	688 0	NW COUT 113-	1	29	01	5	C	R 1	82	2,392	85 03
04-21-55	07/22/86	530 0	SE SIN 102-10	1	30	06	1	C	R 1	82	2,392	85 03
04-21-55	07/29/86		NW -	1	31	01	15	C	S 1	82	2,392	85 03
04-21-55	07/30/86	680 0	NE CNTR 112-	1	31	11	15	C	R 1	82	2,392	85 03
04-21-55	08/02/86	505 0	NW COUT 113-	1	31	01	15	C	R 1	82	2,392	85 03
04-21-55	08/02/86	660 0	NW -	1	31	10	15	C	R 1	82	2,392	85 03
04-21-55	08/07/86	550 0	SE SIN 101-28	1	32	09	3	C	R 1	82	2,392	85 03
04-21-55	08/08/86	705 0	SE SIN 101-21	1	32	06	15	C	R 1	82	2,392	85 03
04-21-55	08/11/86	530 0	SE SIN 101-28	1	33	09	0	C	R 1	82	2,392	85 03
04-21-55	08/11/86	690 0	NW COUT 113-	1	33	03	15	C	R 1	82	2,392	85 03
04-21-55	08/18/86	450 0	SE SIN 101-28	1	34	09	1	C	R 1	82	2,392	85 03
04-21-55	08/21/86	585 0	SW SOUT 104-20	1	34	06	1	C	R 1	82	2,392	85 03
04-21-55	08/25/86	700 0	NW COUT 113-91	1	35	11	15	C	R 1	82	2,392	85 03
04-21-55	08/26/86		NW -	1	35	01	15	C	S 1	82	2,392	85 03
04-21-55	08/27/86	681 0	SE CIN 106-	1	35	05	3	C	R 1	82	2,392	85 03
04-21-55	08/28/86	530 0	SE SIN 101-	1	35	06	1	C	R 1	82	2,392	85 03
04-21-55	08/28/86	710 0	SE SIN 101-25	1	35	09	1	C	S 1	82	2,392	85 03
04-21-55	08/29/86	760 0	NW -	1	35	03	15	C	R 1	82	2,392	85 03
04-21-55	09/01/86	716 0	-	1	36	05	15	C	R 1	82	2,392	85 03
04-21-55	09/02/86	770 0	SE SIN 101-29	1	36	06	1	C	R 1	82	2,392	85 03
04-21-55	09/05/86	600 0	SE SIN 101-21	1	36	06	15	C	R 1	82	2,392	85 03
04-25-21	/ /86		CANADA - NORTHERN TROLL							82	8,709	85 05
04-25-21	/ /86		CANADA - NORTHERN TROLL							82	8,709	85 05
04-25-21	/ /86		CANADA - NORTHERN TROLL							82	8,709	85 05
04-25-21	/ /86		CANADA - NORTHERN TROLL							82	8,709	85 05
04-25-21	/ /86		CANADA - NORTHERN TROLL							82	8,709	85 05

-Continued-

Appendix Table 24. A listing of coded wire tag recoveries of Unuk River
coho salmon, 1985-1986.

Recovery Information										Release Information			
Tag Code	Date	Length	Recovery Area	WK	PC	GC	A	B	C	BY	Tagged	YR	MO
04-25-21	/ /86		CANADA - NORTHERN TROLL							82	8,709	85	05
04-25-21	/ /86		CANADA - NORTHERN TROLL							82	8,709	85	05
04-25-21	/ /86		CANADA - NORTHERN TROLL							82	8,709	85	05
04-25-21	/ /86		CANADA - NORTHERN TROLL							82	8,709	85	05
04-25-21	/ /86		CANADA - NORTHERN TROLL							82	8,709	85	05
04-25-21	06/23/86	660 0	NW COUT 113-	1	26	03	15	C	R 1	82	8,709	85	05
04-25-21	07/01/86		NW -	1	27	03	15	C	S 1	82	8,709	85	05
04-25-21	07/02/86	640 0	NW COUT 113-22	1	27	03	15	C	R 1	82	8,709	85	05
04-25-21	07/07/86	660 0	NW COUT 113-	1	28	03	15	C	R 1	82	8,709	85	05
04-25-21	07/08/86	700 0	NW COUT 113-	1	28	03	15	C	R 1	82	8,709	85	05
04-25-21	07/10/86	562 0	NW COUT 113-81	1	28	01	15	C	R 1	82	8,709	85	05
04-25-21	07/10/86	630 0	NW -	1	28	03	15	C	R 1	82	8,709	85	05
04-25-21	07/10/86	630 0	NW -	1	28	03	15	C	R 1	82	8,709	85	05
04-25-21	07/10/86	650 0	NW COUT 113-	1	28	03	15	C	R 1	82	8,709	85	05
04-25-21	07/12/86		NW NOUT 156-	1	28	03	15	C	S 1	82	8,709	85	05
04-25-21	07/12/86	680 0	NW COUT 113-	1	28	11	15	C	R 1	82	8,709	85	05
04-25-21	07/13/86		NW COUT 113-	1	29	01	15	C	S 1	82	8,709	85	05
04-25-21	07/13/86	570 0	NE SNTR 109-	1	29	05	15	C	R 1	82	8,709	85	05
04-25-21	07/13/86	610 0	NE SNTR 109-	1	29	05	15	C	R 1	82	8,709	85	05
04-25-21	07/13/86	665 0	NW -	1	29	10	15	C	R 1	82	8,709	85	05
04-25-21	07/13/86	702 0	NE SNTR 109-	1	29	05	15	C	R 1	82	8,709	85	05
04-25-21	07/13/86	714 0	NE SNTR 109-	1	29	05	15	C	R 1	82	8,709	85	05
04-25-21	07/14/86	600 0	SE SIN 101-25	1	29	06	15	C	R 1	82	8,709	85	05
04-25-21	07/15/86		NW COUT 113-	1	29	01	15	C	S 1	82	8,709	85	05
04-25-21	07/15/86	640 0	NW COUT 113-	1	29	11	15	C	R 1	82	8,709	85	05
04-25-21	07/16/86		NW -	1	29	10	15	C	S 1	82	8,709	85	05
04-25-21	07/16/86		NW COUT 154-	1	29	03	15	C	S 1	82	8,709	85	05
04-25-21	07/16/86	599 0	NE SNTR 109-	1	29	05	15	C	R 1	82	8,709	85	05
04-25-21	07/16/86	650 0	NW COUT 113-	1	29	01	15	C	R 1	82	8,709	85	05
04-25-21	07/16/86	690 0	NW -	1	29	10	15	C	R 1	82	8,709	85	05
04-25-21	07/17/86	600 0	NW COUT 113-22	1	29	03	15	C	R 1	82	8,709	85	05
04-25-21	07/21/86		-	1	30	01	15	C	S 1	82	8,709	85	05
04-25-21	07/21/86	659 0	SE CIN 106-41	1	30	05	15	C	R 1	82	8,709	85	05
04-25-21	07/22/86	630 0	NW COUT 113-91	1	30	01	15	C	R 1	82	8,709	85	05
04-25-21	07/22/86	670 0	NW COUT 113-	1	30	11	15	C	R 1	82	8,709	85	05
04-25-21	07/23/86	690 0	NW COUT 113-	1	30	03	15	C	R 1	82	8,709	85	05
04-25-21	07/24/86	655 0	NW COUT 113-	1	30	03	15	C	R 1	82	8,709	85	05
04-25-21	07/25/86	600 0	NW COUT 113-11	1	30	03	15	C	R 1	82	8,709	85	05
04-25-21	07/25/86	662 0	NE SNTR 109-	1	30	05	15	C	R 1	82	8,709	85	05

-Continued-

Appendix Table 24. A listing of coded wire tag recoveries of Unuk River coho salmon, 1985-1986.

Recovery Information										Release Information			
Tag Code	Date	Length	Recovery Area	WK	PC	GC	A	B	C	BY	Tagged	YR	MO
04-25-21	07/26/86	690	0 NW COUT 113-94	1	30	01	15	C	R	1	82	8,709	85 05
04-25-21	07/27/86		NW NOUT 157-	1	31	03	15	C	S	1	82	8,709	85 05
04-25-21	07/28/86	673	0 NW CNTR 114-21	1	31	11	15	C	R	1	82	8,709	85 05
04-25-21	07/29/86	620	0 NE SNTR 109-	1	31	05	15	C	R	1	82	8,709	85 05
04-25-21	07/30/86	700	0 SE SIN 102-10	1	31	06	15	C	R	1	82	8,709	85 05
04-25-21	07/30/86	725	0 NW -	1	31	10	5	C	R	1	82	8,709	85 05
04-25-21	07/31/86	660	0 NW COUT 154-	1	31	03	15	C	R	1	82	8,709	85 05
04-25-21	08/01/86	705	0 SW SOUT 104-10	1	31	06	1	C	R	1	82	8,709	85 05
04-25-21	08/02/86	495	0 NW -	1	31	10	15	C	S	1	82	8,709	85 05
04-25-21	08/02/86	600	0 SW SOUT 104-	1	31	06	1	C	R	1	82	8,709	85 05
04-25-21	08/02/86	645	0 NW NOUT 116-05	1	31	01	15	C	R	1	82	8,709	85 05
04-25-21	08/06/86	550	0 SW SOUT 104-40	1	32	06	1	C	R	1	82	8,709	85 05
04-25-21	08/06/86	685	0 SW SOUT 104-40	1	32	03	15	C	R	1	82	8,709	85 05
04-25-21	08/08/86	726	0 SW SOUT 104-30	1	32	05	1	C	R	1	82	8,709	85 05
04-25-21	08/09/86		-	1	32	01	15	C	S	1	82	8,709	85 05
04-25-21	08/09/86		-	1	32	01	15	C	S	1	82	8,709	85 05
04-25-21	08/09/86		-	1	32	03	15	C	S	1	82	8,709	85 05
04-25-21	08/09/86	440	0 SE SIN 101-29	1	32	06	1	C	R	1	82	8,709	85 05
04-25-21	08/10/86	660	0 SW SOUT 104-	1	33	06	1	C	R	1	82	8,709	85 05
04-25-21	08/12/86	725	0 NW -	1	33	03	15	C	R	1	82	8,709	85 05
04-25-21	08/13/86	625	0 SE SIN 101-85	1	33	06	1	C	R	1	82	8,709	85 05
04-25-21	08/13/86	629	0 SE CIN 106-41	1	33	05	3	C	R	1	82	8,709	85 05
04-25-21	08/13/86	670	0 SW SOUT 104-	1	33	06	15	C	R	1	82	8,709	85 05
04-25-21	08/15/86	570	0 SE SIN 101-	1	33	09	1	C	R	1	82	8,709	85 05
04-25-21	08/18/86	665	0 SW SOUT -	1	34	06	1	C	R	1	82	8,709	85 05
04-25-21	08/20/86	695	0 SE SIN 101-23	1	34	06	1	C	R	1	82	8,709	85 05
04-25-21	08/21/86	720	0 SE SIN 101-29	1	34	06	1	C	R	1	82	8,709	85 05
04-25-21	08/22/86	620	0 SE SIN 101-	1	34	09	3	C	S	1	82	8,709	85 05
04-25-21	08/25/86	666	0 -	1	35	05	15	C	R	1	82	8,709	85 05
04-25-21	08/26/86		NW -	1	35	01	15	C	S	1	82	8,709	85 05
04-25-21	08/26/86	675	0 NW COUT 113-91	1	35	01	15	C	R	1	82	8,709	85 05
04-25-21	08/26/86	694	0 SE CIN 106-41	1	35	05	15	C	R	1	82	8,709	85 05
04-25-21	08/26/86	705	0 SE SIN 101-21	1	35	06	5	C	R	1	82	8,709	85 05
04-25-21	08/26/86	710	0 NW COUT 113-	1	35	01	15	C	R	1	82	8,709	85 05
04-25-21	08/26/86	765	0 SE -	1	35	05	1	C	S	1	82	8,709	85 05
04-25-21	08/27/86	610	0 SE SIN 101-25	1	35	06	15	C	R	1	82	8,709	85 05
04-25-21	08/27/86	617	0 SE CIN 106-30	1	35	05	3	C	R	1	82	8,709	85 05
04-25-21	08/27/86	670	0 SW SOUT -	1	35	06	15	C	R	1	82	8,709	85 05
04-25-21	08/27/86	690	0 NW COUT 113-	1	35	03	15	C	R	1	82	8,709	85 05

-Continued-

Appendix Table 24. A listing of coded wire tag recoveries of Unuk River coho salmon, 1985-1986.

Recovery Information										Release Information			
Tag Code	Date	Length	Recovery Area	WK	PC	GC	A	B	C	BY	Tagged	YR	MO
04-25-21	08/27/86	700 0	SE SIN 101-	1	35	06	15	C	R	1	82	8,709	85 05
04-25-21	08/27/86	715 0	NW -	1	35	11	15	C	R	1	82	8,709	85 05
04-25-21	08/29/86	675 0	SW SOUT 104-	1	35	06	1	C	R	1	82	8,709	85 05
04-25-21	08/29/86	695 0	SW SOUT 104-	1	35	06	1	C	R	1	82	8,709	85 05
04-25-21	08/30/86	720 0	SW SOUT 103-	1	35	06	1	C	R	1	82	8,709	85 05
04-25-21	09/02/86	670 0	-	1	36	06	1	C	R	1	82	8,709	85 05
04-25-21	09/03/86		NW -	1	36	01	15	C	S	1	82	8,709	85 05
04-25-21	09/04/86	730 0	SE CIN 106-30	1	36	06	15	C	R	1	82	8,709	85 05
04-25-21	09/08/86	645 0	SE SIN 101-23	1	37	06	15	C	R	1	82	8,709	85 05
04-25-21	09/08/86	670 0	SE SIN 101-23	1	37	06	15	C	R	1	82	8,709	85 05
04-25-21	09/10/86	698 0	SE CIN 106-41	1	37	05	3	C	R	1	82	8,709	85 05
04-25-21	09/15/86	650 0	SE SIN 101-25	1	38	06	15	C	R	1	82	8,709	85 05

Note: Length is in millimeters and is followed by a code for the type of length measurement (0 = tip of head to fork of tail, 1 = mid-eye to fork of tail, 2 = head length).

WK = Statistical Week.	B = Code for sample type
PC = ADFG port code.	R = Random
GC = Code for gear used	S = Select
0 = Fish Trap	C = Code for tag status
1 = Seine	1 = ok
3 = Gillnet	7 = nonsense (e.g. a chinook
5 = Troll	identified and tagged as a
15 = Power Troll	juvenile coho salmon).
98 = NMFS Test Troll	BY = Brood year.
A = Code for sample source	
C = Commercial	
S = Sport	
E = Escapement	
T = Test Fishery	

Appendix Table 25. Chinook salmon escapement into various tributaries of the Chickamin River, 1975-1986.

Year	South Fork	Barrier Creek	Butler Creek	Leduc River	Indian Creek	Above Indian	Humpty King	El Paso	Clear Falls	Total
1975	141	9	66	6	90	11	7	30	...	360
1976	46	10	15	12	9	...	...	...	30	122
1977	52	66	30	26	53	8	0	...	...	235
1978	21	94	4	42	20	...	...	...	...	181
1979	63	17	29	0	31	...	...	...	...	140
1980	56	62	104	17	22	...	...	...	...	261
1981	51	105	51	25	12	...	...	105	...	380
1982	84	149	37	36	...	...	...	165	...	504
1983	28	138	91	30	47	...	...	212	...	556
1984	185	171	124	15	103	...	88	388	...	1,014
1985	136	156	93	8	125	...	50	377	...	957
1986	562	168	203	20	120	...	...	564	...	1,677

Index Escapement Goal = 900 (aerial)

Total Escapement Goal = 1,440

Appendix Table 26. Summary of minnow traps set, catch per trap, sample size and mean fork length of juvenile chinook salmon captured in various areas of the Chickamin River, 1977-1986.

Date	Number of Traps	Catch per Trap	Sample Size	Mean Fork Length
05/05/77	20	0.45	...	...
05/25/77	20	0.65	...	...
12/14/82-12/15/82	24	9.21	205	67.1
03/03/83-04/01/83	1,040	2.26	115	68.6
03/17/84-04/16/84	1,570	3.69	299	69.9
03/19/85-05/04/85	2,576	1.67	702	77.6
03/16/86-04/15/86	1,757	2.33	400	66.0

Appendix Table 27. Sample size/mean fork length in mm by brood year and month of juvenile chinook salmon sampled on the Chickamin River, 1981-1984.

Brood Year	December	March	April	May
1981	205/67.1	...	115/68.6	...
1982	...	199/68.8	100/72.1	...
1983	...	156/77.0	440/77.1	106/80.7
1984	...	199/64.7	201/67.3	...

Appendix Table 28. A summary of coded wire tag releases of Chickamin River chinook salmon, 1983-1986.

Data Code	Young-of-the-Year Released	Smolts Released	Brood Year	Mean Size in mm	Capture Location	% Tag Retention
042055		2,352*	1981	68.6	Chickamin River, March & April 1983	100.0
042062		5,474*	1982	69.9	Chickamin River, March & April 1984	94.4
042157		1,687*	1983	77.6	Chickamin River March & April 1985	95.8
042524		2,426*	1983	77.6	Chickamin River, April & May 1985	95.8
042548		4,435*	1984	66.0	Chickamin River, March & April 1986	98.6
TOTAL		16,374				

* Corrected for juvenile inriver tag loss

Appendix Table 29. A summary of coded wire tag releases of Chickamin River coho salmon, 1983-1986.

Data Code	Young-of-the-Year Released	Smolts Released	Brood Year	Mean Size in mm	Capture Location	% Tag Retention
042027		1,312*	80-81	100.2	Mainstem Chickamin River, 03/01 - 04/12 1983	100.0
042144		900*	80-81	72.0	Mainstem Chickamin River, 03/01 - 04/12 1983	100.0
042063		3,790*	81-82	90.0	Mainstem Chickamin River 03/17 - 04/16 1984	87.5
042156		1,848*	82-83		Mainstem Chickamin River, 03/19 - 04/04 1985	94.9
042522		6,226*	82-83		Mainstem Chickamin River, 04/05 - 05/04 1985	94.9
042547		3,272*	83-84		Mainstem Chickamin River, 03/16 - 04/15 1986	95.4
TOTAL		17,348				

* Corrected for juvenile inriver tag loss

Appendix Table 30. A listing of coded wire tag recoveries of coho salmon
from the Chickamin River, 1984-1986.

Recovery Information										Release Information			
Tag Code	Date	Length	Recovery Area	WK	PC	CC	A	B	C	BY	Tagged	YR	MO
04-20-27	/ /84		B.C., CANADA							81	1,312	83	04
04-20-27	07/21/84	757 0	NE SNTR 109-	1	30	05	5	C	R 1	81	1,312	83	04
04-20-27	07/29/84	625 0	NW -	1	31	10	5	C	R 1	81	1,312	83	04
04-20-27	07/31/84	100 2	-	1	31	01		C	S 1	81	1,312	83	04
04-20-27	08/02/84	105 2	-	1	31	01		C	S 1	81	1,312	83	04
04-20-27	08/03/84	590 0	SE SIN 101-41	1	32	06	1	C	R 1	81	1,312	83	04
04-20-27	08/05/84	614 0	SW SOUT 104-10	1	32	12	1	C	R 1	81	1,312	83	04
04-20-27	08/15/84	735 0	SE CIN 106-	1	33	05	3	C	R 1	81	1,312	83	04
04-20-27	08/16/84	500 0	SE SIN 101-28	1	33	09	0	C	R 1	81	1,312	83	04
04-20-27	08/19/84	750 0	SE SIN 101-	1	34	06	1	C	R 1	81	1,312	83	04
04-20-27	08/21/84	575 0	SE SIN 102-10	1	34	06	1	C	R 1	81	1,312	83	04
04-20-27	08/22/84	720 0	SE CIN 106-30	1	34	05	3	C	R 1	81	1,312	83	04
04-20-27	08/24/84	715 0	SE -	1	35	05	1	C	R 1	81	1,312	83	04
04-20-27	08/30/84	730 0	SE SNTR 105-	1	35	06	5	C	R 1	81	1,312	83	04
04-20-27	09/05/84		-	1	36	01	5	C	S 1	81	1,312	83	04
04-20-27	09/10/84	745 0	NW CNTR 114-21	1	37	11	5	C	R 1	81	1,312	83	04
04-20-27	09/11/84	765 0	SE SIN 101-	1	37	09	3	C	R 1	81	1,312	83	04
04-20-27	09/14/84	780 0	SE SIN 101-29	1	38	06	5	C	R 1	81	1,312	83	04
04-20-63	07/05/85	670 0	NW COUT 113-31	1	27	03	5	C	R 1	81	3,790	84	04
04-20-63	07/15/85	685 0	SW SOUT 104-40	1	29	07	5	C	R 1	81	3,790	84	04
04-20-63	07/16/85	540 0	SW SOUT 104-	1	29	06	1	C	R 1	81	3,790	84	04
04-20-63	07/16/85	680 0	-	1	29	06	1	C	R 1	81	3,790	84	04
04-20-63	07/20/85		NW -	1	30	01	5	C	S 1	81	3,790	84	04
04-20-63	07/20/85	105 2	-	1	30	03	5	C	S 1	81	3,790	84	04
04-20-63	07/22/85	660 0	SE SIN 101-21	1	31	06	5	C	R 1	81	3,790	84	04
04-20-63	07/29/85		NW -	1	31	01	5	C	S 1	81	3,790	84	04
04-20-63	08/01/85	468 0	SE SIN 101-	1	31	05	3	C	R 1	81	3,790	84	04
04-20-63	08/01/85	695 0	SE CIN 106-41	1	31	05	5	C	R 1	81	3,790	84	04
04-20-63	08/02/85	660 0	NW COUT 113-	1	31	03	5	C	R 1	81	3,790	84	04
04-20-63	08/03/85	686 0	NW COUT 113-91	1	32	01	5	C	R 1	81	3,790	84	04
04-20-63	08/05/85	670 0	SE SIN 101-42	1	32	09	1	C	R 1	81	3,790	84	04
04-20-63	08/06/85	440 0	SE SIN -	1	32	06	1	C	R 1	81	3,790	84	04
04-20-63	08/06/85	580 0	SE SIN -	1	32	06	1	C	R 1	81	3,790	84	04
04-20-63	08/10/85	710 0	-	1	33	06	1	C	R 1	81	3,790	84	04
04-20-63	08/10/85	730 0	SE SIN 101-	1	33	06	5	C	R 1	81	3,790	84	04
04-20-63	08/11/85	700 0	NE SNTR 109-61	1	33	05	5	C	R 1	81	3,790	84	04
04-20-63	08/12/85	610 0	-	1	33	09	5	C	R 1	81	3,790	84	04
04-20-63	08/13/85	650 0	SE CIN 106-41	1	33	05	3	C	R 1	81	3,790	84	04
04-20-63	08/14/85	705 0	SW SOUT -	1	33	07	5	C	R 1	81	3,790	84	04
04-20-63	08/14/85	725 0	NW CNTR 114-21	1	33	01	5	C	R 1	81	3,790	84	04

-Continued-

Appendix Table 30. A listing of coded wire tag recoveries of coho salmon from the Chickamin River, 1984-1986.

Recovery Information										Release Information			
Tag Code	Date	Length	Recovery Area	WK	PC	GC	A	B	C	BY	Tagged	YR	MO
04-20-63	08/14/85	750 0	SE SIN 101-	1	33	09	5	C	R 1	81	3,790	84	04
04-20-63	08/15/85	560 0	SW SOUT -	1	33	09	5	C	R 1	81	3,790	84	04
04-20-63	08/16/85	710 0	SE SIN 101-	1	33	09	3	C	R 1	81	3,790	84	04
04-20-63	08/16/85	720 0	NW -	1	33	10	5	C	R 1	81	3,790	84	04
04-20-63	08/20/85	587 0	SE SIN 101-	1	34	06	1	C	R 1	81	3,790	84	04
04-20-63	08/20/85	690 0	SE SIN 101-85	1	34	06	1	C	R 1	81	3,790	84	04
04-20-63	08/20/85	725 0	SE SIN 101-29	1	34	06	1	C	R 1	81	3,790	84	04
04-20-63	08/24/85	780 0	SE SIN 101-85	1	35	06	1	C	R 1	81	3,790	84	04
04-20-63	08/25/85	406 0	SE SIN 101-90	1	35	06		S	S 1	81	3,790	84	04
04-20-63	08/25/85	640 0	SE SIN 101-41	1	35	06	1	C	R 1	81	3,790	84	04
04-20-63	08/26/85	630 0	SE SIN 101-	1	35	06	1	C	R 1	81	3,790	84	04
04-20-63	08/26/85	690 0	SE SIN 101-28	1	35	09	3	C	S 1	81	3,790	84	04
04-20-63	08/26/85	695 0	NW COUT 113-91	1	35	01	5	C	R 1	81	3,790	84	04
04-20-63	08/27/85	650 0	SE SIN 101-28	1	35	09	0	C	R 1	81	3,790	84	04
04-20-63	08/29/85	780 0	SW SOUT 104-40	1	35	05	1	C	R 1	81	3,790	84	04
04-20-63	08/31/85	750 0	SE SIN -	1	36	06	1	C	R 1	81	3,790	84	04
04-20-63	09/02/85	790 0	-	1	36	05	5	C	R 1	81	3,790	84	04
04-20-63	09/03/85	710 0	SE SIN -	1	36	06	1	C	R 1	81	3,790	84	04
04-20-63	09/04/85	625 0	SE CIN 106-10	1	36	06	3	C	R 1	81	3,790	84	04
04-20-63	09/05/85	720 0	SW SOUT 104-	1	36	06	5	C	R 1	81	3,790	84	04
04-20-63	09/09/85	660 0	SE CIN 106-41	1	37	06	5	C	S 1	81	3,790	84	04
04-20-63	09/10/85	710 0	SE CIN 106-41	1	37	05	3	C	R 1	81	3,790	84	04
04-20-63	09/12/85	095 2	-	1	37	03	5	C	S 1	81	3,790	84	04
04-20-63	08/16/85	740 0	SE SIN 101-42	1	38	09	3	C	R 1	81	3,790	84	04
04-20-63	/ /85		CANADA - NORTHERN TROLL							81	3,790	84	04
04-20-63	/ /85		CANADA - NORTHERN TROLL							81	3,790	84	04
04-20-63	/ /85		CANADA - NORTHERN TROLL							81	3,790	84	04
04-20-63	/ /85		CANADA - NORTHERN TROLL							81	3,790	84	04
04-20-63	/ /85		CANADA - NORTHERN NET							81	3,790	84	04
04-20-63	/86		-	1		06		S	S 1	81	3,790	84	04
04-20-63	08/05/86	660 0	SW SOUT 104-10	1	32	06	1	C	R 1	81	3,790	84	04
04-20-63	08/10/86	682 0	SE CIN 106-41	1	33	05	15	C	R 1	81	3,790	84	04
04-21-44	07/14/84	675 0	NW COUT 113-45	1	29	03	5	C	R 1	81	900	83	04
04-21-44	07/27/84	695 0	NW COUT 113-45	1	31	03	5	C	R 1	81	900	83	04
04-21-44	08/07/84	615 0	NW COUT 113-71	1	32	03	5	C	R 1	81	900	83	04
04-21-44	08/07/84	690 0	NW COUT 154-	1	32	03	5	C	R 1	81	900	83	04
04-21-44	08/19/84	730 0	SE SIN 102-10	1	34	06	1	C	R 1	81	900	83	04

-Continued-

Appendix Table 30. A listing of coded wire tag recoveries of coho salmon
from the Chickamin River, 1984-1986.

Recovery Information										Release Information			
Tag Code	Date	Length	Recovery Area	WK	PC	GC	A	B	C	BY	Tagged	YR	MO
04-21-44	08/24/84	660 0	SW SOUT 104-10	1	35	06	1	C	R	1	81	900	83 04
04-21-44	08/29/84	690 0	SE CIN 106-	1	35	05	5	C	R	1	81	900	83 04
04-21-44	08/29/84	730 0	SE SIN 101-11	1	35	06	1	C	R	1	81	900	83 04
04-21-44	09/07/84	650 0	NW COUT 113-91	1	37	03	5	C	R	1	81	900	83 04
04-21-44	09/12/84	735 0	SE SIN 101-27	1	37	06		S	R	1	81	900	83 04
04-21-56	07/14/86	609 0	NE SNTR 109-45	1	29	05	5	C	R	1	82	1,848	85 04
04-21-56	07/28/86		NW -	1	31	01	15	C	S	1	82	1,848	85 04
04-21-56	07/30/86		-	1	31	01	15	C	S	1	82	1,848	85 04
04-21-56	08/05/86	650 0	SE SIN 101-21	1	32	06	15	C	R	1	82	1,848	85 04
04-21-56	08/13/86	544 0	SW SOUT 104-	1	33	05	1	C	R	1	82	1,848	85 04
04-21-56	08/20/86	685 0	SE SIN 101-23	1	34	06	1	C	R	1	82	1,848	85 04
04-21-56	08/22/86	650 0	SE SIN 101-23	1	34	06	1	C	R	1	82	1,848	85 04
04-21-56	08/25/86	700 0	NE CNTR 112-	1	35	05	15	C	R	1	82	1,848	85 04
04-21-56	08/30/86		NW COUT 113-	1	35	03	15	C	S	1	82	1,848	85 04
04-21-56	/ /86		CANADA - NORTHERN TROLL								82	1,848	85 04
04-25-22	/ /86		CANADA - NORTHERN TROLL								82	6,227	85 05
04-25-22	/ /86		CANADA - NORTHERN TROLL								82	6,227	85 05
04-25-22	/ /86		CANADA - NORTHERN TROLL								82	6,227	85 05
04-25-22	/ /86		CANADA - NORTHERN TROLL								82	6,227	85 05
04-25-22	/ /86		CANADA - NORTHERN TROLL								82	6,227	85 05
04-25-22	/ /86		CANADA - NORTHERN TROLL								82	6,227	85 05
04-25-22	/ /86		CANADA - NORTHERN TROLL								82	6,227	85 05
04-25-22	/ /86		CANADA - NORTHERN TROLL								82	6,227	85 05
04-25-22	/ /86		CANADA - NORTHWEST TROLL								82	6,227	85 05
04-25-22	07/05/86	535 0	SW SOUT 103-	1	27	07	15	C	R	1	82	6,227	85 05
04-25-22	07/08/86		NW COUT 113-81	1	28	01	15	C	S	1	82	6,227	85 05
04-25-22	07/11/86	615 0	SE SIN 102-10	1	28	06	15	C	R	1	82	6,227	85 05
04-25-22	07/13/86	665 0	NW -	1	29	10	15	C	R	1	82	6,227	85 05
04-25-22	07/14/86		NW COUT 113-	1	29	01	15	C	S	1	82	6,227	85 05
04-25-22	07/14/86	565 0	NW COUT 113-22	1	29	03	15	C	R	1	82	6,227	85 05
04-25-22	07/15/86	650 0	NW NOUT 116-	1	29	01	15	C	R	1	82	6,227	85 05
04-25-22	07/15/86	655 0	NE SNTR 109-45	1	29	05	15	C	R	1	82	6,227	85 05
04-25-22	07/16/86	670 0	NE SNTR 109-	1	29	05	15	C	R	1	82	6,227	85 05
04-25-22	07/18/86	705 0	NW -	1	29	10	15	C	R	1	82	6,227	85 05
04-25-22	07/19/86		-	1	29	03	15	C	S	1	82	6,227	85 05
04-25-22	07/21/86	651 0	SNTR -	1	30	05	15	C	R	1	82	6,227	85 05
04-25-22	07/22/86		-	1	30	01	15	C	S	1	82	6,227	85 05
04-25-22	07/24/86	662 0	SW SOUT 103-90	1	30	05	15	C	R	1	82	6,227	85 05

-Continued-

Appendix Table 30. A listing of coded wire tag recoveries of coho salmon
from the Chickamin River, 1984-1986.

Recovery Information										Release Information			
Tag Code	Date	Length	Recovery Area	WK	PC	GC	A	B	C	BY	Tagged	YR	MO
04-25-22	07/25/86	700	0 NW COUT 113-	1	30	03	15	C	R	1	82	6,227	85 05
04-25-22	07/28/86	568	0 NE CNTR 112-	1	31	05	15	C	R	1	82	6,227	85 05
04-25-22	07/29/86	648	0 SW SOUT 103-90	1	31	05	15	C	R	1	82	6,227	85 05
04-25-22	08/01/86	578	0 SE SIN 101-41	1	31	06		S	S	1	82	6,227	85 05
04-25-22	08/04/86	640	0 SE SIN 101-28	1	32	09	1	C	S	1	82	6,227	85 05
04-25-22	08/05/86	550	0 SE SIN 101-25	1	32	09	1	C	R	1	82	6,227	85 05
04-25-22	08/05/86	557	0 NE SNTR 109-	1	32	05	15	C	R	1	82	6,227	85 05
04-25-22	08/06/86	680	0 SE SIN 101-	1	32	06	15	C	R	1	82	6,227	85 05
04-25-22	08/06/86	685	0 SE SIN 101-11	1	32	06	3	C	R	1	82	6,227	85 05
04-25-22	08/08/86	590	0 -	1	32	03	15	C	R	1	82	6,227	85 05
04-25-22	08/08/86	710	0 NW -	1	32	10	15	C	R	1	82	6,227	85 05
04-25-22	08/08/86	730	0 -	1	32	03	15	C	R	1	82	6,227	85 05
04-25-22	08/09/86		-	1	32	03	15	C	S	1	82	6,227	85 05
04-25-22	08/09/86	625	0 NW COUT 113-91	1	32	01	15	C	R	1	82	6,227	85 05
04-25-22	08/10/86		-	1	33	03	15	C	S	1	82	6,227	85 05
04-25-22	08/12/86	638	0 SW SOUT 104-	1	33	05	1	C	R	1	82	6,227	85 05
04-25-22	08/12/86	715	0 SE SIN 101-21	1	33	06	15	C	R	1	82	6,227	85 05
04-25-22	08/13/86	585	0 SE SIN 101-11	1	33	06	3	C	R	1	82	6,227	85 05
04-25-22	08/15/86	700	0 SE SIN 101-	1	33	09	3	C	R	1	82	6,227	85 05
04-25-22	08/18/86	690	0 SE SIN 101-29	1	34	06	1	C	R	1	82	6,227	85 05
04-25-22	08/20/86	715	0 SE SIN 101-23	1	34	06	1	C	R	1	82	6,227	85 05
04-25-22	08/21/86	554	0 SW SOUT 103-	1	34	05	1	C	R	1	82	6,227	85 05
04-25-22	08/21/86	600	0 SE SIN 101-29	1	34	06	1	C	R	1	82	6,227	85 05
04-25-22	08/21/86	630	0 -	1	34	06	1	C	R	1	82	6,227	85 05
04-25-22	08/21/86	770	0 -	1	34	06	1	C	R	1	82	6,227	85 05
04-25-22	08/23/86		NW -	1	34	01	15	C	S	1	82	6,227	85 05
04-25-22	08/23/86	675	0 SE SIN 101-11	1	34	06	3	C	R	1	82	6,227	85 05
04-25-22	08/23/86	785	0 SW SOUT -	1	34	06	1	C	R	1	82	6,227	85 05
04-25-22	08/25/86	720	0 NE SNTR 109-	1	35	05	15	C	R	1	82	6,227	85 05
04-25-22	08/25/86	745	0 -	1	35	06	15	C	R	1	82	6,227	85 05
04-25-22	08/27/86	570	0 SE SIN 102-10	1	35	06	15	C	R	1	82	6,227	85 05
04-25-22	08/27/86	755	0 NW COUT 113-45	1	35	03	15	C	R	1	82	6,227	85 05
04-25-22	08/28/86	645	0 SW SOUT -	1	35	06	15	C	R	1	82	6,227	85 05
04-25-22	08/28/86	670	0 SW SOUT -	1	35	06	15	C	R	1	82	6,227	85 05
04-25-22	09/03/86	716	0 SE CIN 106-41	1	36	05	3	C	R	1	82	6,227	85 05
04-25-22	09/05/86	495	0 SE SIN 101-23	1	36	06	1	C	R	1	82	6,227	85 05
04-25-22	09/06/86	705	0 SE SIN -	1	36	06	1	C	R	1	82	6,227	85 05
04-25-24	08/01/86	695	0 NW COUT 113-	1	31	01	15	C	R	7	83	2,426	85 05
04-25-24	08/11/86	670	0 SW SOUT 104-	1	33	06	15	C	R	7	83	2,426	85 05

-Continued-

Appendix Table 30. A listing of coded wire tag recoveries of coho salmon from the Chickamin River, 1984-1986.

Recovery Information										Release Information			
Tag Code	Date	Length	Recovery Area	WK	PC	GC	A	B	C	BY	Tagged	YR	MO
04-25-24	08/25/86	705 0	NW COUT 113-	1	35	11	15	C	R	7	83	2,426	85 05
04-25-24	09/08/86	615 0	SE SIN 101-23	1	37	06	15	C	R	7	83	2,426	85 05

Note: Length is in millimeters and is followed by a code for the type of length measurement (0 = tip of head to fork of tail, 1 = mid-eye to fork of tail, 2 = head length).

WK = Statistical week. B = Code for sample type
 PC = ADFG port code. R = Random
 GC = Code for gear used S = Select
 0 = Fish Trap C = Code for tag status
 1 = Seine 1 = ok
 3 = Gillnet 7 = nonsense (e.g. a coho identified
 5 = Troll and tagged as a juvenile chinook
 15 = Power Troll salmon).
 98 = NMFS Test Troll. BY = Brood year.
 A = Code for sample source
 C = Commercial
 S = Sport
 E = Escapement
 T = Test Fishery.

Appendix Table 31. Peak observed escapement counts of chinook salmon
in the Blossom River, 1961-1986.

Year	Chinook	Method
1961	68	Ground
...	...	...
1963	825	Air
...	...	...
1972	700	Air
...	...	...
1974	166	Helicopter
1975	153	Helicopter
1976	68	Helicopter
1977	112	Helicopter
1978	143	Helicopter
1979	54	Helicopter
1980	89	Helicopter
1981	159	Helicopter
1982	345	Helicopter
1983	589	Helicopter
1984	508	Helicopter
1985	709	Helicopter
1986	1,278	Helicopter

Appendix Table 32. Peak observed escapement counts of chinook salmon
in the Keta River, 1948-1986.

Year	Chinook	Method
1948	500	Foot
...	...	...
1950	210	Foot
1951	120	Foot
1952	462	Foot
1953	156	Foot
1954	300	Air
1955	1,000	Air
1956	1,500	Air
1957	500	Air
...	...	...
1961	44	Ground
...	...	...
1975	203	Helicopter
1976	84	Helicopter
1977	230	Helicopter
1978	392	Helicopter
1979	426	Helicopter
1980	192	Helicopter
1981	329	Helicopter
1982	754	Helicopter
1983	822	Helicopter
1984	610	Helicopter
1985	624	Helicopter
1986	690	Helicopter

Appendix Table 33. Peak observed escapement counts of chinook salmon
in the Chilkat River, 1960-1986.

Year	Big Boulder	Stonehouse	Method
1960	316	...	F
...	...	...	...
1966	330	...	F
1967	150	...	F
1968	259	...	F
...	...	...	...
1970	176	...	F
...	...	...	...
1974	0	...	F
1975	21	...	F
1976	25	...	H, F
1977	25	...	H, F
...	...	...	...
1981	187	69	H, F
1982	56	123	H, F
1983	121	126	H, F
1984	229	104	H, F
1985	70	50	H, F
1986	20	9	H, F

F = Foot

H = Helicopter

Appendix Table 34. Peak escapement counts of chinook salmon in the King
Salmon River (Admiralty Island), 1957-1986.

Year	Enumerated by Foot/Helicopter	Snett. Egg Take Add to Foot Enum. For Total Escp.	Enumerated Through Weir, Egg Take Plus Spawning Below Weir	Jacks Through Weir
1957	200	...	...	...
...	...	...	...	...
1961	117	...	...	...
...	...	...	...	...
1971	94	...	...	...
1972	90	...	...	...
1973	211	...	...	...
1974	104	...	...	...
1975	42	...	...	...
1976	65	...	...	...
1977	134	...	...	...
1978	57	...	...	...
1979	88	...	...	...
1980	70	...	...	...
1981	101	...	...	...
1982	259	31	...	...
1983	208 (84.3%)*	41	283	20
1984	198 (76.7%)*	54	312	79
1985	117 (64.4%)*	34	214	42
1986	199 (85.2%)*	36	281	74

* = Percentage of chinook enumerated from helicopter above weir compared
to total enumerated through weir.