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ALASKA DEPARTMENT OF FISH AND GAME
SUSITNA RIVER AQUATIC STUDIES PROGRAM

Report No. 13

Adult Salmon Investigations: May - October 1985

DRAFT

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Prepared for:

Alaska Power Authority 701 East Tudor Road Anchorage, Alaska 99519

April 1986

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### ADULT SALMON INVESTIGATIONS:

MAY - OCTOBER 1985

Technical Data Report No. 13

by:

Frederick M. Thompson Susan N. Wick Barry L. Stratton

Alaska Department of Fish and Game Susitna River Aquatic Studies Program 620 East 10th Avenue, Suite 302 Anchorage, Alaska 99501

April 1986

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#### 1.0 INTRODUCTION AND OBJECTIVES

This report concludes five years of data collection on adult salmon in the Susitna River, Southcentral Alaska, by the Susitna Aquatic Studies Team of the Alaska Department of Fish and Game. These data were collected to provide baseline information in preparation for proposed hydroelectric development on the Susitna River at Watana and Devil Canyons. This years report is similar to the previous years reports in format and content. Population estimates, escapement timing, length, age and sex ratio, and spawning distribution information is reported for all five species of Pacific salmon utilizing the river. The fecundity of chinook and coho salmon and egg retention of sockeye and chum salmon is also reported to aid associated studies on juvenile salmon.

A different population estimate methodology was affected this season. In previous years a Petersen model for closed systems was utilized. This year, a stratified, open model was used where the design allowed.

As might have been expected, the specific goals of the program have changed from year to year depending on the amount of funding available and the data needed to meet within year objectives. To meet 1985 objectives, Flathorn, Sunshine and Curry stations were operated by Susitna Aquatic Studies staff. Yentna Station, a Susitna Aquatic Studies camp from 1981 until 1984, was operated by the Alaska Department of Fish and Game, Commercial Fisheries Division, Soldotna staff in 1985. Readers interested in the data collected from Yentna Station should contact the Soldotna office of the Alaska Department of Fish and Game.

The primary objectives of the 1985 Adult Salmon Studies were:

- 1. Estimate the escapements of chinook ( $\underline{0}$ ncorhynchus tshawytscha), sockeye ( $\underline{0}$ .  $\underline{nerka}$ ), pink ( $\underline{0}$ .  $\underline{gorbuscha}$ ), chum ( $\underline{0}$ .  $\underline{keta}$ ) and coho ( $\underline{0}$ .  $\underline{kisutch}$ ) salmon at Flathorn, Sunshine and Curry stations.
- 2. Evaluate the adult salmon migrational timing and travel rates between sampling stations.
- Using fishwheel catches, monitor the age, length and sex composition of the adult salmon escapements at Flathorn, Sunshine and Curry stations.
- 4. Determine the relative importance of middle-river (River Mile (RM) 98.6-161.0) main channel, slough and tributary habitats as salmon spawning areas.

#### Secondary objectives included:

- 1. Determine the fecundity of chinook and coho salmon at Sunshine Station. Fecundities of sockeye, pink and chum salmon were evaluated in previous years studies.
- 2. Provide estimates of egg retention for sockeye and chum salmon which spawn in middle river slough habitats.

#### 2.0 METHODS

### 2.1 Main Channel Escapement Monitoring

Adult salmon escapements into the Susitna River were monitored at three tag-and-recapture locations in 1985: Flathorn, Sunshine and Curry stations (Figure 1). Flathorn Station is located approximately six miles below the Susitna-Yentna rivers confluence or 22 miles upstream from the Susitna River mouth. Sunshine Station is located about three miles below the Parks Highway bridge at river mile (RM) 80. Curry Station, the most northern tag and recapture site, is located in the middle river reach at RM 120.

Fishwheels were used to monitor the escapements at all three locations in accordance to the schedule in Table 1. Individual fishwheel sites at each station are shown in Appendix Figures 4-1, 4-2 and 4-3. At Flathorn Station four fishwheels were operated for the entire season. Two additional wheels were operated during the chinook migration to increase the number of tag releases. There were four fishwheels operated at Sunshine Station and two at Curry Station.

Table 1. Operation schedules for Flathorn, Sunshine and Curry stations, 1985.

Station	River Mile	Da Begin	ite End
Flathorn	22	5/26	9/3
Sunshine	80	6/3	9/10
Curry	120	6/10	9/12

Fishwheels at all sites were operated 24 hours a day unless mechanical problems, personnel constraints, or safety hazards dictated otherwise. Fishwheel design and construction details can be found in previous Su Hydro reports (ADF&G 1981, 1982 and 1983; Barrett et al. 1984 and 1985). All salmon except those visibly stressed, post-spawners, and chinook less than 400 millimeters (mm) in length were tagged. Recaptures were identified to species, and had the tag type and number recorded before release.

Two tag types were used at the three sampling locations in 1985. At Flathorn and Sunshine stations, Floy FT-4 spaghetti tags were used. Chinook were tagged with 15 inch tags while all other fish were tagged with 13.5 inch tags. Petersen discs were used at Curry Station. Numbered tags were placed on salmon to provide information on migrational timing between sampling locations. Specific tagging techniques were previously reported (ADF&G 1981 and 1982).

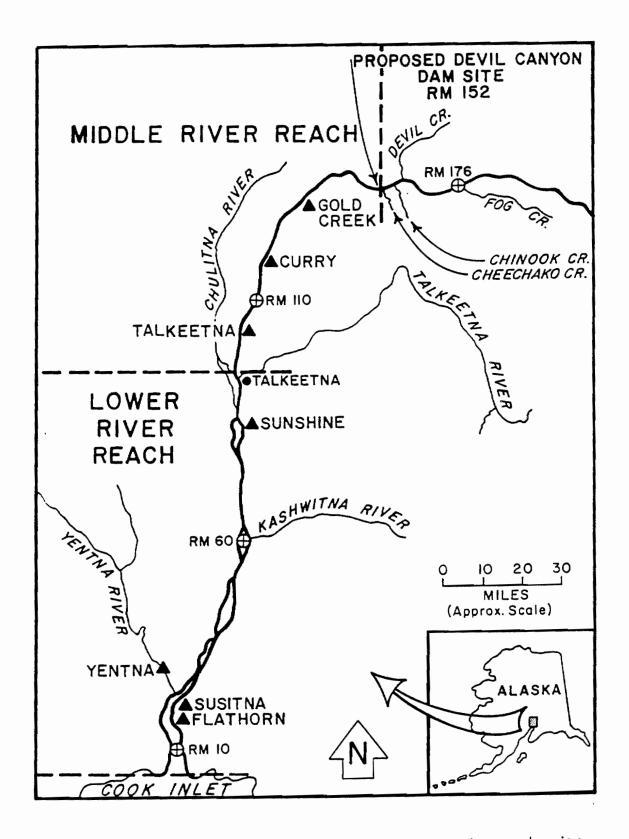


Figure 1. Susitna River basin map showing field stations and major glacial streams, 1985.

The escapement to each station was subsampled to provide age, sex, and length composition information. At the direction of Su Hydro biometrics staff, fifty samples of each species were collected daily from Flathorn Station east channel fishwheels, west channel fishwheels, and collectively from Sunshine and Curry fishwheels. Ages were described using Gilbert-Rich notation (Barrett et al. 1984).

Fecundity studies were conducted for chinook and coho salmon. A total of 25 females of each species were collected at Sunshine Station. Sampling was stratified by length with the number of samples in each strata determined from respective proportions of each length strata in the fishwheel catch sample. Collection and sampling procedures were described in Barrett et al. (1984).

### 2.2 Spawning Ground Surveys

Surveys were conducted for two reasons: 1) to identify the timing and distribution of salmon spawning in the middle Susitna River reach and 2) to provide the tagged to untagged salmon ratios needed to generate population estimates at Flathorn, Sunshine, and Curry stations.

Each lower-river (RM 28.0 - 98.6) tributary stream index area, usually one-third mile from the Susitna River confluence, was surveyed weekly from July 10 until October 7. These surveys were conducted for the sole purpose of providing tagged to untagged ratios for the Flathorn and Sunshine station population estimates. Additional surveys were conducted within select tributaries of the Susitna and Yentna rivers, primarily to increase the tag recovery effort for chinook and coho salmon.

All lower-river stream surveys were conducted on foot or by raft. Surveyors wore polarized sunglasses to reduce glare and were instructed to record tagged to untagged information only from fish that were clearly visible. Therefore, it is possible for the combined tagged to untagged numbers reported to differ from escapement survey data; which includes abundance estimates of schooling fish.

Middle-river (RM 98.6-161.0) tributary stream index reaches, usually three-quarters of a mile in length, were surveyed from July 15 to October 7. As with lower-river streams, tag recovery surveys included only those fish that were entirely visible to the surveyor. Additionally, weekly aerial escapement surveys from July 15 to October 7 were conducted for middle-river streams with major spawning grounds above the index areas. Three Devil Canyon streams (Cheechako, Chinook, and Devil creeks) were also surveyed by helicopter.

All middle-river sloughs were surveyed in their entirety from July 15 through October 7. Surveys were conducted on foot and each slough was surveyed at a minimum seven day interval based on observation life data reported by Barrett et al. (1984 and 1985).

The main channel, including side channel habitats, was surveyed by helicopter for salmon spawning activity from September 1 until October 7. Salmon spawning sites had to meet one or more of the following criteria for inclusion:

- 1. Visual identification of one or more actively mating pairs of fish.
- Presence of one or more distinct redds.
- 3. Confirmed presence of live eggs by intragravel sampling.

### 2.3 Data Analysis

### 2.3.1 Escapement estimates

Salmon escapements passing Flathorn, Sunshine and Curry stations were estimated using the mark-recapture methodology. The programs were designed to use the closed Petersen model, however, post-season analysis indicated that a stratified, open model would be more appropriate. The recapture of numbered tags at Sunshine and Yentna stations enabled stratification of Flathorn escapement estimates. Similar tag recovery data was not available to stratify Sunshine and Curry estimates, and the Petersen method as described by Barrett et al. (1984 and 1985) from Ricker (1975) was used. The estimator used for population size at Flathorn Station was a stratified, open model estimator as originally defined by Darroch (1961) and further explained by Seber (1982).

The stratified approach used at Flathorn was necessitated by non-random (i.e. non-representative) "recovery" of salmon in the lower reach of the Susitna drainage (i.e. below the Chulitna, Susitna, and Talkeetna confluences). This non-randomness presented a problem in that marked to unmarked ratios varied widely at recovery locations, whereas the samples at recovery locations with large sample sizes were not necessarily representative of the entire population. For example, the recovery site of Sunshine Station with its comparatively large sample sizes would "control" a pooled Petersen estimate even though the marked to unmarked ratio at Sunshine Station may not be reflective of the true overall ratio of marked to unmarked fish in the population. The stratified approach to population estimation represents a remedial solution to this sampling problem. Stratification allows for segregation of variable marked to unmarked ratios to the corresponding segments of the escape-Accordingly, each ratio is "weighted" by its own proper ment run. Additional reasons for stratification include the nonsample size. random nature of tagging effort. In particular the efficiency of different fishwheels at Flathorn Station are most likely different in comparison to each other; and this efficiency most likely varies with time (due to seasonal influences such as changing discharge levels). Accordingly, different segments of the run migrating past Flathorn Station would have different probabilities of capture. Again stratification "matches" up these probabilities with the corresponding section of the run.

The strata were defined for each individual species according to river channel where fish were tagged at Flathorn Station, location of recovery (i.e. Sunshine or Yentna stations), time period of tagging and recovery, or combinations of these factors. The particular stratification scheme used for each particular species was dependent upon both the necessity of adequate recovery sample sizes and upon observed patterns of the marked to unmarked ratios. That is, groups of fish tagged at Flathorn Station with similar recovery rates could be pooled. Whereas groups with dissimilar recovery rates could not be pooled (and hence were separated into different strata). A chi-square test for consistency was applied as outlined in Seber (1982) to determine both the need for stratification and for selection of stratum definitions. The individual stratification scheme used for each species is more fully presented in the results sections of this report.

Stratification by size groups of salmon was not feasible as length data was collected for a subsample of each days fishwheel catch, rather than for each individual. The need for stratification by size groups of fish (especially in the case of chinook) is founded upon the assumption that larger fish are less susceptible to fishwheel capture, and that different fishwheels are more or less efficient at capture of different size classes of fish.

The stratified population estimator (for the entire population) is:

$$W = u'r$$

where: W is the estimate of the total unmarked population size at the Flathorn Station:

- u is a vector of the number of unmarked fish in each recovery stratum (i.e. at Sunshine or Yentna stations); and
- r is a vector whose elements are comprised of the element inverses of p; p is a vector of the capture probabilities (p<sub>j</sub>) of a fish being captured in the jth tagging stratum.

The elements of r are estimated with one of two formulas, depending upon whether the number of release and recovery strata are equivalent or not. If the number of release and recovery strata are the same then:

$$r = M^{-1}a$$

where: M is the matrix of recapture (i.e. marked) numbers, classified according to strata of release and recovery (rows and columns respectively); and

a is the vector of the number of marked fish released in each release stratum

If the number of release strata is greater than the number of recovery strata (note: estimators are not defined for the case of fewer release strata) then;

$$r = [XD_a^{-1}M]^{-1}v$$

where: X is an i by j constraint matrix which selects for a method for pooling (i.e. collapsing) the release strata; where i = number of recovery strata and j = number of release strata

D is a diagonal matrix of the number of marked fish released in each release stratum;

M is as stated above; and

v is an i element vector  $(0, 0, \dots 0, 1)$ 

The variance of the estimate of W is calculated with equations 11.20 to 11.23 on page 441 of Seber (1982) [Note standard deviations reported in the results section are merely the square root of the variance estimates]. Calculations were carried out either on the microcomputer based software MINITAB (Ryan et al. 1981) or on the mainframe based software SAS (Statistical Analysis System, SAS 1982) package using PROCEDURE MATRIX. [Results from both software compared favorably.]

Ninety-five percent confidence intervals were calculated for the Petersen population estimates assuming a normal distribution. The assumption of normality was not made for the stratified model and the intervals graphically displayed in this report represent the population estimate plus and minus two standard deviations.

#### 2.3.2 Escapement Timing

Salmon escapement timing was based on fishwheel catch per unit effort (CPUE) at each station. Species migration was defined as starting, reaching a mid-point, and ending on the dates 5, 50 and 95 percent of the cumulative station fishwheel CPUE was attained. Escapement timing is also presented graphically with CPUE, smoothed by the von Hann linear filter method, as a function of time (BMPD 1981).

### 2.3.3 Slough Escapements

The escapements of sockeye and chum salmon to middle-river sloughs were determined using spawner abundance curves (Cousens et al. 1982). Observation life data from 1983 and 1984 (Barrett et al. 1984 and 1985) are the basis for calculating the number of fish from the area under the curve (fish/days).

#### 3.0 RESULTS AND DISCUSSION

### 3.1 Chinook Salmon

### 3.1.1 Main Channel Escapements

The 1985 chinook salmon escapement at Flathorn Station was estimated to be 113,860 fish greater than 400 mm in length, with a standard deviation of 77,931 fish (Figure 2). The tag/recapture program was originally designed in the spring of 1985 to use the Petersen estimator for closed populations, which pools all recovery data. Post-season analysis indicated, however, that assumptions inherent in the model were being violated. Specifically those violations were: 1) fish were not being randomly marked because fishwheels selected for smaller sized chinook, 2) fishwheel efficiency varied with time which affected both capture and recapture probabilities and 3) it appeared that the distribution of tags into different reaches of the drainage were not equal. Therefore, it was determined that a stratified model, which assumes an open population, would improve the accuracy of the estimate.

The tag recovery data obtained from stream surveys was not usable because individual tag numbers were not identified and fish could not be placed into the appropriate temporal release strata. Only tagged fish recovered in Sunshine Station fishwheels could be placed into a release strata. This decreased the number of tag recoveries which subsequently decreased the precision of the estimate. Although this was considered the best model to estimate populations at Flathorn it should be noted that there are still deficiencies with the estimate primarily in the inability to stratify by size. The rationale discussed here applies to the population estimates for all species at Flathorn Station and will not be repeated in the following sections.

Based on the Petersen method, the estimated escapement to Sunshine Station was 185,700 fish greater than 400 mm, with a 95 percent confidence interval of 167,700 to 208,100 fish (Figure 2). The Sunshine Station Petersen estimate assumes normality and therefore calculation of a 95 percent confidence interval is possible. The stratified model used at Flathorn Station does not assume a normal distribution and the range presented represents plus or minus two standard deviations and not a 95 percent confidence interval. Not included in the Sunshine Station estimate was the number of chinook salmon less than 400 mm in length. This segment of the population was not estimated for two reasons: 1) chinook salmon less than 400 mm long were less visible during surveys and therefore they were not tagged because of the positive bias introduced into the estimate and 2) the method used in 1984 was considered inappropriate because of the size selectivity of fishwheels. For these reasons, no estimates were made for chinook salmon less than 400 mm in 1985.

The estimates for Flathorn and Sunshine stations were not directly comparable because of the different methods used. The Petersen estimate at Sunshine Station was subject to the biases associated with size

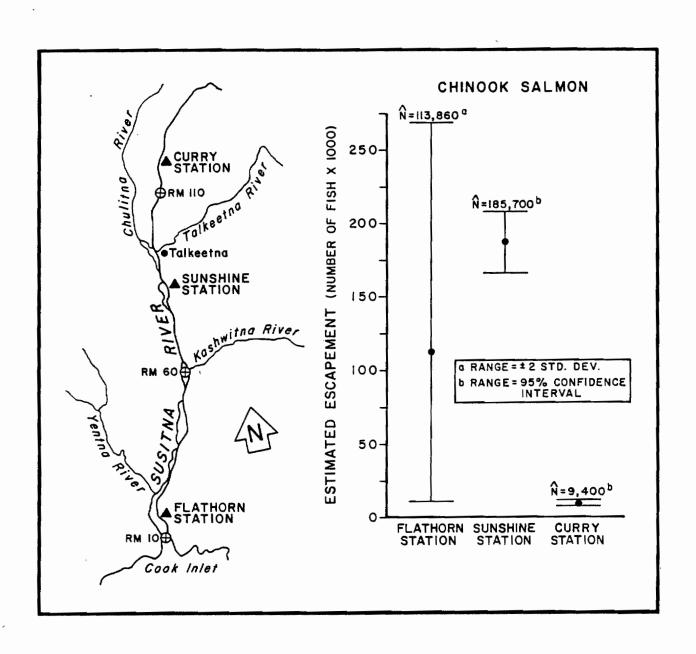


Figure 2. Chinook salmon escapements by sampling stations, 1985.

selectivity of capture and, based on 1984 studies, geographic tag loss. The net result would be an overestimate of the population. The Flathorn Station estimate does not account for size selectivity of capture and the impact to the estimate is unknown.

The 1985 Curry Station escapement was estimated at 9,400 fish with a 95 percent confidence interval of 7,850 to 11,770 (Figure 2). The estimate does not include chinook salmon less than 400 mm long for the same reasons previously discussed.

Fishwheels at Flathorn Station intercepted 11,035 chinook salmon (Table 2), 7,736 in the east channel and 3,299 in the west channel (Appendix Tables 2-1, 2-2 and 2-3). Based on these catches, the migration began on June 6, was 50 percent complete on June 15 and ended on June 27 (Figure 3 and Appendix Table 5-1). Differences in timing between east and west channel fishwheels never exceeded 24 hours. The peak daily catch occurred on June 11 when 768 chinook salmon were caught (Appendix Table 3).

At Sunshine Station, a total of 6,837 chinook salmon were intercepted (Table 2 and Appendix Table 2-4). These catches indicated the migration started on June 15, was 50 percent complete on June 27 and ended July 12 (Figure 4 and Appendix Table 5-1). The largest daily catch was 512 chinook salmon on June 28 (Appendix Table 4).

Curry Station fishwheels intercepted 1,098 chinook salmon in 1985 (Table 2). These interceptions show that the migration which began on June 28, was 50 percent complete on July 9 and finished on July 25 (Figure 5 and Appendix Table 5-1). The peak daily catch was recorded on July 8 when 98 chinook salmon were intercepted (Appendix Table 2-5).

Chinook salmon migration rates between sampling stations were estimated using tag recovery data and peak to peak fishwheel catches. The 58 mile distance between Flathorn and Sunshine stations was traveled in 22 days (median of sample) for a rate of 2.6 miles per day (mpd) based on recovery of tagged fish (Figure 6). The travel rate based on peak fishwheel catches was 3.6 mpd, one mpd faster than indicated by tagged fish recoveries (Appendix Tables 2-3 and 2-4). This trend was also exhibited for the travel rates between the other sampling stations. While no definitive analysis was performed, the difference between the estimated travel rates may be related to tagging stress. Bevan (1962) noted that, while there was no apparent increase in mortality, tagged sockeye salmon behavior was altered as evidenced by a delay in their migration.

A portion of the fishwheel catch at each monitoring station was subsampled to evaluate the age, sex and length composition of the escapement. Each fishwheel may be selective for different size groups (age) or sex therefore, there were sampling biases associated both within and between monitoring stations that may not have been defined.

Table 2. Total fishwheel catch by station and species, 1985.

Station	<u>Catch</u>								
	Chinook	Sockeye	Pink	Chum	Coho	Total			
Flathorn	11,035	8,970	6,905	5,168	2,563	34,641			
Sunshine	6,837	19,505	6,960	25,790	6,178	65,270			
Curry	1,098	324	1,172	1,305	203	4,102			

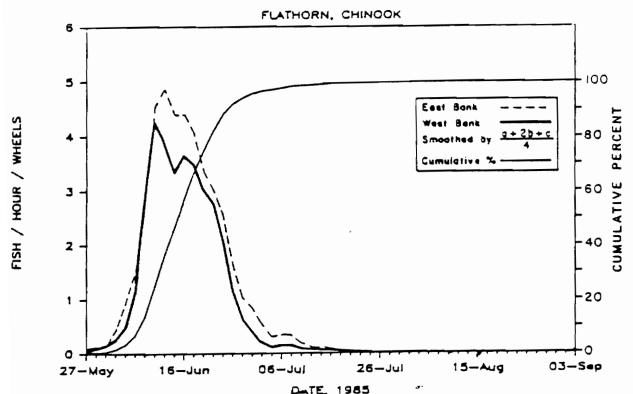


Figure 3. Mean hourly and cumulative percent fishwheel catch of chinook salmon by two day periods at Flathorn Station, 1985.

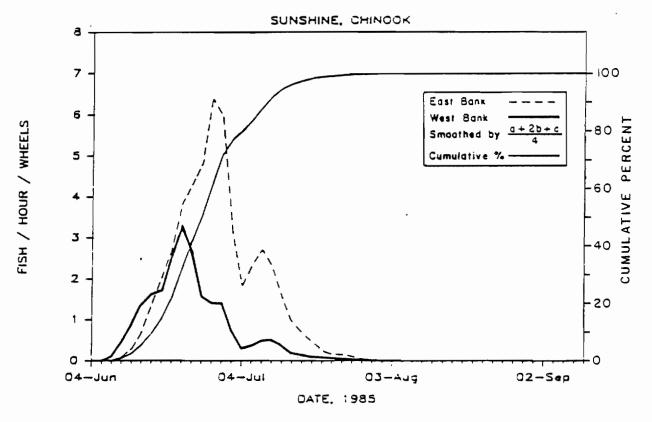


Figure 4. Mean hourly and cumulative percent fishwheel catch of chinook salmon by two day periods at Sunshine Station, 1985.

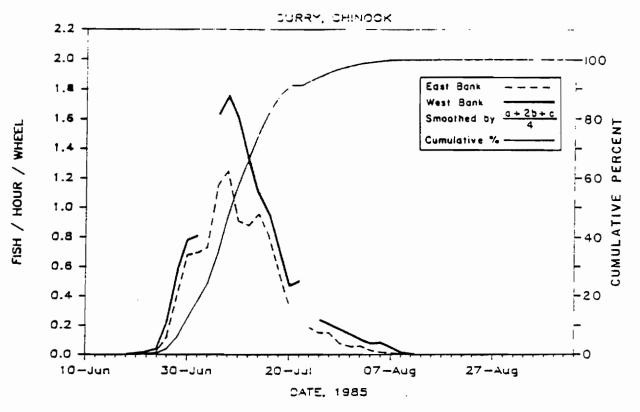


Figure 5. Mean hourly and cumulative percent fishwheel catch of chinook salmon by two day periods at Curry Station, 1985.

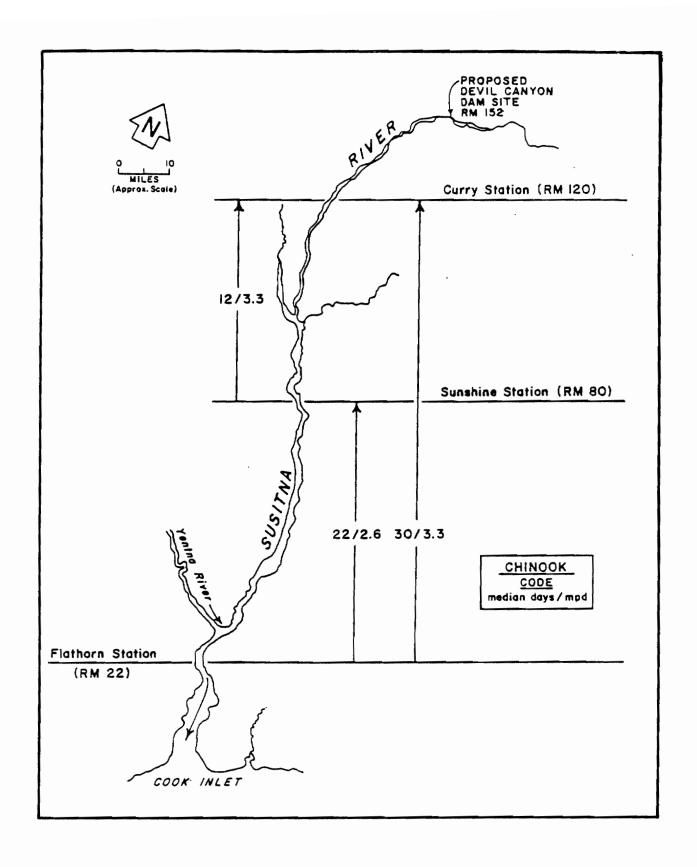


Figure 6. Migration rates of chinook salmon between Susitna River sampling stations based on tag recoveries and expressed in median days and miles per day (mpd), 1985.

The most prevalent age classes in the fishwheel catches at Flathorn, Sunshine and Curry stations were  $3_2$ ,  $4_2$ ,  $5_2$  and  $6_2$  chinook salmon (Table 3 and 4). Age  $3_2$  fish were most abundant in the sample at Flathorn Station where low water velocities probably make fishwheels selective for smaller fish. At Sunshine Station, where the water velocities were much faster, age  $3_2$  fish comprised only 10 percent of the fish sampled. Age  $6_2$  fish comprised 45 percent of the sample at Sunshine Station compared to only 9 percent at Flathorn Station. Age  $5_2$  and  $6_2$  fish were also most abundant at Curry Station comprising 60 percent of the sample.

The sex ratios of chinook salmon may be influenced by the selectivity of fishwheels in that the smaller males (jacks) were more readily intercepted increasing the total proportion of males in the sample. The ratio for age 4<sub>2</sub> fish at all sampling sites indicated more females than males, however, males were more prevalent among age 5<sub>2</sub> fish caught at all sites (Table 5).

### 3.1.2 Fecundity

Chinook salmon fecundities were determined from 25 females collected at Sunshine Station on June 22 and 23. The mean fecundity of the samples was 8,282 eggs, with a 95 percent confidence interval of 7,738-8,826 eggs (Table 6).

Table 6. Number of eggs, length, weight and associated statistics for chinook salmon sampled for fecundity at Sunshine Station, 1985.

			Statistics		
Variables	Sample Size	Mean	Standard Deviation	95 <sub>C</sub> Percept <sup>1</sup> the Mean	
Number of eggs	25	8,282	1,590	7,738 - 8,826	
Length (mm)	25	874	51	854 - 894	
Weight (g)	25	10,488	1,973	9,715 - 11,261	

 $<sup>^{</sup>m 1}$  95 percent confidence interval of the mean.

Table 3. Chinook salmon lengths, in millimeters, by sex and age class from CPUE weighted escapement samples collected at Flathorn, Sunshine and Curry stations, 1985.

			Male			Female		Combined		
	Age	Mean	Std.	Sample	Mean	Std.	Sample	Mean	Std.	Sample
Location	Class	Length	Error	Size	Length	Error	Size	Length	Error	Size
Flathorn Station	2,	333	6.7	56	-	_	-	333	6.7	56
	31	518	19.7	16	562	25.6	5	524	16.8	21
	31	340	1.3	645	500	-	1	340	1.4	646
	42	707	29.8	3	776	33.1	7	768	26.9	10
	41	553	5.7	16 <del>9</del>	569	4.8	122	559	4.0	291
	42	357	15.0	7	518	62.5	2	360	15.1	9
	53	903	27.7	8	889	34.6	4	898	20.8	12
	51	739	16.4	50	758	8.1	97	752	7.6	147
	52	591	30.8	4	-	_	-	591	30.8	4
	21 32 41 42 51 55 62	926	9.9	50	880	6.9	95	896	5.9	145
	A11 <sup>1</sup>	435	4.7	1,465	716	6.6	511	508	4.8	1,976
Sunshine Station	2.	337	15.1	4	-	_	-	337	15.1	4
	3,1	593	33.5	5	584	17.2	6	589	18.0	11
	31	362	4.5	90	480	-	1	365	4.9	91
	42	662	48.9	4	-	-	-	662	48.9	4
	41	617	5.7	134	586	6.8	50	610	4.7	184
	42	370	-	1	-	-	-	370	_	1
	53	937	38.0	2	868	35.0	5	893	28.0	7
	51	845	8.0	101	829	5.2	107	837	4.8	208
	52	685	-	1	490	_	1	670	51.4	2
	21 31 32 41 42 51 52 52 62	974	5.9	160	920	3.8	251	942	3.5	411
	A11 <sup>1</sup>	724	8.5	791	842	5.1	667	778	5.4	1,458
Curry Station	2,	351	16.1	3	-	-	-	351	16.1	3
	3,	355	2.0	141	-	-	-	355	2.0	141
	42	622	4.8	81	660	-	1	622	4.8	82
	52	839	9.5	58	840	4.4	83	840	4.6	141
	62	1,005	7.0	61	941	4.0	141	961	4.0	202
	21 32 42 52 62 72	1,100	-	1	-	-	-	1,100	-	1
	A11 <sup>1</sup>	620	10.9	545	906	3.6	343	730	8.3	888

<sup>1</sup> Includes all aged and non-aged samples.

Table 4. Age composition by percent of chinook salmon escapements past Flathorn, Sunshine and Curry stations, based on catch samples weighted by fishwheel CPUE, 1985.

				4 4 4		1.2 Age	Class	1	1.3		1.4	
Collection Site	n	<sup>2</sup> 1	<sup>3</sup> 1	32	41	4 <sub>2</sub>	<sup>4</sup> 3	51	52	53	62	72
Flathorn Station	1,341	4	2	48	*	23	*	*	12	*	11	-
Sunshine Station	923	*	2	10	*	20	.*	*	23	*	45	-
Curry Station	570	*	-	25	-	15	٠.	-	25	*	35	-

<sup>1</sup> Gilbert-Rich notation

Table 5. Sex ratios of chinook salmon by age from fishwheel escapement samples collected at Flathorn, Sunshine and Curry stations, 1985.

		Combined	Nave	nber	Sex Ratio
Collection Site	Age	Sample Size	Males	Females	(M:F)
Flathorn Station	2,	56	56	-	-
	3¦	21	16	5 1	3.2:1
	3,	64 <b>6</b>	645		645:1
	42	10	3	7	0.4:1
	4 2	291	169	122	1.4:1
	42	9	2	2	3.5:1
	51	12	8 50	4	2:1
	5,	147	50	97	0.5:1
	53	4	4	•	-
	62	145	50	95	0.6:1
	21 31 41 42 42 55 52 6 2 A11	1,976	1,465	511	28.6:1
Sunshine Station	2,	4	4	-	-
	3¦	11	5	6	0.8:1
	3,	91	90	1	90:1
	42	4	4	-	-
	4 2	184	134	50	2.7:1
	42	1	1	•	- · · ·
	51	7	2	5	0.4:1
	5 2	208	101	107	0.9:1
	5-3	2	1	1	1:1
	21 32 41 42 51 52 62	411	160	251	0.6:1
	A11 <sup>1</sup>	1,458	791	667	1.2:1
Curry Station	2,	3	3	-	-
•	3,	141	141	-	-
	42	82	81	1	81:1 0.7:1
	52	141	58	83	0.7:1
	62	202	61	141	0.4:1
	21 32 42 52 62 72	1	1	-	-
	A111	888	545	343	1.6:1

 $<sup>^{1}</sup>$  includes all aged and non-aged samples.

<sup>\*</sup> Frequency of occurrence is less than 1%.

The mean length of females measured throughout the season at Curry Station was 906 mm. A female of this length would be expected to contain 8,935 eggs (Figure 7). This is within the range of 4,242 to 13,619 eggs per female reported by Morrow (1980). Future users of the reported fecundity information should be aware of some of the limitations associated with these data. These are: 1) the samples were collected at Sunshine Station and the chinook salmon passing this site comprise many discrete spawning populations, 2) the samples were collected over a two day period and may not be representative of the entire escapement, and 3) the proportion of samples in each length strata was based on length composition of the fishwheel catch and may be biased to smaller size fish because of fishwheel selectivity.

# 3.1.3 Spawning Areas

Spawning surveys of the middle-river main channel and sloughs revealed no chinook salmon spawning areas in these habitats in 1985.

Twelve of the 25 middle-river tributary streams surveyed were occupied by chinook salmon (Table 7 and Appendix Table 3-1). Based on peak survey counts in these 12 middle-river streams, approximately 90 percent spawned in Indian River and Portage Creek (Figure 8).

Chinook salmon were observed spawning in middle-river streams from the third week of July until the second week of August. Peak spawning occurred during the last week in July and the first week of August.

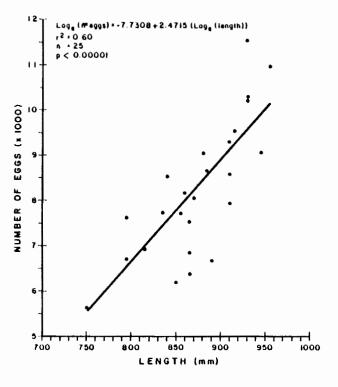
# 3.2 Sockeye Salmon

#### 3.2.1 First-run

# 3.2.1.1 Main Channel Escapements

First-run sockeye salmon were observed spawning in two locations within the Susitna River drainage: 1) Fish Lake system, a tributary to the Yentna River and 2) the Fish Creek system, a tributary to Clear Creek in the Talkeetna River system (Figure 9). Because both sites were surveyed the first-run sockeye salmon escapement at Flathorn Station was estimated using the Petersen method.

The 1985 escapement of first-run sockeye to Flathorn Station was 11,750 fish with a 95 percent confidence interval of 9,700 to 14,900 fish (Table 8). The first-run sockeye salmon escapement past Sunshine Station was 3,900 fish with an associated confidence interval of 3,300 to 5,000. First-run sockeye salmon were not present in the middle-river reach, as indicated by fishwheel catches at Curry Station.



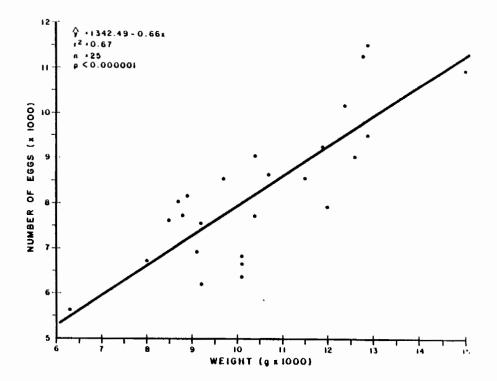


Figure 7. Number of eggs for chinook salmon sampled at Sunshine Station as a function of length and weight, 1985.

Table 7. Peak chinook salmon survey counts for middle river streams in order of contribution, 1985.

				Percent		
Stream	River Mile	Date	Live	Dead	Total	Contribution
Portage Creek	148.9	7/24	2,621	8	2,629	67.0
Indian River	138.6	7/24	970	7	977	24.9
Whiskers Creek	101.4	7/25	101	2	103	2.6
4th of July Creek	131.1	7/24	85	0	85	2.2
Gold Creek	136.7	7/24	35	1	36	0.9
Chase Creek	106.9	7/21	31	0	31	0.8
oth of July Creek	123.7	7/26	21	0	21	0.5
Cheechako Creek	152.5	7/24	18	0	18	0.5
ane Creek	113.6	7/21	17	0	17	0.4
Jack Long Creek	144.5	8/1	7	0	7	0.2
Chinook Creek	156.8	8/23	1	0	1	*
Sherman Creek	130.8	8/2	0	1	1	*
·		TOTALS	3,907	19	3,926	100.0

<sup>\*</sup> Trace, 0.1

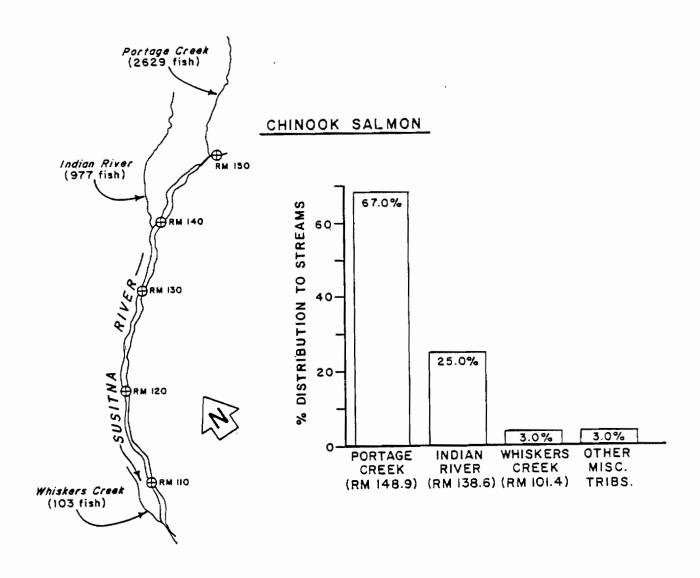
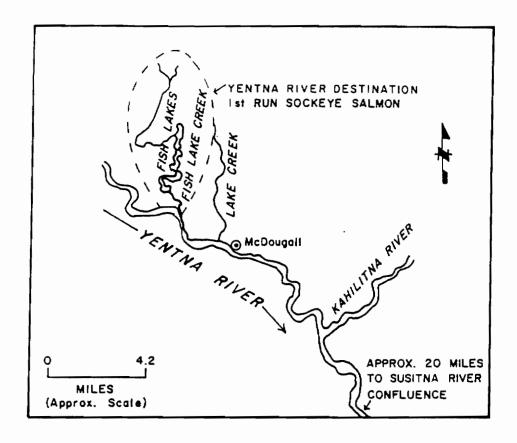


Figure 8. The three major chinook salmon streams in the middle reach and the respective percent escapement based on peak survey counts, 1985.



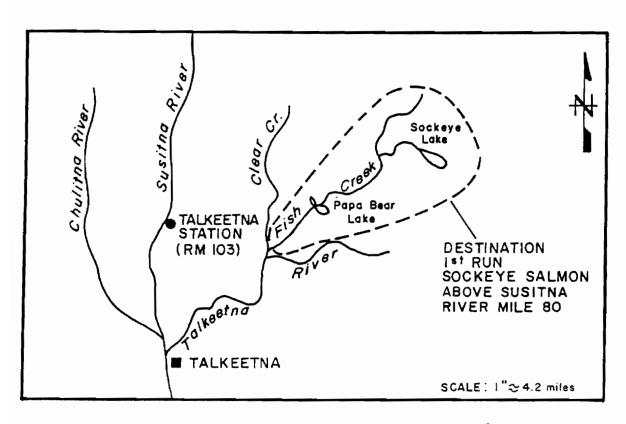


Figure 9. Destination of first-run sockeye salmon tagged at Flathorn and Sunshine stations, 1985.

Table 8. First-run sockeye salmon population estimates at Flathorn and Sunshine stations, based on the Petersen model, 1985.

Location	River Mile	Marks Released	Number Examined for Marks	Marks Recovered	Population Estimate	95% Confidence Interval
Flathorn	22	393	2,512	84	11,753	9,711 - 14,881
Sunshine	80	276	1,215	<b>85</b> .	3,945	3,274 - 4,963

Flathorn Station fishwheels intercepted a total of 393 first-run sockeye salmon (Appendix Table 2-3). Based on analysis of the catch, the migration started on May 30, was fifty percent complete by June 8 and completed on June 18 (Figure 10 and Appendix Table 5-1). The escapement passing Sunshine Station began their migration on June 9, reached a mid-point on June 13 and ended on June 23, based on a fishwheel catch of 280 fish (Appendix Tables 2-4 and 5-1 and Figure 11).

The combined first-run sockeye salmon male and female lengths of Flathorn and Sunshine stations samples averaged 528 mm and 515 mm, respectively (Table 9). The majority were age 5, fish at both Flathorn and Sunshine stations, comprising a respective 69 and 63 percent of the samples (Table 10). The ratio of males to females were nearly equal to both Flathorn and Sunshine stations at 0.9:1 and 1.0:1, respectively (Table 11).

# 3.2.1.2 Spawning Areas

Only the known first-run sockeye salmon spawning areas in the Susitna River drainage were surveyed in 1985 (Appendix Tables 3-1 and 3-5 and Figure 9). Two surveys of each spawning location were conducted in 1985. Based on these surveys, the peak of spawning probably occurred during the second and third weeks of July.

#### 3.2.2 Second-Run

#### 3.2.2.1 Main Channel Escapements

The second-run escapement of sockeye salmon reaching Flathorn Station was estimated to be 407,600 fish (Figure 12). The standard deviation of the estimate was 19,900 fish. Calculations were based on the deployment of 8,915 marks and subsequent recovery of 507 of those marks. Release strata at Flathorn Station were defined by channel and the recovery strata by location, specifically Yentna and Sunshine stations. At Sunshine Station, the sockeye salmon escapement was an estimated 120,800 fish with a 95 percent confidence interval of 118,200 to 123,600 fish (Figure 12). The escapement reaching Curry Station was 2,800 sockeye salmon (Figure 12) with a 95 percent confidence interval of 2,500 to 3,100 fish.

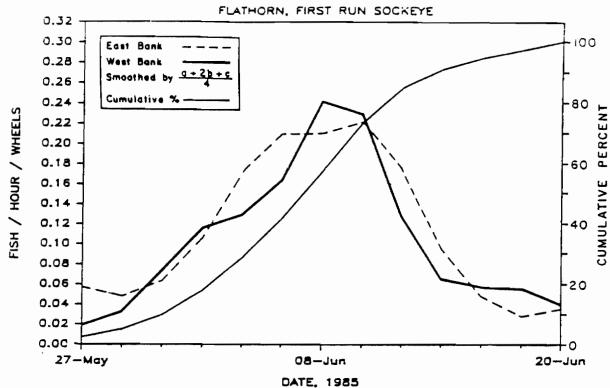


Figure 10. Mean hourly and cumulative percent fishwheel catch of first-run sockeye salmon by two day periods at Flathorn Station, 1985.

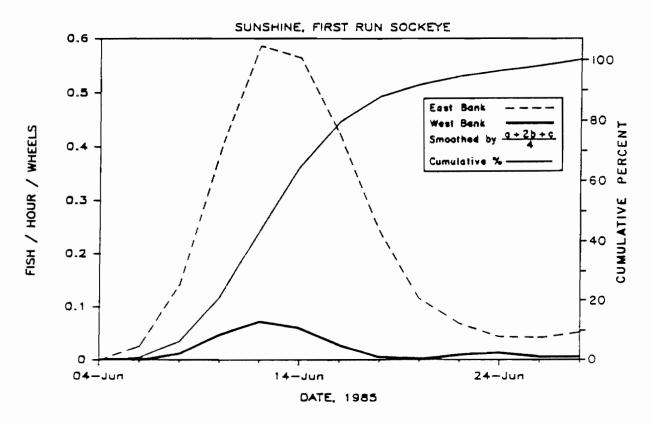


Figure 11. Mean hourly and cumulative percent fishwheel catch of first-run sockeye salmon by two day periods at Sunshine Station, 1985.

Table 9. Analysis of first-run sockeye salmon lengths, in millimeters, by sex and age class from fishwheel CPUE weighted escapement samples collected at Flathorn, Sunshine and Curry stations, 1985.

			Male			Female			Combined	
Location	Age Class	Mean Length	Std. Error	Sample Size	Mean Length	Std. Error	Sample Size	Mean Length	Std. Error	Sample Size
lathorn Station	4,	550	15.3	3	514	9.4	5	529	10.2	8
	4 2	479	11.1	38	476	9.1	21	477	7.8	59
	52	565	5.1	89	529	2.4	109	545	3.0	198
	52	538	37.5	2	525	35.0	2	531	21.3	4
	63	584	6.7	4	563	10.4	10	571	7.7	14
	42 52 53 62 63	-	-	-	519	4.9	4	519	4.9	4
	A11 <sup>1</sup>	535	5.1	174	522	2.8	198	528	2.8	372
Sunshine Station	4.	564	18.2	4	508	27.5	2	545	18.0	6
	41	453	6.6	36	460	5.1	26	455	4.5	62
	54	562	5.2	65	531	3.5	67	546	3.4	132
	52	-	-	-	435	-	1	435	-	1
	63	505	60.0	2	558	9.0	3	532	25.2	5
	41 52 53 62 63	· -	-	-	557	27.3	3	557	27.3	3
	A111	521	6.3	124	509	4.2	122	515	3.8	246

<sup>1</sup> Includes all aged and non-aged samples.

Table 10. Age composition by percent of first-run sockeye salmon escapements past Flathorn and Sunshine stations, based on catch samples, 1985.

		Age Class <sup>1</sup>										
Collection Site	n	31	32	33	41	42	<sup>4</sup> 3	51	52	53	62	<sup>6</sup> 3
Flathorn Station	287	•	-	•	3	21	<b>-</b>	-	69	1	5	1
Sunshine Station	209	-	-	-	3	30	-	-	63	*	3	1

<sup>1</sup> Gilbert-Rich notation

Table 11. Sex ratios of first-run sockeye salmon by age from escapement samples collected at Flathorn and Sunshine stations, 1985.

		Combined	Nur	mber	Sex Ratio
Collection Site	Age	Sample Size	Males	Females	(M:F)
Flathorn Station	4,	8	3	5	0.6:1
	4,	59	38 89	21	1.8:1
	52	198	8 <del>9</del>	10 <del>9</del>	0.8:1
	52	4	2	2	1:1
	63	14	4	10	0.4:1
	52 52 53 62 63	4	-	4	0:1
	A11 <sup>1</sup>	372	174	198	0.9:1
Sunshine Station	4	6	4	2	2:1
oundinate outeron	<u>,</u> 1	62	36	26	1.4:1
	52	132	36 65	26 67	1.0:1
	52	1	-	1	0:1
	63	Ė	2	3	0.7:1
	42 52 53 62 63	<b>5</b> 3	=	3	0:1
	A11 <sup>1</sup>	246	124	122	1.0:1

 $<sup>^{</sup>m 1}$  includes all aged and non-aged samples.

<sup>\*</sup> Frequency of occurrence is less than 1%.

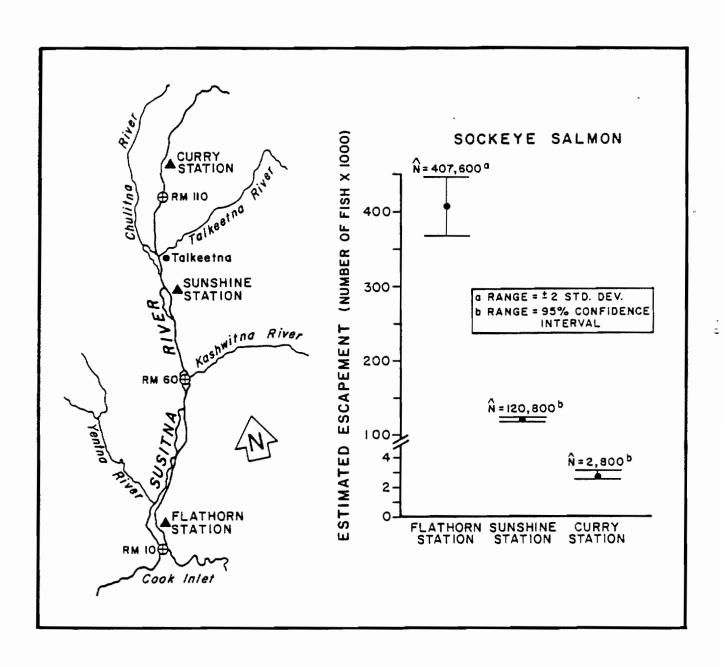


Figure 12. Second-run sockeye salmon escapements by sampling stations, 1985.

Fishwheels at Flathorn Station intercepted 8,970 second-run sockeye salmon, 4,010 in the east channel and 4,960 in the west channel (Appendix Tables 2-1,2-2 and 2-3). These catches indicated the escapement at Flathorn Station started on July 18, reached a mid-point on July 28 and ended on August 13 (Figure 13 and Appendix Table 5-1). The fishwheels at Sunshine Station captured 19,505 second-run sockeye salmon in 1985 (Appendix Table 2-4). Based on these catches, the migration began on July 26, was 50 percent complete on July 30 and ended on August 14 (Appendix Table 5-1 and Figure 14). The Curry Station sockeye salmon migration, based on a fishwheel catch of 324 fish, started on July 30, was 50 percent complete on August 7 and ended on August 22 (Appendix Tables 2-5 and 5-1 and Figure 15).

Recaptures of sockeye salmon, with Flathorn Station tags, at Yentna Station were comprised of 80.4 percent Flathorn west channel tags and 19.6 percent Flathorn east channel tags. At Sunshine Station, the situation was reversed with 89.5 percent of the recaptures originating from Flathorn east channel fishwheels and 10.5 percent from Flathorn west channel fishwheels. These data suggest that the sockeye salmon migration in the east channel at Flathorn Station were primarily stocks which spawned in the Susitna River drainage above the Yentna-Susitna rivers confluence while the migration in the west channel were stocks that spawned primarily in the Yentna River drainage.

Based on recovery of tagged fish, second-run sockeye travel at a rate of 5.0 mpd between Flathorn and Yentna stations, 8.3 mpd between Flathorn and Sunshine stations, and 6.5 mpd between Flathorn and Curry stations (Figure 16). Between Sunshine and Curry stations, second-run sockeye salmon travel rate was 6.7 mpd.

Lengths of second-run sockeye salmon were similar at Flathorn, Sunshine, and Curry stations (Table 12). The combined average lengths of both males and females ranged from 494 mm to 500 mm at all three sampling stations. Female sockeye salmon in the fishwheel catch were larger than males at all sites averaging 510 mm, 507 mm and 525 mm at Flathorn, Sunshine and Curry stations compared to respective average male lengths of 483 mm, 475 mm and 483 mm.

At all three sampling stations,  $4_2$  and  $5_2$  second-run sockeye salmon were the most frequently sampled age classes in fishwheel catches (Table 13). At Flathorn Station, age class  $4_2$  fish were most abundant comprising 39 percent of the combined sample compared to 37 percent age class  $5_2$  fish. Second-run sockeye salmon at Sunshine Station were primarily age class  $4_2$  (45 percent) and  $5_2$  (41 percent) fish. At Curry Station age class  $4_2$  sockeye salmon were most abundant comprising 61 percent of the sample. The majority of the sockeye salmon returning to all sampling stations had one freshwater annulus indicating they outmigrated to sea in their second year of life.

Second-run sockeye salmon males were more abundant than females in the fishwheel catch at Flathorn, Sunshine and Curry stations (Table 14). The respective ratios were 1.3:1, 1.1:1 and 1.5:1.

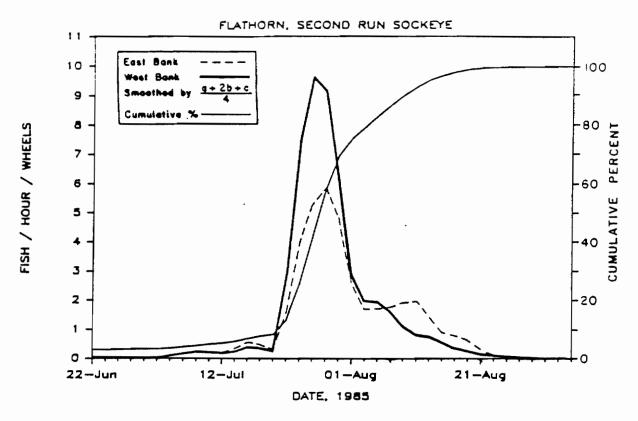


Figure 13. Mean hourly and cumulative percent fishwheel catch of sockeye salmon by two day periods at Flathorn Station, 1985.

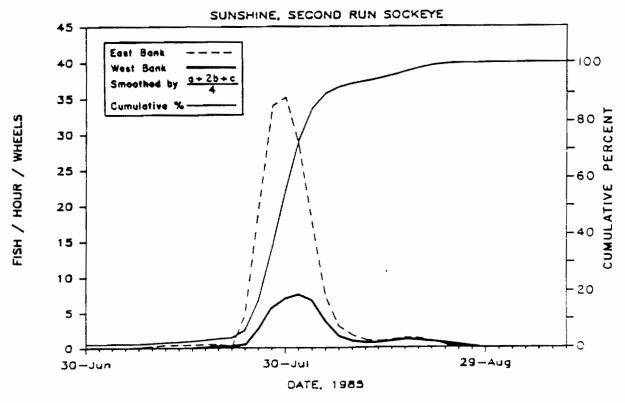


Figure 14. Mean hourly and cumulative percent fishwheel catch of sockeye salmon by two day periods at Sunshine Station, 1985.

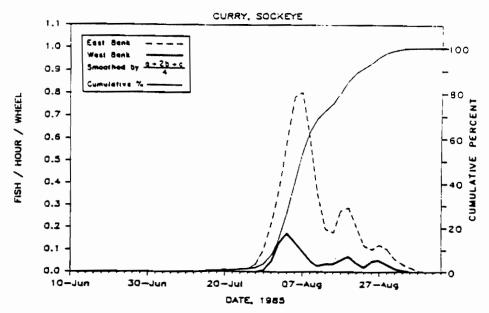


Figure 15. Mean hourly and cumulative percent fishwheel catch of sockeye salmon by two day periods at Curry Station, 1985.

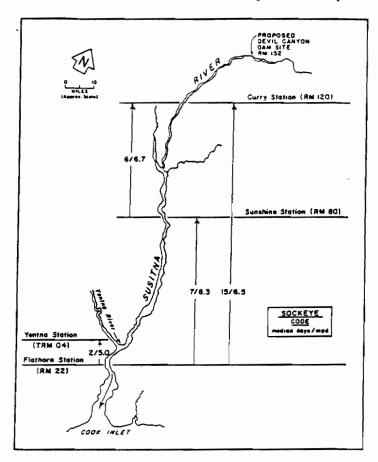


Figure 16. Migration rates of sockeye salmon between Sysitha River sampling stations based on tag recoveries and expressed in median days and miles per day (mpd), 1985

Table 12. Analysis of second-run sockeye salmon lengths, in millimeters, by sex and age class from CPUE weighted escapement samples collected at Flathorn, Sunshine and Curry stations, 1985.

			Male			Female			Combined	
Location	Age Class	Mean Length	Std. Error	Sample Size	Mean Length	Std. Error	Sample Size	Mean Length	Std. Error	Sample Size
lathorn Station	2.	422	37.7	2	-		-	422	37.7	2
	31	454	5.3	61	504	14.2	12	461	5.4	73
	31	341	2.8	228	465	37.9	4	346	3.4	232
	42	553	8.7	45	544	4.6	32	550	5.6	77
	4 2	471	1.7	639	481	1.6	468	475	1.2	1,107
	42	358	4.4	18	392	7.5	2	362	4.8	20
	53	-	-	-	563	16.4	2	563	16.4	2
	5 ,	564	1.7	506	541	1.2	553	552	1.1	1,059
	52	498	4.2	91	482	2.8	98	490	2.6	189
	5,5	-	-	-	442	-	1	442	-	1
	64	589	5.8	10	561	11.1	13	575	7.0	23
	6 <sup>2</sup>	565	4.3	37	534	3.8	45	551	3.3	82
	211212312342355666666666666666666666666666666666	-	-	-	585	-	1	585	-	1
	A11 <sup>1</sup>	483	2.0	1,907	510	1.2	1,423	494	1.3	3,730
unshine Station	2,	315	-	1	-	_	_	315	-	1
	3,	438	6.3	12	469	4.9	6	447	5.7	18
	3 2	331	2.2	126	345	30.6	3	332	2.4	129
	42	585	26.1	9	520	11.3	8	576	18.3	17
	4 2	477	2.7	377	481	1.9	333	478	1.7	710
	42	352	10.5	8	-	-	-	352	10.5	8
	53	564	2.9	282	542	1.8	363	551	1.7	645
	52	500	11.4	21	501	3.5	32	<b>500</b> .	5.9	53
	21 312 41 42 52 53 63	559	9.4	4	514	8.3	7	536	9.3	11
	A11 <sup>1</sup>	475	2.9	1,014	507	1.6	900	490	1.7	1,914
Curry Station	3.	501	36.5	2	550	-	1	540	18.6	3
	3,	336	3.5	20	-	-	-	336	3.5	20
	42	580	7.7	3	570	-	1	577	6.0	4
	4 2	480	5.5	79	504	2.8	54	488	3.7	133
	42	345	-	1	-	-	-	345	-	1
	53	599	5.1	23	555	3.5	33	574	4.1	56
	52	486	26.5	3	-	-	-	486	26.5	3
	31 32 41 42 52 53 63	555	-	1	-	-	-	555	-	1
	A11 <sup>1</sup>	483	7.1	150	525	3.1	103	500	4.6	253

 $<sup>^{</sup>m 1}$  Includes all aged and non-aged samples.

Table 13. Age composition by percent of second-run sockeye salmon escapements past Flathorn, Sunshine and Curry stations based on catch samples weighted by fishwheel CPUE, 1985.

		Age Class <sup>1</sup>												
Collection Site	n	21	3 <sub>1</sub>	32	41	42	43	51	52	53	54	62	63	64
Flathorn Station	2,868	*	3	8	3	39	*	*	37	7	*	it	3	*
Sunshine Station	1,592	*	1	8	1	45	*	-	41	4	-	-	*	
Curry Station	221	-	1	9	2	61	*	-	26	1	-	-	*	-

<sup>&</sup>lt;sup>1</sup> Gilbert-Rich notation

Table 14. Sex ratios of second-run sockeye salmon by age from fishwheel escapement samples collected at Flathorn, Sunshine and Curry stations, 1985.

Collection Site	Age	Combined Sample Size	Nu Males	mber Females	Sex Ratio (M:F)
Flathorn Station	21 31 31 41 42 43 55 55 63 41 1	2 73 232 77 1,107 20 2 1,059 189 1 23 82 1	2 61 228 45 639 18 - 506 91 - 10 37	12 4 32 468 2 2 553 98 1 13 45 1	5.1:1 5.7:1 1.4:1 1.4:1 9:1 0:1 0.9:1 0.9:1 0.9:1 0.8:1 0.8:1
Sunshine Station	6.1 21 6.2 31 1.1 32 6.3 41 1.2 42 2.3 53 2.3 63 AII 1	1 0.4 18 1.1 129 8.1 17 1.1 710 44.6 8 0.5 645 40.5 63 24 3.3 11 0.7	1 12 126 9 377 8 282 32 4	3 8 333 - 363 0.2:1 7	2:1 42:1 1.1:1 1.1:1 0.8:1 0.6:1
Curry Station	0.2 31 1.1 32 6.3 41 1.2 42 2.1 43 1.2 52 2.2 63 2.3 63 A11	3 1.4 20 9.0 4 1.8 133 40.2 1 0.4 56 25.3 3 1.4 1 6.5	2 20 3 79 1 23 3 1	1 - 1 54 - 33 -	2:1 3:1 1.5:1 0.2:1

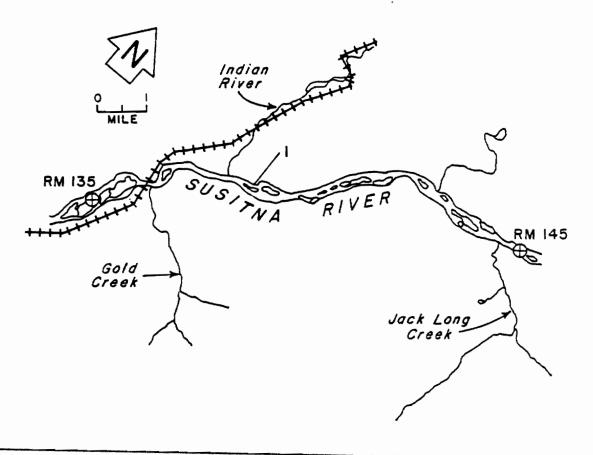
 $<sup>^{1}</sup>$  Includes all aged and non-aged samples.

<sup>\*</sup> Frequency of occurrence is less than 1%.

## 3.2.2.2 Spawning Areas

Based on helicopter survey observations, the main channel was largely unused as sockeye salmon spawning habitat in 1985. Only one sockeye salmon was observed holding over a redd at RM 139.0 on September 28 (Figure 17). Surveys were hampered by high rainfall which contributed to poor visibility conditions throughout the month of September.

Adult sockeye salmon were observed only in one tributary stream in 1985 (Appendix Table 3-1). Two fish were observed approximately three miles up the Indian River on August 23 and were not seen actively spawning.



Map ID	RM Lo	cation	Highest	Spawning
Number		Bank	Fish Count	Observation Dates
1	139.0	L	1	9/28/85

Figure 17. Sockeye salmon spawning areas in the mainstem middle reach, 1985.

Nine sloughs were occuppied by adult sockeye salmon in 1985 (Appendix Table 3-2). In order of abundance, sloughs 11, 8A and 21 were the major sockeye salmon spawning areas (Figure 18). Approximately 99 percent of the middle-river sockeye salmon escapement spawned in these three sloughs. Sockeye salmon observed in sloughs 6A, Bushrod and 19 were probably milling fish based on absence of redds and no visible spawning activity. The total peak survey count for all sloughs was 897 fish, (Table 15). Sockeye salmon spawned in sloughs 11, 8A and 21 from the first week in August until suveys ceased during the first week of October. Peak spawning occurred during the first three weeks of September (Appendix Table 3-2 and Figure 19).

Egg retention studies were conducted for sockeye salmon spawning in the middle-reach. The small escapement and difficulty in obtaining samples resulted in successful collection efforts in only sloughs 8A and 11. These studies indicated that 91 percent of the 66 sockeye salmon sampled had successfully spawned (Figure 20). The average egg retention was 41 eggs and the median of the sample was 0 eggs.

The total sockeye salmon escapement to sloughs 8A, 11 and 21 was an estimated 2,545 fish, based on the area under the curve method (Table 16). This represents 91 percent of the Curry Station escapement estimate, a valid comparison since virtually all sockeye salmon spawn in sloughs.

### 3.3 Pink Salmon

# 3.3.1 <u>Main Channel Escapements</u>

The Flathorn Station pink salmon escapement estimate was 479,500 fish, with a standard deviation of 83,700 (Figure 21). This estimate was calculated using the stratified estimator with the release and recovery strata being time periods at Flathorn and Sunshine stations, respectively. An estimated 42,600 pink salmon reached Sunshine Station in 1985 (Figure 21). The 95 percent confidence interval included from 40,600 to 44,900 fish. This estimate was based on the Petersen model and used the pooled recovery data from surveys and Curry Station fishwheels. The pink salmon escapement to Curry Station was 14,900 fish with a 95 percent confidence interval of 11,300 to 21,900 (Figure 21). The Petersen estimate was also used here with the tag recovery information coming solely from surveys.

The above escapement estimates include some unknown number of milling fish. The magnitude of this component is difficult to assess and probably varies between years and sites. Therefore, the population estimates presented represent the number of pink salmon reaching a specific location and do not necessarily reflect the number of fish spawning above the point where the estimate was made.

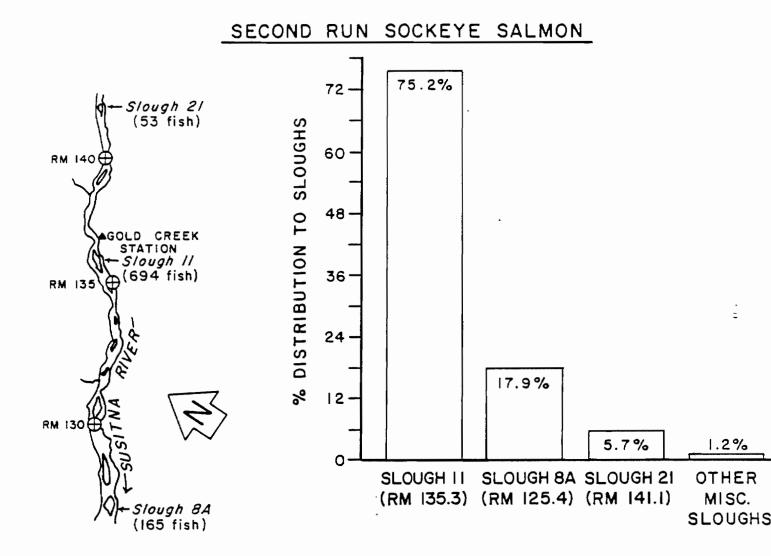


Figure 18. The three major sockeye salmon sloughs in the middle reach and the respective percent escapement based on peak survey counts, 1985.

Table 15. Peak sockeye salmon survey counts for sloughs in the middle Susitna River reach, 1985.

				Percent		
S1ough	River Mile	Date	Live	Dead	Total	Contribution
6A	112.3	9/2	1	0	1	0.1
Bushrod	117.8	9/2	1	0	1	0.1
8C	121.9	9/23	, <b>1</b>	0	1	0.1
<b>8</b> B	122.2	9/23	2	0	2	0.2
8 <b>A</b>	125.4	9/5	161	4	165	17.9
В	126.3	9/5	5	0	5	0.5
11	135.3	9/19	672	22	694	75.2
19	139.7	8/16	1	0	1	0.1
21	141.1	9/20	53	0	53	5.7
		TOTALS <sup>1</sup>	897	26	923	99.9

<sup>1</sup> Percent contribution total may not equal 100 due to rounding errors.

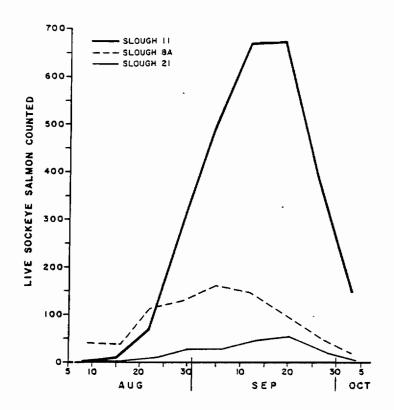


Figure 19. Sockeye salmon live counts by date in sloughs 8A, 11 and 21, 1985.

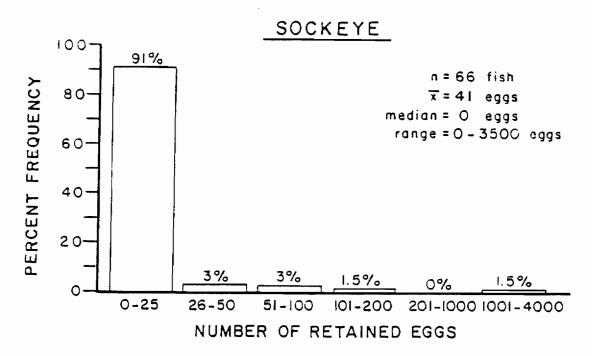


Figure 20. Percent frequency of the numbers of eggs retained by sockeye salmon at sloughs 8A, 11 and 21 combined, 1985.

Estimated sockeye salmon escapements to three middle Susitna River sloughs, 1985. Table 16.

Slough	River Mile	Total Fish <sup>1</sup> Days	Peak Live Survey Count	Mean <sup>3</sup> Observation Life Days	Slough Escapement	% of Curry <sup>2</sup> Station Escapement
8A	125.4	5,467	161	10.4	526	6.0
11	135.3	19,336	672	10.4	1,859	24.0
21	141.1	1,353	_53	10.4	130	2.0
	TOTALS	26,156	886	-	2,515	32.0

<sup>Number of fish days were calculated for sloughs that had peak survey counts > 15 fish.
1985 Curry Station chum salmon escapement was approximately 2,800 fish.
Mean observation life in days was obtained by averaging observation days from 1983 and 1984</sup> observation life data.

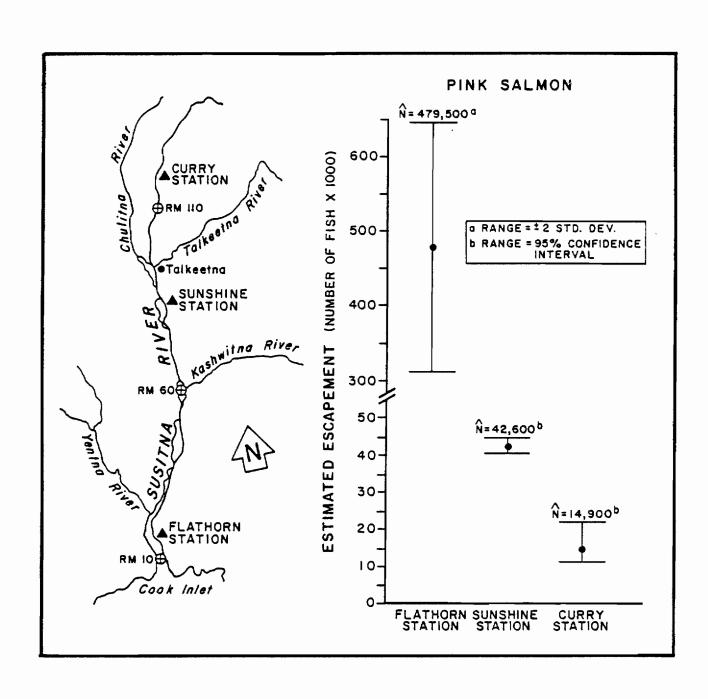


Figure 21. Pink salmon escapements by sampling statios, 1985.

Pink salmon were captured in fishwheels at Flathorn Station from June 22 through September 1 (Figure 22 and Appendix Table 2-3). The beginning of the pink salmon migration, characterized by capture of five percent of the season's total fishwheel catch, was July 14 (Appendix Table 5-1). The peak fishwheel catch was recorded August 12 and reached a mid-point on August 1. About ninety-five percent of the migration passed Flathorn Station by August 15.

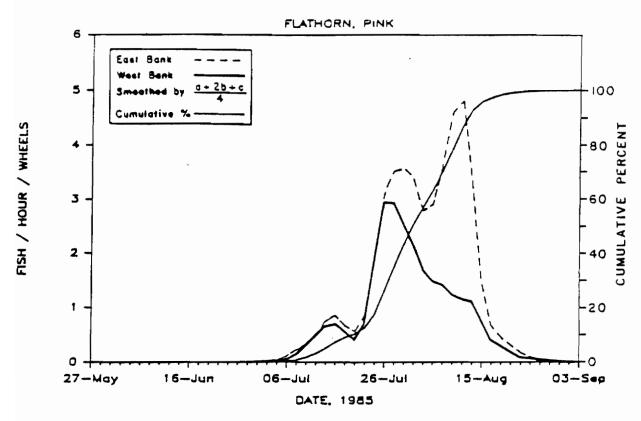


Figure 22. Mean hourly and cumulative percent fishwheel catch of pink salmon by two day periods at Flathorn Station, 1985.

Though pink salmon were documented at Sunshine Station on June 26, the species was not present in fishwheel catches on a continuous basis until July 10 (Figure 23 and Appendix Table 2-4). Five percent of the total catch had occurred at Sunshine Station by July 23 (Appendix Table 5-1). Both the peak catch and mid-point of the escapement occurred on August 2. Ninety-five percent of the migration had passed Sunshine Station by August 8.

Pink salmon were present in fishwheel catches at Curry Station from July 15 through August 28 (Figure 24 and Appendix Table 2-5). Five percent of the catch had occurred at Curry Station by July 28. Timing of the peak fishwheel catch and fifty percent passage rate of the pink salmon escapement by Curry Station were similar occurring on August 6 and August 5, respectively. Ninety-five percent of the pink salmon catch at Curry Station was recorded by August 13.

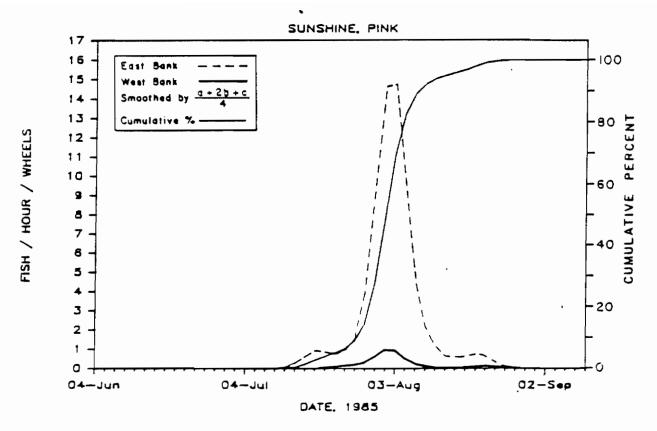


Figure 23. Mean hourly and cumulative percent fishwheel catch of pink salmon by two day periods at Sunshine Station, 1985.

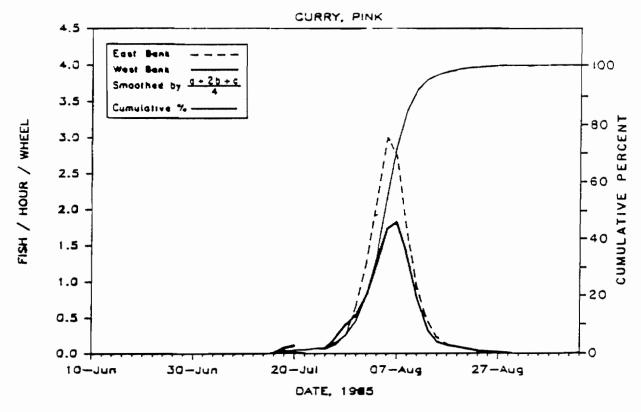


Figure 24. Mean hourly and cumulative percent fishwheel catch of pink salmon by two day periods at Curry Station, 1985.

Pink salmon, which were captured in both east and west channel fishwheels at Flathorn Station, were recaptured at Yentna and Sunshine stations. Approximately 57 percent of the 252 recaptures at Yentna Station originated from west channel fishwheels at Flathorn Station with the remaining 43 percent originating in east channel fishwheels. Tagged pink salmon recaptured at Sunshine Station displayed an east channel orientation at Flathorn Station as evidenced by approximately 89 percent of the 66 recaptures coming from east channel fishwheels and only 11 percent from west channel fishwheels.

Migration rates of pink salmon between sampling stations were determined from tag recoveries of marked pink salmon. Pink salmon tagged at Flathorn station reached Yentna Station, a distance of 10 miles, in one day for a travel rate of 10 mpd (Figure 25). Pink salmon moved between Flathorn and Sunshine stations in 7 days for a rate of 8.3 mpd. The migration rate from Sunshine Station to Curry Station was consistent with that between Flathorn and Sunshine stations (moving 8.0 mpd). Pink salmon tagged at Flathorn Station and recovered at Curry Station traveled at a rate of 8.9 mpd.

Lengths for male and female pink salmon caught in fishwheels at the three sampling stations were consistent considering a sampling bias of plus or minus five millimeters, with mean lengths ranging from 418 to 420 mm (Table 17). Male pink salmon had mean lengths from 422 to 424 mm. Female pink salmon were smaller than males at all sampling locations, with mean lengths of 413 to 419 mm.

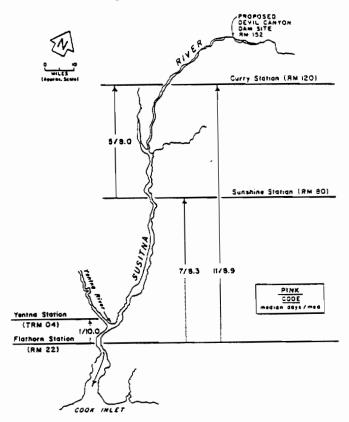


Figure 25. Migration rates of pink salmon between Susitna River sampling stations based on tag recoveries and expressed in median days and miles per day (mpd), 1985.

Table 17. Analysis of pink salmon lengths, in millimeters, by sex and age class from fishwheel CPUE weighted escapement samples collected at Flathorn, Sunshine and Curry, 1985.

	Male			Female			Combined		
Location	Mean Length	Std Error	Sample Size	Mean Length	Std Error	Sample Size	Mean Length	Std Error	Sample Size
Flathorn Station	423	0.91	828	413	0.70	998	418	0.58	1,826
Sunshine Station	423	1,20	844	415	1.17	790	419	0.84	1,634
Curry Station	422	1.47	358	419	1.14	366	420	0.93	724

42

The incidence of male and female pink salmon in fishwheel catches were similar at Flathorn, Sunshine and Curry stations with ratios of 0.8:1, 1.0:1 and 0.9:1, respectively (Table 18).

Table 18. Sex ratios of pink salmon from fishwheel escapement samples collected at Flathorn, Sunshine and Curry stations, 1985.

Location	Sample Size	Sex Ratio (M:F)	
	•		
Flathorn Station	1,826	0.8:1	
Sunshine Station	1,634	1.1:1	
Curry Station	724	0.9:1	

### 3.3.2 Spawning Areas

Spawning surveys of the middle-river main channel revealed no pink salmon spawning areas in 1985.

Pink salmon were found in 16 of the 25 middle-river tributary streams surveyed (Table 19 and Appendix Table 3-1). Spawning occurred in all of these streams with Indian River, Fourth of July, and Portage creeks supporting the majority of spawners based on a combined 82 percent of a total 1,176 fish peak survey count (Figure 26).

In Lane and Fourth of July creeks and Indian River, pink salmon spawned within the first stream mile. Pink salmon spawned in the remaining streams within the first one-half mile. Fourth of July, Skull and Portage creeks and Indian River had pink salmon spawning in the stream mouth and in the interface downstream of the mouth approximately one-eighth mile.

Pink salmon spawned in middle-reach streams from the last week in July until the third week in August. Spawning reached a peak in the first and second week of August.

Pink salmon were observed in the five middle-river sloughs: 8, 88, 9, 16 and 20 (Table 20 and Appendix Table 3-2). With the exception of sloughs 9 and 20 almost all pink salmon observed were milling fish. Less than 10 pink salmon spawned at these two sites indicating that sloughs were of little importance as spawning habitat in 1985.

Table 19. Pink salmon peak survey counts for streams in the middle Susitna River reach in order of contribution, 1985.

	River Mile	Date		Number Count	ed	Percent Contribution
Stream			Live	Dead	Total	
Indian River	138.6	8/8	645	3	648	54.6
4th of July Creek	131.1	8/9	175	2	177	14.9
Portage Creek	148.9	8/8	148	1	149	12.6
Lane Creek	113.6	8/18	125	2	127	10.7
5th of July Creek	123.7	8/18	35	1	36	3.0
Sherman Creek	130.8	8/17	12	0	12	1.0
Clyde Creek	113.8	8/18	7	0	7	0.6
Little Portage Creek	117.7	8/18	6	1	7	0.6
Maggot Creek	115.6	8/18	4	0	4	0.3
Chase Creek	106.9	7/21	4	0	4	0.3
Fromunda Creek	119.3	8/25	3	1	4	0.3
Lower McKenzie Creek	116.2	8/18	3	0	. 3	0.3
Skull Creek	124.7	8/22	3	0	3	0.3
Upper McKenzie Creek	116.7	8/18	2	0	2	0.2
Gold Creek	136.7	8/19	2	0	2	0.2
Gash Creek	111.6	8/25	2	0	2	_0.2
		TOTALS	1,176	11	1,187	100.1

 $<sup>^{1}</sup>$  Percent contribution total does not equal 100 due to rounding errors.

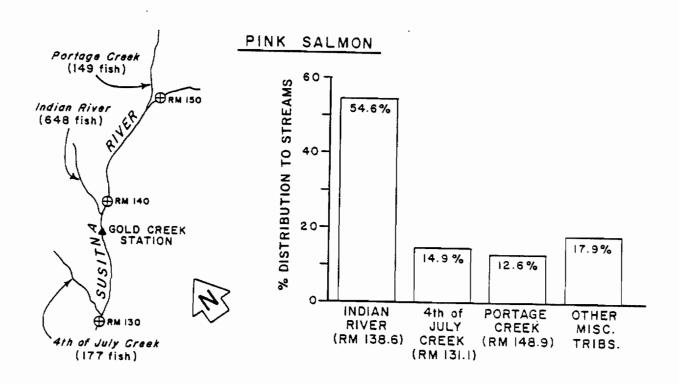


Figure 26. The three major pink salmon streams in the middle reach pink salmon and the respective percent escapement based on peak survey counts, 1985.

Table 20. Peak pink salmon survey counts for sloughs in the middle Susitna River reach, 1985.

Slough	River Mile	Date	Live	Number Counte	ed Total	Percent Contribution
6A	112.3	8/25	0	1	1	7.1
8	113.7	8/25	0	2	2	14.3
Bushrod	117.8	8/25	0	1	1	7.1
8B	122.2	8/25	0	2	2	14.3
9	128.3	8/29	1	0	1	7.1
16	137.3	8/24	0	5	5	35.7
20	140.0	8/30	_2	0	2	14.3
		TOTALS	3	11	14	$99.9^{1}$

 $<sup>^{1}</sup>$  Percent contribution total does not equal 100 due to rounding errors.

#### 3.4 Chum Salmon

# 3.4.1 Main Channel Escapements

An estimated escapement of 316,800 chum salmon reached Flathorn Station in 1985 (Figure 27). The standard deviation of the estimate was 77,100 fish. At Sunshine Station the escapement was estimated to be 373,600 chum salmon with a 95 percent confidence interval of 349,200 to 401,800 fish. The escapement to Curry Station was 24,400 chum salmon with an associated 95 percent confidence interval of 21,700 to 27,800 fish.

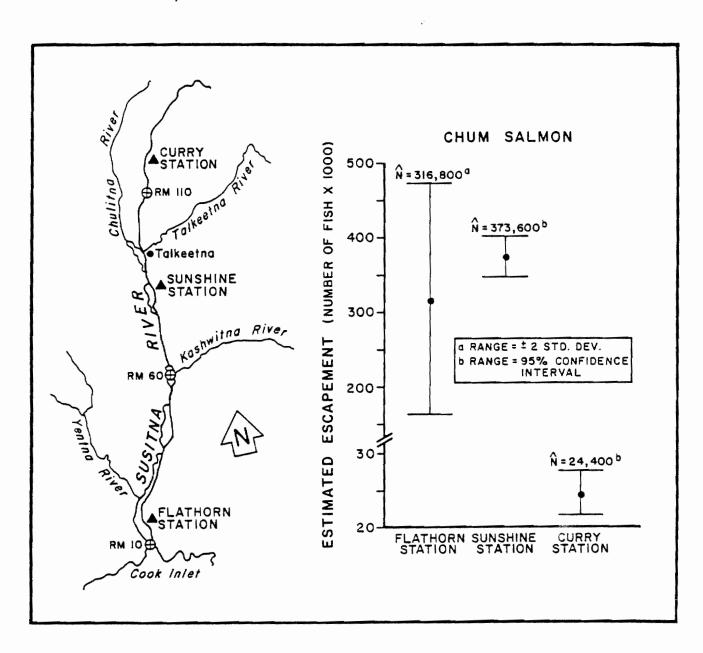


Figure 27. Chum salmon escapements by sampling station, 1985.

Flathorn Station fishwheels intercepted 5,168 chum salmon in 1985 (Table 2 and Appendix Table 2-3). These catches indicated that the migration began, reached a midpoint and ended on the following dates respectively: July 27, August 14 and August 20 (Figure 28 and Appendix Table 5-1). The right, east channel fishwheel was moved on July 29 and the new site increased the fishwheels efficiency for capturing chum This move artificially delayed reported timing information because 89 percent of the fishwheel catches were in the east channel, the majority occurring after the fishwheel was moved. The migration timing at Sunshine Station was more representative of the actual escapement timing, beginning, 50 percent complete and completed on July 29, August 4 and August 26, respectively (Figure 29 and Appendix Table 5-1). The largest daily catch at Sunshine Station occurred on August 2 when 3,348 chum salmon were intercepted. The migration at Curry Station started August 2, was 50 percent complete August 7 and finished on August 28 (Figure 30 and Appendix Table 5-1). A peak daily fishwheel catch of 166 chum salmon occurred on August 6.

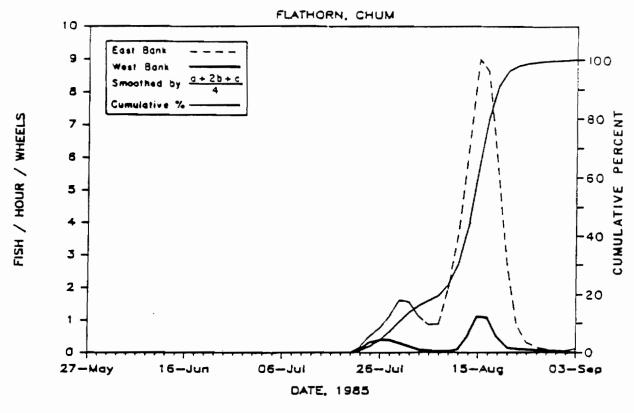


Figure 28. Mean hourly and cumulative percent fishwheel catch of chum salmon by two day periods at Flathorn Station, 1985.

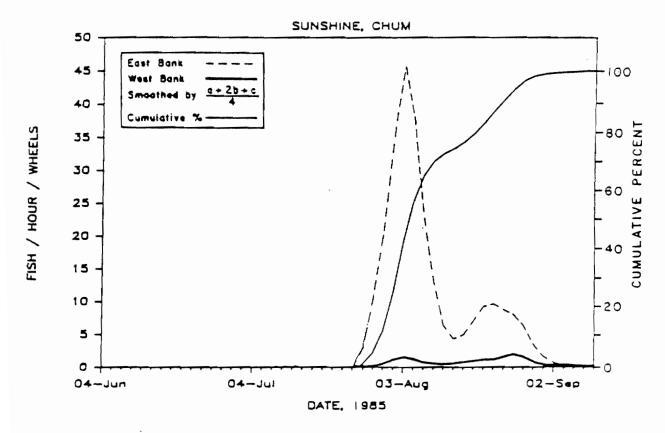


Figure 29. Mean hourly and cumulative percent fishwheel catch of chum salmon by two day periods at Sunshine Station, 1985.

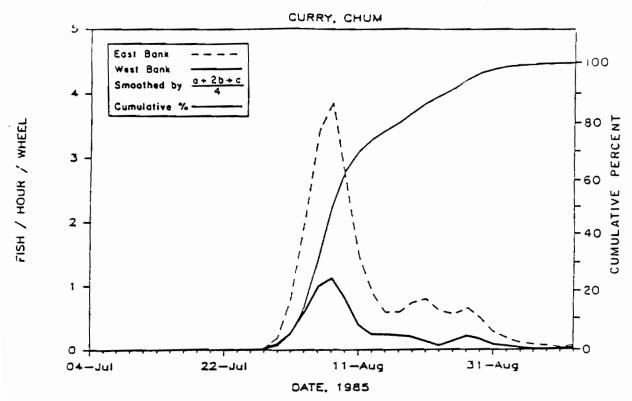


Figure 30. Mean hourly and cumulative percent fishwheel catch of chum salmon by two day periods at Curry Station, 1985.

Fishwheel catches indicated that chum salmon migrated primarily in the east channel at Flathorn Station, (Appendix Table 3). A total of 4,614 (89 percent) chum salmon were intercepted in east channel fishwheels and only 546 (11 percent) in west channel fishwheels. Sunshine Station fishwheels recaptured 172 of the chum salmon tagged at Flathorn Station, 96 percent of which were tagged in the east channel. At Yentna Station, only eight chum salmon with Flathorn Station tags were recovered, five were tagged in the east channel and three in the west channel.

Based on tag recoveries, chum salmon traveled between Flathorn and Yentna stations in five days (median of sample) at a rate of two mpd (Figure 31). Chum salmon spent 12 days traveling days between Flathorn and Sunshine stations and 16 between Flathorn and Curry stations. The respective rates of travel were 4.8 and 6.1 mpd. The travel rate between Sunshine and Curry stations, based on peak to peak fishwheel catches, was 10.0 mpd, two mpd faster than the rate based on tag recoveries. The slower rate may have been due to tagging stress, as previously discussed for chinook salmon. Peak-to-peak treatment of Flathorn Station fishwheel catches was not done because the right east channel fishwheel was moved mid-season.

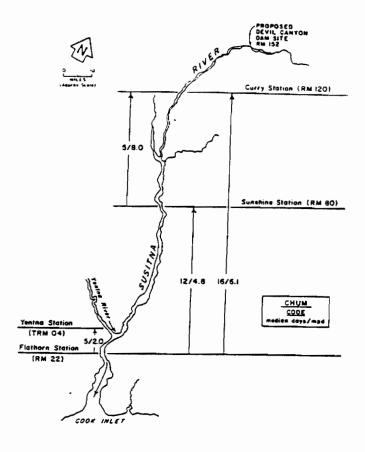


Figure 31. Migration rates of chum salmon between Susitna River sampling stations based on tag recoveries and expressed in median days and miles per day (mpd), 1985.

Analysis of chum salmon lengths, age class composition and male to female ratios were accomplished from a subsample of each stations fishwheel catch. At Flathorn Station the average lengths age class 4, male and female chum salmon were 588 and 577 mm, respectively (Table 21). The average length of age class 4, males at Sunshine Station was similar to that recorded at Flathorn, 599 mm while the female average length at Sunshine Station was 580 mm. The average lengths of both males and females at Curry Station were larger than those of Flathorn and Sunshine station. The age class composition for Flathorn and Sunshine stations were similar, however, the sample at Curry Station was comprised of a comparatively greater percentage of age 5, fish which would account for the larger average lengths (Table 22). Age 4, chum salmon were the dominant age class comprising over 70 percent of the age samples at all three sampling stations.

The ratio of male to female chum salmon varied between stations, with the frequency of males increasing as distance upstream increased (Table 23). This was probably because of the difficulty in differentiating between male and female chum salmon upon initial entry into freshwater. The ratio at Flathorn, Sunshine and Curry stations were 0.7:1, 1.1:1 and 1.4:1, respectively.

#### 3.4.2 Spawning Areas

In 1985, three chum salmon spawning areas in the main river channel were located (Figure 32). The highest concentration was at RM 115.0R (right bank) where 17 spawning chum salmon were observed. All observations were made in September and the first part of October. Peak counts occurred in the third week of September. Due to continual rains during September, main channel flows were high, and visibility was poor for most of the month. Because of the poor survey conditions spawning areas and timing were difficult to assess.

Chum salmon occupied 20 middle river sloughs, 18 of which were spawning areas (Table 24 and Appendix Table 3-2). Chum salmon observed in sloughs 1 and A' were milling fish as no redds or spawning activity were observed. Peak survey counts totaled 1,964 fish with the majority (60.3%) located in sloughs 11, 21 and 8A (Figure 33 and Table 25 and 26). Spawning occurred from the first week of August until the first week of October (Appendix Table 3-2). The observed peak of spawning in sloughs 8A, 11 and 21 occurred between the last week of August and the first week of September (Figure 34).

There were however, some late spawning chum salmon that continued to move into the middle-river and spawned into the second week of October (Appendix Table 3-2). One such area was Slough 8B, in which initial spawning peaked on September 2 with a count of 151 fish. Subsequent to their spawning a second group appeared on September 23, based on a peak count of 111 fish. Other areas such as sloughs 8C, 9A, and to a lesser extent sloughs 8A, and 11 received late spawning chum salmon in smaller numbers. These fish were identified by their fresh appearance and pre-spawning condition.

Table 21. Analysis of chum salmon lengths, in millimeters, by sex and age class from fishwheel CPUE weighted escapement samples collected at Flathorn, Sunshine and Curry Stations, 1985.

			Male			Female			Combined	
Location	Age Class	Mean Length	Std. Error	Sample Size	Mean 1 Length	Std. Error	Sample Size	Mean Length	Std. Error	Sample Size
Flathorn Station	31 41 51	538 588 609	2.8 1.9 2.7	72 342 116	535 577 594	2.8 1.2 2.5	102 610 106	536 581 602	2.0 1.0 1.9	174 952 222
	A11 <sup>1</sup>	591	1.7	55 <b>7</b>	524	1.2	884	580	1.0	1,441
Sunshine Station	3 41 51 61	537 599 616 600	2.8 1.4 3.1	88 668 180 1	541 580 592	2.9 1.3 3.0	101 631 124	539 590 607 600	2.0 1.0 2.3	189 1,299 304 1
	A11 <sup>1</sup>	594	1.3	1,017	576	1.2	932	586	0.91	1,950
Curry Station	3 41 51	534 608 621	6.4 1.9 2.9	22 320 119	551 604 614	7.8 1.7 3.1	15 250 65	540 606 618	5.0 1.3 2.2	37 570 184
	All <sup>1</sup>	607	1.7	479	600	1.6	346	604	1.2	825

<sup>1.</sup> Includes all aged and non-aged samples.

Table 22. Age composition by percent of chum salmon escapements to Flathorn, Sunshine and Curry stations, based on catch samples weighted by fishwheel CPUE, 1985.

		Age Class 1						
Collection Site	n	3 <sub>1</sub>	41	<sup>5</sup> 1	61			
Flathorn Station	1,348	13	71	16	-			
Sunshine Station	1,793	11	. 72	17	*			
Curry Station	791	5	72	23	_			

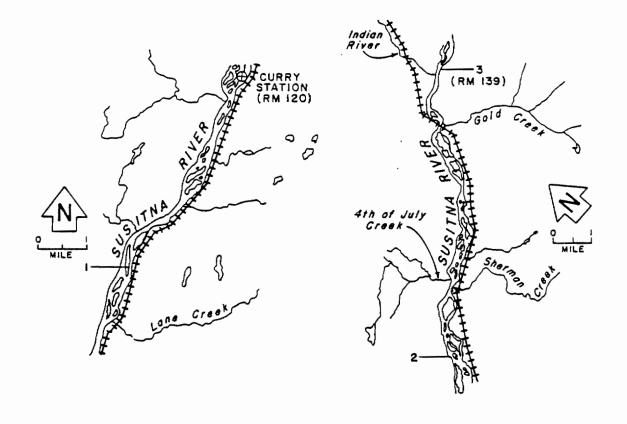
<sup>&</sup>lt;sup>1</sup> Gilbert-Rich notation

Table 23. Sex ratios of chum salmon by age from fishwheel escapement samples collected at Flathorn, Sunshine and Curry stations, 1985.

		Combined	Nui	mber	Sex Ratio
Collection Site	Age	Sample Size	Males	Females	(M:F)
Flathorn Station	3₁	174	72	102	0.7:1
	3 <sub>1</sub> 4 <sub>1</sub> 5 <sub>1</sub>	952 222	342 116	610 106	0.6:1 1.1:1
		444	110	100	1.1.1
	A11 <sup>1</sup>	1,441	557	884	0.7:1
Sunshine Station	3,	189	88	101	0.9:1
	3 <sub>4</sub> 1 5 <sub>1</sub>	1,29 <del>9</del>	668	631	1.1:1
		304	180	124	1.5:1
	A11 <sup>1</sup>	1,950	1,017	932	1.1:1
Curry Station	3,	37	22	15	1.5:1
	3 <sub>1</sub> 41 5 <sub>1</sub>	570	320	250	1.3:1
		184	119	65	1.8:1
	A11 <sup>1</sup>	825	479	346	1.4:1

 $<sup>^{\</sup>mbox{\scriptsize 1}}$  includes all aged and non-aged samples.

<sup>\*</sup> Frequency of occurrence is less than 1%.



Map ID Number	RM Loca	ation Bank	Highest Fish Count	Spawning Observation Dates
1	115.0	R	17	9/4, 9/11, 9/26, 10/2/85
2	128.6	R	16	9/26, 10/2/85
3	139.0	L	13	9/28/85

Figure 32. Chum salmon middle river mainstem spawning areas in the Susitna River mainstem middle reach, 1985.

Table 24. Peak chum salmon survey counts for streams in the middle reach in order of contribution, 1985.

				Number Counte	d	Percent
Stream	River Mile	Date	Live	Dead	Total	Contribution
Indian River	138.6	8/23	1,153	75	1,228	64.0
Portage Creek	148.9	8/28	524	15	539	28.1
4th of July Creek	131.1	8/17	140	0	140	7.3
Slash Creek	111.2	9/16	5	0	5	0.3
Little Portage Creek	117.7	8/25	4	0	4	0.2
Skull Creek	124.7	8/16	2	0	2	0.1
Lane Creek	113.6	8/11	1	0	1	0.1
Upper McKenzie Creek	116.7	9/9	0	1	1	0.1
		TOTALS	1,829	91	1,920	100.2

 $<sup>^{1}</sup>$ . Percent contribution total does not equal 100 due to rounding errors.

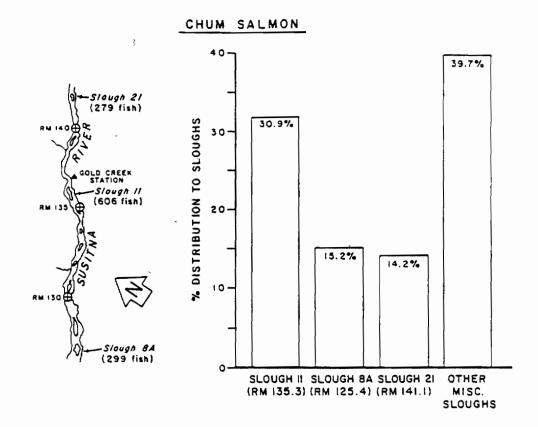


Figure 33. The three major chum salmon sloughs in the middle reach and the respective percent escapement based on peak survey counts, 1985.

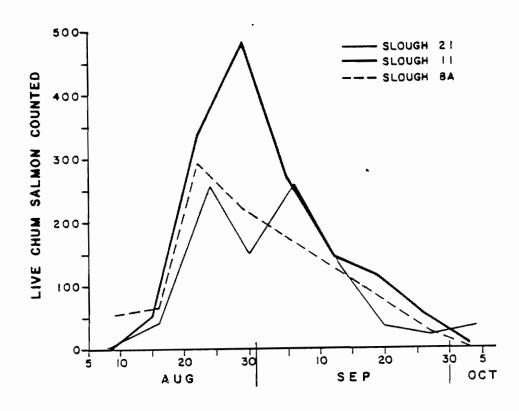


Figure 34. Chum salmon live counts by date in Sloughs 8A, 11 and 21, 1985.

Table 25. Peak chum salmon survey counts for sloughs in the middle Susitna River reach, 1985.

				Number Count	ed	Percent
S1ough	River Mile	Date	Live	Dead	Total	Contribution
1	99.6	9/17	2	0	2	0.1
2	100.2	10/1	15	6	21	1.1
3B 3A	101.4	9/24	1	1	2	0.1
3A	101.9	9/24	2	0	2	0.1
8	113.7	9/2	47	29	76	3.9
8D	121.8	9/16	1	0	1	0.1
8C	121.9	9/23	47	18	65	3.3
8B	122.2	8/25	177	6	183	9.3
Moose	123.5	9/9	22	2 0	24	1.2
A¹	124.6	8/16	1	0	1	0.1
8A	125.4	8/22	292	7	299	15.2
В	126.3	9/12	72	17	89	4.5
9	128.3	8/29	61	33	94	4.8
9A	133.8	9/26	118	13	131	6.7
11	135.3	9/19	115	491	606	30.9
16	137.3	8/24	8	2	. 10	0.5
20	140.0	8/24	54	0	54	2.7
21	141.1	9/6	260	19	279	14.2
22	144.5	8/24	20	4	24	1.2
21A	145.3	8/16	1	0	1	0.1
		TOTALS	1,316	648	1,964	100.1

<sup>1</sup> Percent contribution total does not equal 100 due to rounding errors.

Table 26. Estimated chum salmon slough escapements to twelve middle Susitna River sloughs, 1985.

Slough	River Mile	Total Fish <sup>1</sup> Days	Peak Live Survey Count	Mean <sup>2</sup> Observation Life Days	Slough <sup>2</sup> Escapement	% of Curry <sup>3</sup> Station Escapement
8	113.7	1,455	47	6.86	212	0.9
8C	121.9	672	47	6.86	98	0.4
8B	122.2	4,608	177	_	673	2.7
Moose	123.5	244	22	6.86	36	0.1
8A	125.4	6,582	292	6.86	1,110	4.6
	126.3	1,442	72	6.86	210	0.9
B 9	128.3	807	61	6.86	118	0.5
9 <b>A</b>	133.8	1,029	118	6.86	150	0.6
11	135.3	10,089	485	6.86	1,843	7.6
20	140.0	523	54	6.86	76	0.3
21	141.1	6,465	260	6.86	942	3.9
22	144.5	255	20	6.86	37	0.2
	TOTALS	34,171	1,655	_	5,505	22.7

Number of fish days were calculated for sloughs that had peak survey counts > 15 fish.

<sup>&</sup>lt;sup>2</sup> Mean observation life in days was obtained by averaging observation days from 1983 and 1984 observation life data.

<sup>3 1985</sup> Curry Station chum salmon escapement was approximately 24,400 fish.

Egg retention studies indicated 94 percent of the 93 females sampled in sloughs 8A, 11, 20 and 21 deposited almost all of their eggs (Figure 35). Egg retention was highest in sloughs 11 and 21 with a median (of sample) retention of 79 and 92 eggs, respectively.

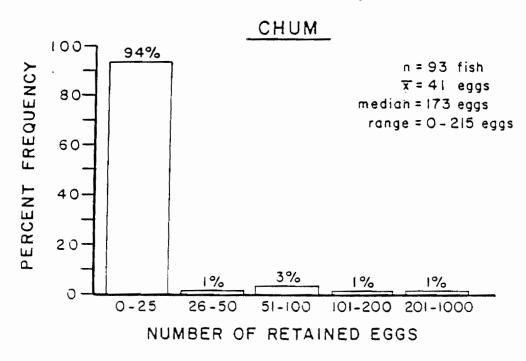


Figure 35. Percent frequency of the numbers of eggs retained by chum salmon at eleven middle reach sloughs, 1985.

Eight of 25 middle-river tributary streams surveyed were occupied by chum salmon (Appendix Table 3-1). Peak live counts totaled 1,829 fish (Table 25). Approximately 99 percent of these fish spawned in Indian River, Portage Creek and Fourth of July Creek (Figure 36). Spawning was noted in these streams from the first week of August until the end of September, and reached a peak during the last two weeks of August.

### 3.5 Coho Salmon

### 3.5.1 Main Channel Escapements

The 1985 escapement of coho salmon at Flathorn Station was an estimated 77,400 fish with a standard deviation of 63,500 (Figure 37). This estimate was derived by stratifying the Flathorn Station tag releases and Sunshine Station tag recoveries into three time strata. There were insufficient tag recoveries at Yentna Station to incorporate that geographic reach as a strata in the model. The estimated escapement to Sunshine Station was 36,800 coho salmon with an associated 95 percent confidence interval of 34,300 to 39,600 fish (Figure 37). These

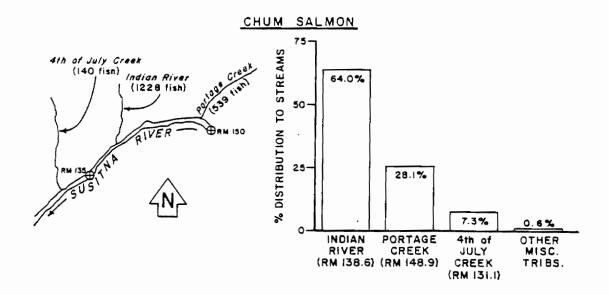


Figure 36. The three major chum salmon streams in the middle reach and the respective percent escapement based on peak survey counts, 1985.

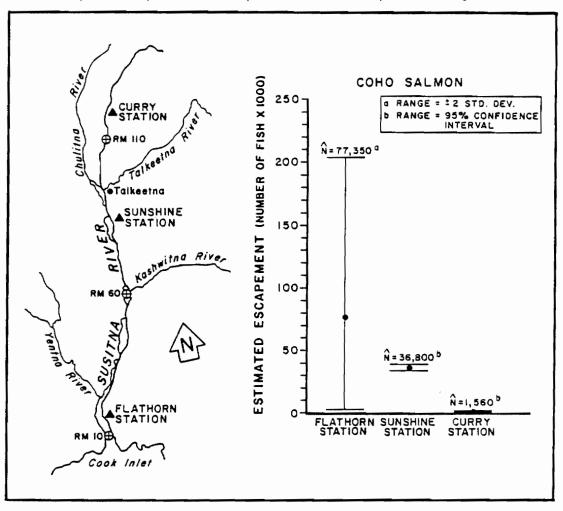


Figure 37. Coho salmon escapements by sampling station, 1985.

estimates were calculated using the Petersen model which pools all survey and fishwheel recovery data. The Curry Station coho salmon escapement was 1,600 fish (Figure 37). The 95 percent confidence interval extended from 1,200 to 2,300 fish. Curry Station estimates were also derived using the Petersen model.

All escapement estimates are for the location at which the tags were deployed. The estimates include some unknown number of milling fish which reached the tagging site but ultimately spawned in a downstream location. For example, coho salmon tagged at Curry Station have been seen in the Deshka River some 80 miles downriver. The incidence of downstream milling fish tagged at a site such as Curry Station were higher in streams near the tagging site and decreased with distance downstream.

Coho salmon passage at Flathorn Station, based on fishwheel catches, extended from July 23 until August 19. Fifty percent of the catch occurred by July 30 while the peak fishwheel catch of 184 fish occurred on July 27 (Figure 38 and Appendix Table 2-3). Coho salmon passage at Sunshine Station, based on fishwheel catches, occurred between August 1 and August 25. Fifty percent of the catch occurred by August 14 and peaked on August 19 when 512 fish were captured (Figure 39 and Appendix Tables 2-4 and 5-1). At Curry Station, the migration ranged from August 5 to September 4 and reached a median on August 18. A peak fishwheel catch of 18 fish occurred on August 20 (Figure 40 and Appendix Tables 2-5 and 5-1).

At Flathorn Station, the distribution of coho salmon fishwheel catches was 56 percent (1,423) east channel and 44 percent (1,098) west channel (Appendix Tables 2-1 and 2-2). Coho salmon recaptured at Yentna and Sunshine stations indicated that the majority (82.1 percent) of the tagged fish reaching Yentna Station traveled past Flathorn in the west channel while 84.8 percent of those reaching Sunshine Station traveled predominantly in the east channel.

Based on recovery of tagged fish, coho salmon traveled the ten mile distance between Flathorn and Yentna stations in five days (median) for a rate of two mpd (Figure 41). Between Flathorn and Sunshine stations, a distance of 58 miles, the median travel time was 21 days for a rate of 2.8 mpd. The rate of travel between Flathorn and Curry stations was not determined because of an inadequate sample size.

Coho salmon sampled at Flathorn Station were predominantly age  $3_2$  (50 percent) and  $4_3$  (44 percent) (Table 27), with a similar trend occurring at Sunshine and Curry stations. The combined mean lengths of age  $3_2$  coho salmon at Flathorn, Sunshine and Curry stations were 521 mm, 531 mm and 530 mm, respectively (Table 28). Age  $4_3$  fish at the above sites had mean lengths of 538 mm, 549 mm and 569 mm, respectively. The sex ratios were 1.3:1 at all three sampling sites (Table 29).

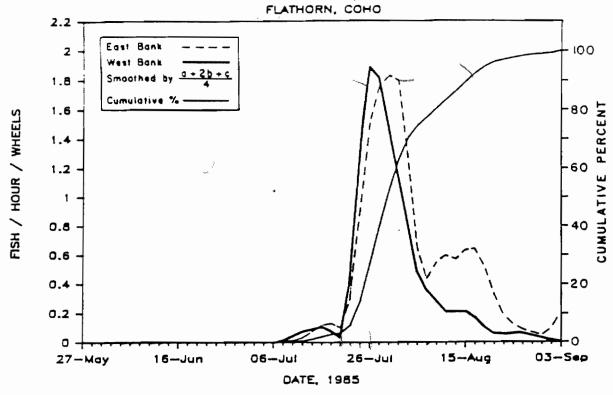


Figure 38. Mean hourly and cumulative percent fishwheel catch of coho salmon by two day periods at Flathorn Station, 1985.

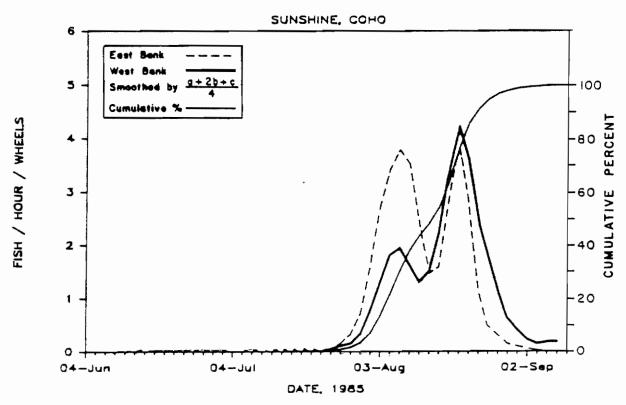


Figure 39. Mean hourly and cumulative percent fishwheel catch of coho salmon by two day periods at Sunshine Station, 1985.

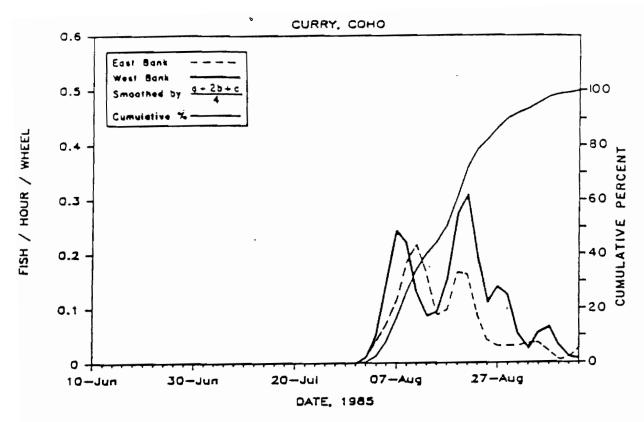


Figure 40. Mean hourly and cumulative percent fishwheel catch of coho salmon by two day periods at Curry Station, 1985.

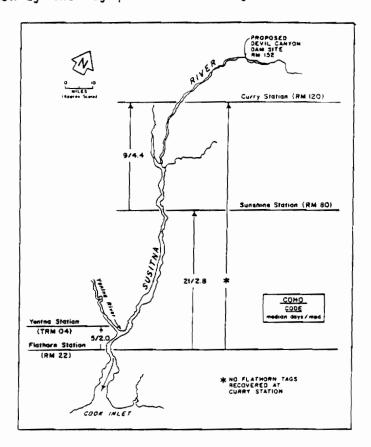


Figure 41. Migration rates of coho salmon between Susitna River sampling stations based on tag recoveries and expressed in median days and miles per day (mpd), 1985.

Table 27. Analysis of coho salmon lengths, in millimeters, by sex and age class from fishwheel CPUE weighted escapement samples collected at Flathorn, Sunshine and Curry stations, 1985.

			Male			Female			Combined		
Location	Age Class	Mean Length	Std. Error	Sample Size	Mean Length	Std. Error	Sample Size	Mean Length	Std. Error	Sample Size	
Flathorn Station	(20 = 1.		12.0	7	_	_		310	12.0	7	
	32 = 1.1	520 289	3.2	340	521	3.3	232	521	2.4	572	
	33 = 2.	<b>3</b> 289	6.9	21		-	-	289	6.9	21	
	43 = 2.		3.7	258	530	3.5	238	538	2.6	496	
	44 3.0		9.5	10	-	-	-	301	9.5	10	
	54 - 3 1	545	25.7	10	560	14.3	12	553	14.0	22	
	54 - 3 // 55 - 4	<b>362</b>	19.6	3	-	-		362	19.6	3	
	All <sup>1</sup>	511	2.85	549 <del>912</del>	524	2.1	680 680	417	1.9	1 <del>,59</del> 2 / <sub>1</sub> 13	31
unshine Station	3, 11	526	3.0	358	539	2.7	280	531	2.1	638	
	32 2.0	371	18,9	3	-	-	-	371	18.9	3	
	43 2.1	542	4.2	201	558	3.1	177	549	2.7	378	
	44 3,0	376	2.1	2	-	-	-	376	2.1	2	
	32 /1/ 33 2.1 43 2.1 44 3.0 54 3.1	576	22.3	3	583	17.4	2	578	14.6	5	
	A11 <sup>1</sup>	531	2.1	567 904	544	1.8	7067	537	1.4	1 <del>,610</del> \	10
Curry Station	3. 1,1	<sup>′</sup> 516	10.4	30	551	5.5	22	530	6.8	52	
•	42 211	562	9.2	38	586	6.9	18	569	6.8	56	
	32 /, ( 43 2, ( 54 3, (	) <del>-</del>	-	-	600	-	1	600	-	1	
	A111	538	6.0	102	567	3.9	76	550	3.9	478 10	9

 $<sup>^{1}\,</sup>$  Includes all aged and non-aged samples.

Table 28. Age composition by percent of coho salmon escapements to Flathorn, Sunshine and Curry stations based on catch samples weighted by fishwheel CPUE, 1985.

		Age Class <sup>1</sup>							
Collection Site	n	22	<i>t</i> -	33	43	3.0 4 <sub>4</sub>	3·{ 5 <sub>4</sub>	4,0 5 <sub>5</sub>	
Flathorn Station	1,131	*	50	2	44	*	2	*	
Sunshine Station	1,026	-	62	*	37	*	*		
Curry Station	109	-	48	-	52	-	*		

<sup>&</sup>lt;sup>1</sup> Gilbert-Rich notation

Table 29. Sex ratios of coho salmon by age from fishwheel escapement samples collected at Flathorn, Sunshine and Curry stations, 1985.

		Combined	Num	nber	Sex Ratio
Collection Site	Age	Sample Size	Males	Females	(M:F)
Flathorn Station	2,	7	7	-	_
	32	572	340	232	1.5:1
	35	21	21	-	
	43	496	258	238	1.1:1
	44	10	10	12	0.8:1
	233445 555	22 3	10 3	12	0.0:1
	-5	•	•		
	A11 <sup>1</sup>	1,592	912	680	1.3:1
	_				
Sunshine Station	32	638	358	280	1.3:1
	33	3	3	1 <b>7</b> 7	1.1:1
	<b>4</b> 3	378	201	177	1.111
	32 33 43 44 5 <sub>4</sub>	2 5	2 3	2	1.5:1
	4	•	·	•	
	All <sup>1</sup>	1,610	904	706	1.3:1
Curry Station	3.	52	30	22	1.4:1
22 ) 2020. 3	42	56	38	18	2.1:1
	32 43 54 A11 <sup>1</sup>	1	•	1	0:1
	1				
	A11.	178	102	76	1.3:1

 $<sup>^{</sup>m 1}$  includes all aged and non-aged samples.

<sup>\*</sup> Frequency of occurrence is less than 1%.

### 3.5.2 Fecundity

The average fecundity of females varies both between and within salmon species, with stocks in northern latitudes averaging more eggs per female than those in southern latitudes (McNeil and Bailey, 1975). Scott and Crossman (1973) reported that British Columbia stocks of coho salmon generally average between 2,190 to 2,789 eggs per female. This agrees with Hart's (1973) value of 2,500 eggs for a 550 mm female.

Susitna River coho salmon fecundity information is limited to samples collected at Sunshine Station. The 27 females sampled here on August 16 averaged 3,437 eggs, with a 95 percent confidence interval of 3,134 to 3,740 (Table 30).

Table 30. Number of eggs, length, weight and associated statistics for coho salmon sampled for fecundity at Sunshine Station, 1985.

Variables	Sample Size	Mean	Standard Deviation	95 Percent <sup>1</sup> C.I. of the Mean
Number of eggs	27	3,437	805	3,134 - 3,740
Length (mm)	27	549	45	532 - 566
Weight (g)	27	2,637	742	2,357 - 2,917

 $<sup>^{</sup>m 1}$  95 percent confidence interval of the mean.

Susitna River coho salmon appear to be more fecund than British Columbia stocks. A 550 mm Susitna River coho would be expected to contain 3,400 eggs, 900 more than the 2,500 reported by Hart (Figure 42). This follows the general pattern of greater average fecundities in more northern latitudes.

### 3.5.3 Spawning Areas

The middle-river main channel was surveyed for salmon spawning activity from July 15 through October 7. No coho salmon were observed spawning in the main channel during this time period.

Coho salmon occupied five sloughs in 1985 (Appendix Table 3-2). However, except for nine coho salmon observed spawning in Slough 8A, they were all milling fish. Spawning here was attributed to high water flows and ice scouring which destroyed beaver dams that had previously impeded access to the sloughs upper reaches.

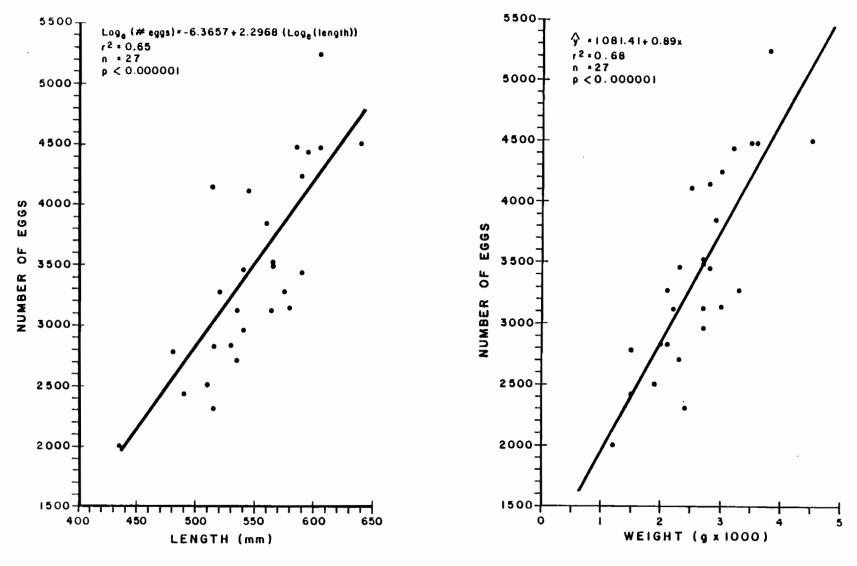


Figure 42. Number of eggs for coho salmon sampled at Sunshine Station as a function of length and weight, 1985.

Most coho salmon spawned in middle-river streams. Ten of the 25 streams surveyed had adult coho salmon present. Spawning was observed in all ten streams (Appendix Table 3-1). Based on a total peak count of 901 fish 89 percent of middle reach coho salmon spawned in Whiskers, Chase and Gold creeks and Indian River (Table 31 and Figure 43). Coho salmon spawned in middle-reach streams from the last week in August until the last week of September. Spawning activity reached a peak during the first two weeks of September.

Table 31. Peak coho survey counts for middle river streams in order of contribution, 1985.

				Number Counted		Percent
Stream	River Mile	Date	Live	Dead	Total	Contribution
Whiskers Creek	101.4	9/4	442	1	443	48.6
Chase Creek	106.9	9/10	218	0	218	23.9
Indian River	138.6	9/4	71	0	71	7.8
Gash Creek	111.6	9/16	70	1	71	7.8
Lower McKenzie Creek	116.2	9/30	41	9	50	5.5
Portage Creek	148.9	8/23	25	0	25	2.7
Lane Creek	113.6	9/26	13	0	13	1.4
Jack Long Creek	144.5	9/11	11	0	11	1.2
Slash Creek	111.2	9/23	8	0	. 8	0.9
Little Portage Creek	117.7	9/23	2	0	2	0.2
		TOTALS	901	11	912	100.0

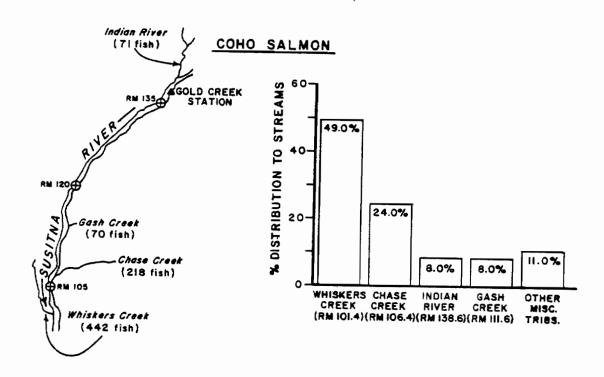


Figure 43. The three major coho salmon streams in the middle reach and the respective percent escapement based on peak survey counts, 1985.

#### 4.0 ACKNOWLEDGEMENTS

The authors especially wish to acknowledge Bruce Barrett for his guidance and patiently sharing his extensive knowledge of the Susitna River; the contributions of Mr. Allen Bingham for his biometric review of the Flathorn Station population estimates and his assistance with writing the methods section; Ms. Linda Brannian for her suggestions and assistance with the chinook salmon population estimates; Rick Gustin for his assistance in preparing the stream and slough survey data; the field crews for their many hours of work under sometimes trying conditions; the data processing staff for their untiring work; and to the many others who without their dedicated efforts, this work would not have been possible.

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# **APPENDICES**

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## APPENDIX 1

Susitna River Drainage Salmon Escapement Data Summary, 1951-84.

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### 1.0 INTRODUCTION

The purpose of this report is to provide a background document for salmon resource investigations relative to the proposed Susitna Hydroelectric project. Historically, the Susitna River has been a major producer of salmon for the Cook Inlet fishery. Escapement data has been collected from various areas within the Susitna River drainage (Figure 1) since the late 1940's and early 1950's by a variety of federal, state, and private agencies. This report summarizes all Susitna River drainage escapement data collected by the Alaska Department of Fish and Game, Divisions of Sport and Commercial Fisheries.

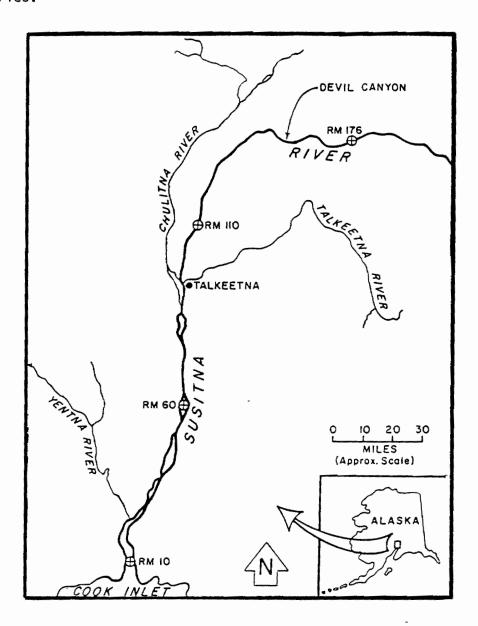


Figure 1. Map of the Susitna River and its three major tributaries below Devil Canyon.

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### 2.0 ORGANIZATION

Escapement data published in 59 reports by the Alaska Department of Fish and Game, Divisions of Sport and Commercial Fisheries since statehood, have been summarized in the appendix of this report. Appendix Tables 1-1 through 1-4 present the salmon escapement data for the Susitna River and its three major tributaries below Devil Canyon (the Yentna River, the Talkeetna River, and the Chulitna River). Streams in these appendix tables are organized using the numbering system developed by the Habitat Division for use in the anadromous waters catalog (ADF&G 1985b). All streams, rivers, and lakes where anadromous fish have been documented are assigned a unique identifying number in the catalog which can be traced to a specific drainage or sub-drainage. The same numbering system is used in the anadromous stream atlas (ADF&G 1985a) so that the streams can be located easily on the atlas maps. All locations where the department has conducted salmon escapement surveys in the Susitna River drainage are identified in this report as well as all of the other streams in the Susitna drainage that are listed in the anadromous stream catalog (ADF&G 1985b).

These appendix tables were initially created by combining a computer file of the known anadromous streams listed in the anadromous stream catalog (ADF&G 1985b) with another computer file of escapement survey data containing information from ADF&G (1982) and ADF&G (1985c). After meshing these two data bases, attempts were made to verify each entry and identify it with the report where the data were originally published. In cases where escapement data could not be linked with the original data report, summary reports were cited. And finally, if a particular entry in the appendix tables could not be verified from the literature, the sources of our computer data files were cited.

Appendix Table 1-5 is a compilation of escapement counts in sloughs, side channels, and the mainstem of the Susitna River. This information is organized by Susitna river mile (RM) which was established by R&M Consultants (1981). The bulk of this information comes from the Susitna Aquatic Studies Program (ADF&G 1981, 1983b; Barrett et al. 1984, 1985).

Data for each location in all five appendix tables are arranged chronologically. All data have been stored on floppy diskettes using a Lotus spreadsheet format. This information is available for updating and use by other divisions.

Information on each salmon escapement survey location is presented as it was reported. Whenever possible, information on the year and dates that the surveys were conducted, which species and how many were found, and information on survey methods, survey conditions, distances surveyed and qualifying comments about the survey were included. Perhaps the most useful part of this summary report is the data source column and the accompanying list of references in the bibliography. Anyone requiring more information about a particular survey can track down the sources of information in these tables in the bibliography.

Because the data in this report were derived from a wide variety of sources whose procedures for reporting information varied from division to division, author to author, and sometimes year to year, it is sometimes difficult and often impossible to make comparisons between different entries regarding accuracy, precision, and techniques used. Considerably more information would be required in order to compare the accuracy and precision of many of these surveys.

### 3.0 OVERVIEW AND LIMITATIONS OF ESCAPEMENT SURVEY TECHNIQUES

A wide variety of techniques have been developed by biologists to estimate the number of fish using a particular location or river reach. These vary according to the environmental conditions, type of habitat, and budget and time constraints. Some of these methods are used to produce an index of fish abundance to compare run strength between and within years or systems. Other methods attempt to enumerate total fish populations.

There are multiple uses for escapement data and each have their own acceptable level of precision and/or accuracy. For example, if one is establishing escapement goals, intensively managing a fishery to maintain a sustained yield of numerous stocks of a number of species, or trying to access the impacts of a particular project, then an absolute estimate of escapement may be required. However, if a fishery is not intense or the goal is just to maintain the existing return of fish, then the accuracy of the escapement data may not need to be as great. Individuals compiling fish distribution data may even be content to know if fish do or do not exist in a given drainage.

The following section has been included largely to familiarize the non-fisheries biologist reader with the various techniques that have been used to index or estimate salmon escapements on the Susitna River and the strengths and limitations of each. Much of this background information has been extracted from Cousens et al. (1982).

Visual techniques involve the direct enumeration of the fish, either from ground level, from elevated platforms or from the air. Studies conducted by Kubik and Trent (1974) concluded that helicopter surveys were the preferred technique for enumerating chinook salmon. Ground and tower counts provided comparable numbers, however it is not always economically feasible to construct towers at a large number of locations and ground surveys are time consuming. Fixed-wing aircraft are less expensive to charter than helicopters, however they fly faster and are not as maneuverable as the helicopter and visibility is more limited from the fixed-wing aircraft.

The Susitna River and a number of its major tributaries are glacially turbid during much of the year and therefore not suitable for visual survey techniques. For this reason several alternative techniques have been developed. The primary turbid water numeration techniques used in the Susitna River are tag/recapture and sonar. Fishwheels are used in combination with ground surveys for use in the mark and recapture population estimates. Fishwheel catches are also used with sonar to apportion sonar counts by species.

In lake habitats, visual techniques can be used to enumerate fish in shallow clear water lakes, however weirs and gill nets are more effective in lakes which are deep or have a lot of aquatic vegetation.

Each of the techniques used to collect data are discussed below.

### 3.1 Tower Counts

Counting towers are permanent or semi-permanent structures, approximately 25 feet high, which are constructed at single-channel points on target streams where visibility across the adult salmon migration path is good. Counts of migrating salmon passing the tower are usually made for ten minutes per bank and extrapolated for each hour. Often contrasting color substrates are placed on the streambed to aid in seeing the fish and lights are used to enable fish counting at night.

Tower counts are a good way of estimating total adult salmon escapements of clear water tributaries when water conditions are good and the tower is well placed. This technique is primarily used to enumerate bank oriented salmon (i.e., sockeye and pink), however towers have also been used successfully on narrow, shallow rivers to count coho, chinook, and chum salmon which do not orient by bank when they migrate. This technique provides a continuous record of salmon passage and is valuable in determining migrational timing and peaks.

Tower count escapement estimates are most accurate when the observed migrations have an even temporal and spatial distribution (Cousens et al. 1982). Error is introduced when the salmon migration is irregular and/or composed of mixed species which complicate species identification. These errors can be compounded by poor visibility and variations between different observers.

In the Susitna River drainage, tower counts have been used on the Deshka River (Kubik and Trent 1974) and on the Talachulitna River (Barrett 1973a, 1975a).

# 3.2 Ground Surveys

Ground level surveys made on foot or in a boat provide an instantaneous count of the number of live and/or dead salmon within specific stream reaches, index areas, or entire stream lengths which can be used to produce an escapement estimate. Escapement estimates from ground survey counts of streams or index areas are more reliable if they are derived from several repeated surveys.

Foot surveys are best suited to small, shallow, clear water tributaries where the flow patterns are stable, the banks are relatively free of large carnivores and easy to walk along, and the fish and carcasses are highly visible. Counts obtained from surveying spawning grounds by foot have been used to estimate escapements of chinook, coho, sockeye, pink, and chum salmon. Foot surveys can be used to obtain counts in small tributaries where aerial surveys are not practical, to provide additional data to calibrate or adjust aerial survey counts, or to determine the spawning distribution of particular tributaries within a large drainage.

Factors which can limit the reliability of escapement estimates from foot surveys or introduce bias are: (1) experience or ability differences between fish counting personnel, and (2) spawning or migrating in

conditions which hinder visual sightings (i.e., deep water, high discharge, high turbidity, and snow and/or ice cover). In addition, observers are often limited to one bank which can limit the visual counts.

Foot surveys have been conducted on a number of clear water tributaries of the Susitna, Yentna, Talkeetna, and Chulitna rivers over the years. Two tributaries which have been surveyed regularly with this technique are Willow Creek (Redick 1970, 1971; Watsjold 1975-1980; ADF&G 1983a; Barrett et al. 1984, 1985) and Prairie Creek (Watsjold 1973-1979; Barrett 1973a, 1975a; Friese 1976a, 1976b; Waltemyer et al. 1980; Barrett et al. 1984). Since 1981 the Susitna Aquatic Studies program has done extensive foot surveys of tributaries, sloughs, and side channels in the lower and middle reach of the Susitna River (ADF&G 1981, 1983b; Barrett et al. 1984, 1985).

An alternative to foot surveys in small, clear water streams that are accessible and do not have major rapids is a float survey in a boat or inflatable raft. Boat surveys can be an efficient method of obtaining instantaneous counts of fish in narrow streams where fish cannot be observed from one bank. However, stream gradient, flow, turbidity, glare on the water surface, and navigational obstacles are important considerations in gaging the usefulness of boat survey counts. For example, in fast, twisting streams, fish counts will be negatively effected if the fish counter has to be more concerned about getting downstream safely than he is about counting fish. Another disadvantage is that boat surveys only provide a one-way coverage (i.e., downstream) of the survey area.

Boat surveys have been used less frequently than ground surveys to count fish in the Susitna River drainage. Kubik (1965, 1966) conducted boat surveys of clear water tributaries in the lower Susitna River and Watsjold (1972-1974) did a series of boat surveys on Willow Creek. Barrett (1973a, 1975a) and Friese (1976a. 1976b) did boat surveys on tributaries and lakes in the Yentna River drainage and on Stephan Lake in the Talkeetna River drainage. Additional boat surveys have been reported by the Susitna Aquatic Studies program (ADF&G 1983b; Barrett et al. 1984, 1985).

# 3.3 <u>Aerial Surveys</u>

Counts of salmon on the spawning grounds using low flying aircraft allow an observer to survey many more streams in a given time than ground surveys. Aerial surveys are conducted using fixed-wing aircraft or helicopters. Fixed-wing aircraft are used most commonly for aerial counts of salmon. Advantages afforded by fixed-wing aircraft are that they allow the observer to survey large drainages in a short period of time and at a lower cost than other aircraft. Aerial surveys by helicopter are more efficient than fixed-wing surveys because helicopters are more maneuverable over winding streams, slower flying, and offer better visibility. However, they have a shorter flying range and may be cost prohibitive for surveys of large drainages.

Aerial surveys are usually conducted by one trained observer and an experienced pilot. Weather and budgets permitting, spawning grounds are surveyed several times to obtain counts during the peak spawning period. Peak aerial counts are used as an indices of relative abundance for estimating total escapement and if the methods remain consistent from year-to-year these index counts can be compared between years. The rough estimates of escapements from aerial surveys may also be useful for in-season management of salmon stocks.

Aerial surveys have been used to enumerate chinook, sockeye, pink, chum, and coho salmon and this technique works best in spawning areas of broad, shallow, clear water tributaries with little or no overhanging vegetation and in shallow lakes.

The reliability of aerial survey counts are affected by the experience or inexperience of the observer and the pilot, fatigue, differences between observers, fish density, lighting conditions, poor weather, high discharges, and highly turbid conditions.

The majority of the salmon escapement data from the Susitna River drainage is composed of aerial survey data. Historically, the Division of Commercial Fisheries has conducted aerial surveys in the Susitna River drainage to monitor escapements of sockeye salmon because they are an important species for the Cook Inlet commercial salmon fishery, and the Division of Sport Fisheries has done aerial surveys to monitor escapements of chinook salmon which are a target species in the Susitna River sport fishery. Escapement information on other salmon species has largely been obtained incidentally during aerial surveys for sockeye or chinook or it has been collected using other escapement monitoring techniques.

Streams and lakes in the Susitna River drainage which have been aerial surveyed regularly for sockeye salmon are Red Shirt Lake, Role Jo Creek, Chelatna Lake, Shell Creek, the Talachulitna River, Talachulitna Creek, Judd Lake, Talachulitna Lake, Trinity Lake, Red Salmon Lake, and Larson Lake (Barrett 1973a, 1975a; Friese 1976a, 1976b; Namtvedt et al. 1979; Tarbox and Sanders 1980; Waltemyer et al. 1980; ADF&G 1982; Tarbox et al. 1983; ADF&G 1985c-YENONE.TAB).

Aerial surveys for chinook salmon have been conducted on the following tributaries in the Susitna River drainage on a regular basis: Alexander Creek, the Deshka River, Willow Creek, Little Willow Creek, North Fork Kashwitna River, Sheep Creek, Goose Creek, Indian River, Portage Creek, Lake Creek, Camp Creek, Sunflower Creek, the Talachulitna River, Canyon Creek, Chunilna Creek, Troublesome Creek, Bunco Creek, Byers Creek, Honolulu Creek, East Fork Chulitna River, and Middle Fork Chulitna River (Stefanich 1962; Kubik 1963-1973; Watsjold 1972-1980; Kubik and Trent 1974; Kubik and Chlupach 1975; Kubik and Riis 1976; Kubik and Wadman 1977-1979; Kubik and Delaney 1980; Delaney et al. 1981; ADF&G 1981, 1983a; Bentz 1982; Delaney and Hepler 1983; Barrett et al. 1984, 1985).

### 3.4 Fishwheels

Fishwheels function like paddlewheels, using the current of the river to rotate sampling baskets which capture salmon as they migrate upstream through turbid rivers. In most instances, fishwheels are used in conjunction with weirs which divert fish toward the fishwheels. When properly placed in the migration corridor of major rivers, fishwheels can be used to obtain a relative abundance index of salmon escapements. Comparisons of the relative abundance index obtained from fishwheel catches from year-to-year can only be made if the fishwheels are operated at the same sites under similar conditions each year.

On the Susitna River, the efficiency of fishwheels has been found to vary from site-to-site and year-to-year due to changes in climatic conditions, mainstem discharge, on-site morphology, and debris loads in the water (ADF&G 1981, 1983b; Barrett et al. 1984, 1985). Fishwheels were also found to be species selective and size selective (Thompson and Barrett 1983).

Fishwheels have been used in the Susitna River drainage to capture fish for tagging at Flathorn, Susitna, Yentna, Sunshine, Talkeetna, and Curry stations. Recovery of fishwheel tagged fish from upstream fishwheels and stream surveys have been used to calculate escapements to the fishwheel tagging sites using mark/recapture techniques (ADF&G 1981, 1983; Barrett et al. 1984, 1985). Mark/recapture techniques have also provided information on salmon migrations (i.e., routes, timing, and variations), stock separation, and spawning distribution.

The time, effort, and expense required to conduct mark/recapture studies are great; however, this is an effective way of evaluating large systems with major runs that cannot be enumerated effectively by other means. The primary source of bias or error associated with estimations of salmon escapements by mark/recapture techniques is caused by the violation of one or more of the basic assumptions which must be maintained to ensure the reliability of population estimates by these methods (Cousens et al. 1982).

Another application for fishwheels is discussed in Section 3.5.

## 3.5 Side Scan Sonar Counts

Hydroacoustic techniques have been developed to enumerate upstream migrations of bank-oriented salmon in clear or turbid rivers using side scan sonar. Sonic signals reflected off migrating fish are electrically recorded. Before escapement estimates can be produced or compared, these electronic fish counts must be apportioned by species. Sonar fish counts have been apportioned by simultaneously sampling the escapements with fishwheels, set gill nets, drift gill nets, beach seines, or trip seines and apportioning the sonar counts based on the relative abundance of each species in the catch during specific periods.

The accuracy of properly adjusted side scan sonar counters have compared favorably with tower counts when both methods were used side-by-side to enumerate salmon in rivers with moderate fish abundance, stable flows, consistent fish swimming speeds, and good visibility (Cousens et al. 1982). Side scan sonar is considered to be particularly effective for enumerating sockeye and pink which migrate along stream banks, and less effective for counting chinook, coho, and chum which do not orient by bank and may pass outside the range of the sonar beam.

Most problems associated with the operation of side scan sonar involve improper site selection. Side scan sonar should be located at a point where the river flows through a single channel so that all fish may be counted. The site should also have a minimum of offshore migrants and low levels of debris, air entrainment, and milling of spawning fish.

The major problem encountered with side scan sonar in the Susitna River drainage has been the apportionment of sonar fish counts by species. Fishwheels have been used in conjunction with side scan sonar on the Susitna to apportion sonar counts. However, there are several inherent problems with using fishwheel catches to apportion sonar counts which cast doubt upon the reliability of these data. Not only are fishwheels selective by species and by size, but the species composition of a fishwheel catch in a 6 foot sampling area near the river bank may not be representative of fish counts from sonar which enumerate fish passing between the shore and the outer-most substrate which may be 65 to 70 feet out from the bank. Therefore, ADF&G biologists recommend that an alternate sampling scheme (perhaps gillnetting) be used to apportion sonar counts on the Susitna River.

In the Susitna River drainage, side scan sonar have been used to enumerate salmon on the Deshka River (Stewart and Flagg 1969), on the Yentna River (ADF&G 1981, 1983a; Barrett et al. 1984, 1985), and at Susitna, Sunshine, and Talkeetna stations on the Susitna River (Tarbox et al. 1980; Tarbox and Sanders 1980; ADF&G 1981, 1982, 1983a; and Barrett et al. 1984, 1985).

# 3.6 Weir Counts

Weirs are temporary or permanent fences which are erected on lake outlets, streams, or rivers. By blocking the passage of fish, weirs allow the total enumeration of salmon migrating upstream to spawn and for the collection of biological data. Weir counts are often used as a standard to compare the accuracy of other enumeration techniques.

Weirs are generally constructed on streams where an accurate count of adult salmon escapements are required and where variations in flow and water depth are slight so that the weir will not be washed out during high discharges.

Disadvantages of this technique are that construction and operation of weirs are labor intensive and the initial construction costs can be high. Therefore, weirs are not well suited for evaluating a large number of different sites.

Weir counts of salmon have only been conducted on two small tributaries in the Susitna River drainage, Fish Lake Creek/Quig Creek (Barrett 1975b) and Shell Creek (Barrett 1973a, 1975b; Friese 1976a). Both of these creeks are located in the Yentna River system.

### 4.0 RECOMMENDATIONS

One of the primary difficulties encountered during their review of the literature was the lack of maps to identify streams for which data were presented. This is especially important when several streams in the same drainages have the same name. It is recommended that all data reports include a detailed map of the area for which data are presented. It would also be helpful to have each stream identified in these data reports by the Habitat Division's anadromous stream catalog location number.

During the review of the literature, it was found that some data were reported in several reports in the same or subsequent years often without adequate reference to the original data source. This was particularly true of the aerial survey data shared by the Sport and Commercial Fisheries divisions. In addition, year-to-year presentation of the same data type (e.g., aerial surveys) was not consistent. One year counts for each tributary in a drainage (i.e., Deshka, Alexander, Lake creeks) were presented, the next year only the total count for the whole system was presented, another year only an estimate of the system escapement based on the surveys was presented. It is recommended that a consistent presentation be used each year for the same data type, preferably presenting as much detail as practical. Additional presentations can be used in addition to this standard format for the purposes of making a particular point.

Finally, it is recommend that this computerized file of salmon escapement data for the Susitna River drainage should be maintained and updated annually. Since the Susitna Aquatic Studies Program is being terminated, the department should consider assigning the responsibility of maintaining this data base to someone who can fulfill this long-term commitment.

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# 6.0 APPENDIX

The following appendix is made up of five tables which summarize salmon escapement data that has been collected in the Susitna River drainage.

- Appendix Table 1-1. Escapement survey counts of adult salmon in the Susitna River drainage exclusive of the Yentna, Talkeetna, and Chulitna River drainages.
- Appendix Table 1-2. Escapement survey counts of adult salmon in the Yentna River drainage.
- Appendix Table 1-3. Escapement survey counts of adult salmon in the Talkeetna River drainage.
- Appendix Table 1-4. Escapement survey counts of adult salmon in the Chulitna River drainage.
- Appendix Table 1-5. Escapement survey counts of adult salmon in Susitna River sloughs, side channels, and mainstem.

Appendix Table 1-1. Escapement survey counts of adult salmon in the Susitna River drainage between river mile (RM) 0.0 and RM 195.0, excluding the Yentna, Talkeetna, and Chulitna River drainages.

OCATION CODE / STREAM NAME	YEAR	DATE	CH1NDOK	SOCKEYE	COHO	CHUN	Płnk	SURVEY HETHOD	COMMENTS	DATA SOURCE
47-41-10200										
Susitna River										
Susitna Station	1970			38000						ADF&G (1982)
(system-wide	1972			113000						ADF&6 (1982)
estimate)	1973		15000	40000					Chinook estimate from aerial surveys	ADF&G (1982)
									includes sport harvest	
	1974		15000	70000					Chinook estimate from aerial surveys	ADF&6 (1982)
									includes sport harvest	
	1975		11500	108000					Chinook estimate from aerial surveys	ADF&G (1982)
									includes sport harvest	
	1976		71200	111000			933000		Escapement-population estimate;	ADF&G (1982)
									chinook estimate from aerial surveys	
									includes sport fish harvmst	
	1977		118100	238000	50000	102000	1490000		Escapement-population estimate;	ADF&G (1982)
									chinook estimate from aerial surveys	
					14454		*****	<b></b>	includes sport fish harvest	ARCAR (1000)
	1978		B1100	94000	100800	148000	2478100	Side-scan sonar	Escapement count; chinnok estimate	ADF <b>LG</b> (1982)
									from aerial surveys, includes sport	
	1979		77700	157000	27088	45000	125000	6: 4	harvast	T1 /40001
	17/7		77200	157000	37000	49000	125000	Side-scan sonar	Escapement count; chinook estimate	Tarbox et al. (1980)
									from aerial surveys, includes sport harvest	
	1980	7/01-8/29		191000	42895	7939	2047000	Side-scan sonar	Escapement count	Tarbox & Sanders (198
	1981	6/27-9/02		340232	33470	46461	113349	Side-scan sonar	Escapement count	ADF&6 (1981)
	1981	B) Z) - 1) VZ	65000	340232	33770	10101	113347	Aerial count plus sport fish harvest	(60-70,000) estimate	ADF&6 (1982)
	1701		02000					ner res comme bins short tism der sest	tbo-/0,000/ Estimate	HDI EU (1702)
	1982	7/01-9/05		215856					Escapement count (sonar-apportioned)	ADFEG (1985c)-SUSONE
				2.0000					from Yentna Sta. and Susitna Sta.	navas (170017 popule
									east bank	
	1983			112314				Side-scan sonar	Escapement count	ADF&G (1985c)-SUSONE.
	1984		1457	45105	13413	26721	377425	Si de-scan sonar	Escapement count, east bank only	ADFEG (1985c)-SUSONE.
Sunshine Station	1976	6/21-8/13	749	2296	1307	338	19230	Fishwheel catch	Relative abundance	Friese (1976b)
	1981	6/23-9/15		B9906	22793	59630	72945	Side-scan sonar	Escapement count	ADF&6 (1981)
	1981	6/23-9/15		133489	19841	262851	49501	Petersen population estimate	Hark/recapture	ADF&6 (1981)
	1982	6/04-10/01	52900	151500	45700	430400	443200	Petersen population estimate	Mark/recapture	ADF&6 (1983a)
	1983	6/03-9/11	90100	71500	15200	265800	40500	Petersen population estimate	Mark/recapture	Barrett et al. (1984)
	1984	6/04-9/10	121700	130071	94702	764958	1017022	Petersen population estimate	Mark/recapture	Barrett et al. (1985)
Talkeetna Station	1974	7/23-9/11		1008		24286	5252	Petersen population estimate	Hark/recapture	Barrett (1974)
	1981	6/22-9/15		3464	3522	10036	2529	Side-scan sonar	Escapement count	ADF&G (1981)
	1981	6/22-9/15		4809	3304	20835	2335	Petersen population estimate	Mark/recapture	ADF&6 (1981)
	1982	6/05-9/14	10900	3100	5100	49100	73000	Petersen population estimate	Mark/recapture	ADF&6 (1983a)
	1983	6/07-9/12	14400	4200	2400	50400	9500	Petersen population estimate	Mark/recapture	Barrett et al. (1984)

LOCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
	1984	6/03-9/11	24800	13050	11947	98236	177881	Petersen population estimate	Mark/recapture	Barrett et al. (1985)
Curry Station	1981	6/15-9/21		2804	1146	1306B	- 1041	Petersem population estimate	Mark/recapture	ADF&G (1981)
	1982	6/09-9/18	11300	1300	2400	29400	58800	Petersem population estimate	Mark/recapture	ADF&G (1983a)
	1983	6/09-9/14	9600	1900	800	21100	5500	Petersen population estimate	Mark/recapture	Barrett et al. (1984)
	1984	6/09-9/14	18000	3593 .	2162	49278	116958	Petersen population estimate	Mark/recapture	Barrett et al. (1985)
Flathorn Station	1984	6/29-9/03		605933	190061	812694	3629B57	Petersea population estimate	Mark/recapture	Barrett et al. (1985)
247-41-10200-2015										
Alexander Creek	Hist								Max. count 1,868 chinook (1953), sockeye present (1964), 100,000	
	1050	E /00							pinks (1964), 500 chum (1963)	Kubik (1964)
	1958 1961	5/29 7/11	1						Suspect this was an aerial count	Kubik (1964)
Ř	1962	7/23	19					Aerial count	Suspect this was an aerial count	Kubik (1963)
	1963	8/16	750					Aerial count		Kubik (1964)
	1964	7/29	205					Boat survey		Kubik (1965)
	1965	7/30	400					Boat survey		Kubik (1966)
	1965	7/30	416					Boat survey	Includes Sucker Creek	Kubik (1966) .
	1966	,,,,,	197					Aerial count		Kubik (1967)
	1966		248					Aerial count	Includes Sucker Creek	Kubik (1967)
	1966		300					Aerial count	Estimate of total escapement	Kubik (1967)
	1947		354					Aerial count		Kubik (1968)
	1967		388					Aerial count	Includes Sucker Creek	Kubik (1968)
	1967		500					Aerial count	Estimate of total escapement	Kubik (1968)
	1968		563					Aerial count	·	Kubik (1969)
	1968		727					Aerial count	Includes Sucker Creek	Kubik (1969)
	1969		588					Aerial count		Kubik (1970)
	1969		735					Aerial count	lactudes Sucker Creek	Kubik (1970)
	1969		30						Poor observing - water colored	Stewart & Flagg (1969)
	1970		420					Aerial count		Kubik (1971)
	1970		562					Aerial count	Includes Sucker Creek	Kubik (1971)
	1970		491							
	1970	7/26	280						2,720 sockeye and coho	ADF&G (1982)
	1972		103					Aerial count		Kubik (1973)
	1972		202					Aerial count/Ground survey	Includes Sucker Creek	Kubik & Trent (1974)
	1973		875					Ground survey		Kubik & Trent (1974)
	1974		2193					Aerial count		Kubik & Chlupach (1975
	1975		1878					Aerial count		Kubik & Riis (1976)
	1976		5412					Aerial count		Kubik & Wadman (1977)
	1977		13385					Aerial count		Kubik & Wadman (1978)
	1977	7/26	2504							ADF&G (1982)
	1978		5854					Aerial count		Kubik & Wadman (1979)

Appendix Table 1-1 (Continued).

LOCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	СОНО	CHUM	PINK	SURVEY HETHOB	COMMENTS	DATA SOURCE
	1979		6215					Aerial count		Kubik & Delaney (1980)
	19B1	7/29	58B					Aerial count, helicopter - Poor	Sucker Creek to Lake	ADF&G (1981)
	1982			5000			250000		Max. abundance estimate from several years observations	Kubik (pers. comm.)
	1982		2546					Aerial count	,	Delaney & Hepler (1983)
	1982		4798							ADF&G (1985c)-SUSONE.TAB
	1982	7/31	1697					Aerial count, helicopter - Good	Mouth to Lake	ADF&G (1903a)
	1983	7/19	3755					Aerial count, helicopter - Good	Mouth to Lake	Barrett et al. (1984)
	1984	7/20	4620					Aerial count, helicopter - Good		Barrett et al. (1985)
247-41-10200-2015-0010 Alexander Lake										
247-41-10200-2015-3010 Deep Creek										
247-41-10200-2015-3017										
Granite Creek										
247-41-10200-2015-3020 Fox Creek										
247-41-10200-2015-3025 Trail Creek										
247-41-10200-2015-3025-4011										
247-41-10200-2015-3025-4015										
247-41-10200-2015-3025-4035										
247-41-10200-2015-3035									,	
Lower Sucker Creek	Hist								Max.count 20 chinook (1964);	
	1963	8/14	15					Aerial count		Kubik (1964)
	1965	7/29	16					Bround survey		Kubik (1966)
	1966		51					Ground survey		Kubik (1967)
	1967		34					Aerial count		Kubik (1973)
	1969		75					Ground survey		Kubik (1973)
	1970		71					Ground survey		Kubik (1973)
	1972		39					Aerial count		Kubik (1973)
	1981	7/29	269					Aerial count, helicopter - Good		ADF&6 (1981)
	1982	7/29	322					Aerial count, helicopter - Good		ADF&G (1983a)
	1983	7/19	597					Aerial count, helicopter - Good		Barrett et al. (1984)

LOCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	СОНО	CHUM	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
Sucker Lake										
247-41-10200-2015-3035-4019 Walverine Creek	Hist								1,000,000 pinks (1966) Max. count 14 chinook (1964)	
•	1964 1981 1982 1983	B/05 7/24 7/28 7/19	14 243 537 491					Aerial count Aerial count, helicopter - Good Aerial count, helicopter - Good Aerial count, helicopter - Good	Max. Eddit 14 Edditor (1701)	Kubik (1965) ADF&G (1981) ADF&G (1983a) Barrett et al. (1984)
247-41-10200-2015-3035-4223 Upper Sucker Creek										
247-41-10200-2015-3035-4225										
247-41-10200-2015-3035-4225-0010										
247-41-10200-2015-3040 Clear Creek										
247-41-10200-2015-3117 Bear Creek										
247-41-10200-2015-3117-420B Texas Creek								•		
247-41-10200-2020 Fish Creek (Flat Horn Lake)	1958 1961 1984 1984 1984 1984 1984 1984	5/19 6/03 9/10 9/20 9/27 10/06 7/31 8/08 8/17	3 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Aerial count, helicopter - Poor, TRM 0.0 Aerial count, helicopter - Fair, TRM 0.0 Aerial count, helicopter - Fair, TRM 0.0 Aerial count, helicopter - Good, TRM 0.0 Ground survey - Poor, TRM 0.0 Ground survey - Poor, TRM 0.0 Ground survey - Fair/Good, TRM 0.0 Ground survey - Poor, TRM 0.0	Suspect ground survey or aerial count Suspect ground survey or aerial count	Kubik (1964) Kubik (1964) Barrett et al. (1985)
247-41-10200-2020-0010 Flat Horn Lake										
247-41-10200-2020-0015 Red Shirt Lake	Hist								Max. counts, 2,600 sockeye (1952); 380 coho (1952)	
	1972	8/29		160	100			Aerial count, Super Cub	39V CUIIO 11732/	Barrett (1973a)

LOCATION CODE / STREAM NAME	YEAR	DATE	CHINDOK	SOCKEYE	COHO	CHUM	PINK	SURVEY NETHOD	COMMENTS	DATA SOURCE
	1972			200		-			Includes Role Jo Creek	Tarbox & Sanders (1980)
	1973	8/17		35				Aerial count, Super Cub		Barrett (1973a)
	1973	9/14		47				Aerial count, Super Cub		Barrett (1973a)
	1974	8/26		0	0	0	0	Aerial count, Super Cub		Barrett (1975a)
	1974	9/09		0	0	0	0	Aerial count, Super Cub		Barrett (1975a)
	1974	10/03		1				Aerial count, Super Cub		Barrett (1975a)
	1974			160				3	Peak survey count	ADF&G (1982)
	1975	B/29		135				Aerial count, Super Cub		Friese (1976a)
	1975			159					includes Role Jo Creek	Tarbox & Sanders (1980)
	1976	8/17		66						ADFRG (1985c)-SUSONE.TAB
	1976	B/26		92						ADFRG (1985c)-SUSONE.TAB
	1976	9/14		117						ADF&G (1985c)-SUSONE.TAB
	1976	9/16		130						ADF&G (1985c)-SUSONE.TAB
	1976			180				Aerial count, Super Cub	Peak survey count	Friese (1976b)
	1976			215				Aerial count	Includes Role Jo Creek	Tarbox & Sanders (1980)
	1977	B/24		43				Aerial count	Includes Role Jo Creek	Tarbox & Sanders (1980)
	1977	9/01		4						ADF&G (1982)
	1970	8/29		13				Aerial count	Includes Role Jo Creek	Waltemyer et al. (1980)
	1979	9/07		645				Aerial count		Tarbox & Sanders (1980)
	1979	9/07			92					ADFRG (1985c)-SUSONE.TAB
	1980	9/11		650				Aerial count	Includes Role Jo Creek	Tarbox & Sanders (1980)
	1981	0/25		600						ADF&G (1982)
	1981			505				Aerial count	Includes Role Jo Creek	Tarbox et al. (1983)
	1981	B/23		5900						ADF&G (1985c)-SUSONE.TAB
	1982			100		1000				ADFRG (1985c)-SUSONE.TAB
	1984	8/26		776						ADFRG (1985c)-SUSONE.TAB
	1984	8/30		1400						ADF&G (1985c)-SUSONE.TAB

247-41-10200-20	20-0020	
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<sup>247-41-10200-2020-0030</sup> 

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<sup>247-41-10200-2020-0040</sup> 

<sup>247-41-10200-2020-3031</sup> 

<sup>247-41-10200-2020-3031-4016</sup> 

<sup>247-41-10200-2020-3041</sup> 

<sup>247-41-10200-2020-3041-0020</sup> 

<sup>247-41-10200-2020-3110</sup> 

<sup>247-41-10200-2020-3110-0010</sup> 

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OCATION CODE / STREAM NAME	YEAR	DATE	EH1 NOOK	SOCKEYE	COHO	CHUM	PINK		SURVEY METHOD	CONNENTS	DATA SOURCE
Cow Lake											
47-41-10200-2020-3130										Note - TYDNEK C-1	
Role Jo Creek *	Hist									Sockeye and coho present	
	1972	8/16		40				Aerial count,	Super Eub		Barrett (1973a)
	1972	8/29		160				Aerial count,	Super Cub		Barrett (1973a)
	1973	8/17	0	0	0	0	0	Aerial count,	Super Cub		Barrett (1973a)
	1973	9/04		47				Aerial count,	Super Cub		Barrett (1973a)
	1974		0	0	0	0	0	Aerial count,	Super Cub		Barrett (1975a)
	1975	8/29		24				Aerial count,	Super Cub		Friese (1976a)
	1976	9/26		2 <b>5</b>				Aerial count,	Super Cub		Friese (1976b)
	1976			35				Aerial count,	Super Cub	Peak survey count	Friese (1976b)
	1977	8/24		43					•	•	ADF&G (1982)
	1977	9/01		4							ADF&G (1982)
,	1977			28				Aerial count			Mamtvedt et al. (1979
	197B			0				Aerial count			Waltemyer et al. (19
	1983	8/23		450							ADFEG (1985c)-SUSDNE
	1984	8/26		450							ADF&G (1985c)-SUSONE
	1984	8/30		240							ADF&G (1985c)-SUSDNE

247-41-10200-2020-3130-0020 Łynx Lake

247-41-10200-2020-3130-4020

247-41-10200-2020-3150

247-41-10200-2020-3150-0010

247-41-10200-2020-3185

247-41-10200-2020-3185-0010

247-41-10200-2020-3195

247-41-10200-2020-3195-0010

247-41-10200-2030

247-41-10200-2043

Anderson Creek

247-41-10200-2050

247-41-10200-2060

OCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
47-41-10200-2070										
47-41-10200-2075								·		
47-41-10200-2081										
Deshka River / Kroto Creek	Hist								Max. count chinook 3,000 (1954); 86 sockeye (1950); 300,000 pinks (1954)	
	1958	5/29	3						Suspected ground survey or aerial	Kubik (1964)
	1961	6/06	18					Ground survey	Peak count	Stefanich (1962)
	1962	8/08-8/11	998					Ground survey	reak Count	Kubik (1963)
	1963	7/03	131					Aerial count	Peak	Kubik (1964)
	1964	8/17	311					Boat survey	West Fork only	Kubik (1965)
	1964	• • • • • • • • • • • • • • • • • • • •	2422					Boat survey	Entire Deshka River System - Chujik,	Kubik (1965)
			- 1					Duet survey	Trapper, West Fork, and Moose	MADIK (11/03/
	1965	7/29	640					Aerial count	West Fork only	Kubik (1966)
	1965		2749					Aerial count	Entire Deshka River System	Kubik (1966)
	1965		5000					HE LES CHANG	System-wide aerial estimate	Kubik (1966)
	1966		281					Aerial count	West Fork only	Kubik (1967)
	1966		933					Aerial count	Entire Deshka River System	Kubik (1967)
	1966		2000					1121 . 4 . 5 . 5 . 5 . 5 . 5 . 5 . 5 . 5 . 5	System-wide aerial estimate	Kubik (1967)
	1967		764					Aerial count	West Fork only	Kubik (1968)
	1967		1535	•				Aerial count	Entire Deshka River System	Kubik (1968)
	1967		2500					72.00	System-wide aerial estimate	Kubik (1968)
	1968		1246					Aerial count	West Fork only	Kubik (1969)
	1948		4863					Aerial count	Entire Deshka River System	Kubik (1969)
	1969		2036					Aerial count	West Fork only	Kubik (1970)
	1969		5652					Aerial count	Entire Deshka River System	Kubik (1970)
	1969		2300					Sonar count	Entire Manual Hirts System	Stewart & Flagg (1
	1970		1417					Aerial count	West Fork only	Kubik (1971)
	1970		5286					Aerial count	Entire Deshka River System	Kubik (1971)
	1971		161					Aerial count	East Fork only	Kubik (1972)
	1972		877					Aerial count	West Fork only	Kubik (1973)
	1972		1780					Aerial count	Entire Deshka River System	Kubik (1973)
•	1972		275						Sport fish harvest	ADF&6 (1982)
	1972		1780					Ground survey	sport from no vest	Kubik & Trent (1974
	1973		2391					Observation tower count		Kubik & Trent (197
	1974		5279					Aerial count		Kubik & Chlupach (
	1975		4737					Aerial count	•	Kubik & Riis (1976
	1976		21693					Aerial count		Kubik & Wadman (19)
	1977		39642					Aerial count	Entire Deshka River System	Kubik & Wadman (19
	1978		24639					Aerial count	Missis Podrino 112761 U/2169	Kubik & Wadman (19
	1979		5373					Aerial count	Study Area 1	Delaney et al. (19
	1979		2830					Aerial count	Study Area 11	Delaney et al. (19

LOCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUN	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
***************************************	1979	********	1212					Aerial count	Study Area 111, IV, V, & V1	Belaney et al. (1981)
	1979		27305					Aerial count	Entire Deshka River system	Kubik & Delaney (1980)
	1979		7908					Aerial count	Kroto Creek above confluence with Moose Creek	Delaney et al. (1981)
	1982			500	10000		500000		Entire Deshka River System	Kubik (pers.com.)
	1982 1982		20000 16000					Aerial count	ADF&G, Sport Fish	ADF&G (1985c)-SUSOME.T Delaney & Hepler (1983
	1982	8/05-8/09	10671					Aerial count, helicopter - Fair	Partial count - Mainstem Deshka from	ADF&G (1983a)
	1701	8703-8707	100/1					HETTEL COUNTY HEATTOPEEN TEL	Trapper Creek to Forks; Trapper Creek	1191 44 11794
	1983	7/26	19237					Aerial count, helicopter - Excellent		Barrett et al. (1984)
	1984	8/04	16892					Aerial count, helicopter - Good		Barrett et al. (1985)
247-41-10200-2081-0010 Kroto Lake										
247-41-10200-2081-3050										
Trapper Creek	Hist								Max. count 234 chinook (1964)	
	1964	8/10	234					Boat survey		Kubik (1965)
	1967		121					Scound survey		Kubik (1973)
	1968		184					Ground survey		Kubik (1973)
	1972		0					Ground survey		Kubik (1973)
	1979	7.00	283	7400				Aerial count		Delaney et al. (1981)
	1983	7/29		3000						Marcuson (pers. comm.)
247-41-10200-2081-3065									Note - TYONEK D-2	
Chijuk Creek *	1964	8/09	238					Boat survey		Kubik (1965)
	1965	7/20	16					Aerial count		Kubik (1966)
	1966		27					Anrial count		Kubik (1973)
	1967		54					Ground survey		Kubik (1973)
	1968		242					Ground survey		Kubik (1973)
	1969		14					Ground survey		Kubik (1973)
	1970		195					Ground survey		Kubik (1973)
	1971 1979		36 1220					Ground survey Aerial count		Kubik (1973) Delaney et al. (1981)
247-41-10200-2081-3065-4019										
247-41-10200-2081-3065-4027 Yenio Creek										
247-41-10200-2081-3081	Ni c.k								Max. count 2,705 chinook (1965)	
Twentymile Creek	Hist 1964	8/07	11					Aerial count	nex. Count 2,/03 ENIADOK (1703)	Kubik (1965)

LOCATION CODE / STREAM NAME	YEAR	DATE	CHINDOK	SOCKEYE	СОНО	CHUM	P1NK	SURVEY NETHOD	COMMENTS	DATA SOURCE
247-41-10200-2001-3094 Seventeenmile Creek		<b></b>	******							
247-41-10200-2081-3100									Note - Most escapements combined in Deshka River totals	
Moose Creek	1964	7/31	1590					Boat survey	Index area	Kubik (1965)
	1965	8/05	2065					Boat survey	Index area	Kubik (1966) .
	1966		625					Ground survey	Index area	Kubik (1973)
	1967		596					Ground survey	Index area	Kubik (1973)
	1968		1646					Ground survey	Index area	Kubik (1973)
	1969		2786					Ground survey	Jndex area	Kubik (1973)
	1970		2824					Ground survey	Index area	Kubik (1973)
	1971		161					Ground survey	Index area	Kubik (1973)
	1972		967					Ground survey	Index area	Kubik (1973)
	1973		316					Aerial count		Kubik & Trent (1974)
	1979		8559					Aerial count		Delaney et al. (198
247-41-10200-2081-3100-4167 *									Listed in Kubik's reports as	
									Unknown Creek (vic. Deshka)	
Gate Creek +	1962	6/21	0					Aerial count		Kubik (1964)
	1963	6/27	0					Aerial count		Kubik (1964)
	1964		49					Aerial count		Kubik (1973)
	1965		28					Aerial count		Kubik (1973)
	1970		5					Aerial count		Kubik (1973)
247-41-10200-2081-3121 *									Note - Trib. of Kroto Creek, TALK A-1	
Parker Creek	Hist								Max. count 200 sockeye (1965)	
247-41-10200-2081-3100-4155										
247-41-10200-2081-3100-4167 Gate Creek										
247-41-10200-2081-3124										

247-41-10200-2095 247-41-10200-2120 Willow Creek

Hist

1958

1961

1962

7/04

7/06

7/31

300

170

71

. .

Aerial count, fixed wing

Aerial count

Max. count 4,500 chinook (1947); 2,000 coho (1950); 20,000 chum (1950); 40,000 pinks (1950) 60

Suspect this was an aerial count

Kubik (1964)

Kubik (1963)

Stefanich (1962)

sockeye (1967)

Peak count

OCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUM	P1NK	SURVEY METHOD	COMMENTS	DATA SOURCE
	1963	7/30	55					Aerial count	***************************************	Kubik (1964)
	1964	8/02	51					Boat survey		Kubik (1965)
	1945	7/11	35					Aerial count		Kubik (1966)
	1966		103					Aerial count		Kubik (1967)
	1967		24					Aerial count		Kubik (1968)
	1968		125					Aerial count		Kubik (1969)
	1969		290					Bround survey	Index area	Redick (1970)
	1969		100						Excellent observation - all at mouth	Stewart & Flagg (1969
	1970		640					Ground survey	Index area	Redick (1971)
	1971		165					Boat survey	Index area	Watsjold (1972)
	1972		370					Boat survey	Index area	Hatsjold (1973)
	1972		11					2242 247 127	Sport fish harvest	ADF&6 (1982)
	1973		1074					Boat survey	Index area	Watsjold (1974)
	1973	7/24	678					Buat survey	· Huth er se	ADF&6 (1982)
		7/25	981							ADF&6 (1982)
	1973							Convey de automatic		Watsjold (1975)
	1974	7/26	402					Ground survey		Watsjold (1976)
	1975	B/04	177					Ground survey		-
	1976	7/15	1660					Ground survey		Watsjold (1977)
	1977		1065					Bround survey		Watsjold (1978)
	1978		1166					Ground survey - Poor		Watsjold (1979)
	197 <del>9</del>		849					Ground survey ~ Poor		Watsjold (1980)
	1980								No count - high, turbid water	Bentz (1982)
	19B1		1357							ADF&G (1982)
	1981					7000	250000		Max. abundance estimate based on several years observations	Engel (pers.comm.)
	1981	7/29	991					Aerial count, helicopter - Good	Less than 10% mortality at this time	ADF&6 (1981)
	1982		821					• •		ADF&B (1985c)-SUSDNE.
•	1982	B/06	592					Ground survey - Fair		ADF&G (1983a)
	1983	7/18	B3					Aerial count, helicopter - Good	Parks Hwy to Mouth (RM 0.0)	Barrett et al. (1984)
	1983	7/19	694					Boat survey, raft - Excellent	Canyon to Parks Hwy	Barrett et al. (1984)
	1983	,,,,	111							Hepler & Bentz (1984)
	1984		2789							Hepler & Bentz (1985)
	1984	10/04	0	0	0	0	0	Aerial count, helicopter - Bood, TRM 0.0		Barrett et al. (1985)
	1984	7/27	0	0	0	0	0	Ground survey - Poor, TRN 0.0		Barrett et al. (1985)
	1984	8/04	0	77	90	157	2071	Ground survey - Excellent, TAM 0.0		Barrett et al. (1985)
	1984	8/12	0	212	347	16	926	Ground survey - Good, TRM 0.0		Barrett et al. (1985)
	1984	8/22	Ŏ	0	119B	0	125	Ground survey - Excellent, TRM 0.0		Barrett et al. (1985)
	1984	B/30	Ŏ	Ŏ	92	1	10	Ground survey - Fair, TRN 0.0		Barrett et al. (1985)
	1984	9/09	ŏ	Ŏ	7	ō	7	Ground survey - Excellent, TRM 0.0		Barrett et al. (1985)
	1984	9/18	٥	Ŏ	3	ŏ	,	Ground survey - Good, TRM 0.0		Barrett et al. (1985)
	1984	9/25	0	0	3	0	, A	Bround survey - Excellent, TRM 0.0		Barrett et al. (1985)

247-41-10200-2120-3010

OCATION CODE / STREAM NAME	YEAR	DATE	CHINDOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
247-41-10200-2120-3010-0010										
47-41-10200-2120-3017										
247-41-10200-2120-3020	1978 1979 1980 1961 1982 1983	7/29 8/06	495 238 366 366 229 121 675					Ground survey Ground survey Aerial count, helicopter - Good Ground survey - Fair	Note - TYDNEK D-1 Upper Deception Creek Upper Deception Creek Less than 10% mortality at this time	Matsjold (1979) Matsjold (1980) ADF&6 (1981) ADF&6 (1983a) Hepler & Bentz (1984) Hepler & Bentz (1985)
47-41-10200-2120-3020-4010										
47-41-10200-2120-3020-401B										
47-41-10200-2120-3020-4021										
47-41-10200-2120-3020-4031										
47-41-10200-2120-3020-4041										
47-41-10200-2120-3020-4051										
47-41-10206-2120-3020-4071										
47-41-10200-2120-3020-4071-5011										
47-41-19200-2120-3020-4071-501B										
47-41-10200-2120-3020-4071-5050									•	
47-41-10200-2130 Little Willow Creek	Hist								Max. count 278 chinook (1969); 35,000 pinks	
	1961 1962 1963 1964 1965 1966 1967 1968	6/27 7/16 7/09 8/13 7/06	112 26 11 7 3 38 6 12					Aerial count, fixed wing Aerial count	Peak count  Excellent observation - all at mouth	Stefanich (1962) Kubik (1963) Kubik (1964) Kubik (1965) Kubik (1966) Kubik (1967) Kubik (1960) Kubik (1960) Stewart & Flagg (1969

0.0

OCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	СОНО	CHUM	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
	1970	7/28	45					Aerial count - Poor		Watsjold (1973)
	1972	B/01	99					Aerial count		Watsjold (1973)
	1973		371					Aerial count, helicopter		Watsjold (1974)
	1974		139					Aerial count, helicopter - Poor		Watsjold (1975)
	1975		103					Aerial count, helicopter		Watsjold (1976)
	1976		833					Aerial count, helicopter		Watsjold (1977)
	1977		598					Aerial count, helicopter		Watsjold (1978)
	1978		436					Aerial count, helicopter		Watsjold (1979)
	1979		324					Aerial count, helicopter - Poor		Watsjold (1980)
	1980								No count - high, turbid water	Bentz (1982)
	1981	7/31	459					Aerial count, helicopter - Sood	Less than 10% mortality at this time	ADF&6 (1981)
	1982	B/07	316					Aerial count, helicopter - Good		ADF&G (1983a)
	1983	7/19	1042					Aerial count, helicopter - Good		Barrett et al. (1984)
	1984	9/20	0	0	0	0	0	Aerial count, helicopter - Sood, TRM 0.0		Barrett et al. (1985)
	1964	10/06	0	0	2	0	0	Aerial count, helicopter - Sood, TRM 0.0		Barrett et al. (1985)
	1984	7/27	0	0	0	0	0	Bround survey - Poor, TRM 0.0		Barrett et al. (1985)
	1984	B/03	0	5	2	15	145	Ground survey - Good/Excellent, TRM 0.0		Barrett et al. (1985)
	1984	8/11	0	0	1	2	32	Bround survey - Fair/Bood, TRM 0.0		Barrett et al. (1985)
	1984	0/21	0	12	3	0	412	Ground survey - Excellent, TRM 0.0		Barrett et al. (1985)
	1984	8/29	0	0	10	0	23	Ground survey - Good, TRM 0.0		Barrett et al. (1985)
	1984	9/08	0	0	0	2	12	Ground survey - Excellent, TRM 0.0		Barrett et al. (1985)
	1984	9/26	0	0	0	2	21	Ground survey - Excellent, TRM 0.0		Barrett et al. (1985)
47-41-10200-2130-3011									RN 59.5	
47–41–10200–2130–3011–0010 Kashwitna Lake										
47-41-10200-2170 F									Note - TYDNEK D-1	
196 Mile Creek / Grays Creek *	1984	10/06	0	0	0	0	0	Aerial count, helicopter - Fair, TRM 0.0		Barrett et al. (1985)
	1984	7/2 <b>7</b>	0	0	0	0	0	Ground survey - Poor, TRM 0.0	·	Barrett et al. (1985)
	1984	8/02	0	0	0	0	0	Ground survey - Very Poor, TRM 0.0		Barrett et al. (1985)
	1984	8/10	0	0	0	0	0	Ground survey - Poor, TRM 0.0		Barrett et al. (1985)
	1984	B/20	0	0	0	0	1	Ground survey - Pogr, TRM 0.0		Barrett et al. (1985)
	1984	B/28	0	0	0	0	0	Ground survey - Poor, TRN 0.0		Barrett et al. (1985)
	1984	9/11	0	0	0	0	0	Ground survey - Excellent, TRM 0.0		Barrett et al. (1985
	1984	9/20	0	0	0	0	0	Ground survey - Poor, TRM 0.0		Barrett et al. (1985
	1984	9/27	0	0	0	0	0	Ground survey - Fair, TRM 0.0		Barrett et al. (1985)
7-41-10200-2180										
Kashwitna River	195B	7/04	0						Suspected aerial count	Kubik (1964)
	1961	7/25	35					Aerial count, fixed wing		Stefanich (1962)
	1010		0					Acutal count		Kubik (1963)
	1962		v					Aerial count		KADIK (1403)

OCATION CODE / STREAM NAME	YEAR	DATE	CHINDOK	SOCKEYE	СОНО	CHUM	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
	1984	9/10	0	0	0	0	0	Aerial count, helicopter - Poor, TRM 0.0		Barrett et al. (1985)
	19B4	7/26	0	0	0	0	0	Ground survey - Poor, TRM 0.0		Barrett et al. (1985)
	19B4	8/02	0	0	0	0	0	Ground survey - Poor, TRM 0.0		Barrett et al. (1985)
	1984	8/10	0	0	0	0	0	Ground survey - Poor, TRM 0.0		Barrett et al. (1985)
	1984	8/20	0	0	0	0	0	Ground survey - Poor, TRN 0.0		Barrett et al. (1985)
	1984 1984	9/28 9/27	0	0	0	0	0	Ground survey - Poor, TRM 0.0 Ground survey - Good, TRM 0.0		Barrett et al. (1985 Barrett et al. (1985
	1704	1/2/	v	v	v	v	U	Grand Survey - Book, INN 0.0		DEFFECT EC 43. 11700
247-41-10200-2180-3061										
North Fork Kashmitma River	Hist								Chinook present, max count 10,000 pinks (1966)	
	1961	7/25	35					Aerial count, fixed wing	Peak count	Stefanich (1962)
	1962	7/31	19					Aerial count		Kubik (1963)
	1963	7/07	3					Aerial count		Kubik (1964)
	1964	7/17	14					Aerial count		Kubik (1965)
	1965	7/11	3					Aerial count		Kubik (1966)
	1966		2					Aerial count		Kubik (1967)
	1971		1					Aerial count - Poor		Watsjold (1972)
	1972		31					Aerial count		Watsjold (1973)
	1973		183					Aerial count, fixed ming		Watsjold (1974)
	1974		103					Aerial count, fixed wing		Watsjold (1975)
	1975		33					Aerial count, helicopter		Watsjold (1976)
	1976		303					Aerial count, helicopter		Wats)old (1977)
	1977		336					Aerial count, helicopter		Watsjold (1978)
	1978		362	•				Aerial count, helicopter		Watsjold (1979)
	1979		457					Aerial count, helicopter		Watsjold (1980)
	1980		,					merce to the second	No count - high, turbid water	Bentz (1982)
	· 1981	7/31	557					Aerial count, helicopter - Good	Less than 10% mortality at this time	ADF&6 (1981)
	1982	8/10	156					Aerial count, helicopter - Excellent	come come to an entre of at the come	ADF&G (1983a)
	1983	7/19	297					Aerial count, helicopter - Good	•	Barrett et al. (1984
	1984	7/31	111					Aerial count, helicopter - Poor	•	Barrett et al. (1985
	1984	8/20					2	HELTET COUNTY HETTCOPEEL - 1004		Barrett et al. (1985
	1984	9/27			33	172	2			Barrett et al. (1985
247-41-10200-2190										
Caswell Creek	1958	6/10	0						Suspected aerial count	Kubik (1964)
	1961	7/06	6					Aerial count, fixed wing		Stefanich (1962)
•	1962	7/01	_					Ground survey	Chinook present - jumpers sited	Kubik (1963)
	1963	7/07	0					Aerial count	••••	Kubik (1964)
	1966		i					Aerial count		Kubik (1967)
	1984	7/26	0	0	0	0	0	Ground survey - Poor, TRM 0.0		Barrett et al. (1985
	1984	7/30	ŏ	0	Ŏ	ŏ	ő	Ground survey - Poor, TRN 0.0		Barrett et al. (1985
	1984	B/04	2	0	44	14	16	Ground survey - Fair, TRH 0.0		Barrett et al. (1985
		0,00	•	v	**	17		A. A AND LEAST AND ALL		

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OCATION CODE / STREAM NAME	YEAR	DATE	CHINDOK	SOCKEYE	СОНО	CHUM	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
	1984	8/13	0	0	42	34	39	Ground survey - Fair, TRM 0.0		Barrett et al. 11985
	1984	8/20	0	0	32	21	29	Ground survey - Poor, TRM 0.0		Barrett et al. (1985
	1984	8/28	0	0	42	20	27	Ground survey - Good, TRM 0.0		Barrett et al. (198
	1984	9/06	0	0	40	11	20	Ground survey - Good, TRM 0.0		Barrett et al. (198
	1984	9/13	0	0	25	7	4	Ground survey - Bood, TRM 0.0		Barrett et al. (198)
	1984	9/21	0	0	23	10	3	Ground survey - Good, TRM 0.0		Barrett et al. (198:
47-41-10200-2190-0010 Caswell Lake										
47-41-10200-2190-3020										
47-41-10200-2200										
Sheep Creek	1958	6/15	200						Suspected aerial count	Kubik (1964)
	1961	7/06	70					Aerial count, fixed wing	Peak count	Stefanich (1962)
	1962	7/16	35					Aerial count		Kubik (1963)
	1963	8/07	24					Aerial count		Kubik (1964)
	1964	7/17	5					Aerial count		Kubik (1965)
	1965	7/07	3					Ground survey		Kubik (1966)
	1966		100					Ground survey		Kubik (1967)
	1969		150					Ground survey		Kubik (1970)
	1969		250						Excellent observation - all at mouth	Stewart & Flagg (19
	1972		101					Aerial count		Watsjold (1973)
	1973		482					Aerial count, helicopter		Watsjold (1974)
	1974		202					Aerial count, fixed ming		Watsjold (1975)
	1975		42					Aerial count, fixed wing		Watsjold (1976)
	1976		455					Aerial count, helicopter		Watsjold (1977)
	1977		630					Aerial count, helicopter		Watsjold (1978)
	1978		1209					Aerial count, helicopter		Watsjold (1979)
	1979		778					Aerial count, fixed wing		Watsjold (1980)
	1980								No count - high, turbid water	Bentz (1982)
	1981	7/31	1013					Aerial count, helicopter - Good	Less than 10% mortality at this time	ADF&6 (1981)
	1982	8/07	527					Aerial count, helicopter - Good	2222 211311 201 221 221 24 21 21 21 21 21 21 21 21 21 21 21 21 21	ADF&G (1903a)
	1983	8/18	945					Aerial count, helicopter - Fair		Bartlett et al. (19
	1983	2,10	975					narra county naticapier   1 ar.		Hepler & Bentz (198
	1984	7/26	0	0	0	0	0	Ground survey - Poor, TRM 0.0		Barrett et al. (198
	1984	7/30	0	0	0	0	0	Ground survey - Poor, TRM 0.0		Barrett et al. 1198
	1984	7/31	1028					Aeriel count, helicopter - Fair		Barrett et al. (198
	1984	8/06	0	0	0	86	91	Ground survey - Poor, TRM 0.0		Barrett et al. (198
	1984	8/13	Ö	ō	21	111	211	Ground survey - Poor, TRM 0.0		Barrett et al. (198
	1984	8/20	Ŏ	Ŏ	ŏ		0	Ground survey - Poor, TRN 0.0		Barrett et al. (198
	1984	8/28	Ŏ	Ŏ	ĭ	5	ĭ	Ground survey - Fair, TRM 0.0		Barrett et al. (198
	1984	9/06	Ŏ	ŏ	i	5	14	Ground survey - Fair, TRM 0.0		Barrett et al. (198
	1984	9/13	0	0	21	2	14	Ground survey - Good, TRM 0.0		Barrett et al. 1198
	1704	7/13	V	v	41	4	•	BLORUS 201 AEA - 00041 1KU A'A		DEFFECT EL 81. 1170

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LOCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
	1967		2					Ground survey		Kubik (1968)
	1968		5					Ground survey		Kubik (1969)
	1969		250						Comm. Fish observe school at mouth	Kubik (1970)
	1969		150					Ground survey	Index area	Redick (1970)
	1969		50						Excellent observation - all at mouth	Stewart & Flagg (1969
	1970		161							ADF&6 (1902)
	1970	7/27	260							ADF&G (1982)
	1970	7/28	21							ADF&G (1982)
	1970		261					Ground survey	Index area	Redick (1971)
	1971		44					Ground survey	Index area	Watsjold (1972)
	1971	8/03	20							ADF&G (1982)
	1971	8/05	24							ADF&G (1982)
	1972		317					Ground survey	Index area	Watsjold (1973)
	1972	7/25	211							ADF&6 (1982)
	1972	7/26	106							ADF&G (1982)
	1973		527					Ground survey	Index area	Watsjold (1974)
	1974	7/24	280					Ground survey		Watsjold (1975)
	1975	7/29	229					Ground survey		Watsjold (1976)
	1976	7/26	1445					Ground survey		Watsjold (1977)
	1977		1443					Ground survey		Watsjold (1978)
	1978		991					Ground survey - Poor		Watsjold (1979)
	1979		1094					Ground survey - Poor		Watsjold (1980)
	1980								No count - high, turbid water	Bentz (1982)
	1981	7/30	814					Aerial count, helicopter ~ Good	Less than 10% mortality at this time	ADF&6 (1981)
	1982	8/05	887					Ground survey - Good		ADF&G (1983a)
	1983	7/14	1641					Ground survey - Excellent		Barrett et al. (1984)
	1984	7/24	2309					Ground survey - Fair		Barrett et al. (1985)
	1984	7/27	1	0	0	0	0	Ground survey - Fair/Good, TRM 0.0		Barrett et al. (1985)
	1984	7/31	15	0	0	13	23	Ground survey - Poor, TRM 0.0		Barrett et al. (1985
	1984	8/07	3	0	7	20	96	Ground survey - Fair, TRM 0.0		Barrett et al. (1985
	1984	8/14	10	0	12	41	192	Bround survey - Fair, TRM 0.0	·	Barrett et al. (1985
	1984	6/21	2	0	9	24	37	Ground survey - Fair, TRM 0.0		Barrett et al. (1985
	1984	8/29	0	0	0	0	0	Ground survey - Poor, TRM 0.0		Barrett et al. (1985
	1984	9/07	0	0	10	6	16	Ground survey - Good, TRM 0.0		Barrett et al. (1985
	1984	9/14	Ŏ	ō	50	õ	0	Ground survey - Good, TRM 0.0		Barrett et al. (1985)
	1984	9/23	Ŏ	Ŏ	7	2	۵	Ground survey - Good, TRM 0.0		Barrett et al. (1985)

247-41-10200-2250-3050 South Fork Montana Creek

247-41-10200-2250-3061 Middle Fork Montana Creek

247-41-10200-2250-3061-4009

LOCATION CODE / STREAM NAME	YEAR	DATE	CHINDOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
North Fork Montana Creek										
247-41-10200-2254										
247-41-10200-2254-0010										
247-41-10200-2254-0020										
247-41-10200-2261										
247-41-10200-2291 Rabideux Creek	Hist 1962 1964 1975 1976 1977 1978	6/27 8/05 9/26 9/29	0 8 99			67 91 88		Aerial count Aerial count Ground survey Bround survey Aerial count Bround survey	Chinook present  Index area Index area Index area chinook, coho, pink present	Kubik (1964) Kubik (1965) Matsjold (1976) Matsjold (1977) Kubik & Madman (1978) Matsjold (1979) Kubik (pers. comm.)
	1984 1984 1984 1984 1984 1984 1984 1984	9/26 7/23 7/29 8/02 8/10 B/17 8/24 9/01 9/10	0 B 0 0 0 0 0	1 0 7 0 0 0 0	21 0 0 0 0 0 0 0	0 0 13 0 0 0 0 2 2	. 0 0 0 0 35 1 1 0 2	Aerial count, helicopter - Good, TRM 0.0 Ground survey - Good, TRM 0.0 Ground survey - Poor, TRM 0.0 Ground survey - Good, TRM 0.0 Ground survey - Good, TRM 0.0 Ground survey - Fair, TRM 0.0		Barrett et al. (1985)
247-41-10200-2291-3011 Queer Creek									•	
247-41-10200-2291-3011-4030										
247-41-10200-2291-3041 Sammill Creek										
247-41-10200-2291-3049										
247-41-10200-2300 Sunshine Creek	Hist								Max. count 25 chinook (1963); 1,000 pinks (1962)	
	1958	6/10	0						Suspected aerial count	Kubik (1964)

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LOCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	ОНОЭ	CHUM	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
	1961	7/25	0					Aerial count		Kubik (1964)
	1962	6/27	20					Aerial count		Kubik (1963)
	1963	7/07	25					Aerial count		Kubik (1964)
	1984	9/26	0	0	3	12	0	Aerial count, helicopter - Good, TRN 0.0		Barrett et al. (1985)
	1984	7/29	0	0	0	4	1611	Ground survey - Fair, TRM 0.0		Barrett et al. (1985)
	1984	B/03	1	42	2	37	321	Ground survey - Fair, TRM 0.0		Barrett et al. (1985
	1984	B/10	0	0	16	0	766	Ground survey - Fair, TRM 0.0		Barrett et al. (1985
	1984	8/17	0	0	20	0	256	Bround survey - Good, TRM 0.0		Barrett et al. (1985
	1984	8/24	0	0	38	1	16	Ground survey ~ Good, TRM 0.0		Barrett et al. (1985
	1984	9/01	0	0	82	1	2	Ground survey - Good, TRM 0.0		Barrett et al. 11985
	1984	9/10	0	0	0	0	0	Ground survey - Fair, TRM 0.0		Barrett et al. (1985)
	1984	9/17	0	0	3	7	1	Ground survey - Good, TRM 0.0		Barrett et al. (1985
247-41-10200-2300-0010										
Sunshine Lakes										
247-41-10200-2300-3011									Note - All Question Creek and	
									Question Lake data combined.	
Question Creek	Hist								Max. count 5,970 sockeye (1957)	
	1950	7/15	0						Suspected aerial count	Kubik (1964)
	1961	7/25	0					Aerial count		Kubik (1964)
	1962	6/27	0					Aerial count		Kubik (1964)
	1963	7/07	0					Aerial count		Kubik (1964)
	1973	9/28			59			Ground survey	Index area	Watsjold (1974)
	1974				3			Ground survey	Index area	Watsjold (1975)
	1975	9/23			111			Bround survey	Index area	Watsjold (1976)
	1976	9/28			126			Ground survey	Index area	Watsjold (1977)
	1 <del>9</del> 77				87			Ground survey	Index area	Watsjold (1978)
	1978				45			Ground survey	Index area	Watsjold (1979)
	1979				384			Ground survey	Index area	Watsjold (1980)
	1980				321			Ground survey	Index area	Watsjold (1981)
	1981				230			Ground survey	Index area	Bentz (1982)
	1982				397					Bentz (1983)
	1984	9/28			320					Barrett et al. (1985
	1984	9/29			26			Ground survey - Excellent, TRN 0.0		Barrett et al. (1985
247-41-10200-2300-3011-0010										
Question Lake									Note - See Question Creek.	
247-41-10200-2300-3011-4016										
Answer Creek	1950	7/15	0						Suspected aerial count	Kubik (1964)
	1982				24					ADF&G (1983b)
	1984	9/28			60				Middle fork only	Barrett et al. (1985)

OCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUN	PINK	SURVEY METHOD	CONHENTS	DATA SOURCE
47-41-10200-2320 Birch Creek Slough										
47-41-10200-2320-3010										
Birch Creek	Hist								Large numbers of sockeye observed 1953; few coho, some chums; 75,000 pinks (1969)	
	1961	6/27	80					Aerial count	prints (1727)	Stefanich (1962)
	1962	٠, ٠,	0					Aerial count		Kubik (1963)
	1963	7/07	ě					Aerial count		Kubik (1964)
	196B	9/16	•		125			Ground survey	Index area, total estimate = 300 coho	Redick (1969a)
	1969	10/01			142			* Ground survey	Index area, total estimate = 175 coho	Redick (1970)
	1970	9/17			201					ADF&6 (1982)
	1970	9/23			206			Ground survey	Index area	Redick (1971)
	1971	9/27			138			Ground survey	Index area	Watsjold (1972)
	1972	8/18		107	15	10	3051			ADF&G (1982)
	1972	9/28			68		5051	Ground survey	Index area	Watsjold (1973)
	1973	B/31		16	••		,	Boat survey	Upper Birch Creek	Barrett (1973a)
	1973	9/07						Boat survey	Upper Birch Creek	Barrett (1973a)
,	1973	9/16		5				Boat survey	Upper Birch Creek	Barrett (1973a)
	1973	9/26		-	106			Ground survey	Index area	Watsjold (1974)
	1974	8/23	0	0	0	0	0	Boat survey		Barrett (1975a)
	1974	8/29	Ŏ	Ô	ò	Ŏ	Ğ	Boat survey		Barrett (1975a)
	1974	9/04	•	2	ě	•	•	Boat survey		Barrett (1975a)
	1974	9/16	0	ō	Õ	0	0	Boat survey		Barrett (1975a)
	1974	9/26	•	•	49	•	•	Ground survey	Index area	Watsjold (1975)
	1975	8/21		55			2			ADF&6 (1982)
	1975	8/26		8			-			ADF&6 (1982)
	1975	8/29		11	10					ADF&6 (1982)
	1975	9/05		ï	15		1			ADF&G (1982)
	1975	9/23	0		0	٥				ADF&G (1982)
	1975	7723	•	•	92	•	•	Ground survey	Index area	Watsjold (1976)
	1976	8/24		49			19	5. 2011 Jan 10 y		ADF&6 (1982)
	1976	8/27		25	11		"			ADF&6 (1982)
	1976	U. Z.		••	40		•			ADF&6 (1982)
	1976				27			Ground survey	Index area	Watsjold (1977)
	1977				96			Ground survey	Index area	Watsjeld (1978)
	1978	9/11		299	146					ADF&G (1982)
	197B			•	103			Ground survey	Index area	Watsjold (1979)
	1979	8/28		100	25					ADF&6 (1982)
	1979	0,10		•••	120			Ground survey	Index area	Watsjold (1980)
	1980				121			Ground survey	Index area	Watsjold (1981)
	1981	8/25		150	10	10			CHARA SI AN	ADF&G (1982)
	1981	0,14		104	121	••		Ground survey	Index area	Bentz (1982)
	1982				41			Ground survey	Index area	Bentz (1983)

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LOCATION CODE / STREAM NAME	YEAR	DATE	CHINDOK	SOCKEYE	СОНО	CHUM	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
	1984	7/23	0	0	0	0	0	Ground survey - Excellent, TRM 0.0		Barrett et al. (1985
	1984	7/29	9	174	0	0	132	Ground survey - Good, TRM 0.0		Barrett et al. 11985
	1984	8/02	9	50	0	0	115	Ground survey - Good, TRM 0.0		Barrett et al. (1985
	1984	8/09	16	0	0	0	904	Ground survey - Good, TRM 0.0		Barrett et al. (1985
	1784	8/16	9	0	0	0	551	Ground survey ~ Bood, TRM 0.0		Barrett et al. (1985
	1984	8/23	1	3	. 0	٥	72	Ground survey - Excellent, TRM 0.0		Barrett et al. (1985
	1984	9/02	0	1	0	0	56	Ground survey - Fair, TRM 0.0		Barrett et al. 11985
	1984	9/09	0	0	0	0	62	Ground survey - Good, TRM 0.0	•	Barrett et al. (1985
	1984	9/16	0	0	0	0	71	Ground survey ~ Good, TRM 0.0		Barrett et al. (1985
	1984	9/25	0	0	0	0	4	Ground survey - Good, TRM 0.0		Barrett et al. (1985
247-41-10200-2320-3010-0010										
Fish Lake	Hist	•							Max. counts 500 sockeye (1953)	
(Birch Creek)	1972	8/18		107				Boat survey		Barrett (1973a)
	1973	8/21		251				Boat survey		Barrett (1973a)
	1973	8/31		205				Boat survey		Barrett (1973a)
	1973	9/07		150				Boat survey		Barrett (1973a)
	1973	9/16		158				Boat survey		Barrett (1973a)
	1974	8/23		43				Boat survey		Barrett (1975a)
	1974	B/29		95				Boat survey		Barrett (1975a)
	1974	9/04		67				Boat survey		Barrett (1975a)
	1974	9/16		67				Boat survey		Barrett (1975a)
	1975	8/21		70						ADF&6 (1982)
	1975	8/26		93						ADF&G (1982)
	1975	8/29		113						ADF&G (1982)
	1975	9/05		132						ADF&G (1982)
	1975	9/23		46						ADF&6 (1982)
	1975			187				Boat survey	Peak survey count	Friese (1976a)
	1976	8/24		82	17		48	Boat survey		friese (1976b)
	1976	8/27		25	11		26			ADF&G (1982)
	1976	9/03		47			7			ADF&G (1982)
	1976	9/07		23			14			ADF&6 (1982)
	1977			611					Peak survey count	Namtvedt et al. (19)
	1978	8/22		79			42			ADF&G (1982)
	1978	9/25		242	28					ADF&G (1982)
	1978			299					Peak survey count	Waltemyer et al. (19
	1979			100					Low visibility, turbid H2O	Tarbox & Sanders (19
	1980	8/18		2100						Tarbox & Sanders (19
	1981			176						Tarbox et al. (1983)
	1982			280						ADF&G (1985c)-SUSONI
	1984	8/08		26			10055			ADF&G (1985c)-SUSONE
	1984	9/15		190			20020			ADF&G (1985c)-SUSON

247-41-10200-2320-3010-4010

LOCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
247-41-10200-2341										
Trapper Creek	1984	7/23	15	0	0	0	0	Ground survey - Excellent, TRM 0.0		Barrett et al. (196
•	1984	7/28	2	45	0	5	234	Ground survey - Fair, TRM 0.0		Barrett et al. (19
	1984	8/01	0	0	0	0	70	Ground survey - Fair, TRM 0.0		Barrett et al. (19
	1984	8/08	1	0	2	46	224	Ground survey - Fair, TRM 0.0		Barrett et al. (19
	1984	B/15	2	0	4	41	313	Ground survey - Fair, TRM 0.0		Barrett et al. (19
	1984	B/22	0	2	8	21	19	Ground survey - Poor, TRM 0.0		Barrett et al. (19
	1984	B/30	0	0	0	3	0	Ground survey - Poor, TRM 0.0		Barrett et al. (19
	1984	9/08	0	0	В	11	14	Ground survey - Good, TRN 0.0		Barrett et al. (19
	1984	9/15	0	0	` 21	14	7	Ground survey - Excellent, TRM 0.0		Barrett et al. (19
	1984	9/24	0	0	3	13	2	Ground survey - Good, TRM 0.0		Barrett et al. (19
247-41-10200-2355 +									Note - TALK B-1	
Cache Creek #	1984	7/23	0	0	0	0	0	Bround survey - Excellent, TRM 0.0		Barrett et al. (19
	1984	7/28	0	0	0	0	0	Ground survey - Good, TRM 0.0		Barrett et al. (19
	1984	B/01.	0	0	0	0	0	Ground survey - Good, TRM 0.0		Barrett et al. (19
	1984	B/08	0	0	0	0	0	Ground survey - Good, TRM 0.0		Barrett et al. (19
	1984	8/15	0	12	0	29	17	Ground survey - Good, TRM 0.0		Barrett et al. (19
	1984	8/22	0	0	0	3	14	Ground survey - Good, TRM 0.0		Barrett et al. (19
	1984	B/30	0	0	3	1	13	Ground survey - Poor, TRM 0.0		Barrett et al. (19
	1984	9/08	0	0	6	17	11	Ground survey - Good, TRM 0.0		Barrett et al. (19
	1984	9/15	0	0	13	37	0	Ground survey - Good, TRM 0.0		Barrett et al. (19
	1984	9/24	0	0	1	22	0	Ground survey - Good, TRM 0.0		Barrett et al. (19
247-41-10200-2391										
Whiskers Creek	1974	0/30			27			Ground, boat and aerial counts combined	Peak count	Barrett (1974)
	1975	8/04	22							Friese (1975)
	1981	B/05 /	0	0	0	0	0	Ground survey - Poor, 0.5 ei.		ADF&G (1981)
	1981	8/11	0	0	8	0	0	Ground survey - Poor, 0.25 mi.		ADF&G (1981)
	1981	9/2[	0	0	43	0	0	Bround survey - Fair, 0.5 mi.		ADF&G (1981)
	1981	8/29	0	0	50	0	0	Ground survey - Good, 0.5 mi.		ADF&G (1981)
	1981	9/06	0	0	70	0	0	Ground survey - Good, 0.5 mi.		ADF&G (1981)
	1981	9/17	0	0	9	1	1	Ground survey - Fair, 0.5 mi.		ADF&G (1981)
	1981	9/24	0	0	16	0	1	Ground survey - Good, 0.5 mi.		- ADF&G (1981)
	1981	10/02	0	0	11	0	0	Ground survey - Good, 0.5 mi.		ADF&G (1981)
	1982	8/ <b>0</b> B	0	0	5	0	73	Ground survey - Excellent, 0.5 mi,		ADF&G (1983b)
	1982	8/13	0	0	39	0	27	Ground survey - Excellent, 0.5 mi.		ADF&G (1983b)
	1982	8/18	0	0	82	0	47	Ground survey - Poor, 0.25 mi.		ADF&G (1983b)
	1982	B/23	0	0	176	0	138	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	9/21	0	0	0	0	0	Ground survey - Poor, 0.5 mi.		ADF&G (1983b)
	1982	9/24	0	0	39	0	0	Ground survey - Good, 10.0 mi.		ADF&G (1983b)
	1982	10/25	0	0	0	0	0	Ground survey - Good, 0.8 mi.		ADF&G (1983b)

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OCATION CODE / STREAM NAME	YEAR	DATE	CH1NOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD CO	MMENTS DATA SOURCE
	1983	7/15	3	0	0	0	0	Bround survey - Excellent, 0.25 mi.	Barrett et al. (19)
	1983	7/25	0	0	0	0	0	Ground survey - Excellent, 0.25 ei.	Barrett et al. (19)
	1983	8/04	3	0	0	0	0	Ground survey - Poor, 0.25 mi.	Barrett et al. (19)
	1983	9/12	0	0	4	0	0	Ground survey - Poor, 0.25 mi.	Barrett et al. (19)
•	1983	8/26	0	0	5	0	0	Ground survey - Poor, 0.25 ei.	Barrett et al. (19)
	1983	9/05	0	0	55	0	0	Bround survey - Excellent, 0.25 mi.	Barrett et al. (19
	1983	9/09	0	0	50	0	0	Ground survey - Fair, 0.25 ai.	Barrett et al. (19)
	1993	9/10	0	0	0	0	0	Ground survey - Poor, 0.25 mi.	Barrett et al. (19)
	1983	9/19	0	0	32	0	0	Bround survey - Excellent, 0.25 mi.	Barrett et al. (19)
	1983	9/24	0	0	115	0	0	Aerial count, helicopter - Excellent, 8.0 mi.	Barrett et al. (19)
	1983	10/01	0	0	0	0	0	Aerial count, helicopter - Poor, 8.0 mi.	Barrett et al. (19)
	1983	10/08	0	0	6	0	0	Aerial count, helicopter - Good, 8.0 mi.	Barrett et al. (19
	1984	7/22	67	0	0	0	0	Aerial count, helicopter - Fair, 8.0 mi.	Barrett et al. (19
	1984	9/01	0	0	90	0	0	Aerial count, helicopter - Good, 8.0 mi.	Barrett et al. (19)
	1984	9/08	0	0	301	0	0	Aerial count, helicopter - Good, B.O mi.	Barrett et al. (19)
	1984	9/15	0	0	33	0	0	Aerial count, helicopter - Fair, 8.0 mi.	Barrett et al. (19)
	1984	9/22	0	0	217	0	0	Aerial count, helicopter - Excellent, 8.0 mi.	Barrett et al. (190
•	1984	9/29	0	0	273	0	0	Aerial count, helicopter - Good, 8.0 mi.	Barrett et al. (19)
	1984	10/13	0	0	46	0	0	Aerial count, helicopter - Excellent, 8.0 mi.	Barrett et al. (19)
	1984	10/14	0	0	132	0	0	Aerlal count, helicopter - Good, 8.0 mi.	Barrett et al. (19)
	1984	7/11	0	0	0	0	0	Bround survery - Excellent, 0.5 mi.	Barrett et al. (198
	1984	7/22	40	0	0	0	0	Ground survery - Excellent, 0.5 ai.	Barrett et al. (19)
	1984	7/27	1	0	0	0	41	Ground survery - Fair, 0.5 ai.	Barrett et al. (196
	1984	8/02		0	0	0	67	Ground survery - Fair, 0.5 ai.	Barrett et al. (19)
	1984	8/09	0	0	. 6	0	174	Ground survery - Fair, 0.5 ai.	Barrett et al. (19)
	1984	8/15	0	0	10	0	293	Ground survery - Excellent, 0.5 mi.	Barrett et al. (196
	1984	9/26	0	0	0	0	10	Bround survery - Poor, 0.5 ai.	Barrett et al. [19]
	1994	9/06	0	0	45	0	16	Ground survery - Excellent, 0.5 ai.	Barrett et al. (19)
	1984	9/17	0	0	117	0	0	Ground survery - Good, 0.5 ai.	Barrett et al. (196
	1984	9/24	0	0	18	0	0	Ground survery - Bood, 0.5 ai.	Barrett et al. (198
	1984	9/30	0	0	22	0	0	Bround survery - Excellent, 0.5 ai.	Barrett et al. (196
	1984	10/07	0	0	38	0	0	Ground survery - Excellent, 0.5 mi.	Barrett et al. (196
47-41-10200-2391-3021									
47-41-10200-2420								Note - TALK I	9-1
Chase Creek #		6/1648/21		1				Ground, boat and aerial counts combined Peak count	Barrett (1974)
	1974	9/01			40			Ground, boat and aerial counts combined Peak count	Barrett (1974)
	1981	8/04	0	0	0	0	5	Ground survey - Good, 0.75 ai.	ADF&G (1981)
	1981	B/11	0	0	23	1	38	Ground survey - Good, 0.75 mi.	ADF&G (1981)
	1981	8/17	0	0	0	0	0	Ground survey - Fair, 0.75 mi.	ADF&B (1981)
	1981	8/23	0	0	13	0	0	Ground survey - Excellent, 0.75 mi.	ADF&6 (1981)

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	1981	B/29	0	0	49	0	0	Ground survey - Good, 0.75 mi.		ADF&G (1981)
	1981	9/07	0	0	80	1	0	Ground survey - Excellent, D.75 mi.		ADF&6 (1981)
	1981	9/14	0	0	62	1	0	Ground survey - Good, 0.75 mi.		ADF&G (1981)
	1981	9/24	0	0	34	0	0	Bround survey - Good, 0.75 mi.		ADF&G (1981)
	1981	10/02	0	0	21	0	0	Ground survey - Bood, 0.75 mi.		ADF16 (1981)
	1982	B/QB	0	0	0	0	4	Ground survey - Excellent, 0.75 mi.		ADF&G (1983b)
	1982	8/11	15	D	0	0	96	Ground survey - Good, 1.0 mi.		ADF&G (1983b)
	1982	8/20	2	0	0	0	107	Ground survey - Excellent, 1.0 mi.		ADF&6 (1983b)
	1982	8/28	2	0	0	0	62	Ground survey - Excellent, 1.0 mi.		ADF&6 (1983b)
	1982	9/06	0	0	0	0	4	Ground survey - Good, 0.25 mi.		ADF&G (1983b)
	1982	9/17	0	0	1	0	0	Ground survey - Good, 0.25 mi.		ADF&G (1983b)
	1982	9/21	0	0	2	0	0	Ground survey - Excellent, 0.75 mi.		ADF&G (1983b)
	1982	9/27	0	0	36	0	0	Ground survey - Excellent, 0.25 mi.		ADF&B (1983b)
	1982	10/25	0	0	0	0	0	Bround survey - Fair, 0.5 ei.		ADF&B (1983b)
	1983	7/21	0	0	0	0	0	Ground survey - Excellent, 0.75 mi.		Barrett et al. (19
	1983	7/22	0.	0	0	0	0	Ground survey - Excellent, 1.0 mi.		Barrett et al. (19
	1983	B/01	0	0	0	0	0	Ground survey - Excellent, 0.75 mi.		Barrett et al. (19
	1983	B/12	0	0	0	0	6	Ground survey - Good, 0.75 mi.		Barrett et al. (19
	1983	B/27	0	0	0	0	0	Ground survey - Excellent, 0.75 ai.		Barrett et al. (15
	1983	9/06	0	0	0	0	0	Ground survey - Excellent, 0.75 mi.		Barrett et al. (19
	1983	9/19	0	0	0	0	0	Ground survey - Excellent, 0.75 ai.		Barrett et al. (19
	1983	9/24	0	0	12	0	0	Aerial count, helicopter - Excellent, 1.2 ei.	•	Barrett et al. (19
	1983	10/01	0	0	6	0	0	Aerial count, helicopter - Good, 1.2 mi.		Barrett et al. (19
	1983	10/01	0	0	0	0	0	Ground survey - Excellent, 0.75 mi.		Barrett et al. (19
	1983	10/0B	0	` 0	1	0	0	Aerial count, helicopter - Excellent, 1.2 mi.		Barrett et al. (19
	1983	10/08	0	0	1	0	0	Ground survey - Excellent, D.75 mi.		Barrett et al. (19
	1984	9/01	0	0	120	0	0	Aerial count, helicopter - Good, 2.0 mi.		Barrett et al. (19
	1984	9/0B	0	0	95	0	0	Aerial count, helicopter - Good, 2.0 mi.		Barrett et al. (19
	1984	9/15	0	0	70	0	0	Aerial count, helicopter - Poor, 2.0 mi.	,	Barrett et al. (19
	1984	9/22	0	0	43	0	0	Aerial count, helicopter - Good, 2.0 mi.		Barrett et al. (19
	1984	9/29	0	0	74	0	0	Aerial count, helicopter - Good, 2.0 mi.		Barrett et al. (19
	1984	10/06	0	0	34	0	0	Aerial count, helicopter - Good, 2.0 mi,		Barrett et al. (19
	1984	10/13	0	0	26	0	0	Aerial count, helicopter - Excellent, 2.0 mi.		Barrett et al. (19
	1984	7/12	0	0	0	0	0	Ground survey - Excellent, 0.75 ei.		Barrett et al. (19
	1984	7/27	0	0	Ö	0	41	Ground survey - Excellent, 0.75 mi.		Barrett et al. (19
	1984	B/02	i	0	Ö	Ŏ	49	Ground survey - Fair, 0.75 mi.		Barrett et al. (19
·	1984	B/09	2	0	2	0	68	Ground survey - Good, 0.75 mi.		Barrett et al. (19
	1984	8/16	3	0	8	i	438	Bround survey - Good, 0.75 ai.		Barrett et al. (19
	1984	8/28	ŏ	Ŏ	239	ò	140	Bround survey - Excellent, 0.75 mi.		Barrett et al. (19
	1984	9/04	ŏ	0	202	0	116	Ground survey - Excellent, 0.75 ai.		Barrett et al. (15
	1984	9/17	Ŏ	٥	85	ő	110	Ground survey - Excellent, 0.75 mi.		Barrett et al. 119
	1984	9/24	0	0	44	0	0	Ground survey - Good, 0.75 mi.		Barrett et al. (15

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LOCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD	CONHENTS	DATA SOURCE
	1984	9/30	0	0	42	0	0	Ground survey - Excellent, 0.75 mi.		Barrett et al. (198
	1984	10/07	0	0	32	0	0	Ground survey - Excellent, 0.75 mi.		Barrett et al. (1985
	1984	10/14	0	0	10	0	0	Ground survey ~ Excellent, 0.75 ai.		Barrett et al. (1985
247-41-10200-2426 +									Note - TALK B-1	
Slash Creek +	1982	9/21	0	0	ė	0	0	Ground survey - Excellent, 0.75 mi.		ADF&G (1983b)
	1982	10/25	0	0	0	0	0	Ground survey - Good, O.1 mi.		ADF46 (1983b)
	1983	7/27	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (198
	1983	9/05	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (198
	1983	B/15	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (198
	1983	9/22	0	0	0	0	0	Bround survey - Excellent, 0.25 ai.		Barrett et al. (198
	1983	9/29	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (198
	1983	9/05	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (198
	1983	9/12	0	0	0	0	0	Ground survey - Excellent, 0.25 ai.		Barrett et al. (198
	1983	9/19	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (198
	1983	10/02	0	0	2	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (198
	1984	7/23	0	0	0	0	0	Ground survey - Excellent, 0.25 ai.		Barrett et al. (198
	1984	7/30	Ō	Ō	Ō	Ö	Ō	Ground survey - Fair, 0.25 ai.		Barrett et al. (196
	1984	8/07	0	Ö	0	0	0	Ground survey - Excellent, 0.25 ai.		Barrett et al. (198
	1984	8/14	0	0	0	0	0	Ground survey - Excellent, 0.25 ai.		Barrett et al. (198
	1984	8/21	0	0	0	0	0	Ground survey - Excellent, 0.25 ai.		Barrett et al. (198
	1984	8/27	0	0	0	0	3	Ground survey - Fair, 0.25 mi.		Barrett et al. 1198
	1984	9/05	0	0	Ò	0	0	Greend survey - Good, 0.25 ai.		Barrett et al. (198
	1984	9/16	0	0	0	0	0	Ground survey - Good, 0.25 ai.		Barrett et al. (198
	1984	9/24	0	0	0	0	0	Ground survey - Good, 0.25 mi.		Barrett et al. (198
	1984	9/30	0	0	5	0	0	Ground survey - Excellent, 0.25 ai.		Barrett et al. (198
	19B4	10/07	0	0	0	0	0	Bround survey - Excellent, 0.25 mi.		Barrett et al. (198
247-41-10200-2435									Note - TALK C-I	
Sash Creek #	1981	9/23	0	0	141	0	0	Ground survey - Excellant, 0.75 ai.	•	ADF&6 (1981)
	1981	9/28	0	0	117	0	0	Ground survey - Excellent, 0.75 ai.		ADF46 (1981)
	1982	B/07	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	8/19	0	0	0	0	0	Bround survey - Excellent, 0.25 ai.		ADF&G (1983b)
	1982	9/01	0	0	0	0	0	Ground survey - Excellent, 0.25 ai.		ADF&G (1983b)
	1982	9/07	0	0	0	0	0	Bround survey - Excellent, 0.25 ai.		ADF&6 (1983h)
	1982	9/23	0	0	74	0	0	Ground survey - Excellent, 1.0 mi.		ADF&6 (1983b)
	1982	9/27	0	0	67	0	0	Ground survey - Excellent, 1.0 mi.		ADFRG (1983b)
	1982	10/02	0	0	22	0	0	Bround survey - Excellent, 1.0 mi.		ADF&6 (1983b)
	1982	10/25	0	0	0	0	0	Ground survey - Good, 0.25 ai.		ADF46 (19836)
	1993	7/27	0	0	0	0	0	Ground survey - Excellent, 0.75 ai.		Barrett et al. (198
	1983	8/05	0	٥	Ō	0	•	Ground survey - Excellent, 0.75 mi.		Barrett et al. (198-

LOCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
***************************************	1983	8/15	0	0	0	0	0	Ground survey - Excellent, 0.75 mi.		Barrett et al. (1984)
	1983	8/22	0	0	0	0	0	Ground survey - Excellent, 0.75 mi.		Barrett et al. (1984)
	1983	8/29	0	0	0	0	0	Ground survey - Excellent, 0.75 mi.		Barrett et al. (1984)
	1983	9/05	0	0	0	0	0	Ground survey - Excellent, 0.75 mi.		Barrett et al. (1984)
	1983	9/12	0	0	0	0	0	Ground survey - Excellent, 0.75 mi.		Barrett et al. (1984)
	1983	9/19	0	0	19	0	0	Ground survey - Excellent, 0.75 mi.		Barrett et al. (1984)
	1983	10/02	0	0	16	0	0	Ground survey - Excellent, 0.75 mi.		Barrett et al. (1984)
	1984	9/01	0	0	14	0	0	Aerial count, helicopter - Good, 3.0 mi.		Barrett et al. (1985)
	1984	7/23	0	0	0	0	0	Ground survey - Excellent, 3.0 mi.		Barrett et al. (1985)
	1984	7/30	0	0	0	0	0	Ground survey - Fair, 3.0 mi.		Barrett et al. (1985)
	1984	8/07	0	0	0	0	0	Ground survey - Excellent, 3.0 mi.		Barrett et al. (1985
	1984	8/14	0	0	0	0	0	Ground survey - Excellent, 3.0 mi.		Barrett et al. (1985
	1984	8/21	0	0	0	0	6	Ground survey - Excellent, 3.0 mi.		Barrett et al. (1985
	1984	8/27	0	0	0	0	0	Ground survey - Poor, 3.0 mi.		Barrett et al. (1985
	1984	9/05	0	0	20	0	0	Ground survey - Good, 3.0 mi.		Barrett et al. (1985
	1984	9/16	0	0	61	0	0	Ground survey - Good, 3.0 mi.		Barrett et al. (1985
	t 984	9/24	0	0	234	0	0	Ground survey - Good, 3.0 mi.		Barrett et al. (1985
	1984	9/30	0	0	192	0	0	Ground survey - Excellent, 3.0 mi.		Barrett et al. (1985
	1984	10/07	0	0	127	0	0	Ground survey - Excellent, 3.0 mi.		Barrett et al. (1985
	1984	10/14	0	0	71	0	0	Bround survey - Excellent, 3.0 mi.		Barrett et al. (1985
247-41-10200-2440									•	
Lane Creek	Hist								Chinook present	
	1958	7/17	5						Suspected aerial count	Kubik (1964)
	1961	6/27	0					Aerial count		Kubik (1964)
	1962	7/19	0					Aerial count		Kubik (1964)
	1974	8/09					82	Ground, boat and merial counts combined	Peak count	Barrett (1974)
	1975	8/17					106		Peak count	Friese (1975)
	1975	8/17				3				ADF&G (1985c)-SUSONE
	1981	7/27	22					Aerial count, helicopter - Fair		ADF&G (1981)
	1981	7/28	40					Aerial count, helicopter - Good		ABF&6 (1981)
	1981	8/19	0	0	0	9	53	Ground survey - Fair, 0.5 mi.		ADF&G (1981)
	1981	8/23	0	0	0	76	291	Ground survey - Excellent, 1.0 mi.		ADF&G (1981)
	1981	B/29	0	0	0	17	43	Ground survey - Excellent, 0.5 mi.		ADF&G (1981)
	1981	9/05	0	0	0	44	0	Ground survey - Excellent, 0.5 mi.		ADF&G (1981)
	1981	9/13	0	•	0	24	6	Ground survey - Excellent, 0.5 mi.		ADF&6 (1981)
	1981	9/21	0	0	3	1	1	Ground survey - Excellent, 0.5 mi.		ADF&6 (1981)
	1981	9/28	0	0	1	0	0	Ground survey - Excellent, 0.5 mi.		ADF&G (1981)
	1982	7/12	47	0	0	0	0	Ground survey - Excellent, 0.7 mi.		ADF&G (1983b)
	1982	7/28	41	0	0	0	0	Ground survey - Fair, 2.5 ai.		ADF&G (1983b)
	1982	8/02	1	0	0	1	0	Ground survey - Fair, 0.25 mi.		ADF&G (1983b)
	1982	8/07	1	0	0	1	504	Ground survey - Excellent, 0.5 mi.		ADF&6 (1983b)

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OCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
	1982	8/19	0	0	0	4	577	Ground survey - Excellent, 0.5 mi.		ADF&6 (1983b)
	1982	8/25	0	0	0	11	576	Ground survey - Excellent, 0.5 mi.		ADF&G (1983b)
	1982	8/31	0	0	0	11	78	Ground survey - Good, 0.5 mi.		ADF&6 (1983b)
	1982	9/06	0	0	1	5	0	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	9/14	0	0	5	1	0	Ground survey - Excellent, 0.5 mi.		ADF&G (1983b)
	1982	9/21	0	0	1	0	0	Ground survey - Fair, 0.5 mi.		AÐF&G (1983b)
	1982	10/25	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1983	7/12	6	0	0	0	0	Bround survey - Excellent, 1.5 mi.		Barrett et al. (1984
	1983	7/21	6	0	0	0	0	Ground survey - Excellent, 1.5 mi.		Barrett et al. (1984
	1983	7/28	0	0	0	0	0	Ground survey - Excellent, 0.5 mi.		Barrett et al. (1984
	1983	B/02	12	0	0	0	0	Aerial count, helicopter - Excellent, 1.5 mi.		Barrett et al. (1984
	1983	8/05	6	0	0	0	5	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1984
	1983	8/15	0	0	0	6	28	Ground survey - Excellent, 0.25 ai.		Barrett et al. (1984
	1983	8/22	0	0	0	3	28	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1984
	1983	B/29	0	0	0	1	14	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1984
	1983	9/05	0	0	0	0	0	Ground survey ~ Excellent, 0.25 mi.		Barrett et al. (1984
	1983	9/12	0	0	0	0	0	Ground survey - Excellent, 0.25 ai.		Barrett et al. (1984
	1983	9/19	0	0	2	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1984
	1983	9/24	0	0	1	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (198
	1983	10/01	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1984
	1983	10/08	0	0	0	0	0	Aerial count, helicopter - Excellent, 2.0 mi.		Barrett et al. (1984
	1984	7/22	23	0	0	0	0	Aerial count, helicopter - Excellent, 5.0 ai.		Barrett et al. (1985
	1984	7/23	4	0	0	0	0	Aerial count, helicopter - Excellent, 5.0 mi.		Barrett et al. (1985
	1984	9/29	0	0	24	0	0	Aerial count, helicopter - Good, 5.0 mi.		Barrett et al. (1985
	1984	10/06	0	0	17	0	0	Aerial count, helicopter - Good, 5.0 mi.		Barrett et al. (1985
	1984	7/30	6	0	0	6	35	Ground survey - Good, 0.25 mi.		Barrett et al. (1985
	1984	8/07	1	` 0	0	25	686	Ground survey ~ Fair, 0.25 mi.		Barrett et al. (1985
	1984	8/14	0	0	0	16	1184	Ground survey - Good, 0.25 mi.		Barrett et al. (1985
	1984	8/21	0	0	3	31	B29	Ground survey - Good, 0.25 ai.		Barrett et al. (1985
	1984	8/27	Ō	Ō	Ō	0	0	Ground survey - Poor, 0.25 mi.	·	Barrett et al. (1985
	1984	9/05	Ŏ	Ö	ò	2	ŏ	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1985
	1984	9/16	ŏ	Ŏ	i	0	٥	Ground survey - Good, 0.25 ai.		Barrett et al. (1985
	1984	9/24	ŏ	ŏ	2	ň	۵	Ground survey ~ Good, 0.25 ai.		Barrett et al. (1985
	1984	9/30	ŏ	ŏ	2	Ŏ	٨	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1985
	1984	10/05	o	ō	8	0	Ŏ	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1985
17-41-10200-2441								Note -	TALK C-1	
Clyde Creek #	1984	8/07	0	0	8	0	4	Ground survey - Good, 0.25 mi.		Barrett et al. (1985
	1984	8/14	ŏ	Ŏ	8	Õ	10	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1985
	1984	B/21	ŏ	ŏ	8	Õ	34	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1985
	1984	8/27	ŏ	ō	B	0	5	Ground survey - Fair, 0.25 mi.		Barrett et al. (1985
	1984	9/05	0	0	8	0	0	Ground survey - Good, 0.25 ai.		Barrett et al. (1985
	1984	9/16	0	0	A	٨	0	Ground survey - Good, 0.25 ai.		Barrett et al. (1985
	1704	7/10	V	v		v	V	OF DAME BUT YEY - DOUB, V.23 B1.		Darrett et al. (176;

DCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUN	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
	1984	9/24	0	0	8	0	0	Ground survey - Good, 0.25 mi.		Barrett et al. (1985)
	1984	9/30	0	0	В	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1985)
47-41-10200-2443 #									Note - TALK E-I	
Maggot Creek *	1984	8/07	0	0	0	0	107	Ground survey - Good, 0.25 mi.		Barrett et al. (1985)
	1984	8/14	0	0	0	0	68	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1985)
	1984	B/21	0	0	0	0	48	Ground survey - Excellant, 0.25 mi.		Barrett et al. (1985)
	1984	8/27	0	0	0	0	0	Ground survey - Poor, 0.25 mi.		Barrett et al. (1985)
	1984	9/05	0	0	0	0	0	Ground survey - Good, 0.25 mi.		Barrett et al. (1985)
	1984	9/16	0	0	0	0	0	Ground survey - Good, 0.25 mi.		Barrett et al. (1985)
	1984	9/24	0	0	0	0	0	Ground survey - Good, 0.25 mi.		Barrett et al. (1985)
7-41-10200-2444									Note - TALK C-1	
Lower McKenzie Creek *	1981	B/23	0	1	56	14	0	Ground survey ~ Excellent, 0.5 mi.		ADF&G (1981)
	1981	8/29	0	0	0	12	0	Ground survey - Excellent, 0.5 mi.		ADF&G (1981)
	1981	9/05	0	0	0	2	0	Ground survey - Excellent, 0.5 mi.		ADF&G (1981)
	1981	9/13	0	0	6	1	0	Ground survey - Excellent, 0.5 mi.		ADFLG (1981)
	1981	9/21	0	0	2	0	0	Ground survey - Excellent, 0.5 mi.		ADF&G (1981)
	1981	9/28	0	0	2	1	0	Ground survey - Excellent, 0.5 mi.		ADF&G (1981)
	1982	B/07	0	0	0	0	0	Bround survey - Excellent, 0.25 ai.		ADF&G (1983b)
	1982	8/13	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		ADFLG (1983b)
	1982	8/19	0	0	0	0	23	Ground survey - Excellant, 0.25 mi.		ADF&G (1983b)
	1982	8/25	0	0	0	0	6	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	8/31	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	9/06	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	9/14	0	0	133	0	0	Ground survey - Excellent, 1.5 mi.		ADF&G (19836)
	1982	9/21	0	0	103	0	0	Ground survey - Good, 1.5 mi.		ADF&G (1983b)
	1982	9/27	0	0	90	0	0	Ground survey - Excellent, 1.0 mi.		ADF&G (19836)
	1982	10/02	0	0	34	0	0	Ground survey - Excellent, 1.0 mi.		ADF&G (1983b)
	1982	10/25	0	0	0	0	0	Ground survey - Excellent, 0.25 ai.		ADFEG (19836)
	1983	7/27	0	0	0	0	0	Ground survey - Excellent, 0.75 mi.		Barrett et al. (1984)
	1983	8/05	0	0	0	0	0	Ground survey - Excellent, 0.75 mi.		Barrett et al. (1984)
	1983	8/15	0	0	Ō	1	17	Bround survey - Excellent, 0.75 mi.		Barrett et al. (1984
	1983	8/22	0	0	0	i	5	Ground survey - Excellent, 0.75 mi.		Barrett et al. (1984
	1983	B/29	Ò	ò	ō	Ò	1	Ground survey - Excellent, 0.75 mi.		Barrett et al. (1984
	1903	9/05	Ò	ō	0	Ö	Ŏ	Ground survey - Excellent, 0.75 mi.		Barrett et al. (1984
	1983	9/12	ō	Ŏ	ō	ō	٥	Bround survey - Excellent, 0.75 mi.		Barrett et al. (1984
	1983	9/19	ŏ	ŏ	4	Õ	ő	Ground survey - Excellent, 0.75 mi.		Barrett et al. (1984
	1983	9/24	Ŏ	ŏ	5	ō	٥	Ground survey - Fair, 3.0 mi.		Barrett et al. (1984
	1983	10/01	ă	ŏ	18	٥	۵	Ground survey - Excellent, 0.75 mi.		Barrett et al. (1984
	1983	10/08	ŏ	ŏ	.0	Ŏ	۵	Aerial count, helicopter - Excellent, 2.4	) ei.	Barrett et al. (1984
	1983	10/0B	ů	Ŏ	, ,	٥	0	Bround survey - Excellent, 0.75 mi.		Barrett et al. (1984)

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LOCATION CODE / STREAM NAME

YEAR

DATE

CHINDOK

SOCKEYE

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PINK

SURVEY NETHOD

COMMENTS

DATA SOURCE

Ground survey - 6000, 0.25 mi.

Bround survey - Excellent, 0.25 mi.

Barrett et al. (1985)

Barrett et al. (1985)

1984

1984

6/14

8/21

OCATION CODE / STREAM NAME	YEAR	DATE	CHINDOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD	CONMENTS	DATA SOURCE
	1984	8/27	0	0	0	0	0	Ground survey - Poor, 0.25 ml.	B-+	Barrett et al. (198
	1984	9/05	0	0	0	0	0	Ground survey - Good, 0.25 mi.		Barrett et al. (1985
	1984	9/16	0	0	0	0	0	Ground survey - Good, 0.25 mi.		Barrett et al. (1985
	1984	9/24	0	0	0	0	0	Ground survey - Poor, 0.25 mi.		Barrett et al. (1985
47-41-10200-2454 *									Note - TALK C-1	
Little Portage Creek *	1982	8/07	0	0	0	0	40	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	8/13	0	0	0	0	140	Ground survey - Excellent, 0.5 mi.		ADF&G (1983b)
	1982	8/19	0	0	0	0	74	Ground survey - Excellent, 0.25 ai.		ADF&G (1983b)
	1982	8/25	0	0	0	31	61	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	8/31	0	0	0	5	9	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	9/06	0	0	0	25	0	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	9/14	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	9/21	0	0	6	0	0	Ground survey - Good, 0.25 mi.		ADF&G (1983b)
	1982	9/27	0	0	8	0	0	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	10/02	0	0	9	0	0	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	10/25	0	0	0	0	0	Ground survey - Good, 0.1 mi.		ADF&G (1983b)
	1983	7/27	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (198-
	1983	8/05	0	o	Ŏ	Ŏ	ō	Ground survey - Excellent, 0.25 mi.		Barrett et al. (198
	1983	8/15	Ŏ	Ŏ	ō	Ŏ	Ŏ	Ground survey - Excellent, 0.25 mi.		Barrett et al. (198
	1983	8/22	0	Ō	0	Ŏ	1	Ground survey - Fair, 0.25 ai.		Barrett et al. (198
	1983	8/29	Ŏ	Ŏ	٥	Ŏ	3	Bround survey - Excellent, 0,25 mi.		Barrett et al. (198
	1983	9/05	Õ	Ŏ	ŏ	Ŏ	ŏ	Ground survey - Excellent, 0.25 mi.		Barrett et al. (198-
	1983	9/12	Ŏ	ō	ŏ	Ŏ	ň	Bround survey - Excellent, 0.25 mi.		Barrett et al. (198
	1983	9/19	ŏ	Ŏ	ŏ	Ŏ	ŏ	Ground survey - Excellent, 0,25 mi.		Barrett et al. (198-
	1983	10/01	Ŏ	Ŏ	ŏ	Ŏ	ŏ	Ground survey - Excellent, 0.25 mi.		Barrett et al. (198
	1983	10/08	ō	Ŏ	ō	Ŏ	Ŏ	Ground survey - Excellent, 0.25 mi.		Barrett et al. (198
	1984	7/23	0	0	0	0	٥	Bround survey - Excellent, 0.25 mi.		Barrett et al. (198
	1984	7/30	ŏ	ŏ	ŏ	ŏ	ĭ	Ground survey - Poor, 0.25 ai.		Barrett et al. (198)
	1984	8/07	Ŏ	Ŏ	ŏ	Ŏ	ė	Ground survey ~ Excellent, 0.25 mi.		Barrett et al. (198)
	1984	8/13	ŏ	ŏ	Ŏ	2	157	Ground survey - Poor, 0.25 mi.		Barrett et al. (198
	1984	8/20	Ŏ	0	٥	18	162	Ground survey - Good, 0.25 mi.		Barrett et al. (198
	1984	8/27	ŏ	0	Õ	0	26	Ground survey - Poor, 0.25 mi.		Barrett et al. (198)
	1984	9/05	0	0	٥	Ř	70	Ground survey - Good, 0.25 mi.		Barrett et al. (198)
	1984	9/16	0	Ŏ	Ŏ	2	•	Ground survey - Good, 0.25 mi.		Barrett et al. (198)
	1984	9/24	Ŏ	Ŏ	Ŏ	Ō	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (198
47-41-10200-2462 *									Note - TALK C-1	
Deadhorse Creek +	1962	7/19	0					Aerial count	URIE - INTU F.1	Kubik (1964)
	1981	8/11	0	0	0	0	0	Ground survey - Excellent, 0.5 mi.	RM 120.9	ADF&G (1981)
	1981	8/25	0	0	0	0	0	Ground survey - Excellent, 0.5 mi.		ADF&G (1981)
	1983	8/15	0	0	0	٥	٥	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1984

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OCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY NETHOB	COMMENTS	DATA SOURCE
**************************************	1983	8/22	0	0	0	0	0	Bround survey - Excellent, 0.25 mi.		Barrett et al. (1984)
	1983	B/30	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrott et al. (1984)
	1983	9/06	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1984)
	1983	9/13	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1984)
	1983	9/17	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1984)
	1983	9/25	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1984)
	1983	10/01	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1984)
	1993	10/08	0	0	0	0	0	Bround survey - Excellent, 0.25 mi.		Barrett et al. (1984)
	1984	8/06	0	0	0	0	41	Ground survey - Good, 0.25 mi.		Barrett et al. (1985)
	1984	0/13	0	0	0	0	337	Bround survey - Excellent, 1.5 mi.		Barrett et al. (1985)
	1984	B/20	0	0	0	0	0	Bround survey - Poor, 0.25 mi.		Barrett et al. (1985)
	1984	B/27	0	0	0	0	0	Bround survey - Poor, 0.25 mi.		Barrett et al. (1985)
	1964	9/06	0	0	0	0	0	Bround survey - Good, 0.25 ai.		Barrett at al. (1985)
	1984	9/13	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1985)
	1984	9/22	0	0	0	0	0	Bround survey - Excellent, 0.25 mi.		Barrett et al. (1985)
47-41-10200-2470										
17-41-10200-2473										
Fifth of July Creek #	1981	0/11	0	0	0	0	2	Ground survey - Excellent, 0.5 mi.		ADF&6 (1981)
	1982	B/06	3	0	0	1	17	Bround survey - Excellent, 0.5 mi.		ADF&6 (1983b)
	1982	9/12	0	0	0	0	61	Brownd survey - Excellent, 0.25 ei.		ADF&G (1983b)
	1962	8/19	0	0	0	0	113	Bround survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	8/25	0	0	0.	0	29	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	₽/31	0	0	0	0	0	Bround survey - Bood, 0.25 mi.		ADF&6 (1983b)
	1982	9/06	0	0	0	0	0	Bround survey - Excellent, 0.25 mi.		ADF&6 (1983b)
	1982	9/14	0	0	0	0	0	Ground survey - Bood, 0.25 mi.		ADF&G (1983b)
	1982	9/20	0	0	0	0	0	Ground survey - Good, 0.25 mi.		ADF&6 (1983b)
	1982	10/25	0	0	0	0	0	Ground survey - Poor, 0.2 mi.	,	ADF&G (1983b)
	1983	7/21	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1984)
	1983	7/26	0	0	0	0	0	Bround survey - Excellent, 0.25 mi.		Barrett et al. (1984)
	1983	9/05	0	0	0	6	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1984)
	1983	8/13	0	0	0	0	9	Bround survey - Good, 0.25 mi.		Barrett et al. (1984)
	1983	8/20	0	0	0	0	6	Bround survey - Excellent, 0.25 mi.		Barrett et al. (1984)
	1983	B/27	0	0	0	0	3	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1984)
	1983	9/03	0	0	0	0	0	Bround survey - Boad, 0.25 mi.		Barrett et al. (1984)
	1983	9/11	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1984)
	1983	9/18	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1984)
	1983	10/01	0	0	0	0	0	Ground survey - Poor, 0.25 mi.		Barrett et al. (1984)
	1983	10/0B	Ó	0	Ō	Ō	Ō	Aerial count, helicopter - Excellent, 0.25 ai.		Barrett et al. (1984)
	1984	7/22	10	0	0	0				

LOCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
	1984	7/22	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1985)
	1984	7/23	17	0	0	0	0	Ground survey - Excellent, 0.5 mi.		Barrett et al. (1985)
	1984	7/30	5	0	0	0	4	Ground survey - Poor, 0.25 mi.		Barrett et al. (1985)
	1984	8/06	0	0	0	2	171	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1985)
	1984	B/13	0	0	0	1	411	Ground survey - Good, 0.25 mi.		Barrett et al. (1985)
	1984	B/20	0	0	0	1	222	Ground survey - Good, 0.25 mi.		Barrett et al. (1985)
	1984	8/26	0	0	0	0	0	Ground survey - Poor, 0.25 mi.		Barrett et al. (1985)
	1984	9/04	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1985)
	1984	9/11	0	0	0	0	0	Ground survey - Excellent, 0.25 et.		Barrett et al. (1985)
	1984	9/21	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1985)
	1984	9/28	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1985)
	1984	10/05	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1985)
247-41-10200-2474										
Skull Creek .	1981	8/11	0	0	0	10	0	Ground survey - Excellent, 0.5 mi.		ADF&6 (1981)
	1991	B/19	0	0	0	0	6	Ground survey - Excellent, 0.5 mi.		ADF&G (1981)
	1981	8/20	0	0	0	0	8	Ground survey - Excellent, 0.5 mi.		ADF&G (1981)
	1982	B/06	0	0	0	. 0	0	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	9/12	0	0	0	0	12	Ground survey - Excellent, 0.5 mi.		ADF&G (1983b)
	1982	B/17	0	0	0	0	12	Ground survey - Excellent, 0.5 mi.		ADF&G (1983b)
	1982	8/23	0	0	0	0	11	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	8/31	0	0	0	1	0	Ground survey - Good, 0.25 mi.		ADF&G (1983b)
	1982	9/06	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	9/13	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	9/19	0	0	Ó	Ô	Ô	Ground survey - Fair, 0.25 ai.		ADF&G (1983b)
	1982	10/25	0	0	0	Ö	Ö	Ground survey - Excellent, 0.1 mi.		ADF&G (1983b)
	1983	8/05	0	٥	0	٥	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1984)
	1983	8/13	Ó	0	0	Ŏ	Ö	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1984)
	1993	8/20	Ô	0	0	0	1	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1984)
	1983	9/27	0	Ö	Ŏ	0	ò	Ground survey - Excellent, 0.25 mi.	•	Barrett et al. (1984)
	1993	9/03	0	Ö	ŏ	0	ŏ	Ground survey - Good, 0.25 mi.		Barrett et al. (1984)
	1983	9/11	0	0	0	0	Ò	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1984)
	1993	9/18	Ŏ	ō	ŏ	0	ŏ	Bround survey - Excellent, 0.25 mi.		Barrett et al. (1984)
	1983	10/01	٥	Ŏ	ŏ	0	Ď	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1984)
	1983	10/08	ō	ō	Ŏ	Ŏ	ō	Aerial count, helicopter - Excellent, 1.0 mi.		Barrett et al. (1984)
	1984	7/22	0	٥	0	٥	٥	Aerial count, helicopter - Good, 1.5 mi.		Barrett et al. (1985)
	1984	9/29	0	0	0	0	0	Aerial count, helicopter ~ 600d, 1.5 mi.		Barrett et al. (1985)
	1984	7/30	0	0	0	0	0	Ground survey - Good, 0.25 mi.		Barrett et al. (1985)
	1784	8/04	0	0	0	0	10	Ground survey - Good, 0.25 ml.		Barrett et al. (1985)
	1707	8/13	0	0	0	0		• •		Barrett et al. (1985)
	1984	8/13 8/20	0	0	0	4	121	Ground survey - Good, 0.25 mi.		
			0	0	0	•	81	Ground survey - Good, 0.25 mi.		Barrett et al. (1985)
	1984	8/26	Ü	U	V	0	0	Ground survey - Poor, 0.25 mi.		Barrett et al. (1985)

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LOCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	СОНО	CHUK	PINK	SURVEY NETHOD COMMENTS	DATA SOURCE
***************************************	1984	9/04	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.	Barrett et al. (198
	1984	9/11	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.	Barrett et al. (198
	1984	9/21	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.	Barrett et al. (198)
	1984	9/28	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.	Barrett et al. (198
47~41-10200-2510									
Sherman Ereek #	1962	7/10	0					Aerial count	Kubik (1964)
	1981	7/31	0	0	0	0	0	Ground survey - Poor, 0.25 mi.	ADF&6 (1981)
	1981	8/07	0	0	0	2	0	Ground survey - Good, 0.25 mi.	ADF&G (1981)
	1981	8/10	0	0	0	9	5	Ground survey - Good, 0.25 mi.	ADF&6 (1981)
	1981	B/11	0	0	0	6	2	Ground survey - Excellent, 0.25 mi.	ADF&G (1981)
	1981	B/20	0	0	0	2	6	Ground survey - Excellent, 0.25 mi.	ADF46 (1981)
	1981	9/25	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.	ADF&6 (1981)
	1982	8/06	3	0	0	0	5	Ground survey - Excellent, 0.25 mi.	ADF&6 (1983b)
	1982	B/12	ō	ō	Ō	0	24	Ground survey - Excellent, 0.25 mi.	ADF&6 (1983b)
	1982	8/17	ŏ	Ŏ	Õ	Ŏ	5	Ground survey - Excellent, 0.25 mi.	ADF&6 (1983b)
	1982	8/23	ō	Ŏ	Ď	Ŏ	3	Ground survey - Excellent, 0.25 mi.	ADF&6 (1983b)
	1982	9/05	Ŏ	ŏ		Õ		Ground survey - Excellent, 0.25 mi.	ADF&G (1983b)
	1982	9/13	^	0	•	^	Ď	Ground survey - Poor, 0.25 ai.	ADF&G (1983b)
	1982	9/25	, ,	0	•	۸	•	Ground survey - Good, 0.25 mi.	ADF&6 (1983b)
			0	0	o	٥	•	•	ADF&G (1983b)
	1982	10/01	0	0	0	ů A	٥	Ground survey - Good, 0.25 mi.	
	1982	10/25	v	U	v	v	v	Ground survey - Excellent, 0.1 mi.	ADF&6 (1983b)
	1983	8/07	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.	Barrett et al. (198
	1983	B/14	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.	Barrett et al. (198
	1983	8/21	0	0	0	0	0	Ground survey - Good, 0.25 mi.	Barrett et al. (198
	1983	8/29	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.	Barrett et al. (198
	1983	9/11	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.	Barrett et al. (198
	1983	9/18	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.	Barrett et al. (198
	1983	10/01	Ö	0	ō	0	0	Ground survey - Excellent, 0.25 mi.	Barrett et al. (198
	1983	10/08	0	Ō	0	0	0	Aerial count, helicopter - Excellent, 0.25 mi.	Barrett et al. (198
	1984	7/22	0	0	٥	0	0	Aerial count, helicopter - Excellent, 2.0 mi.	Barrett et al. (198
	1984	7/23	ŏ	Ŏ	ŏ	Ŏ	0	Ground survey - Excellent, 0.25 mi.	Barrett et al. (198
	1984	7/30	Ŏ	ō	٥	Ŏ	0	Ground survey - Poor, 0.25 mi.	Barrett et al. (196
	1984	8/06	0	Õ	٥	2	43	Ground survey - Excellent, 0.25 mi.	Barrett et al. (198
	1984	8/13	ů	0	٨		48	Ground survey - Good, 0.25 mi.	Barrett et al. (198
	1984	8/20	0	0	٨		21	Ground survey - Good, 0.25 mi.	Barrett et al. 1198
		8/26	0	0	۸	٨	71		Barrett et al. (196
	1984		0	0	V	0	0	Ground survey - Poor, 0.25 ai.	
	1984	9/04	-	-	Ü	0	0	Ground survey - Excellent, 0.25 ai.	Barrett et al. (198
	1984	9/11	0	0	U	0	0	Ground survey - Excellent, 0.25 ai.	Barrett et al. (196
	1984	9/21	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.	Barrett et al. (19)
	1984	9/28	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.	Barrett et al. (196

DCATION CODE / STREAM NAME	YEAR	DATE	CHINDOK	SOCKEYE	COHO	CHUM	PINK	SURVEY NETHOD	COMMENTS	DATA SOURCE
7~41~10200-2511										
Fourth of July Creek +	1974	8/16					159	Ground, boat and aerial counts combined	Peak count	Barrett (1974)
	1974	9/11			26	594		Ground, boat and aerial counts combined	Peak count	Barrett (1974)
	1975	8/09	1					•		Friese (1975)
	1975	8/17		1			148			Friese (1975)
	1981	7/31	0	0	0	1	0	Ground survey - Poor, 0.25 mi.		ADF&G (1981)
	1981	B/07	0	0	1	90	18	Ground survey - Fair, 0.25 mi.		ADF&6 (1981)
	1981	8/10	0	0	0	31	4	Ground survey - Good, 0.25 mi.		ADF&G (1981)
	1981	8/20	0	0	0	66	29	Ground survey - Good, 0.25 mi.		ADF&G (1981)
	1981	9/01	0	0	0	0	5	Ground survey - Excellent, 1.5 ei.		ADF&G (1981)
	1981	9/25	0	0	1	1	0	Ground survey - Excellent, 0.3 ai.		ADF46 (1981)
	1982	7/28	56	0	0	0	0	Bround survey - Good, 2.0 mi.		ADFR6 (1983b)
	1982	8/06	8	0	0	0	63	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	8/12	5	0	0	8	511	Ground survey - Bood, 0.5 mi.		ADF&6 (1983b)
	1982	8/17	0	0	0	79	594	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	0/23	0	0	0	169	702	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	8/30	0	0	0	188	125	Ground survey - Sood, 0.25 mi.		ADF&G (1983b)
	1982	9/05	0	0	0	191	0	Ground survey - Good, 0.25 mi.		ADF&G (1983b)
	1982	9/13	0	0	1	50	0	Ground survey - Fair, 0.25 mi.		ADF&G (1983b)
	1982	9/19	0	0	0	43	0	Ground survey - Bood, 0.25 mi.		ADF&6 (1983b)
	1982	9/25	0	0	4	28	0	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	10/01	0	0	2	6	0	Bround survey - Excellent, 0.25 mi.		ADF#6 (1983b)
	1982	10/25	0	. 0	0	0	0	Ground survey - Poor, 0.2 mi.		ADF&G (1903b)
	1983	7/10	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1
	1983	7/21	0	0	0	0	0	Bround survey - Excellent, 1.5 mi.		Barrett et al. (i
	1983	7/26	0	0	0	0	0	Ground survey - Excellent, 1.5 mi.		Barrett et al. (1
	1983	8/02	6	0	0	0	0	Ground survey - Excellent, 0.5 mi.		Barrett et al. (i
	1983	8/05	6	0	0	11	25	Ground survey - Excellent, 0.5 mi.	,	Barrett et al. (1
	1983	8/13	3	0	0	54	20	Sround survey - Good, 0.5 mi.		Barrett et al. (1
	1983	8/20	0	0	0	112	78	Ground survey - Excellent, 0.5 mi.		Barrett et al. (1
	1983	8/27	0	0	1	148	32	Ground survey - Good, 0.5 mi.		Barrett et al. (1
	1983	9/03	0	0	0	30	11	Ground survey - Fair, 0.5 mi.		Barrett et al. (1
	1983	9/11	0	0	2	24	0	Ground survey - Excellent, 0.5 mi.		Barrett et al. (1
	1983	9/18	0	0	3	54	0	Ground survey - Excellent, 0.5 mi.		Barrett et al. (1
	1983	10/01	0	0	0	0	0	Ground survey - Poor, 0.5 mi.		Barrett et al. 11
•	1983	10/08	0	0	2	14	0	Ground survey - Excellent, 0.5 mi.		Barrett et al. 11
	1984	7/22	92	0	0	0	0	Aerial count, helicopter - Good, 4.0 mi.		Barrett et al. []
	1984	7/23	34	0	0	0	0	Aerial count, helicopter - Excellent, 1.0	si.	Barrett et al. (1
	1984	9/15	0	0	0	0	0	Aerial count, helicopter - Fair, 4.0 mi.		Barrett et al. (1
	1984	9/29	0	0	8	0	0	Aerial count, helicopter - Good, 2.0 mi.		Barrett et al. (1
	1984	7/30	25	0	0	129	553	Ground survey - Poor, 0.25 ai.		Barrett et al. (1

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OCATION CODE / STREAM NAME	YEAR	DATE	CHINDOK	SOCKEYE	COHO	CHUM	P1NK	SURVEY METHOD	COMMENTS	DATA SOURCE
47-41-10200-2551										
Indian River	Hist								Max. count 1,002 chinook (1957)	
	1962	7/03	28					Aerial count		Kubik (1963)
	1962	8/19	0					Aerial count		Kubik (1963)
	1964	8/12	2					Aerial count		Kubik (1965)
	1972	7/30	35					Aerial count		Watsjold (1973)
	1973	7/26	110							ADF&G (1982)
	1973	7/29	122					Aerial count, fixed wing		Watsjold (1974)
	1973		5					Aerial count		Kubik & Trent (197
	1974	7/25	102					Aerial count, fixed wing		Watsjold (1975)
	1974	8/19					577	Ground, boat and aerial counts combined	Peak count	Barrett (1974)
	1974	9/10			64	531		Ground, boat and aerial counts combined		Barrett (1974)
	1975	8/04	31					Aerial count, fixed wing		Watsjold (1976)
	1975		35					•		ADF&G (1982)
	1975	8/12	10			70	321		Peak count	Friese (1975)
	1975	9/26		i					Peak count	Friese (1975)
	1976	7/23	537					Aerial count, fixed wing		Watsjold (1977)
	1977		393					Aerial count, fixed wing		Watsjold (1978)
	1978		114					Aerial count, fixed wing		Watsjold (1979)
	1979	10/29	•			150			Cook Inlet Aquaculture Ass'n (CIAA)	-
	1979	****	285					Aerial count, fixed wing		Watsjold (1980)
	1980								No count - high, turbid water	Bentz (1982)
	1981	7/27	422					Aerlal count, helicopter - Sood		ADF&6 (1991)
	1981	8/06	0	0	0	22	0	Ground survey - Excellent, 0.25 mi.		ADF&G (1981)
	1981	B/10	0	0	0	4	0	Ground survey - Poor, 0.25 mi.		ADF&G (1981)
	1981	8/21	0	0	0	34	2	Ground survey - Fair, 0.25 mi.		ADF&6 (1981)
	1981	9/03	0	0	0	40	0	Ground survey - Excellent, 0.25 mi.		ADF&6 (1981)
	1981	9/11	0	0	16	16	0	Ground survey - Fair, 0.25 mi.		ADF&G (1981)
	1981	9/15	0	0	85	0	0	Aerial count, helicopter - Good, 15.0 mi.		ADF&G (1981)
	1981	9/19	0	0	10	3	0	Ground survey - Fair, 0.25 mi.		ADF&6 (1981)
	1981	9/26	0	0	0	0	0	Ground survey - Good, 0.25 mi.		ADF&6 (1981)
	1982	7/21	1053	0	0	0	0	Aerial count, halicopter - Excellent, 15.0	ei.	ADF&G (1983b)
	1982	8/01	110	0	0	0	0	Ground survey - Excellent, 6.0 mi.		ADF&G (1983b)
	1982	8/03	142	0	0	0	24	Ground survey - Excellent, 2.0 mi.		ADF&G (1983b)
	1982	8/05	129	0	0	16	203	Ground survey - Good, 4.0 mi.		ADF&G (19836)
	1982	8/11	30	0	0	134	738	Ground survey - Excellent, 1.0 mi.		ADF&G (1983b)
	1982	8/16	15	0	9	367	559	Ground survey - Excellent, 1.0 mi.		ADF&G (1983b)
	1982	8/23	2	0	Ö	199	567	Ground survey - Excellent, 1.0 mi.		ADF&6 (1983b)
	1982	8/29	ē	ō	18	168	347	Ground survey - Good, 1.0 mi.		ADF&6 (19836)
	1982	9/04	0	Ŏ	24	1346	98	Ground survey - Excellent, 2.0 mi.		ADF&G (1983b)
	1982	9/12	ŏ	0	37	1177	0	Ground survey - Excellent, 2.0 mi.		ADF&G (1983b)
	1982	9/18	ŏ	ŏ	36	74	ŏ	Ground survey - Excellent, 2.0 mi.		ADF&G (1983b)

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OCATION CODE / STREAM NAME	YEAR	DATE	CHINDOK	SOCKEYE	COHO	CHUN	PINK	SURVEY METHOD CO	MMENTS DATA SOURCE	
	1962	9/24	0	0	101	0	0	Aerial count, helicopter - Excellent, 15.0 mi.	ADF&G (1983b)	
	1982	9/30	0	0	32	2	0	Ground survey - Excellent, 2.0 mi.	ADF&G (1983b)	
	1982	10/25	0	0	0	0	0	Ground survey - Good, 1.0 mi.	ADF&G (1983b)	
	1983	7/25	1193	0	0	0	0	Aerial count, helicopter - Excellent, 16.0 mi.	Barrett et al.	
	19B3	8/02	406	0	0	0	0	Aerial count, helicopter - Excellent, 16.0 mi.	Barrett et al.	
	1983	B/09	8	0	0	0	0	Aerial count, helicopter - Poor, 16.0 mi.	Barrett et al.	
	19B3	8/26	0	0	16	361	151	Aerial count, helicopter - Good, 16.0 mi.	Barrett et al.	
	1983	9/03	0	0	33	118	0	Aerial count, helicopter - Good, 16.0 mi.	Barrett et al.	
	1983	9/10	0	0	53	120	0	Aerial count, helicopter - Excellent, 16.0 mi.	Barrett et al.	
	1983	9/24	0	0	38	0	0	Aerial count, helicopter - Excellent, 16.0 mi.	Barrett et al.	
	1983	10/01	0	0	17	0	0	Aerial count, helicopter - Good, 16.0 mi.	Barrett et al.	
	1983	10/08	0	0	18	0	0	Aerial count, helicopter - Good, 16.0 mi.	Barrett et al.	
	1983	7/27	40	0	0	76	36	Bround survey - Fair, 1.0 mi.	Barrett et al.	
	19B3	8/04	4	0	0	314	696	Ground survey - Good, 1.0 ei.	Barrett et al.	
	1983	9/12	0	0	0	494	675	Ground survey - Good, 1.0 mi.	Barrett et al.	
	1983	B/19	0	1	27	611	986	Ground survey - Excellent, 1.0 mi.	Barrett et al.	(190
	1983	8/27	0	0	22	734	289	Ground survey - Fair, 1.0 mi.	Barrett et al.	1198
	1983	9/03	0	0	0	0	0	Ground survey - Póor, 1.0 mi.	Barrett et al.	
	19 <b>B</b> 3	9/10	0	0	15	171	0	Ground survey - Excellent, 1.0 mi.	Barrett et al.	(198
	1983	9/16	0	0	7	108	0	Ground survey - Excellent, 1.0 mi.	Barrett et al.	(198
	1983	9/22	Ò	0	15	0	0	Ground survey - Excellent, 1.0 mi.	Barrett et al,	1198
	1983	10/03	0	0	5	0	0	Ground survey - Excellent, 1.0 mi.	Barrett et al.	1198
	1984	7/25	1456	0	0	0	0	Aerial count, helicopter - Good, 16.0 ei.	Barrett et al.	1198
	1984	8/01	635	0	0	437	1466	Aerial count, helicopter - Good, 16.0 mi.	Barrett et al.	(198
	1984	9/11	42	1	5	2247	7966	Aerial count, helicopter - Excellent, 16.0 ei.	Barrett et al.	. 1198
	1984	8/16	0	. 0	125	1758	4066	Aerial count, helicopter - Fair, 16.0 mi.	Barrett et al.	1198
	1984	9/01	0	0	211	509	0	Aerial count, helicopter - Excellent, 16.0 mi.	Barrett et al.	(198
	1984	9/08	0	0	277	62	0	Aerial count, helicopter - Good, 16.0 mi.	Barrett et al.	(198
	1984	9/15	. 0	0	465	6	0	Aerial count, helicopter - Good, 16.0 ei.	Barrett et al.	1199
	1984	9/22	0	0	203	0	0	Aerial count, helicopter - Excellent, 16.0 mi.	Barrett et al.	(198
	1984	9/29	0	0	87	0	0	Aerial count, helicopter - Good, 16.0 mi.	Barrett et al.	(198
	1984	10/06	0	0	74	0	0	Aerial count, helicopter - Good, 16.0 mi.	Barrett et al.	1198
	1984	10/13	0	0	77	0	0	Aerial count, helicopter - Excellent, 16.0 mi.	Barrett et al.	(198
	1984	7/24	199	0	0	0	0	Ground survey - Good, 1.0 mi.	Barrett et al.	(198
	1984	7/31	197	0	0	296	549	Ground survey - Fair, 1.0 mi.	Barrett et al.	1198
	1984	8/08	100	0	2	494	3405	Ground survey - Good, 1.0 mi.	Barrett et al.	(198
	1984	8/11	0	0	3	515	1634	Ground survey - Excellent, 1.0 mi.	Barrett et al.	
	19B4	8/17	0	0	45	1272	5282	Ground survey - Good, 1.0 mi.	Barrett et al.	
	1984	8/24	0	0	0	0	0	Ground survey - Poor, 1.0 mi.	Barrett et al.	
	1984	9/02	Ŏ	Ŏ	29	354	4	Ground survey - Good, 1.0 mi.	Barrett et al.	
	1984	9/10	Ŏ	Ŏ	70	230	0	Ground survey - Good, 1.0 mi.	Barrett et al.	
	1984	9/20	ŏ	Ŏ	ő	0	٥	Ground survey - Poor, 1.0 mi.	Barrett et al.	
	1984	9/28	0	Ŏ	ě	. 0	Ŏ	Ground survey - Excellent, 1.0 mi.	Barrett et al.	

OCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
	1984	10/03	0	0	10	0	0	Ground survey - Excellent, 1.0 mi.		Barrett et al. (1985
	1984	10/11	0	0	0	0	0	Ground survey - Excellent, 1.0 mi.		Barrett et al. (1985
47-41-10200-2551-3015 Salmon Creek										
47-41-10200-2551-3015-0010 Summit Lake										
47-41-10200-2551-3201										
47-41-10200-2570										
Jack Long Creek *	1981	8/21	0	0	0	0	0	Ground survey - Poor, 0.25 mi.		ADF46 (1981)
	1981	8/26	0	0	0	0	1	Ground survey - Excellent, 0.75 mi.		ADF&G (1981)
	1981	9/24	0	0	0	0	0	Ground survey - Excellent, 0.5 mi.		ADF46 (1981)
	1982	B/04	2	0	0	0	0	Ground survey - Excellent, 0.25 mi.		ADF&6 (1983b)
	19B2	8/11	2	0	0	0	15	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	8/16	0	0	0	0	21	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	8/22	0	0	0	0	8	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	8/30	0	0	1	3	0	Ground survey - Good, 0.25 mi.		ADF&G (1983b)
	1982	9/04	0	0	0	1	0	Ground survey - Excellent, 0.25 mi.		ADF&6 (1983b)
	1982	9/12	0	0	0	0	0	Graund survey - Good, 0.25 mi.		ADF&6 (1983b)
	1982	9/18	0	0	0	0	0	Ground survey ~ Poor, 0.25 mi.		ADF&G (1983b)
	1982	9/30	0	0	1	0	0	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	10/25	0	0	0	0	0	Ground survey - Poor, 0.3 mi.		ADFLG (1983b)
	1983	7/24	0	0	0	0	0	Aerial count, helicopter - Excellent, 8.0 mi.		Barrett et al. (19)
	1983	8/01	6	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (196
	1983	8/04	1	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (196
	1983	8/12	1	0	0	2	5	Ground survey - Excellent, 0.25 mi.		Barrett et al. (19)
	1983	9/1B	0	0	0	2	1	Ground survey - Excellent, 0.25 mi.		Barrett et al. (19)
	1983	8/25	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (19)
	1983	9/02	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (19)
	1983	9/10	0	0	0	0	0	Bround survey - Excellent, 0.25 mi.		Barrett et al. (19)
	1993	9/15	0	0	0	0	0	Ground survey ~ Excellent, 0.25 mi.		Barrett et al. (19)
	1983	9/22	0	0	0	0	0	Bround survey - Excellent, 0.25 mi.		Barrett et al. (19)
	1983	10/01	0	0	1	0	0	Aerial count, helicopter - Excellent, 8.0 mi.		Barrett et al. (19)
	1983	10/03	0	0	0	0	0	Ground survey - Poor, 0.25 mi.		Barrett et al. (196
	1984	7/21	7	0	0	0	0	Aerial count, helicopter - Excellent, 8.0 mi.		Barrett et al. 1198
	1984	9/08	0	0	0	0	0	Aerial count, helicopter - Sood, 8.0 mi.		Barrett et al. (196
	1984	9/15	0	0	0	0	0	Aerial count, helicopter - Good, 8.0 mi.		Barrett et al. (196
	1984	9/22	0	0	5	0	0	Aerial count, helicopter - Excellent, 8.0 mi.		Barrett et al. (19)
	1984	9/29	0	0	6	0	0	Aerial count, helicopter - Good, 8.0 mi.		Barrett et al. (196

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DCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
	1984	7/31	1	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1985
	1984	8/08	2	0	0	4	14	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1985
	1984	8/17	0	0	0	1	5	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1985
	1984	8/24	0	0	0	0	0	Ground survey - Poor, 0.25 mi.		Barrett et al. (1985
	1984	9/02	0	0	0	0	0	Ground survey - Good, 0.25 mi.		Barrett et al, (1985
	1984	9/10	0	0	0	0	0	Ground survey - Good, 0.25 mi.		Barrett et al. (1985
	1984	9/20	0	0	0	0	0	Ground survey - Good, 0.25 mi.		Barrett et al. (1985
	1984	9/26	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1985
	1984	10/03	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		Barrett et al. (1985
17-41-10200-2585										
Portage Creek	1962	7/30	27					Aerial count		Kubik (1963)
-	1963	8/15	0					Aerial count		Kubik (1964)
	1972	7/30	86					Aerial count, fixed wing		Watsjold (1973)
	1973	7/26	153					•		ADF&G (1982)
	1973	7/29	174					Aerial count, helicopter		Watsjold (1974)
	1974	7/27	260					Aerial count, fixed wing		Watsjold (1975)
	1974	8/18			150	276	218		Peak count	Barrett (1974)
	1975	7/29	29					##	Peak count	Friese (1975)
	1975	8/04	32					Aerial count, fixed wing	,	Watsjold (1976)
	1976	7/23	702					Aerial count, fixed wing		Watsjold (1977)
	1977	,,,,,	374					Aerial count, fixed wing		Watsjold (1978)
	1978		140					Aerial count, fixed wing		Watsjold (1979)
	1979		190					Aerial count, fixed wing		Watsjold (1980)
	1980		170					nerial County Itaes ming	No count - high, turbid water	Bentz (1982)
	1981	7/27	459					Aerial count, helicopter - Bood		ADF&6 (1981)
	1981	8/21	0	0	0	0	٥	Ground survey - Poor, 0.25 mi.		ADF16 (1981)
	1981	9/15	ŏ	ŏ	22	Ŏ	0	Aerial count, helicopter - Fair, 12.0 mi.		ADF&6 (1981)
	1981	9/24	Ŏ	0	0	ŏ	ŏ	Ground survey - Good, 0.25 mi.		ADF&6 (1981)
	1000	7/24	oet		•	•	^	Assist sout believeter Functions (F.A.	_:	AAFIR /1007h)
	1982	7/21	955	Ð	0	0	0	Aerial count, helicopter - Excellent, 15.0	<b>B1</b> ,	ADF&6 (1983b)
	1982		1111					A -1 1 1 1-121 711-1 18 A		Bentz (1983)
	1982	B/03	1253	0	0	0		Aerial count, helicopter - Excellent, 15.0	•1.	ADF&6 (1983b)
	1982	8/09	25	0	0	25	144	Ground survey - Excellent, 0.5 mi.		ADFR6 (1983P)
	1982	8/16	4	0	0	71	169	Ground survey - Excellent, 0.25 ai.		ADF&G (1983b)
	1982	8/22	2	0	1	153	111	Ground survey - Excellent, 0.25 mi.		ADFR6 (1983b)
	1982	8/29	4	0	1	28	141	Ground survey - Good, 0.25 ei.		ADF&G (1983b)
	1982	9/03	0	0	0	7	0	Bround survey - Excellent, 0.25 mi.	•	ADF&6 (1983b)
	1982	9/12	0	0	0	0	0	Ground survey - Good, 0.25 mi.		ADF&6 (1983b)
	1982	9/18	0	0	0	0	0	Ground survey - Poor, 0.25 mi.		ADF&6 (1983b)
	1982	9/23	0	0	0	0	0	Ground survey - Fair, 0.25 mi.		ADF&G (1983b)
	1982	9/24	0	0	88	5	0	Aerial count, helicopter - Excellent, 15.0	ai.	ADF&G (1983b)
	1982	9/30	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.		ADF&G (1983b)
	1982	10/25	0	0	0	0	0	Aerial count, helicopter - Excellent, 1.0 o	oi.	ADF&G (1983b)

OCATION CODE / STREAM NAME	YEAR	DATE	CHINODK	SOCKEYE	СОНО	CHUN	PINK	SURVEY METHOD CO	MMENTS DATA SOURCE
	1983	7/25	3140	0	0	0	0	Aerial count, helicopter - Excellent, 25.0 mi.	Barrett et al. (19
	1983	8/01	2556					Aerial count, helicopter - Excellent	Barrett et al. (19
	1983	8/09	0	0	0	0	0	Aerial count, helicopter - Poor, 25.0 ai.	Barrett et al. (19
	1983	8/26	5	0	0	526	35	Aerial count, helicopter - Excellent, 25.0 mi.	Barrett et al. (19
	1983	9/04	0	0	0	141	0	Aerial count, helicopter - Good, 25.0 mi.	Barrett et al. 119
	1983	9/10	0	0	ı	8	0	Aerial count, helicopter - Excellent, 25.0 mi.	Barrett et al. (19
	1983	9/18	0	0	8	0	0	Aerial count, helicopter - Excellent, 25.0 mi.	Barrett et al. (19
	1983	9/24	0	0	15	0	0	Aerial count, helicopter - Excellent, 25.0 ⋅mi.	Barrett et al. (19
	1983	10/01	0	0	2	0	0	Aerial count, helicopter - Fair, 25.0 mi.	Barrett et al. (19
	1983	10/08	0	0	6	0	0	Aerial count, helicopter - Excellent, 25.0 mi.	Barrett et al. (19
	1983	8/04	5	0	0	262	285	Ground survey - Excellent, 0.25 mi.	Barrett et al. (19
	1983	8/12	4	0	0	68	50	Ground survey - Good, 0.25 mi.	Barrett et al. (19
	1983	8/18	0	0	2	26	57	Ground survay - Excellent, 0.25 mi.	Barrett et al. (19
	1983	8/25	0	0	0	0	4	Ground survey - Fair, 0.25 mi.	Barrett et al. (19
	1983	9/02	0	0	0	0	0	Ground survey - Poor, 0.25 mi.	Barrett et al. (19
	1983	9/09	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.	Barrett et al. (19
	1983	9/15	0	0	0	1	0	Ground survey - Excellent, 0.25 ai.	Barrett et al. (19
	1983	9/22	0	0	0	0	0	Ground survey - Excellent, 0.25 mi.	Barrett et al. (19
	1983	10/03	0	0	0	0	0	Ground survey - Excellent, 0.25 ai.	Barrett et al. (19
	1984	7/21	99	, 0	0	0	0	Aerial count, helicopter - Excellent, 25.0 mi.	Barrett et al. (15
	1984	7/25	190	0	0	0	0	Aerial count, helicopter - Poor, 25.0 mi.	Barrett et al. 119
	1984		2341						Hepler & Bentz (19
	1984	8/01	5446	0	0	115	90	Aerial count, helicopter - Excellant, 25.0 ai.	Barrett et al. (19
	1984	8/11	663	0	15	405	2707	Aerial count, helicopter - Excellent, 25.0 ai.	Barrett et al. (19
	1984	8/18	12	14	91	1285	2105	Aerial count, helicopter - Good, 25.0 mi.	Barrett et al. (19
	1984	9/01	0	0	9	40	0	Aerial count, helicopter - Good, 25.0 mi.	Barrett et al. (19
	1984	9/08	0	0	93	19	0	Aerial count, Helicopter - Good, 25.0 mi.	Barrett et al. (19
	1984	9/15	0	0	128	0	0	Aerial count, helicopter - Good, 25.0 ai.	Barrett et al. (19
	1984	9/22	0	0	94	0	0	Aerial count, helicopter - Excellent, 25.0 mi.	Barrett et al. (19
	1984	9/29	0	0	115	0	0	Aerial count, helicopter - Good, 25.0 mi.	Barrett et al. (19
	1984	10/06	0	0	46	0	0	Aerial count, helicopter - Good, 25.0 mi.	Barrett et al. (19
	1984	10/13	0	0	43	0	0	Aerial count, helicopter - Excellent, 25.0 mi.	Barrett et al. (19
	1984	7/31	43	0	0	53	40	Ground survey - Fair, 0.25 mi.	Barrett et al. (19
	1984	8/01	153	0	0	0	0	Ground survey - Excellent, 0.25 mi.	Barrett et al. (19
	1984	8/04	50	0	0	0	0	Ground survey - Excellent, 0.25 mi.	Barrett et al. (19
	1984	8/08	11	0	6	242	158	Ground survey - Fair, 0.25 mi.	Barrett et al. (19
	1984	8/17	0	12	21	262	58	Ground survey - Fair, 0.25 mi.	Barrett et al. (19
	1984	8/18	2	0	0	156	302	Ground survey - Excellent, 0.25 mi.	Barrett et al. (19
	1984	8/24	0	0	0	0	0	Ground survey - Poor, 0.25 mi.	Barrett et al. {!5
	1984	9/02	0	2	Ö	i	ō	Ground survey - Good, 0.25 mi.	Barrett et al. (19
	1984	9/10	0	ī	1	0	0	Ground survey ~ Good, 0.25 mi.	Barrett et al. (19
	1984	9/20	٥	ò	i	Õ	ů	Ground survey - Excellent, 0.25 mi.	Barrett et al. (19
	1984	9/26	٥	Ŏ	Ŏ	٥	•	Ground survey - Excellent, 0.25 mi.	Barrett et al. (19

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LOCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	соно	CHUM	PINK	SURVEY METHOD COMMENTS	DATA SOURCE
	1984	10/03	0	0	0	0	0	Ground survey - Excellent, 0.25 ai.	Barrett et al. (1985)
247-41-10200-2585-3100									
247-41-10200-2585-3201 Thoroughfare Creek									
247-41-10200-2585-3223									·
247-41-10200-2596								Note - TALK MTS D-5	
Cheechako Creek *	1962	7/19	0					Aerial count	Kubik (1964)
	1982	8/05	11	0	0	0	0	Aerial count, helicopter - Excellent, 0.75 Tributary in Devil Canyon (RM 1	2.5). ADF&G (1983b)
	1982	8/06	16	0	0	0	0	Aerial count, helicopter - Excellent, 3.0 mi.	ADF&G (1983b)
	1982	8/11	6	0	0	0	0	Aerial count, helicopter - Good, 1.0 mi.	ADF&G (1983b)
	1982	8/1B	0	0	0	0	0	Aerial count, helicopter - Excellent, 1.0 mi.	ADF&G (1983b)
	1982	8/22	1	0	0	0	0	Aerial count, helicopter - Bood, 1.5 mi.	ADF&G (1983b)
	1982	8/20	0	0	0	0	0	Aerial count, helicopter - Excellent, 1.0 mi.	ADF&G (1983b)
	1982	9/08	0	0	0	0	0	Aerial count, helicopter - Good, 0.5 mi.	ADF&G (1983b)
	1982	9/24	0	0	0	0	0	Aerial count, helicopter - Excellent, 1.5 mi.	ADF&G (1983b)
	1982	10/25	0	0	0	0	0	Aerial count, helicopter - Good, O.1 mi.	ADF&G (1983b)
	1983	7/24	16	0	0	0	0	Aerial count, helicopter - Excellent, 1.25 mi.	Barrett et al. (1984)
	1983	8/01	25	0	0	0	0	Aerial count, helicopter ~ Excellent, 1.25 mi.	Barrett et al. (1984)
	1983	8/09	2	0	0	0	0	Aerial count, helicopter - Good, 1.25 mi.	Barrett et al. (1984)
	1983	8/26	0	0	0	0	0	Aerial count, helicopter - Fair, 1.25 mi.	Barrett et al. (1984)
	1983	9/04	0	0	0	0	0	Aerial count, helicopter - Good, 1.25 mi.	Barrett et al. (1984)
	1983	9/10	0	0	0	0	0	Aerial count, helicopter - Excellent, 1.25 mi.	Barrett et al. (1984)
	1983	9/10	0	0	0	0	0	Aerial count, helicopter - Excellent, 1.25 mi.	Barrett et al. (1984)
	1983	9/24	0	0	0	0	0	Aerial count, helicopter - Excellent, 1.25 mi.	Barrett et al. (1984)
	1983	10/01	0	0	0	0	0	Aerial count, helicopter - Excellent, 1.25 mi.	Barrett et al. (1984)
	1983	10/08	0	0	0	0	0	Aerial count, helicopter - Excellent, 1.25 mi.	Barrett et al. (1984)
	1984	7/21	16	0	0	0	0	Aerial count, helicopter - Good, 1.25 ai.	Barrett et al. (1985)
	1984	8/01	29	0	0	0	0	Aerial count, helicopter - Good, 1.25 mi.	Barrett et al. (1985)
	1984	8/11	6	0	0	0	0	Aerial count, helicopter - Bood, 1.25 mi.	Barrett et al. (1985)
	1984	8/18	0	0	0	0	0	Aerial count, helicopter - Good, 1.25 mi.	Barrett et al. (1985)
	1984	9/15	0	0	0	0	0	Aerial count, helicopter - Good, 1.25 mi.	Barrett et al. (1985)
	1984	9/29	0	0	0	0	0	Aerial count, helicopter - Good, 1.25 mi.	Barrett et al. (1985)
	1984	10/13	0	0	0	0	0	Aerial count, helicopter - Excellent, 1.25 mi.	Barrett et al. (1985)
247-41-10200-2630								Note - TALK MTS D-5	
Chinook Creek #	1982	8/04	5	0	0	0	0	Aerial count, helicopter - Excellent, 2.0 Tributary in Devil Canyon (RM 1	6.8). ADF&G (1983b)
	1982	8/11	1	0	0	0	0	Aerial count, helicopter - Good, 1.5 mi.	ADF&G (1983b)
	1982	8/19	ī	ò	Ŏ	Ó		Aeriel count, helicopter - Excellent, 1.0 mi.	ADF&G (1983b)

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OCATION CODE / STREAM NAME	YEAR	DATE	CHINDOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD COMMENTS	DATA SOURCE
	1982	8/22	0	0	0	0	0	Aerial count, helicopter - Good, 2.0 mi.	ADF&6 (1983b)
	1982	10/25	0	0	0	•	0	Aerial count, helicopter - Bood, 0.1 mi.	ADF&G (1983b)
	1983	7/24	4	0	0	0	0	Aerial count, helicopter - Excellent, 1.0 mi.	Barrett et al. (198
	1983	8/01	8	0	0	0	0	Aerial count, helicopter - Excellent, 1.0 mi.	Barrett et al. (198
	1983	8/09	0	0	0	0	0	Aerial count, helicopter - Poor, 1.0 mi.	Barrett et al. 1198
	1983	8/26	0	0	0	0	0	Aerial count, helicopter - Fair, 1.0 mi.	Barrett et al. (198
	1983	9/04	0	0	0	0	0	Aerial count, helicopter - Excellent, 1.0 mi.	Barrett et al. 1199
	1983	9/10	0	0	0 `	0	0	Aerial count, helicopter - Excellent, 1.0 mi.	Barrett et al. (198
	1983	9/17	0	0	0	0	0	Aerial count, helicopter - Excellent, 1.0 mi.	Barrett et al. (196
	1983	9/24	0	0	0	0	0	Aerial count, helicopter - Excellent, 1.0 mi.	Barrett et al. (19)
	1983	10/01	0	0	0	0	0	Aerial count, helicopter - Excellent, 1.0 ai.	Barrett et al. (196
	1983	10/08	0	0	0	0	0	Aerial count, helicopter - Excellent, 1.0 mi.	Barrett et al. (19)
	1984	7/21	2	0	0	0	0	Aerial count, helicopter - Fair, 1.0 mi.	Barrett et al. (19)
	1984	B/01	15	0	0	0	0	Aerial count, helicopter - Excellent, 1.0 mi.	Barrett et al. (19)
	1984	8/11	8	0	0	0	0	Aerial count, helicopter - Good, 1.0 mi.	Barrett et al. (19)
	1984	8/18	0	0	0	0	0	Aerial count, helicopter - Good, 1.0 mi.	Barrett et al. (19)
	1984	9/15	0	0	0	0	0	Aerial count, helicopter - Good, 1.0 mi.	Barrett et al. (19)
	1984	9/29	0	0	0	0	0	Aerial count, helicopter - Good, 1.0 mi.	Barrett et al. (19)
	1984	10/13	0	0	0	0	0	Aerial count, helicopter - Excellent, 1.0 mi.	Barrett et al. (19)
47-41-10200-2649 +								Note - TALK MTS 0-5	
Devil Creek *	1982	8/04	0	0	0	0	0	Aerial count, helicopter ~ Excellent, 2.0   Tributary in Devil Canyon (RM 16)	.0). ADF&6 (1983b)
	1982	8/11	0	0	0	0	0	Aerial count, helicopter - Excellent, 2.0 mi.	ADF&G (1983b)
	1982	8/18	0	0	0	0	0	Aerial count, helicopter - Excellent, 2.0 mi.	ADF&6 (1983b)
	1982	8/22	0	0	0	0	0	Aerial count, helicopter - Excellent, 2.0 mi.	ADFRG (1983b)
	1982	10/25	0	0	0	0	0	Aerial count, helicopter - Good, 1.0 mi.	ADF16 (1983b)
	1983	7/24	0	0	0	0	0	Aerial count, helicopter - Excellent, 0.5 mi.	Barrett et al. (19
	1983	8/01	1	0	0	0	0	Aerial count, helicopter - Excellent, 0.5 mi.	Barrett et al. (19)
	1983	8/02	1	0	0	0	0	Aerial count, helicopter - Excellent, 0.5 mi.	Barrett et al. (19)
	1983	8/09	0	0	0	0	0	Aerial count, helicopter - Excellent, 0.5 mi.	Barrett et al. (19
	1983	8/26	0	0	0	0	0	Aerial count, helicopter - Excellent, 0.5 mi.	Barrett et al. (19
	1983	9/04	0	0	0	0	0	Aerial count, helicopter - Excellent, 0.5 mi.	Barrett et al. (19
	1983	9/10	0	0	0	0	0	Aerial count, helicopter - Excellent, 0.5 mi.	Barrett et al. (19
	1983	9/18	0	0	0	0	0	Aerial count, helicopter - Excellent, 0.5 mi.	Barrett et al. (19
	1983	9/24	0	Ö	Ö	Ö	0	Aerial count, helicopter - Excellent, 0.5 mi.	Barrett et al. (19
	1983	10/01	Ö	Ŏ	Ö	Ŏ	0	Aerial count, helicopter - Excellent, 0.5 mi.	Barrett et al. (19
	1983	10/08	Ō	Ō	Ö	ŏ	Ö	Aerial count, helicopter - Excellent, 0.5 mi.	Barrett et al. (19
	1984	7/21	0	0	0	0	0	Aerial count, helicopter - Poor, 0.5 mi.	Barrett et al. (19)
	1984	8/01	Ŏ	Ó	Ů	0	0	Aerial count, helicopter - Fair, 0.5 mi.	Barrett et al. (19
	1984	8/11	0	Ŏ	Ŏ	Ŏ	0	Aerial count, helicopter - Good, 0.5 mi.	Barrett et al. (19
	1984	8/18	0	Ŏ	0	Ŏ	0	Aerial count, helicopter - Good, 0.5 mi.	Barrett et al. (19

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LOCATION CODE / STREAM NAME	YEAR	DATE	CHINDOK	SOCKEYE	COHO	CHUN	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
	1984 1984	9/15 10/13	0	0	0	0		Aerial count, helicopter - Good, 0.5 mi. Aerial count, helicopter - Excellent, 0.5 mi.		Barrett et al. (1985) Barrett et al. (1985)
247-41-10200-2696 *								Furth (RM 1 docum	- TALK MTS D-4 hest upstream tributary 176.1) where salmon have been mented in the middle reach of Gusitna River.	·
fog Creek ◆	1984	7/21	2	0	0	0	0	Aerial count, helicopter - Excellent, 3.0 mi.		Barrett et al. (1985)
	1984	8/01	0	0	0	0	0	Aerial count, helicopter - Excellent, 3.0 mi.		Barrett et al. (1985)
	1984	8/11	0	0	0	0	0	Aerial count, helicopter - Good, 3.0 mi.		Barrett et al. (1985)
	1984	8/18	0	0	0	0	0	Aerial count, helicopter - Good, 3.0 mi.		Barrett et al. (1985)

<sup>\* -</sup> These new location codes and mames were submitted to the editors of the Anadromous Waters Catalog in October 1985. Upon verification, they will be included in the next printing of the Anadromous Waters Catalog.

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LOCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	СОНО	CHUM	PINK	SURVEY KETHOD	CONNENTS	DATA SOURCE
247-41~10200-2053-3150-4060										
Peters Creek	1962	8/14	3					Aerial count		Kubik (1964)
	1963	6/25	0					Aerial count		Kubik (1964)
	1965	7/27	101					Aerial count		Kubik (1966)
	1972		95					Aerial count		Kubik (1973)
	1973		59					Ground survey		Kubik & Trent (1974
	1974		124					Aerial count		Kubik & Chlupach (1
	1975		8					Aerial count		Kubik & Riis (1976)
	1976		1489					Aerial count		Kubik & Wadman (197
	1977		3042					Aerial count		Kubik & Wadman (197
	1978		1130					Aerial count		Kubik & Wadman (197
	1982		4000		1000		10000			Kubik (pers. com.)
	1983	7/14	2272					Aerial count, helicopter - Excellent	Martin Creek included in this count	Barrett et al. 1198
	1984		324					Aerial count	Martin Creek included in this count	Hepler & Bentz (198
247-41-10200-2053-3150-4060-5012										
247-41-10200-2053-3150-4060-5026										
Kenny Creek										
247-41-10200-2053-3150-4060-5033										
Martin Creek	Hist								Chinook present	
	1962	7/30	6					Aerial count	Peak	Kubik (1963)
	1963	7/09	5					Aerial count	Peak	Kubik (1964)
	1964	7/29	12					Aerial count	Peak	Kubik (1965)
	1974		23					Aprial count		Kubik & Chlupach (1
	1975		6					Aerial count		Kubik & Riis (1976)
	1976		791					Aerial count		Kubik & Wadman 1197
	1977		1061					Aprial count		Kubik & Wadean (197
•	1978		205					Aerial count		Kubik & Wadean (197
	1979		108					Aerial count	Provide included in Daton Count data	Kubik & Delaney (19
	1983 1984							Aerial count Aerial count	Counts included in Peters Creek data Counts included in Peters Creek data	Hepler & Bentz (198 Hepler & Bentz (198
247-41-10200-2053-3150-4060-5033-6006	•									
247-41-10200-2053-3150-4060-5033-6009 Black Creek										
247-41-10200-2053-3150-4060-5033-6010										
47-41-10200-2053-3150-4060-5033-6015										

LOCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	соно	CHUN	PINK	SURVEY METHOD	CONNENTS	DATA SOURCE
Sand Creek										
247-41-10200-2053-3150-4060-5033-6019 South Fork Martin Creek										
247-41-10200-2053-3150-4060-5033-6025									•	
247-41-10200-2053-3150-4060-5033-6033 String Creek										
247-41-10200-2053-3150-4060-5040 Deep Creek										
247-41-10200-2053-3150-4060-5050 Cottonwood Creek										
247-41-10200-2053-3150-4060-5050-6003 Willow Creek										
247-41-10200-2053-3150-4060-5067 • Bird Creek •	1964	7/03	4					Aerial count	Note - TALK C-2	Kubik (1965)
247-41-10200-2053-3150-4080									•	
Bear Creek	1962	7/23	•					Aerial count	Peak	Kubik (1963)
	1963	7/09						Aerial count	Peak	Kubik (1964)
	1964	7/29						Aerial count	Peak	Kubik (1965)
	1972 1976		12 15					Aerial count Aerial count	Peak	Kubik (1973) Kubik & Wadman (1977)
	1977		298					Aerial count	•	Kubik & Wadman (1978)
	1982		100				5000	Weller Coult		Kubik (pers. comm.)
			•••						Max. abundance estimate from several years observations	Rober (par 57 Comm)
247-41-10200-2053-3150-4090										
Pickle Creek	1982		100				5000			Kubik (pers. comm.)
247-41-10200-2053-3150-4090-500B										
Hungrymay Creek	1982		100	5000						Kubik (pers. comm.)
247-41-10200-2053-3150-4115 Treasure Creek										
247-41-10200-2053-3150-4120										
Cache Greek	1958	7/23	0					्र <b>र शाम</b> ः . १ व्यक्तिः	Suspected aerial count	Kubik (1964)

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LOCATION CODE / STREAM NAME	YEAR	DATE	CHINOCK	SOCKEYE	СОНО	CHUM	PINK		SURVEY HETHOD	COMMENTS	DATA SOURCE
	1962	7/23	4					Aerial count		Peak	Kubik (1963)
	1963	6/25	0					Aerial count		Peak	Kubik (1964)
	1976		61					Aerial count			Kubik & Wadman (197)
	1977		100		_			Aer intrount			Kubik & Wadman (197
	1982				2	68					Kubik (pers. comm.)
	1983		497					Aerial count			Hepler & Bentz (198
247-41-10200-2053-3150-4120-5017 Dollar Creek											
247-41-10200-2053-3150-4120-5021 Fails Creek											
247-41-10200-2053-3150-4120-5023											
247-41-10200-2053-3150-4120-5027 Nugget Creek											
247-41-10200-2053-3150-4120-5032 Cache Creek											
247-41-10200-2053-3150-4144 #										Note - TALK B-3	
Granite Creek +	1973		4					Aerial count,	fixed wing		Watsjold (1974)
247-41-10200-2053-3170											
Lake Creek	Hist									Max. count 770 chinook (1969),	
				•						559 sockeye (1956)	
	1961	6/27	60					Aerial count			Kubik (1964)
	1962	7/12	10					Aerial count		Peak ·	Kubik (1963)
	1963	6/21	4					Aerial count			Kubik (1964)
	1964		45					Aerial count		Lake Creek mainstem count	Kubik (1965) >
	1964		305					Aerial count		Lake Creek System (includes Camp, Sunflower, Yenlo, and Twin Cks.)	Kubik (1965)
	1965		172					Aerial count		Lake Creek mainstem count	Kubik (1967)
	1965		0					Aerial count		Lake Creel System	Kubik (1967)
	1966		30					Aerial count		Lake Creek mainstem count	Kubik (1967)
	1966		147					Aerial count		Lake Creel System	Kubik (1967)
	1966		300							Total escapement estimate	Kubik (1967)
	1967		343					Aerial count		Lake Creek mainstem count	Kubik (1968)
•	1967		723					Aerial count		Lake Creel System	Kubik (1968)
	1967		1000					the thent		Total escapement estimate	Kubik (1968)
	1968		362					Aerial count		Lake Creek mainstem count	Kubik (1969)
	1968		453					Aerial count		Lake Creel System	Kubik (1969)
	1968		1300					werter Fount		Total escapement estimate	Kubik (1969)

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LOCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
	1969		304					Aerial count	Lake Creek mainstem count	Kubik (1970)
	1949		770					Aerial count	Lake Greel System	Kubik (1970)
	1969		1540						Total escapement estimate	Kubik (1970)
	1969		350						Excellent observation - TRM 0.0-10.0	Stewart & Flagg (196
	1970		54					Aerial count - Poor	Lake Creek mainstem count, high water	Kubik (1971)
	1970	7/26	189				70			ADF&6 (1982)
	1971		0					Aerial count	Lake Creek meinstem count	Kubik (1972)
	1971		119					Aerial count	Includes Sunflower & Camp Ck	Kubik (1972)
	1972		442					Aerial count	Lake Creek mainstem count	Kubik (1973)
	1972		920					Aerial count	Lake Creel System	Kubik (1973)
	1972	8/30	114	112						ADF&6 (1982)
	1973		761					Aerial count/Ground survey		Kubik & Trent (1974)
	1974		535					Aerial count		Kubik & Chlupach (19)
	1975		281					Aerial count		Kubik & Riis (1976)
	1974	7/2 <b>6</b>	3735					Aerial count		Kubik & Wadman (1977)
	1977		7391					Aerial count		Kubik & Wadman (1978)
	1978		8931					Aerial count		Kubik & Wadman (1979)
	1979		4196					Aerial count		Kubik & Delaney (1980
	19B0		<b>9000</b>	5000	2500	15000	500000			Kubik (pers. comm.)
	1981	7/30	169					Aerial count, helicopter - Poor	Camp Creek to Lake, partial count	ADF&G (1981)
	1982		3577					Aerial count		Delaney & Hepler (198
	1982	8/02	2317					Aerial count, helicopter - Good		ADF&G (1983a)
	1983	7/26	7075					Aerial count, helicopter - Excellent		Barrett et al. (1984)
247-41-10200-2053-3170-0010										
Chelatna Lake	1972			57					Includes Coffee Ck. & Snowslide Ck.	Tarbox & Sanders (19)
	1973			11					Includes Coffee Ck. & Snowslide Ck.	Tarbox & Sanders 1191
	1974			0					Includes Coffee Ck. & Snowslide Ck.	Tarbox & Sanders (19)
	1975			4				v	Includes Coffee Ck. & Snowslide Ck.	Tarbox & Sanders (19)
	1975	8/29		50						ADF&6 (1982)
	1977			171					Includes Coffee Ck. & Snowslide Ck.	Tarbox & Sanders (19)
	1976			0					Includes Coffee Ck. & Snowslide Ck.	Tarbox & Sanders (19)
	1979			0					Blacially occluded,Coffee & Snowslide	Tarbox & Sanders (19
	1980	8/29		4120					Includes Coffee Ck. & Snowslide Ck.	Tarbox & Sanders (198
	1981	8/27		14500					Includes Coffee Ck. & Snowslide Ck., includes 2,700 carcassas	Tarbox et al. (1983)
	1982	8/20		23180					Includes 2,700 carcassas Includes 2,700 carcasses	ADF&G (1985c)-YENDNE
	1983	8/25		520					INFIGUES TOLON COLFERNOS	ADF&G (1985c)-YENONE
	1984	8/08		575						ADF&B (1985c)-YENONE
	1984	8/15		3/3 341						ADFEG (1985c)-YENONE
	1984	8/26		41						ADFR6 (1985c)-YENONE
247~41-10200-2053-3170-4027										
Yenio Craek	1962	7/27	33					Aerial Sequence		Kubik (1963)
	-							G-164 EGB/*		
								44.		

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LOCATION CODE / STREAM NAME	YEAR	DATE	CHINDOK	SOCKEYE	СОНО	CHUM	PINK		SURVEY METHOD	COMMENTS	DATA SOURCE
	1963	6/25	0					Aerial count			Kubik (1964)
	1964	7/29	8					Aerias count			Kubik (1965)
	1965	7/29	3					Aerial aunt			Kubik (1966)
	1966		6					Aeri & count			Kubik (1973)
	1969 1972		28 0					Aerial count Aerial count			Kubík (1973) Kubík (1973)
247-41-10200-2053-3170-4039											
247-41-10200-2053-3170-4039-5017											
247-41-10200-2053-3170-4045 Hoam Creek											
247-41-10200-2053-3170-4057										W	
Camp Greek	Hist	3,0,	0,					Assist sec-4	fiund winn	Hax. count 101 chinook (1965)	Stefanich (1962)
	1961 1962	7/26 7/23	86 34					Aerial count Aerial count		Peak count Peak	Kubik (1963)
	1762	7/23	10					Aerial count		FEEK	Kubik (1964)
	1964	7/29	94					Agrial count			Kubik (1965)
	1965	7/30	101					Aerial count			Kubik (1966)
	1966		68					Aerial count			Kubik (1973)
	1967		225					Aerial count			Kubik (1973)
	1968		129					Aerial count			Kabik (1973)
	1969		86					Aerial count			Kubik (1973)
	1969		0							To early	Stewart & Flagg (19
	1970		47					Aerial count			Kubik (1973)
	1971		98					Aerial count			Kubik (1973)
	1972		126					Aerial count		•	Kubik (1973)
	1973		72					Aerial count			Kubik & Trent (1974)
	1981	7/24	436					Aerial count	, helicopter - Fair		ADF&G (1981)
	1982	8/02	517					Aprial count	, helicopter - Excellent		ADF&G (1983a)
	1983	7/29	1050					Aerial count	, helicopter - Excellent		Barrett et al. 1198
247-41-10200-2053-3170-4057-5011 Hills Creek											
247-41-10200-2053-3170-4057-5011-601					;						
Twin Creek	1963	7/09	20					Aerial count			Kubik (1964)
	1964	7/29	7					Aerial count			Kubik (1965)
	1965	7/30	19					Aerial count			Kubik (1966)
	1966		5					Aerial count			Kubik (1973)
	1969		56					Aerial count			Kubik (1973)
	1972		0					Aerial count			Kubik (1973)

LOCATION CODE / STREAM NAME	YEAR	DATE	CHINODK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
247-41-10200-2053-3170-4067										
Sunflower Creek	Hist								Max. count 151 chinook (1964),	
(Lake Creek Drainage)									1 pink (1953)	
	1961	7/26	16					Aerial count, fixed wing	,	Stefanich (1962)
	1962	7/23	19					Aerial count	Peak	Kubik (1963)
	1963	8/24	32					Aerial count		Kubik (1964)
	1964	7/29	151					Aerial count		Kubik (1965)
	1965	7/30	49					Aerial count		Kubik (1966)
	1966		38					Aerial count		Kubik (1973)
	1967		155					Aerial count		Kubik (1973)
	1968		162					Aerial count		Kubik (1973)
	1969		296					Aerial count		Kubik (1973)
	1970		88					Aerial count		Kubik (1973)
	1971		31					Aerial count		Kubik (1973)
										Kubik (1973)
	1972		261					Aerial count		Kubik & Trent (1974)
	1973	7.04	154					Aerial count		
	1981	7/24	260					Aerial count, helicopter - Fair		ADF&G (1981)
	1982	8/02	743					Aerial count, helicopter - Excellent		ADF&6 (1983a)
	1983	7/29	2250					Aerial count, helicopter - Excellent		Barrett et al. (1984
									W. I. TANK D. T.	
247-41-10200-2053-3170-4080 *									Note - TALK C-3	B . ( - (
Eagle Creek *	1985									Davis (pers. comm.)
247-41-10200-2053-3170-408B										
Coffee Creek	Hist								Sockeye present	
COLLEC CLEEK	1963	8/19	ú					Aerial count	socrete biesent	Kubik (1964)
	1972	8/29	v	254				Bround Survey		Barrett (1973a)
	• • • •									Barrett (1973a)
	1972	8/30		24				Ground survey	·	
	1973	9/06	0	•	0	0	0	Ground survey		Barrett (1973a)
	1974	9/06	0	0	0	0	0	Ground survey		Barrett (1975a)
	1975	8/30		70						ADF&G (1982)
	1975	9/01		7						ADF&6 (1982)
	1975			0				Ground survey		Friese (1976a)
	1976							Ground survey	Glacially occluded	Frie <b>se</b> (1976b)
	1977	8/27		231						ADF&G (1982)
	1977								Glacially occluded	Namtvedt et al. (197
	1978			0						Waltemyer et al. (19
	1978	8/27		18					Coffee Creek and Snowslide Creek	ADF&G (1982)
247-41-10200-2053-3170-4093									Note - TALK C-4	
	W: -4									
Spring Creek •	Hist	B / 00						Fact annual	Max. count 142 sockeye (1954)	D
	1972	8/29		33				Foot survey	Includes Snowslide Creek	Barrett (1973a)
	1972			57					Includes Snowslide Creek	ADF&G (1985c)-YENDNE

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LOCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	СОНО	CHUM	PINK	SURVEY NETHOD	CONNENTS	DATA SOURCE
	1973	9/06		11				Foat survey	Includes Snowstide Creek	Barrett (1973a)
	1974	9/06	0	0	0	0	0	Font survey	Includes Snowslide Creek	Barrett (1975a)
	1975	9/01		4					Includes Snowslide Creek	Friese (1976a)
	1976			0				Foot survey	Glacially occluded	Friese (1976b)
247-41-10200-2053-3170-4095 # Snowslide Creek #									Note - Trib. of Cripple Creek, TALK C	-4
	1977			171					Referred to in previous reports as Spring Creek	Namtyedt et al. (1970
	1978			0					Referred to in previous reports as Spring Creek	Waltemyer et al. (198
247-41-10200-2053-3170-4095-5019										
Cripple Creek	1975	8/23		427						ADF&G (1982)
	1975	B/30		4B						ADF&6 (1982)
	1976	B/23		438						ADF&6 (1982)
	1976	9/02	24	428						ADF&G (1982)
	1977	9/12	0	0	0	0	0			ADF&G (1982)
	1979	8/26	0	0	0	0	0			ADF&G (1982)
247-41-10200-2053-3180									Note - Also known as Quick Creek	
									(Barrett 1975, weir counts)	
									and Quig Creek (ADF&G, Soldatna	)
Fish Lake Creek / Quig Creek									• · · · · ·	
-	1965	7/30	53					Aerial count		Kubik (1966)
	1974	7/30-8/14		1048	6		7	Neir count, Quick Creek	Partial estimate for sockeye & coho	Barrett (1975b)
	1077							·	due to sampling dates	
	1977		131					Aerial count	,	Kubik & Wadman (1978)
	1978	7 (00	66	47700				Aerial count		Kubik & Wadman (1979)
	1983	7/22	250	17500				Aerial count	Sockeye reported (15000-20000)	Marcuson (pers. com.)
247-41-10200-2053-3180-0010									Note - All Fish Lake data combined (Fish Lake 0010 - 0050)	
Fish Lakes	Hist								Sockeye escapements exceeding	
(Fish Lake Creek)	1974			1048					1,000 Escapement count (weir)	Barrett (1975b)
	1981		200		500				.,	Kubik (pers. com.)
247-41-10200-2053-3180-0020									Note - See Fish Lakes (0010)	
Fish Lakes										
(Fish Lake Creek)										
247-41-10200-2053-3180-0030									Note - See Fish Lakes (0010)	
Fish Lakes										
(Fish Lake Creek)										

OCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	COHD	CHUM	PINK	SURVEY METHOD	COMMENTS	DATA SOURC
47-41-10200-2053-3180-0040 Fish Lakes (Fish Lake Creek)									Note - See Fish Lakes (0010)	
47-41-10200-2053-3180-0050 Fish Lakes (Fish Lake Creek)									Note - See Fish Lakes (0010)	
47-41-10200-2053-3205										
Skwentna River	Hist								Max. count 75 sockeye (1953)	
	1958	6/12	0						Suspected aerial count	Kubik (1964)
	1976	8/26		150 450	20	1	140			ADF&6 (1982)
	1977 1978	9/01 B/29		400 30B						ADF&G (1982) ADF&G (1982)
	1779	0/21		300						HVF4D (1704)
7-41-10200-2053-3205-4027									Note - TYONEK D-4	
Eight Mile Creek →	1961	6/17	0						Peak, suspected ground survey	Kubik (1964)
	1962	7/04	2					Ground survey	Peak	Kubik (1963)
7=41-10200-2053-3205-4050										
Shell Creek	Hist								Significant numbers of sockeye	
	1961	6/17	0					Aerial count	arditations insupers of societies	Kubik (1964)
	1962	8/03	0					Aerial count		Kubik (1964)
	1963	6/19	0					Aerial count		Kubik (1964)
	1972	7/28		5000			5 ·	Ground survey		Barrett (1973a)
	1972	8/10		0	0	0	0	Ground survey		Barrett (1973a)
	1972	8/18		0	0	0	0	Ground survey		Barrett (1973a)
	1972	8/29		50				Aerial count, Super Cub		Barrett (1973a)
	1973	7/15-8/14	0	26	0	0	26	Neir count	Weir site #1, estimates believed low due to low discharge and timing	Barrett (1973a)
	1973	9/14		200				Aerial count, Super Cub	•	Barrett (1973a)
	1973			295				Aerial count, Super Cub	Peak survey count	Barrett (1973a)
	1974	8/26		35	15			Aerial count, Super Cub		Barrett (1975a)
	1974	9/09		64	20			Aerial count, Super Cub		Barrett (1975a)
	1974	10/03		0	0	0	0	Aerial count, Super Cub		Barrett (1975a)
	1974	7/10-0/17		956	ı		3	Weir count	Escapement count (Meir Sites 01 & 02)	Barrett (1975a)
	1975	B/29		0	0	0	0	Aerial count, Super Cub	P	Friese (1976a)
	1975 1976	7/26-8/1 <b>5</b> 8/17		2027 900		2	76	Weir count	Escapement count (weir)	Friese (1976a)
	1976	B/1/		900 170	55		20			ADF&6 (1982)
	1976	9/14		120	10			( 1:04 T T"		ADF&6 (1982) ADF&6 (1982)
	1976	7/17		344					Peak survey count	ADF&6 (1982)
	1977	8/24		127				SHIP SEE	FEEK SUITEY LOUIL	ADF&6 (1982)
	.,,,	07.47		147				रुव्य ः		UN. 20 (1)07)

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ATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
Talachulitna River	Hist						*********		Max. count 52,900 sockeye (1962);	
				,					30,000 coho (1952); 1,522 chums	
									(1956) 1,000,000 pinks (1960)	
	1958	6/25	0						Suspected aerial count	Kubik (1964)
	1961	6/29	32					Aerial count, fixed wing	Peak count	Stefanich (1962)
	1962	7/27	78					Aerial count		Kubik (1963)
	1963	7/29	56					Aerial count		Kubik (1964)
	1964	7/28	95					Aerial count		Kubik (1965)
	1965	8/07	69					Aerial count		Kubik (1966)
	1966		15					Aerial count		Kubik (1967)
	1972		405					Aerial count		Kubik (1973)
	1972			6501				Aerial count	Total count - entire drainage	Friese (1976a)
	1973			12362				Aerial count	Total count - entire drainage	friese (1976a)
	1974			6816				Aerial count	Total count - entire drainage	friest (1976a)
	1975			5105				Aerial count	Total count - entire drainage	Friese (1976a)
	1976			13210				Aerial count	Total count - entire drainage	Namtvedt et al. (197
	1977			25935				Aerial count	Total count - entire drainage	Namtvedt et al. (197
	1978			1430B				Aerial count	Total count - entire drainage	Waltemyer et al. (19
	1979			11696				Aerial count	Total count - entire drainage	Tarbox et al. (1983)
	1980			21125				Aerial count	Total count ~ entire drainage	Tarbox et al. (1983)
	1981			9926				Aerial count	Total count - entire drainage	Tarbox et al. (1983)
	1972	7/10-8/14	405	15730	454	12783	202915	Observation towers	Tower 1 only, (7/10-7/17)	Barrett (1973a)
									Tower 1 & 2, (7/18-8/14)	
									Barrett (1973a) doubted the accuracy	
									of the 1972 sockeye & chum estimates	
									due to possible species I.D. problems	
	1972	9/16		30				Aerial count, helicopter	Upper river	Barrett (1973a)
	1972		405					Observation tower		Kubik & Trent (1974)
	1973	7/05		78					Upper river	ADF&6 (1982)
	1973	7/5-8/14	291	19727	8	707	92496	Observation tower	Tower 2 only,	Barrett (1973a)
									Partial estimates for chinook & coho	
									due to timing of sampling	
	1973					50	· 6200		Spawners observed below Tower 2	Barrett (1973a)
	1973	8/17		26				Aerial count, helicopter	Talachulitna Lake	Barrett (1973a)
	1973	8/17		510				Aerial count, Super Cub	Upper river	Barrett (1973a)
	1973	9/05		231				Aerial count, helicopter	Talachulitna Lake	Barrett (1973a)
	1973	9/05		78				Aerial count, helicopter	Upper river	Barrett (1973a)
	1973	9/28		61				Aerial count, helicopter	Talachulitna Lake	Barrett (1973a)
	1973	9/28		65	6	10		Aerial count, helicopter	Upper river	Barrett (1973a)
	1973		333			•		Observation tower	-FF	Kubik & Trent (1974)
	1974	7/6-8/14		15976	193	415	50496	Observation tower	Tower 3.	Barrett (1975a)
									Partial estimates for coho	
									due to timing of sampling	

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LOCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUM PINI		SURVEY METHOD	COMMENTS	DATA SOURCE
	1974	8/29		55			Aerial coun	t, helicopter		Barrett (1975a)
	1974	9/10		102			Aerial coun	t, helicopter		Barrett (1975a)
	1974		303				Aerial coun	t		Kubik & Chlupach (1975)
	1975	8/06		96						ADF&G (1982)
	1975	8/29		95						ADF&6 (1982)
	1975	8/29		150					Upper river	ADF&G (1982)
	1975		120				Aerial coun	t		Kubik & Riis (1976)
	1976	9/17		10249		30000				ADF&6 (1982)
	1976	8/25		20550					includes Talachulitna Lake and	ADF&G (1982)
									and Judd Spring #2	
	1974	8/26		10553					included Judd Lake	ADF&G (1982)
	1976		1319				Aerial coun	t		Kubik & Wadman (1977)
	1977		1856				Aerial coun	t		Kubik & Wadman (1978)
	1978		1375				Aerial coun	t		Kubik & Wadman (1979)
	1979		1648				Aprial coun	t		Kubik & Belaney (1980)
	1979	8/31		2699						ADF&G (1982)
	1981	7/29-7/30	2129				Aprial coun	t, helicopter		ADF&G (1981)
	1981	9/08		200					Upper river count	ADF&B (1985c)-YENONE.TA
	1981	10/02		35					Upper river count.	ADF&G (1985c)-YENONE.TA
									includes 25 carcasses	
	1991		2025				Aerial coun	t		Hepler & Kubik (1982)
	1982	8/01	3101				Aerial coun	t, helicopter - Excellent		ADF&G (1983a)
	1982	B/23		1000		104000		,,	Upper river survey ,	ADFAG (1985c)-YENDNE.TA
									includes 4,000 pinks carcasses	•
	1983	7/29	10014				Aerial coun	t, helicopter - Excellent	· · · · · · · · · · · · · · · · · · ·	Barrett et al. (1984)
	1983	8/27		1650				,		ADF&G (1985c)-YENONE.TA
	1984	8/28		250		6000				ADF&G (1985c)-YENONE.TA
	1984	9/04				600				ADF&G (1985c)-YENONE.TA
	1984	7/31	6138				Aerial coun	t, helicopter - Poor	· ,	Barrett et al. (1985)
247-41-10200-2053-3205-4053-5009										
247-41-10200-2053-3205-4053-5028										
Thursday Creek	1961	6/17	0				Aerial coun			Kubik (1964)
	1962	8/02	0				Aerial coun	t		Kubik (1964)
	1963	8/14	0				Aerial coun	l		Kubik (1964)
247-41-10200-2053-3205-4053-503B Deep Creek										
247-41-10200-2053-3205-4053-5046										
Friday Creek	1961	7/06	0				Aerial coun	<b>}</b>		Kubik (1964)
	1962	8/02	Ō				Aerial coun			Kubik (1964)
	1963	8/14	Ŏ				Aerial coun			' Kubik (1964)
			•							HENRY STATE

LOCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY NETHOD	COMMENTS	DATA SOURCE
	1980	7/26	82							ADF&G (1982)
247-41-10200-2053-3205-4053-5046-6011 Saturday Creek										
247-41-10200-2053-3205-4053-5046-6020						,				
247-41-10200-2053-3205-4053-5053										
247-41-10200-2053-3205-4053-5066										
Talachulitna Creek	Hist								Max. count 1,199 sockeye (1956)	
	1958	9/29	0						Suspected aerial count	Kubik (1964)
	1962	6/27	12	704				Aerial count	Peak	Kubik (1963)
	1972	9/16		390				Aerial count, helicopter		Barrett (1973a)
	1973 1973	9/17 9/05		270 <b>9</b> 40				Aerial count, Super Cub		Barrett (1973a) Barrett (1973a)
	1973	9/28		1350				Aerial count, helicopter Aerial count, helicopter		Barrett (1973a)
	1974	8/28		74				Aerial count, helicopter		Barrett (1975a)
	1974	9/10		205				Aerial count, helicopter		Barrett (1975a)
	1975	8/29		86						ADF&G (1982)
	1981	9/08		5025					Includes 4,000 carcasses	ADF&G (1985c)-YENONE
	1981	10/02		100					•	ADF&G (1985c)-YENONE
	1982	8/23		6045			50		Includes 1,395 carcasses	ADF&G (1985c)-YENONE
	1983	7/21						\	Significant nos.of chinook & sockeye, no counts	Marcuson (pers. come
	1983	8/27		2200					no formers	ADF&G (1985c)-YENONE
	1984	9/28		6000						ADF&G (1985c)-YENDNE
	1984	9/04		4430						ADF&G (1985c)-YENONE
247-41-10200-2053-3205-4053-5066-0010										
Judd Lake	Hist								Max. counts 100,000 sockeye (1966),	
									10,062 pinks (1952), 56 chinook	
	1070	0.01							(1963) and 370 chum (1952)	
	1970 1972	9/01		600				A-dal and ballants		0
	1973	9/16 8/17		4900				Aerial count, helicopter		Barrett (1973a)
	1973	9/05		5350 1034 <b>4</b>				Aerial count, Super Cub Aerial count, helicopter		Barrett (1973a) Barrett (1973a)
	1973	9/28		4225				Aerial count, helicopter		Barrett (1973a)
	1974	8/28		4050				Aerial count, helicopter		Barrett (1975a)
	1974	9/10		5675				Aerial count, helicopter		Barrett (1975a)
	1975	8/29		4720						ADF&G (1982)
	1981	9/08		625					Includes 200 carcasses	ADF&G (1985c)-YENDNE
	1981	10/02		1800					Most at Talachulitna Creek aouth	ADF&6 (1985c)-YENONE
	1983	8/27		440						ADF&G (1985c)-YENONE

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OCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD	COMMENTS	BATA SOURCE
	1984	8/28		12500						ADFEG (1985c)-YENDNE.T.
	1984	9/04		18104						ADF&G (1985c)-YENONE.T
No location code assigned) Judd Springs									Note - TYONEK C-5, located in the marshy area on the western shore of Judd Lake, no map of its location found	Davis (pers. comm.)
	1981	10/02		3000					includes 500 carcasses	ADF&6 (1985c)-YENDNE.T
	1982	8/23		200						ADF&6 (1985c)-YENDNE.T
No location code assigned) North Judd Springs									Mote - TYONEK C-5, located in the marshy area on the western shore of Judd Lake, no map of its location found	Davis (pers. come.)
	1981 1981 1982	9/08 10/02 8/23		1000 200 400					Carcass count	ADF&6 (1985c)-YENONE.T ADF&6 (1985c)-YENONE.T ADF&6 (1985c)-YENONE.T
No location code assigned) South Judd Springs									Note - TYOMEK C-5, located in the marshy area on the western shore of Judd Lake, no map of its location found	Davis (pers. comm.)
	1981	9/0B		1000					Carcass count	ADF&G (1985c)-YENONE.T
	1981 1982	10/02 B/23		200 800					Carcass count	ADF&G (1985c)-YENDNE.T ADF&B (1985c)-YENDNE.T
47-41-10200-2053-3205-4053-5066-0020										
Talachulitna Lake	1973	8/17		26				Aerial count, Super Cub		Barrett (1973a)
	1973	9/05		531				Aerial count, helicopter		Barrett (1973a)
	1973 1981	9/28 10/02		61 75	25			Aerial count, helicopter	landarder of analysis account	Barrett (1973a)
	1981	9/0B		101	23				includes 25 sockeye carcasses includes i carcass	ADFEG (1985c)-YENDNE.T ADFEG (1985c)-YENDNE.T
	1982	8/23		12 <b>5</b>					INTINGES I CALCUSS	ADF&G (1985c)-YENONE.T
	1983	8/27		550						ADF&G (1985c)-YENONE.T
	1984	B/2B		600						ADFEG (1985c)-YENONE.T
	1984	9/04		700						ADF&G (1985c)-YENGHE.1
47-41-10200-2053-3205-4053-5066-6012										
Trinity Creek *	1961	7/10	0					Aerial count		Kubik (1964)
	1962	8/02	0					Aerial count		Kubik (1964)
47-41-10200-2053-3205-4053-5066-6012-00										
Trinity Lake	Hist								Max. counts 417 sockeye (1957),	

1972 1973 1974 1974 1974 1975 1976 1977 1977 1978 1978 1979 1980 1980 1981 1982 1983 1984 247-41-10200-2053-3205-4053-5066-6012-0020 Movie Lake 1983 1984	8/1B 9/14 8/26 9/09 10/03 9/14 8/25 9/01 8/26 9/07 8/22 9/11 9/04		350 75 0 8 0 0 42 148 196 140 150	20			Ground survey  Aerial count, Super Cub Aerial count	6,000 pints (1962) Trinity Creek Includes Movie Lake count Includes Movie Lake count	Barrett (1973a) Tarbox & Sanders (1980) Barrett (1975a) Barrett (1975a) Barrett (1975a) Friese (1976a) Friese (1976b) ADF&& (1982) Tarbox & Sanders (1980)
1973 1974 1974 1974 1975 1976 1977 1978 1978 1979 1980 1980 1980 1981 1982 1983 1983 1984 247-41-10200-2053-3205-4053-5066-6012-0020 Movie Lake 1983 1984	9/14 8/26 9/09 10/03 9/14 8/25 9/01 8/26 9/07 8/22 9/11 9/04		75 0 8 0 0 42 148 186 140 150				Aerial count, Super Cub Aerial count, Super Cub Aerial count, Super Cub Aerial count, Super Cub Aerial count, Buper Cub	Includés Movie Lake Count	Tarbox & Sanders (1980) Barrett (1975a) Barrett (1975a) Barrett (1975a) Friese (1976a) Friese (1976b) ADF&G (1982) Tarbox & Sanders (1980)
1974 1974 1974 1975 1975 1976 1977 1977 1978 1978 1979 1980 1980 1981 1982 1983 1983 1984 247-41-10200-2053-3205-4053-5066-6012-0020 Rovie Lake 1983 1984	8/26 9/09 10/03 9/14 8/25 9/01 8/26 9/07 8/22 9/11 9/04		0 0 0 42 148 186 140 150	20			Aerial count, Super Cub Aerial count, Super Cub Aerial count, Super Cub Aerial count, Buper Cub		Barrett (1975a) Barrett (1975a) Barrett (1975a) Friese (1976a) Friese (1976b) ADF&G (1982) Tarbox & Sanders (1980)
1974 1974 1975 1976 1977 1977 1977 1977 1978 1978 1979 1980 1980 1980 1981 1982 1983 1984  247-41-10200-2053-3205-4053-5066-6012-0020 Movie Lake 1983 1984	9/09 10/03 9/14 8/25 9/01 8/26 9/07 8/22 9/11 9/04		8 0 0 42 14B 186 140 150 195	20			Aerial count, Super Cub Aerial count, Super Cub Aerial count, Super Cub Aerial count, Buper Cub	Includes Novie Lake count	Barrett (1975a) Barrett (1975a) Friese (1976a) Friese (1976b) ADF&G (1982) Tarbox & Sanders (1980)
1974 1975 1976 1977 1977 1978 1978 1979 1980 1980 1980 1981 1982 1983 1984 247-41-10200-2053-3205-4053-5066-6012-0020 Movie Lake 1983 1984	9/14 8/25 9/01 8/26 9/07 8/22 9/11 9/04		0 42 148 186 140 150 195	20			Aerial count, Super Cub Aerial count, Super Cub Aerial count, Buper Cub	Includes Novie Lake count	Barrett (1975a) Friese (1976a) Friese (1976b) ADF&G (1982) Tarbox & Sanders (1980)
1975 1976 1977 1977 1977 1978 1978 1978 1979 1980 1980 1981 1982 1983 1984  247-41-10200-2053-3205-4053-5066-6012-0020 Movie Lake 1983 1984  247-41-10200-2053-3205-4053-5066-6026	9/14 8/25 9/01 8/26 9/07 8/22 9/11 9/04		0 42 148 186 140 150 195	20			Aerial count, Super Cub Aerial count, Buper Cub	Includes Novie Lake count	Friese (1976a) Friese (1976b) ADF&G (1982) Tarbox & Sanders (1980)
1976 1977 1977 1978 1978 1978 1978 1979 1980 1990 1980 1981 1982 1983 1984  247-41-10200-2053-3205-4053-5066-6012-0020 Movie Lake 1983 1984	8/25 9/01 8/26 9/07 8/22 9/11 9/04		42 148 186 140 150 195	20			Aerial count, Buper Cub	Includes Novie Lake count	Friese (1976b) ADF&G (1982) Tarbox & Sanders (1980)
1977 1978 1978 1978 1978 1979 1970 1980 1980 1981 1982 1983 1984  247-41-10200-2053-3205-4053-5066-6012-0020 Movie Lake 1983 1984  247-41-10200-2053-3205-4053-5066-6026	8/25 9/01 8/26 9/07 8/22 9/11 9/04		148 186 140 150 195 50	20			, ,	Includes Movie Lake count	ADF&6 (1982) Tarbox & Sanders (1980)
1977 1978 1978 1979 1980 1980 1981 1982 1983 1984 247-41-10200-2053-3205-4053-5066-6012-0020 Movie Lake 1983 1984	9/01 8/26 9/07 8/22 9/11 9/04		186 140 150 195 50	20			Aerial count	Includes Hovie Lake count	Tarbox & Sanders (1980)
1978 1978 1979 1980 1980 1981 1982 1983 1984 247-41-10200-2053-3205-4053-5066-6012-0020 Movie Lake 1983 1984 247-41-10200-2053-3205-4053-5066-6026	9/26 9/07 8/22 9/11 9/04		140 150 195 50	20			Aerial count	Includes Hovie Lake count	
1978 1979 1980 1980 1981 1982 1983 1984 247-41-10200-2053-3205-4053-5066-6012-0020 Movie Lake 1983 1984 247-41-10200-2053-3205-4053-5066-6026	9/07 8/22 9/11 9/04		150 195 50	20					
1979 1980 1980 1981 1982 1983 1984 247-41-10200-2053-3205-4053-5066-6012-0020 Movie Lake 1983 1984 247-41-10200-2053-3205-4053-5066-6026	8/22 9/11 9/04 8/27		195 50						ADF&G (1982)
1980 1980 1981 1982 1983 1984 247-41-10200-2053-3205-4053-5066-6012-0020 Rovie Lake 1983 1984 247-41-10200-2053-3205-4053-5066-6026	8/22 9/11 9/04 8/27		50				Aerial count	Includes Movie take count	Tarbox & Sanders (1980)
1980 1981 1982 1983 1984 247-41-10200-2053-3205-4053-5066-6012-0020 Movie Lake 1983 1984 247-41-10200-2053-3205-4053-5066-6026	9/11 9/04 8/27							Includes Movie Lake count	Tarbox & Sanders (1980)
1981 1982 1983 1984 247-41-10200-2053-3205-4053-5066-6012-0020 Movie Lake 1983 1984 247-41-10200-2053-3205-4053-5066-6026	9/04 8/27		244						ADF&G (1982)
1982 1983 1984 247-41-10200-2053-3205-4053-5066-6012-0020 Movie Lake 1983 1984 247-41-10200-2053-3205-4053-5066-6026	8/27		200					Includes Movie Lake count	Tarbox & Sanders (1980)
1783 1784 247-41-10200-2053-3205-4053-5066-6012-0020 Movie Lake 1983 1984 247-41-10200-2053-3205-4053-5066-6026			500						Tarbox et al. (1983)
1984 247-41-10200-2053-3205-4053-5066-6012-0020 Movie Lake 1983 1984 247-41-10200-2053-3205-4053-5066-6026			138						ADF&G (1985c)-YENONE.TA
247-41-10200-2053-3205-4053-5066-6012-0020 Movie Lake 1983 1984 247-41-10200-2053-3205-4053-5066-6026			230						ADF&G (1985c)-YENONE.TA
Movie Lake 1983 1984 247-41-10200-2053-3205-4053-5066-6026	8/28		280						ADFEG (1985c)-YENONE.TA
1984 247-41-10200-2053-3205-4053-5066-6026									
247-41-10200-2053-3205-4053-5066-6026	8/27		30						ADF&G (1985c)-YENONE.TA
	8/28		640					Includes 200 fish at stream mouth	ADF&G (1985c)-YENONE.TA
247-41-10200-2053-3205-4053-5066-6034									
Judd Springs #2 # Hist								Max. count 2,858 sockeye (1956)	
1972	9/16		180				Aerial count, belicopter		Barrett (1973a)
1973	8/17	0	0	0	0	0	Aerial count, Super Cub		Barrett (1973a)
1973	9/05		335	•	-	•	Aerial count, helicopter		Barrett (1973a)
1973	9/28		75				Aerial count, helicopter		Barrett (1973a)
1974	8/29	0	0	0	0	Λ	Aerial count, belicopter		Barrett (1975a)
1974	9/10	•	82	•	•	•	Aerial count, belicopter		Barrett (1975a)
1975	8/29	0	0	0	0	0	neries councy messcapes		ADF&6 (1982)
1983	8/27	v	3908	v	•	v			ADF&G (1985c)-YENDNE.TA
1703	4727		3700						HUFKO (1763C)-TERUNC.IN
247-41-10200-2053-3205-4053-5066-6045									
Upper Talachulitna Creek ♦ 1981	9/08		175						ADF&6 (1985c)-YENONE.TA
1991	10/02		25	100					ADF&6 (1985c)-YENONE.TA
1982	B/23		990					Includes 90 carcassas	ADF&G (1985c)-YENONE.TA
1983	8/27		850						ADFLG (1985c)-YENONE.TA

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LOCATION CODE / STREAM NAME	YEAR	DATE	CHINDOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
4	1984	8/28		4500						ADF&G (1985c)-YENONE.T
	1984	9/04		3902						ADFLG (1985c)-YENONE.T
247-41-10200-2053-3205-4053-5072										
247-41-10200-2053-3205-4057										
Quartz Creek	1973	9/14		250						ADF&6 (1982)
	1976	8/17		60			35			ADF&G (1982)
	1976			150					Peak survey count	ADF&G (1982)
	1977			450		•			Peak survey count	Namtvedt et al. (1979)
	1977		8					Aerial count		Kubik & Wadman (1978)
	1978			125					Glacially occluded	Waltemyer et al. (1980)
	1979	8/26	5	480						ADF&G (1982)
	1981	9/04		1210	50					ADF&G (1982)
	1981	7/29	8					Aerial count, helicopter - Good		ADF&G (1981)
	1982								Pinks present	Kubik (pers. comm.)
247-41-10200-2053-3205-4064										
247-41-10200-2053-3205-4067-5020										
Canyon Creek #	1962	7/27	23					Aerial count	Peak	Kubik (1963)
(Skwentna River)	1963	7/13	0					Aerial count		Kubik (1964)
	1972		8					Aerial count		Kubik (1973)
	1973		29					Aerial count		Kubik & Trent (1974)
	1974		10					Aerial count		Kubik & Chlupach (1975)
	1975		2					Aerial count	•	Kubik & Riis (1976)
	1976		44					Aerial count		Kubik & Wadman (1977)
	1977		135					Aerial count		Kubik,& Wadman (1978)
	1981	7/ <b>29</b>	84					Aerial count, helicopter ~ Good		ADF&G (1981)
	1982								Chinook and pink present	Kubik (pers. comm.)
	1983	7/13	575					Aerial count, helicopter ~ Excellent		Barrett et al. (1984)
247-41-10200-2053-3205-4067 +									Note - Trib. of Canyon Creek by Dickason Mt. , TYONEK D-5	
Contact Creek #	1982		100				1000		Chua present	Kubik (pers. comm.)
247-41-10200-2053-3205-4070										
247-41-10200-2053-3205-4077 * Hayes River *										

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LOCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY NETHOD	COMMENTS	DATA SOURCE
247-41-10200-2053-3205-4112-5045-0010							********			
Puntilla Lake	1977	8/24		2100				Aerial count		Namtvedt et al. (1979
	1978	B/24		1105				Aerial count		Walkemyer et al. (198
	1979	8/26		90						Tarbox & Sanders (198
	1980	8/22		550						Tarbox & Sanders (198
	1981			200						Tarbox et al. (1983)
247-41-10200-2053-3205-4112-5049			`							
Indian Creek	1958	8/14	225						Suspected aerial count	Kubik (1964)
INGING CLEEK	19B2	9/17	113						Chinopk and chum present	Kubik (pers. comm.)
	1782								Carnook and cada present	Rubik tpers. commit
247-41-10200-2053-3205-4112-5050									Note - TALK A-6	
Moose Creek +	1982			900						Kubik (pers. comm.)
247-41-10200-2053-3205-4130 *									Note - TYONEK D-7	
Portage Creek *	1958	7/07	2						Suspected aerial count	Kubik (1964)
(Skwentna River)	1750	,,,,	•							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
247-41-10200-2053-3205-4282 *									Note - TYOMEK C-8	
Crystal Creek +	1972	8/29		32						ADF&G (1982)
	1972	9/06		11						ADF&6 (1982)
247-41-10200-2053-3213										
Hewitt Creek	Hist								Sockeye, pink, chinook present,	
HEATTE OF EAR									max. count 312 coho (1954)	
	1962	8/02	0					Aerial count		Kubik (1964)
	1972	8/23		137				Ground survey		Barrett (1973a)
	1973	8/18		29				Boat survey		Barrett (1973a)
	1973	8/29		49				Boat survey	•	Barrett (1973a)
	1973	9/12		67				Boat survey		Barrett (1973a)
	1974	8/27		94				Boat survey		Barrett (1975a)
	1974	9/09		78				Boat survey		Barrett (1975a)
	1974	9/18		32				Boat survey		Barrett (1975a)
	1975	8/25		30				Boat survey		Friese (1976a)
	1975	9/03		30				Boat survey		Friese (1976a)
	1976	8/26		17				Boat survey		Friese (1976b)
	1976	9/19		236				•	Combined with Whiskey Lake	Friese (1976b)
	1977			236 14			17	Boat survey	POWNINGS MITH MUIDER FAEE	ADF&G (1982)
		8/28					17			
	1977	D 100		B 07						Namtwedt et al. (197
	1978	8/29		93						Waltenyer et al. (19
	1979	9/07		40						ADF&S (1982)
	1979	8/26		. 20						ADF&6 (1982)
	1980	B/22		50						ADF&G (1982)
	1980	9/11		50	50					ADF&G (1982)

LOCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUN	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
<u> </u>	1982								Chinook and pink present	Kubik (pers. comm.)
	1983	7/22	0	0	0	٧	0		Cook Inlet Aquaculture Association	Marcuson (pers. coam.)
	1984	8/29		44						ADFEG (1985c)-YENONE.TA
	1984	9/04		262			,			ADF&G (1985c)-YENONE.TA
247-41-10200-2053-3213-0010										
Mhiskey Lake	Hist								Max. count 1,000 sockeye (1953)	
	1972	8/29		20				Aerial count, Super Cub		Barrett (1973a)
	1973	9/11		1				Boat survey		Barrett (1973a)
	1974	8/26		49				Boat survey		Barrett (1975a)
	1974	9/09		216				Boat survey		Barrett (1975a)
	1974	9/18		118				Boat survey		Barrett (1975a)
	1975	9/03		62				Boat survey		Friese (1976a)
	1976	8/26		150				Boat survey		Friese (1976b)
	1976			17				Boat survey		Friese (1976b)
	1977			0						Mantvedt et al. (1979)
	1978			221						Waltemyer et al. (1980)
	1978	8/28		8						ADF&6 (1982)
	1978	9/28		192	2					ADF&G (1982)
	1979	,,,,,		221	-				Peak survey count	ADF&G (1982)
	1979	8/26		190					TER SUIVEY COURT	ADF&G (1982)
	1979	9/07		110						ADF&G (1982)
	1980	8/22		425				,		ADF&G (1982)
	1980	9/11		300					Sport fish harvest	ADF&6 (1982)
	1983	8/27		2425						ADF&6 (1985c)-YENONE,TA
	1783	8/28		1520					includes stream (marshy)	ADF&G (1985c)-YENONE.TA
	1984	9/04		4301					Includes stream (marshy)	ADF&G (1985c)-YENONE.TA
247-41-10200-2053-3213-4063 •									Make and an MRRR area areas	
24/-41-10200-2033-3213-4063 #									Note - not on USGS maps, overgrown,	
									not surveyed in '84 or '85	
									TYONEK D-4	
Christmas Tree Creek ■	Hist								Sockeye present	
	1972	8/29		50				Aerial count, Super Cub		Barrett (1973a)
	1973	8/17		0				Boat survey		Barrett (1973a)
	1973	8/28		29				Boat survey		Barrett (1973a)
	1973	9/11		40				Boat survey		Barrett (1973a)
	1974	8/26		49				Boat survey		Barrett (1975a)
	1974	9/09		56				Boat survey		Barrett (1975a)
	1974	9/18		80				Boat survey		Barrett (1975a)
	1975	B/24		84				Boat survey		Friese (1976a)
	1975	9/03		55				Boat survey		Friese (1976a)
	1976	B/26		56				Boat survey		Friese (1976b)
	1976	9/09		54						ADF&6 (1982)

LOCATION CODE / STREAM NAME	YEAR	DATE	CHINDOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
	1977	8/28		30						Namtvedt et al. (1979)
	1978			67						Waltemyer et al. (1980
	1980	9/22		0						ADF&G (1982)
	1980	9/11		50						ADF&6 (1982)
247-41-10200-2053-3213-4066 +									N	
									Note - called Whiskey Creek in '84 - '85 surveys TYONEK D-4	
Huckleberry Creek *	Hist								Nax. count 434 sockeye (1953)	
HULKIEDEN Y CIEEK	1972	8/23	1				1	Ground survey	HEAT COURT TOT SUCKEYE (1700)	Barrett (1973a)
	1973	8/17	•	110				Boat survey		Barrett (1973a)
	1973	8/28		389				Boat survey		Barrett (1973a)
	1973	9/11		511				Boat survey		Barrett (1973a)
	1974	8/27		79				Poat survey		Barrett (1975a)
	1974	9/18		129				Boat survey		Barrett (1975a)
	1974	9/19		369				Boat survey		Barrett (1975a)
	1975	8/29	328				1	Boat survey		Friese (1976a)
	1975	9/03		263						ADF&G (1982)
	1976			192				Boat survey	Peak survey count	Friese (1976b)
	1977			25					Peak survey count	Namtvedt et al. (1979)
	1978			23						Waltemyer et al. (1980
	1978	8/29	211						Combined with Whiskey Lake count	ADF&G (1982)
	1979	8/26	500							ADF&G (1982)
	1980	8/22	1000							ADF&G (1982)
	1980	9/11	1750							ADF&G (1982)
247-41-10200-2053-3213-4050										
247-41-10200-2053-3213-4050-0010										
Hewitt Lake	Hist								Max. count 3060 sockeye (1956)	
	1972	8/23		990				Boat survey		Barrett (1973a)
	1972	8/29		290				Aerial count, Super Cub		Barrett (1973a)
	1973	B/29		134				Boat survey		Barrett (1973a)
	1973	9/12		453				Boat survey		Barrett (1973a)
	1973	8/18		69				Boat survey		Barrett (1973a)
	1974 1974	8/27		151				Boat survey		Barrett (1975a)
	1974	9/10 9/18		204 288				Boat survey		Barrett (1975a) Barrett (1975a)
	1975	8/25		113				Boat survey		ADF&6 (1982)
	1975	9/04		247				Boat survey		Friese (1976a)
	1976	8/24		419						ADF LG (1982)
	1976	9/10		1984						ADF&G (1982)
	1976			2017				Boat survey	Peak survey count	Friese (1976b)
				729						

OCATION CODE /	STREAM NAME	YEAR	DATE	EHTNOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
		1978			1594					Peak survey count	Waltemyer et al. (198
		1978	8/29		225					·	ADF&G (1982)
		1979	8/26		275						ADF&G (1982)
		1979	9/07		415						ADF&G (1982)
		1980	8/22		1205					Hewit & Whiskey Lakes combined	Tarbox et al. (1983)
		1980	9/11		1100						ADF&6 (1982)
		1981	9/04		3250					Hewitt and Whiskey Lakes combined	Tarbox et al. (1983)
		1981	10/02		9850					Hewitt and Whiskey Lakes combined,	Tarbox et al. (1983)
										60% carcasses	
		1984	8/2B		1756					Hewitt and Whiskey Lakes combined	ADF&G (1985c)-YENONE.
,		1984	9/04		6593					Hemitt and Whiskey Lakes combined	ADF&6 (1985c)-YENONE.
47-41-10200-20 <del>:</del>	53-3220										
	reek Slough										
47-41-10200-20	53-3220-4030										
Donkey Co	reek	1963	7/06	0					Aerial count		Kubik (1964)
,		1973		25					Aerial count		Kubik & Trent (1974)
		1977		159					Aerial count		Kubik & Wadman (1978)
		197B		163					Aerial count		Kubik & Wadman (1979)
		1982		100	1000			5000			Kubik (pers. come.)
				•••	••••						Kabir (pc) 21 comm.
47-41-10200-20	53-3220- <b>4</b> 030 <b>-5</b> 030										
47-41-10200-20	53-3220-4030-5030-0010										
Donkey C											
47~41-10200-20	53-3225										
Johnson	Creek	1958	7/21	0						Suspected merial count	Kubik (1964)
		1962	7/27	Ô					Aerial count		Kubik (1964)
		1963	7/03	Ó					Aerial count		Kubik (1964)
		1982		_						Chinook, coho, & chum present	Kubik (pers. comm.)
17-41-10200-20	, 53-1225-4015										
Red Creel		Hist								Chinash account	
NEU LI CE		1958	7/21	22						Chinook present	V-1:1- (10(4)
		1962	7/21	27					A	Suspected aerial count	Kubik (1964)
		1977	1121	11 1511					Aerial count		Kubik (1963)
			0./24		•				Aerial count		Kubik & Wadman (1978)
		1978	8/24	0	0	0	0	0			ADF&G (1982)
		1978	3,00	385					Aerial count		Kubik & Wadman (1979)
		1981	7/29	749					Aerial count, helicopter - Good		ADF&G (1981)
		1982						5100			Kubik (pers. come.)

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LOCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD	COMMENTS	DATA SOURCE
* * R = * * * * * * * * * * * * * * * *	1980	9/10		5500					Includes 1,630 carcasses	Tarbox & Sanders (1980)
	1981	8/27		9000					Includes 1,000 carcassas	Tarbox et al. (1983)
	1992	8/20		10340			210			ADF&G (1985c)-YENONE.TAB
	1983	B/25		630					Upstream from Fourth of July Creek	ADF&G (1985c)-YENONE.TAB
	1983	9/07		9660						ADF&G (1985c)-YENOME.TAB
	1984	8/28		5700						ADF&G (1985c)-YENONE.TAB
	1984	9/04		<b>6320</b>						ADF&G (1985c)-YENONE.TAB
247-41-10200-2053-3249-4101										
247-41-10200-2053-3250 East Fort Yentna River										
247-41-10200-2053-3250-4008 +									Note - TALK B-4	
Rich Creek +	1982								Few pinks	Kubik (pers. comm.)
247-41-10200-2053-3250-4018 *									Note - TALK B-4	
Flag Creek +	1982								Pinks present	Kubik (pers. comm.)

<sup>&</sup>gt; - These new location codes and names were submitted to the editors of the Anadromous Maters Catalog in October 1985. Upon varification these changes will be included in the mext printing of the Anadromous Maters Catalog.

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LOCATION CODE / STREAM NAME	YEAR	DATE	CHINDOK	SOCKEYE	COHO	CHUM	PINK	SURVEY NETHOD	COMMENTS	DATA SOURCE
247-41-10200-2370										
Talkeetna River	Hist								Large number chuns (1953)	
	1976	8/23				410				ADF&G (1982)
	1981	7/29-7/30	2129					Aerial count, helicopter - Good		ADF&6 (1981)
47-41-10200-2370-3041										
Chunilna Creek / Clear Creek	Hist								Max. counts 349 chinook (1964), coho	
									present, 10,000 chums (1953), 75,000	
									pinks (1954)	
	1961	7/14	300					Ground survey	<b>F</b>	Stefanich (1962)
	1962	7/11	3					Aerial count	Peak	Kubik (1963)
	1963	7/29	38					Aerial count		Kubik (1964)
	1964	7/21	319					Boat survey		Kubik (1965)
	1964	B/05	9					Aprial count		Kubik (1965)
	1965	8/06	8					Aerial count		Kubik (1966)
	1966		300					Aerial count	Total escapement estimate	Kubik (1967)
	1968		1000					Aerial count	•	Kubik (1969)
	1969		375					Aerial count		Kubik (1970)
	1969		125						Excellent observation - TRM 0.0-2.0	Stewart & Flagg (1
	1970		58					Aerial count - Poor	High water	Kubik (1971)
	1970		72	7000					•	ADF&6 (1982)
	1971		5					Aerial count - Poor		Watsjold (1972)
	1972	7/30	91					Aerial count		Watsjold (1973)
	1973	7/25	245							ADF&B (1982)
	1973	7/28	292					Aerial count		Watsjold (1974)
	1974	7/27	236							ADF&G (1982)
	1974	7/31	283					Aerial count, heliocopter	•	Watsjold (1975)
	1974		823							ADF&G (1982)
	1975	7/28	101					Aerial count, heliocopter		Watsjold (1976)
	1976	7/16	1220							ADF&6 (1982)
	1976	7/23	1237					Aerial count, heliocopter		Matsjold (1977)
	1976			30					Includes Moma & Popa Bear Lakes	Tarbox & Sanders (
	1977			75					Includes Mosa & Popa Bear Lakes	Tarbox & Sanders (
	1977		769					Aerial count, fixed wing		Watsjold (1978)
	1978			310					Includes Moma & Popa Bear Lakes	Tarbox & Sanders (
	1978		997					Aerial count, heliocopter		Watsjold (1979)
	1979			365					Includes Moma & Popa Bear Lakes	Tarbox & Sanders (
	1979		864					Aerial count, heliocopter - Poor		Watsiold (1980)
	1980			320					Includes Moma & Popa Bear Lakes	Tarbox & Sanders (
	1980								No count - high, turbid water	Bentz (1982)
	1981		169					Suspected merial count - Poor	•	Bentz (1982)
	1982	7/21	982					Aerial count, helicopter - Fair		ADF&G (1983a)

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LOCATION CODE / STREAM NAME	YEAR	DATE	CHINDOK	SOCKEYE	СОНО	CHUM	PINK	SURVEY METHOD	CONNENTS	DATA SOURCE
	1982 1983 1983 1984	9/01 7/25	938 806 1520		2500	7500	52100	Aerial count, helicopter - Good Aerial count, helicopter - Poor	Upper Cook Inlet (UCI) surveys	ADF&G (1985c)-TALK.TAB Hepler & Bentz (1984) Barrett et al. (1984) Barrett et al. (1985)
247-41-10200-2370-3041-4010										
247-41-10200-2370-3041-4010-0010									Note - All Moma Bear & Popa Bear Lake data combined.	
Mama Bear lake	1976 1977	8/23 9/12		30 75	100		7700			ADF&G (1982) Namtvedt et al. (1979)
	1977	9/12		, <b>.</b>	23					ADFEG (1985c)-TALK.TAB
	1978	8/29		310						Waltemyer et al. (1980)
	1978	8/29			250		20250			ADF&& (1985c)-TALK.TAB
	1980	8/18		300			10000			ADF&6 (1982)
	1981	8/25		450			100			ADF&G (1982)
	1982	8/23		1315	100					ADFRG (1985c)-TALK.TAB
	1984	8/26		220					Visibility poor	ADF&S (1985c)-TALK.TAB
	1984	B\30		421			2500		Pinks in stream	ADF&6 (1985c)-TALK.TAB
247-41-10200-2370-3041-4010-0015 Papa Bear Lake				١			`		Note - See Homa Bear Lake	
247-41-10200-2370-3041-4080										
247-41-10200-2370-3041-4101										
247-41-10200-2370-3041-4131										

247-41-10200-2370-3041-4180

247-41-10200-2370-3041-4190

247-41-10200-2370-3041-4200

247-41-10200-2370-3041-4200-5021

247-41-10200-2370-3041-4200-5021-6020

247-41-10200-2370-3041-4200-5021-6021

247-41-10200-2370-3080

LDCATION CODE / STREAM NAME	YEAR	DATE	CHINDOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD	CONNENTS	DATA SOURCE
247-41-10200-2370-3080-0010										
Larson Lake	Hist								Sockeye, coho, pinks and chues present	
	1972	9/07		300				Aerial count, Super Cub		Barrett (1973a)
	1973	9/06		₹20				Aerial count, Super Cub	Max. count 559 sockeye (1956)	Barrett (1973a)
	1974	9/09		19 32				Aerial count, Super Cub		Barrett (1975a)
	197 <b>5</b> 1975	8/30 7/06		52 63				Annial asset Come Cub		ADF&G (1982) Friese 11976a)
	1975	9/13		47				Aerial count, Super Cub		ADF&G (1982)
	1976	9/13		485						ADF&G (1982)
	1976	9/02		327						ADF&G (1982)
	1976	1/02		95				Aerial count, Super Cub	Peak count	Friese (1976b)
	1977			220				Aerial count	Lear Comit	Namtvedt et al. (197
	1977	8/05		50				HET LET COUNT	Entire System	ADF&6 (1982)
	1977	B/10		150					Entire system	ADF&G (1982)
	1977	8/16		1300					Entire system	ADF&G (1982)
	1977	8/29		2500					Entire system	ADF&8 (1982)
	1977	9/12		1655					Entire system	ADF&6 (1982)
	1978	",12		117				Aerial count	Peak survey count	Waltemyer et al. (19
	1979	9/28		160				16.191 +4411	Ten survey Louis	Tarbox & Sanders (19
	1980	U/ 14							No count	Tarbox et al. (1983)
	1981			4600					HE EVENT	Tarbox et al. (1983)
	1981	9/25		5500						ADF&G (1982)
	1982	8/23		1200						ADF&6 (1985c)-TALK.T
	1982			2150	41	3	5000			ADF&G (1985c)-TALK.T
	1983	9/07		650						ADF&6 (1985c)-TALK.T
247-41-10200-2370-3090								41,2		
Sheep River *	1973							Aerial surveyed	Blacially occluded, no count	Watsjold (1974)
(Name correction)									, ,	
747 41 10200 7770 7080 4048										
247-41-10200-2370-3090-4049										
247-41-10200-2370-3090-4049-0010										
Rainbow Lake										
247-41-10200-2370-3171										
Disappointment Creek	1958	8/01	5						Suspected aerial count	Kubik (1964)
	1962	7/19	0					Aerial count	•	Kubik (1964)
	1974		20					Aerial count, fixed wing		Watsjold (1974)
247-41-10200-2370-3301										
Prairie Creek	Hist								Max. count 275 chinook (1963) sockeye	
I I BALLE DI CCK	III SC								present	
									hi enemr	

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LOCATION CODE / STREAM NAME

YEAR

1962

1963

1964

19B4

1984

1984

7/24

8/08

8/15

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85

40

DATE

7/30

B/07

7/17

CHINDOK

142

275

138

SOCKEYE

CHUN

PINK

Aerial count

Aerial count

Aerial count

SURVEY NETHOD

COHO

112

(1)

Aerial count, fixed wing - Good

PA

counts

COMMENTS

DATA SOURCE

Kubik (1963)

Kubik (1964)

Kubik (1965)

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Barrett et al. (1985)

ADF&S (1985c)-TALK.TAB

ADFR6 (1985c)-TALK, TAB

7	47	-4	1-1	107	ሰሰ~	237	10-	330	1-4	ሰን	1

247-41-10200-2370-3301-4034

247-41-10200-2370-3301-4044

247-41-10200-2370-3320

247-41-10200-2370-3329

247-41-10200-2370-3332

247-41-10200-2370-3340

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						Z.	_	NIRUEV MCTUON		
				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				THE LINE	COMMENTS	
247-41-10300 przs									COMMERCIA	DATA SOURCE
0535-075-070-11-16-767								4 1 1 1 4 4 1 1 4 4 1 1 1 1 1 1 1 1 1 1		Tollogo

LOCATION CODE / STREAM NAME	YEAR	DATE	CHIMOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD	CONNENTS	DATA SOURCE
247-41-10200-2381										
Chulitna River	Hist								Chinook, coho, pinks and chinook	
	1958	7/11	3						Suspected aerial count, peak	Kubik (1964)
	1973		42					Aerial count, helicopter	East Fork	Watsjold (1974)
	1973		219					Aerial count, helicopter	West Fork	Watsjold (1974)
	1976	7/23	124					Aerial count, fixed wing		Watsjold (1977)
,	1977		229					Aerial count, fixed ming		Watsjold (1978)
•	197B		62					Aerial count, fixed wing		Watsiold (1979)
	1979								No count conducted	Watsjold (1980)
	1980								No count - high, turbid water	Bentz (1982)
	1981								Na count - high, turbid water	Bentz (1982)
	1982	8/12	100					Aerial count, helicopter - Excellent	no count might carate water	ADF&G (1981)
	1983	47.12	213					HE 181 CHANCE HESSCOPEE EXCESSES		Hepler & Bentz (198
	1984	7/24	4191					Boat survey, raft - Excellent		Barrett et al. (198
	1984	8/12	1036					Boat survey, raft - Excellent		Barrett et al. (198
247-41-10200-2381-3051										
247-41-10200-2381-3090										
247-41-10200-2381-3130								1		
Troublesome Creek	Hist								Max. count 100 chipook (1958)	
	1958	7/07	100						Suspected aerial count	Kubik (1964)
	1970		5					Ground survey		Watsjold (1972)-
	1971	7/21	5					•		ADF&G (1982)
	1971	7/27	5							ADF&6 (1982)
	1971	9/08	5			70				ADF&6 (1982)
	1972	8/26		182						ADF&6 (1982)
	1972	7/30	5					Aerial count, fixed ming	·	Watsjold (1973)
	1973	7/26	7					Aerial count, fixed wing		Watsjold (1974)
	1973	9/05		141				, and the second control of the second contr		ADF&6 (1982)
	1973	9/26			5					ADF&G (1982)
	1974	7/25	0	0	Ō	٥	٥			ADF&G (1982)
•	1974		14		-	•	•	Aerial count, fixed ming		Watsjold (1975)
	1976	7/23	92					Aerial count, fixed wing		Watsjold (1977)
	1977		95					Aerial count, fixed wing		Watsjold (1978)
	1978		192					Ground survey		Watsjold (1979)
	1979		58					Aerial count, fixed wing		Watsjold (1980)
	1979	10/29				100			Cook Injet Aquaculture Assoc.	
	1980					.00			No count - high, turbid water	Bentz (1982)
	1981								No count - high, turbid water	Bentz (1982)
	1982	8/12	36					Agrial count halisentes - Eventlent	no court - mign, turgio mater	
	1 102	0/12	30					Aerial count, helicopter - Excellent		ADF&G (1983a)

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A7 44 10000 0304 7441	1982									
47 41 10000 0301 7111	.,01				39	585	172		Upper Cook Inlet Survey	ADF&G (1985c)-CHUL.TAB
247-41-10200-2381-3161									Also spelled "Tokichitna River"	
Tokositna River	Hist								Max. count 97 sockeye (1954)	
	1958	7/25	0						Suspected amrial count	Kubik (1964)
	1981								Sockeye & coho present	Kubik (pers. com.)
247-41-10200-2381-3161-4016										
Alder Creek	1958	7/22	0						Suspected aerial count	Kubik (1964)
	1963	8/19	0					Aerial count		Kubik (1964)
47-41-10200-2381-3161-4016-5010									Note - Trib. of Alder Creek,	
									TALK C-1	
Unnamed Creek *	1982				3					ADF&G (1983a)
247-41-10200-2381-3161-4071										
247-41-10200-2381-3161-4071-0010										
Swan Lake	Hist								Max. count 150 sockeye (1954)	
	1972			302					Includes Slim Creek and T-Creek	Tarbox & Sanders (1980
	1973			310					Includes Blim Creek and T-Creek	Tarbox & Sanders (1980
	1974			386					Includes Slim Creek and T-Creek	Tarbox & Sanders (1980
	1975			465					Includes Slim Creek and T-Creek	Tarbox & Sanders (1980
	1975	8/22		229						ADF&G (1982)
	1975	B/30		289						ADF&G (1982)
	1975	9/25		90						ADF&G (1982)
	1976			516					Includes Slim Creek and T-Creek	Tarbox & Sanders (1980
	1977			827					Includes Slim Creek and T-Creek	Tarbox & Sanders (1980
	197 <del>8</del>	8/25-B/26		734						ADF&G (1982)
	1978	9/14		263						ADF&S (1982)
	1978	9/21-9/22		234						ADF&G (1982)
	- 1978			917					Includes Slim Creek and T-Creek	Tarbox & Sanders (1980
	1979			40					Includes Slim Creek and T-Creek,	Tarbox & Sanders (1980
									low visibility, & turbid water	
	1980	8/18		1						ADF&G (1982)
	1981			505					Includes Slim Creek and T-Creek	ADF&G (1985c)-CHUL.TAB
	1981	B/20		660						ADF&G (1985c)-CHUL.TAB
	1981	8/25		350					Includes Slim Creek and T-Creek	Tarbox et al. (1983)
	1983	9/23	0	0	0	0	0		Visibility poor, turbid H2D	ADF&B (1985c)-CHUL.TAB
	1983	9/07		340						ADF&G (1985c)-CHUL.TAB
	1984	8/26		48					S. lake and stream to Tokositna River occluded	ADF&G (1985c)-CHUL.TAB
	1984	8/30		21					SAA, visibility poor	ADF&G (1985c)-CHUL.TAB
		0, 50		••					Editors Note - What is SAA ?	UNI ED CLINDEL PURCHUM

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LOCATION CODE / STREAM MAME	YEAR	DATE	CH1NDOK	SOCKEYE	COHO	CHUM	PINK	SURVEY NETHOD	COMMENTS	DATA SOURCE
247-41-10200-2381-3161-4071-5020									Note - NW end of Swan Lake, TALK C-1	
									overgrown, not surveyed in '84	- '85
Slim Creek *	Hist								Max. count 150 sockeye (1954)	
	1970	8/24		516						
	1972	8/25		63				Ground survey		Barrett (1973a)
	1973	8/22	0	0	0	0	0	Ground survey		Barrett (1973a)
	1973 1 <b>9</b> 73	9/05 9/18		53				Ground survey		Barrett (1973a)
	1973	7/18		168 195				Ground survey	Bask susuau saust	Barrett (1973a)
	1974	8/24	0	0	0	0	٨	Ground survey Bround survey	Peak survey count	Barrett (1973a) Barrett (1975a)
	1974	9/06	v	83	V	V	v	Ground survey		Barrett (1975a)
	1974	9/17		195				Ground survey		Barrett (1975a)
	1975	****		176				Ground survey	Peak survey count	Friese (1976a)
	1975	9/25		50						ADF&G (1982)
	1975	8/30		50						ADF&6 (1982)
	1975	9/26		75						ADF&G (1982)
	1976	8/24		69				Ground survey		Friese (1976b)
	1976	9/08		64				ŕ		ADF&G (1982)
	1977	8/24		755	3					ADF&G (1982)
	1977	9/12-9/13		739						ADF&6 (1982)
	1977			82						Namtvedt et al. (197
	1978			253						Waltemyer et al. (19)
	1978			263					Peak survey count	ADF&G (1982)
	1979	8/28		40						ADF&G (1982)
247-41-10200-2381-3161-4071-5031									Note - S and of Swan Lake, TALK C-1	
T-Creek *	Hist								Max. count 400 sockeye (1954)	
	1972	8/26		182				Ground survey		Barrett (1973a)
	1972			239					Peak survey count	ADF&G (1982)
	1973	8/22		35				Ground survey		Barrett (1973a)
	1973	9/05		88				Ground survey		Barrett (1973a)
	1973	9/18		57				Ground survey		Barrett (1973a)
	1973			115					Peak survey count	ADF16 (1982)
	1974	8/24		103				Ground survey		Barrett (1975a)
	1974	9/05		118				Ground survey		Barrett (1975a)
	1974 1974	9/17		42 191				Ground survey	Book durant court	Barrett (1975a)
	1975	8/22		171 229					Peak survey count	ADF&G (1982)
	1975 1975	8/30		229						ADF&G (1982) ADF&G (1982)
	1975	6/30		223 289				Bround survey	Onak rusunu sount	ADFRG (1982) Friese (1976a)
	1976	8/24		447				Ground survey	Peak survey count	Friese (1976b)
	1976	9/08		39	50			or only survey		ADF&G (1982)
	17/0	7/00		37	30					MUTED (1702)

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LOCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY HETHOD	COMMENTS	DATA SOURCE
	1977			745					Peak survey count, chum & pink present	Namtvedt et al. (1979
	1978			654						Waltemyer et al. (198
247-41-10200-2381-3161-4071-5031-0020										
247-41-10200-2381-3161-4085										
Bunco Creek	1973	8/02	34					Aerial count, fixed wing	•	Watsjold (1974)
	1976	7/23	112					Aerial count, fixed wing		Watsjold (1977)
	1977		136					Aerial count, fixed wing		Watsjold (1978)
	1978		153					Aerial count, fixed wing		Watsjold (1979)
	1980							•	No count - high, turbid water	Bentz (1982)
	1981								No count - high, turbid water	Bentz (1982)
	1982	8/07	198					Aerial count, helicopter - Fair	•	ADF&G (1983a)
	1983	8/02	279					Ground survey - Good		Barrett et al. (1984)
	1983		523					Aerial count	Estimate based on ground & aerial	Barrett et al. (1984)
									counts	
	1984	8/10	51					Aerial count, helicopter - Good		Barrett et al. (1985)
247-41-10200-2381-3161-4085-0010										
Bunco Lake	Hist								Good escapement of pinks In 1964	
247-41-10200-2381-3179										
Spink Creek	1958	7/07	60						Suspected aerial count	Kubik (1964)
	1963	8/19	0					Aerial count		Kubik (1964)
	1982	8/07		. 12				Aerial count, helicopter - Excellent		ADF&6 (1983a)
247-41-10200-2381-3179-0010										
Spink Lake										
									•	
247-41-10200-2381-3180										
Byers Creek	Hist								Few chinook, 1,200 sockeye (1964);	
									good pink escapement (1964)	
	1964	B/27	2					Aerial count		Kubik (1965)
	1965	8/06	4					Aerial count		Kubik (1966)
	1971		3					Ground survey/Aerial count		Watsjold (1972)
	1971	8/29	2					Aprial count		ADF&G (1982)
	1971	9/0B			35	1100				ADF&G (1982)
•	1972	7/30	7					Aerial count		Watsjold (1973)
	1973	7/26	1					Aerial count		Watsjold (1974)
	1973	9/26			49					ADF&G (1982)
	1974	7/25	0					Aerial count, fixed wing		Watsjold (1975)
	1976	7/23	53					Aerial count, fixed wing		Watsjold (1977)
	1//0									

LOCATION CUDE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD	CONNENTS	DATA SOURCE
	1977		69					Aerial count, fixed wing	Peak survey count	Watsjold (1978)
	1977	8/04	1							ADF&6 (1982)
	1977	8/05	2	300 200 100						ADF&G (1982)
	1977	B/10		200						ADF&G (1982)
	1977	8/16		1ĝo						ADF&G (1982)
	1977	9/12			314					ADF&6 (1982)
	1979	10/29		1000	500	0			Cook Inlet Aquaculture Ass'n (CIAA)	
	1979		20					Aerial count, fixed wing		Watsjold (1980)
	1980								No count - high, turbid water	Bentz (1982)
	1981								No count - high, turbid water	Bentz (1982)
	1982		15		36	417	1110		-	ADF&6 (1985c)-CHUL.
	1992	8/12	7					Aerial count, helicopter - Excellent		ADF&G (1983a)
247-41-10200-2381-3180-0010										
Byers Lake	1976			50						Namtvedt et al. (19
•	1977			300					Peak survey count	Namtvedt et al. (19
	1981	8/27		275	100		200		Coho & pink data source unknown	Tarbox et al. (198
247-41-10200-2381-3220 Horseshoe Creek										
247-41-10200-2381-3223 +									Note - TALK MTS D-6	
Coal Creek *	1962	7/30	5					Aerial count	Peak	Kubik (1963)
D484 87 84F -	1963	8/19	0					Aerial count	Peak	Kubik (1964)
247-41-10200-2381-3223-4023 +									Note - TALK MTS B-6	
West Fork Coal Creek *	Hist								Chinook, pinks present	
	1976	8/17	0	٥	0	0	0	\$	,,,,,	ADF&G (1982)
	1976	8/26	Ò	0	Ō	Ö	Ó			ADF&6 (1982)
	1976	9/14	Ŏ	0	Ò	Ô	Ō		•	ADF&6 (1982)
	1977	B/25	•	47	•	•	•	•	Lake and creek	ADF&6 (1985c)-CHUL
	1977	9/01		151					100 fish in lower creek	ADF&6 (1985c)-CHUL
	197B	,,,,,		2389					Includes Coal Creek Lake and	Tarbox et al. (198
	17/0			2300					mainstem West Fork Coal Creek	141 DOX EL 41. 1170
	4070	0.440		E00						T
	1979	9/19		500					Includes Coal Creek Lake and	Tarbox et al. (198
									mainsten Nest Fork Coal Creek	T
	1980	8/22		<b>60</b> 0					Includes Coal Creek Lake and	Tarbox et al. (198
									mainstem West Fork Coal Creek	
	1981			1100					Includes Coal Creek Lake and	Tarbox et al. (198
									mainstem West Fork Coal Creek	
	1982	0/23		1200					West Fork Coal Creek	ADF&G (1985c)-CHUL.
	1982	8/23		240					Coal Creek Lake	ADF&6 (1985c)-CHUL.
247-41-10200-2381-3223-4023-0010									Note - See Coal Creek, TALK HTS D-6	

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LUCATION CODE / STREAM NAME	YEAR	DATE	CHINOOK	SOCKEYE	СОНО	CHUM	PLNK	SURVEY METHOD	COMMENTS	DATA SOURCE
	1980 1981 1982 1982 1983 1983	B/12 7/19 B/03	863 644 3846 958 4191					Aerial count, helicopter - Excellent Boat survey, raft - Excellent Boat survey, raft - Excellent	No count - high, turbid water No count - high, turbid water	Bentz (1982) Bentz (1982) ADF&G (1985c)-CHUL.TAB ADF&G (1983a) Barrett et al. (1984) Barrett et al. (1984) Hepler & Bentz (1985)

<sup>\* -</sup> These new location codes and makes have been submitted to the editors of the Anadromous Waters Catalog in October 1985. Upon varification they will be included in the next printing of the Anadromous Waters Catalog.

Appendix Table 1-5. Escapement survey counts of adult salmon in Susitna River stoughs, side channels, and the mainstem between river mile (RM) 28.0 and RM 161.0.

All data presented for 1981-1984 represent the peak total counts (live fish + dead fish) observed.

LOCATION NAME / (RIVER MILE)	YEAR		CHINOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD +	COMMENTS	DATA SOURCE
Rustic Wilderness Slough (RM 57.0)	1984	10/13	ú	0	á	0	0	Ground survey - Good, 1001	Spawning site	Barrett et al. (198
Caswell Side Channel Mouth (RM 62.1)	1984	10/09	0	0	0	8	0	Ground survey - Good, 100%	Spawning site	Barrett et al. (198
Caswell Creek Slough (RM 63.2)	1984	10/11	0	0	0	4	0	Ground survey - Good, 100%	Spawning site	Barrett et al. (198
Mainstem (RM 68.3)	1981	9/21	0	0	0	6	0	Ground survey - 0.5 miles	622 NOS WI3 AAB, Spawning	ADF&G (1981)
Unnamed Side Channel (RM 71.6)	1984	10/09	0	0	0	4	0	Ground survey - Good, 1001	Spawning site	Barrett et al. (196
Mid-Chan W Goose S1 (RM 73.9)	1984	10/10	0	0	0	2	0	Ground survey - Poor, 100%	Spawning.site	Barrett et al. (196
SM of Circular Side Chan (RM 74.4)	1984	9/25	0	0	0	36	0	Ground survey - Good, 1002		Barrett et al. (19)
Goose Creek Slough (RM 74.5)	1984 1984	10/01 10/08	0	0	4 0	0 16	0	Ground survey - Good, 1001 Bround survey - Fair, 1001	Spawning site Spawning site	Barrett et al. (19) Barrett et al. (19)
Circular Side Channel (RM 75.3)	1984 1984	9/18 9/25	0·	0	0	0 89	0 2	Ground survey - Good, 100% Ground survey - Bood, 50%	Spawning site Spawning site	Barrett et al. (19) Barrett et al. (19)
Mainstem (RM 76.6)	1981	9/21	, 0	0	2	i	0	Electroshocking - 1.0 mile	S23 NO4 WO7 BBD, Spawning	ADF&G (1981)
(11) 70.07	1981	9/27	0	0	0	16	0	Ground survey - 0.5 miles	S23 NO4 WO7 BBD, Spawning	ADF&6 (1981)
Sauna Slough Mouth (RM 79.2)	1984 1984	9/18 10/08	0	0	4 0	18 7	0	Ground survey - Good, 1001 Ground survey - Fair, 1001	Spawning site Spawning site	Barrett et al. (19) Barrett et al. (19)
Whitefish Slough (RM 79.4)	1984 1984 1984	8/16 8/25 9/18	0	0 0 0	0 0 0	0 1 1	0 2 0	Ground survey - Poor, 100% Ground survey - Poor, 15% Ground survey - Good, 22%		Barrett et al. (19 Barrett et al. (19 Barrett et al. (19
	1984	9/28	0	0	0	0	0	Ground survey - Excellent, 100%		Barrett et al, (19
Mainstee (RM 83.3)	1981	9/05	0	0	0	17	0	Ground survey - 0.5 miles	S24 NOS WIS BCC Spawning	ADF&G (1981)

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CATION NAME / (RIVER MILE)	YEAR	DATE	CHINOOK	SOCKEYE	СОНО	CHUH	PINK	SURVEY METHOD *	COMMENTS	DATA SOURCE
Sunset Side Channel	1984	9/21	0	0	0	173	14	Ground survey - Boad, 1001	Spawning site	Barrett et al. (19
(RM 87.0)	1984	9/28	0	0	5	165	10	Ground survey - Excellent, 100%	Spawning site	Barrett et al. (19
North Sunset Side Channel (RM 87.5)	1984	9/21	0	0	5	0	0	Ground survey - Good, 60%	Spawning site	Barrett et al. (19
Birch Creek Slough	1984	7/23	126	375	0	3	437	Ground survey - Excellent, 221	Surveyed from	Barrett et al. (19
(RM 88.2)	1984	7/29	0	0	0	0	0	Ground survey - Poor, 7%	south to confluence	Barrett et al. (1
	1984	8/02	4	230	0	0	3304	Ground survey - Good, 71	with stream.	Barrett et al. (1
	1984	8/09	13	93	234	1064	9917	Ground survey - Good, 7%	Only pink	Barrett et al. []
	1984	8/16	0	6	75	476	6510	Bround survey - Good, 22%	salmon observed	Barrett et al. il
	1984	B/23	17	22	112	326	1350	Ground survey - Good, 17%	spawning.	Barrett et al. (i
	1984	8/31	4	0	119	175	507	Ground survey - Poor, 22%		Barrett et al. (1
	1984	9/09	0	0	79	156	359	Ground survey - Poor, 172		Barrett et al. 11
	1984	9/16	0	0	40	117	161	Ground survey - Good, 71		Barrett et al. (1
	1984	9/25	0	0	0	60	15	Ground survey - Excellent, 22%		Barrett et al. (1
	1984	10/01	0	0	16	539	0	Ground survey - Good, 22%		Barrett et al. (1
Lower Birch Mainstea	1984	10/09	0	0	0	23	0	Ground survey - Good, 100%	Spawning site	Barrett et al. (i
(RM 88.7)	1984	10/11	0	0	0	23	0	Bround survey - Good, 100%	Spawning site	Barrett et al. (1
Upper Birch Camp	1984	9/29	0	0	0	12	0	Ground survey - Excellent, 100%	Spawning site	Barrett et al. (1
(RM 89.5)	1984	10/09	0	0	0	12	0	Ground survey - Good, 100%	Spawning site	Barrett et al. (1
Upper Birch Side Channel (RM 90.1)	1984	10/09	0	0	0	68	0	Ground survey - Good, 1002	Spawning site	Barrett et al. ()
Trapper Creek Side Channel	1984	9/23	0	0	0	795	0	Ground survey - Excellent, 100%	Spawning site	Barrett et al. (1
(RM 90.3)	1984	9/26	0	0	2	141	2	Ground survey - Excellent, 100%	Spawning site	Barrett et al. ()
	1984	9/28	0	0	0	4	0	Ground survey - Good, 100%	Spawning site	Barrett et al. ()
	1984	10/01	0	0	24	149	0	Ground survey - Fair, 15%	Spawning site	Barrett et al. {
	1984	10/02	0	0	45	121	0	Ground survey - Good, 1001	Spawning site	Barrett et al. (1
	1984	10/04	0	0	23	0	0	Ground survey - Good, 100%	Spawning site	Barrett et al. (1
	1984	10/09	0	0	0	58	0	Ground survey - Good, 100%	Spawning site	Barrett et al. (1
	1984	10/10	0	0	117	0	0	Ground survey - Good, 100%	Spawning site	Barrett et al. ()
	1984	10/11	0	.0	0	12	0	Bround survey - Poor, 100%	Spawning site	Barrett et al. (1
Mainstem (RM 92.2)	1981	10/09	0	0	0	11	0	Ground survey - 0.3 miles	S25 NOS W13 BCC Spawning	ADF&6 (1981)
Beaver Dam Channel (RM 95.0)	1984	9/27	0	0	0	3	0	Ground survey - Good, 1002	Spawning site	Barrett et al. (
Musher Slough	1984	9/27	0	0	0	65	0	Ground survey - Excellent, 100%	Spawning site	Barrett et al. ()

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LOCATION NAME / (RIVER HILE)	YEAR	DATE	CHINDOX	SOCKEYE	COHO	CHOK	P.	SURVEY METHOD .	CONNENTS	DATA SOURCE
(RN 95.2)	1984	97.58	0	0	•	<b>5</b>	٥	Ground survey - Excellent, 1001	Spawning site	Barrett et al. (1985)
Cache Creek Slough (AN 95.4)	1984	12/6	٠	•	•	091	2	Ground survey - Excellent, 100%	Spawning site	Barrett et al. (1985)
Mainstea (RM 96.8)	1861	9/03	٠	•	•	-	٠	Ground survey - 0.3 miles	S26 NOS N25 BAA Spawning	ADF46 (1981)
Mainstea (RM 97.0)	1861	4/17	•	•	•	90	•	Ground survey - 0.1 miles	S26 NOS W26 ADB Spawning	ADF&6 (1981)
Perdidula Slough (RM 98.0)	1984	9/14	•	-	7	439	•	Ground survey - Bood, 1001	Spanning site	Barrett et al. (1985)
			•	•	•	•	٠			ANTIC LIBRAL
1 ubno15	1861	17/1	-	•	<b>.</b>	-	-	Survey		ADP46 (1981)
(BN 49.6)	1881	8/29	•	•	•	•	-	survey		ADF 46 (1961)
	1861	90/6	•	•	•	•	•	Graund survey - Good, 100% surveyed		ADF&6 (1981)
	1861	41/6	•	•	•	-	•	Ground survey - Excellent, 100% survey		ADF16 (1981)
	1981	9/24	•	•	•	-	•	Ground survey - Excellent, 100% survey		ADF&6 (1981)
	1861	10/02	•	•	•	۰	•	Graund survey - Excellent, 1001 survey		ADF&6 (1981)
	1987	8/08	•	•	o	•	•	Srund aurysy - Excellent, 100% aurysy		ABF16 (1983b)
	1982	8/13	•	•	•	•	•	SULVEY		ADF&6 (1983b)
	1982	8/20	-	-	•		•	survey - Sond. 1001		ADF16 (1983b)
	1982	8/38	• •					Survey - Good, 1002		
	1982	10/6	-	· -	-		-	Survey - Good, 1002		
	1982	67.5	,	•		• •	•	Sur vev		
	1982	10/25	•	•	۰	•	•	count,		ADF&6 (1983b)
	1991	7671	•	•	•	•	-	COOL TOWN TO THE PERSON OF THE		Narrott et al. (1984)
	90	0/07	• •	•	•	• •	• =	7		
	1001	21/0	•	•	•	•	• <			1
	1983	6/22	• •	•	• •	•	•	survey - Farellant		1
	1983	B/20		•			• •	kurvav - Farallant		1
	68	6/02				• •	•	kurvey - Freallant.		1
	1983	6/12	•				-	survey - Excellent		1
	1981	61/6	• •				• •	survey - Errellent, 1002		-
	1983	10/01	•	•	•		0	Survey - Excellent, 1001		1
	1983	10/08	٠٠	•	•	•	•	survay - Excellent, 100%		4
	1984	8/09	٥	٥	•	•	•	Ground survey - Poor, 1001 surveyed		Barrett et al. (1985)
	1984	8/36	•	•	•	•	٠	TUTVEY		Barrett et al. (1985)
	1984	4/06	0	9	•	13	•	Survey		
			•							

OCATION NAME / (RIVER MILE)	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD *	COMMENTS	DATA SOURCE
Slough 2	1981	B/02	0	0	0	0	0	Ground survey - Poor, 50% surveyed		ADF&G (1981)
(RM 100.4)	1981	8/21	0	0	0	0	0	Ground survey - Poor, 100% surveyed		ADF&6 (1981)
	1981	8/29	0	0	0	3	0	Ground survey - Excellent, 100% survey		ADF46 (1981)
	1981	9/06	0	0	0	27	0	Ground survey - Excellent, 100% survey		ADF&G (1981)
	1981	9/16	0	0	0	6	0	Ground survey - Excellent, 100% survey		ADF&6 (1981)
	1981	9/24	0	0	0	5	0	Ground survey - Excellent, 100% survey		ADF&6 (1981)
	19B1	10/02	0	0	0	3	0	Ground survey - Excellent, 100% survey		ADF&G (1981)
	1982	8/08	0	0	0	0	0	Ground survey - Poor, 100% surveyed		ADF&6 (1983b)
	1982	B/13	0	0	0	0	0	Ground survey - Poor, 100% surveyed		ADF&G (1983b)
	1982	8/20	0	0	0	0	0	Ground survey - Good, 100% surveyed		ADF&G (1983b)
	1982	9/26	0	0	0	0	0	Ground survey - Good, 100% surveyed		ADF&6 (1983b)
	1982	9/01	0	0	0	0	0	Ground survey - Good, 100% surveyed		ADF&G (1983b)
	1982	9/29	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF&G (19836)
	1982	10/25	0	0	0	0	0	Aerial count, helicopter - Fair, 100% survey	red	ADF46 (19836)
	1983	7/27	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al.
	1983	8/07	0	0 .	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al.
	1983	0/15	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al.
	1983	8/22	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al.
	1983	9/29	0	0	0	10	0	Ground survey - Excellent, 20% survey		Barrett et al.
	1983	9/05	0	0	, 0	23	0	Ground survey - Excellent, 100% survey		Barrett et al.
	1983	9/12	0	0	0	49	0	Ground survey - Excellent, 100% survey		Barrett et al.
	1993	9/19	0	0	0	21	0	Ground survey - Good, BOI surveyed		Barrett et al.
	1983	10/01	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al.
	1983	10/08	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al.
	1984	B/09	0	0	0	o <sup>*</sup>	0	Ground survey - Poor, 100% surveyed		Barrett et al.
	1984	8/15	0	0	0	2	0	Ground survey - Good, 20% surveyed	•	Barrett et al.
	19B4	8/17	0	0	0	13	0	Ground survey - Excellent, 50% survey		Barrett et al.
	1984	8/26	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al.
	1984	9/06	0	7	0	129	0	Bround survey - Excellent, 100% survey		Barrett et al.
	1984	9/15	0	4	0	26	0	Ground survey - Poor, 100% surveyed		Barrett et al.
	1984	9/17	0	5	Û	55	0	Ground survey - Good, 100% surveyed		Barrett et al.
	1984	9/24	0	4	0	32	0	Ground survey - Good, 100% surveyed		Barrett et al.
	1984	9/28	0	2	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al.
,	1984	9/30	0	2	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al.
•	1984	10/07	0	4	0	0	0	Ground survey - Excellent, 100% survey.		Barrett et al.
Mainstee (RM 100.5)	1981	9/24	0	0	0	0	0	Ground survey - 0.1 miles	924 NOS NO2 CDD, Redds observed	ADF&6 (1981)
Mainstee	1984	8/24	0	0	0	0	0	Aerial count, helicopter - Bood		Barrett et al.

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LOCATION NAME / (RIVER MILE)	YEAR	DATE	CHINDOK	SOCKEYE	СОНО	CHUM	PINK	SURVEY METHOD .	COMMENTS	DATA SOURCE
(RM 101,2)	1984	9/01	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (1985)
	1984	9/08	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (1985)
	1984	9/15	0	0	0	89	0	Aerial count, helicopter - Good	Spawning	Barrett et al. (1985)
	1984	9/22	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (1985)
	1984	9/29	Û	0	0	16	0	Aerial count, helicopter - Good	Spawning	Barrett et al. (1985)
Slough 38 (RM 101.4)	1975	9/03		15		50			Peak count	Friese (1975)
***************************************	1981	8/05	0	0	0	0	0	Ground survey ~ Fair, 100% surveyed		ADF&G (1981)
	1981	8/11	0	0	0	0	0	Ground survey - Fair, 100% surveyed		ADF&G (1981)
	1981	8/21	0	0	0	0	0	Ground survey - Poor, 100% surveyed		ADF&G (1981)
	1981	B/29	0	0	0	0	0	Ground survey - Poor, 100% surveyed	*	ADF&G (1981)
	1981	9/06	0	1	0	0	0	Ground survey - Excellent, 100% survey		ADF&G (1981)
	1981	9/17	Ō	i	Ō	Ò	0	Ground survey - Excellent, 100% survey		ADF&6 (1981)
	1981	9/24	Ŏ		ò	Ŏ	Ŏ	Ground survey - Excellent, 100% survey		ADF&6 (1981)
	1981	10/02	Ŏ	Ŏ	ō	ŏ	ò	Ground survey - Good, 100% surveyed		ADF&6 (1981)
	1982	8/08	٥	0	0	0	٥	Browné survey - Excellent, 100% survey		ADF&6 (1983b)
	1982	8/13	0	ŏ	Ŏ	Ď	Ň	Ground survey - Poor, 1001 surveyed		ADF&G (1983b)
	1982	8/23	Ď	•	٥	ŏ		Ground survey - Good, 100% surveyed		ADF&G (1983b)
	1982	9/01	0	Ň	٥	ŏ	Ň	Ground survey - Good, 100% surveyed		ADF&G (1983b)
	1982	9/07	0	•	Ď	0	, , , , , , , , , , , , , , , , , , ,	Ground survey - Excellent, 1001 survey		ADF&6 (1983b)
		9/21	0	0	0	0	•	Ground survey - Good, 1001 surveyed		
	1982		0		0	-				ADFR6 (1983b)
	1982 1982	9/29 10/25	0	0	0.	0	0	Ground survey - Escellent, 100% survey Aerial count, helicopter - Good, 100% se	irveyed	ADF&G (1983b) ADF&G (1983b)
	1983	7/27	0	٥	0	٥	۸	Bround survey - Poor, 1001 surveyed		Barrett et al. (1984)
		8/04	Ô	٥	0	j	•			
	1983		0	0	0	-	0	Ground survey - Poor, 100% surveyed		Barrett et al. (1984)
	1983	8/12	-	•	•	0	v	Bround survey - Poor, 100% surveyed		Barrett et al. (1984)
	1983	8/26	0	0	0	3	V	Ground survey - Poor, 100% surveyed		Barrett et al. (1984)
	1983	9/05	0	1	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (1984)
	1983	9/19	0	5	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (1984)
	1983	10/01	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (1984)
	1983	10/08	0	1	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (1984)
	1984	8/09	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. (1985)
	1984	8/17	0	0	0	1	0	Ground survey - Good, 10% surveyed		Barrett et al. (1985)
	1984	8/26	0	10	0	21	1	Ground survey - Excellent, 70% survey		Barrett et al. (1985)
	1984	9/06	0	20	0	56	0	Ground survey - Excellent, 70% survey		Barrett et al. (1985)
	1984	9/17	0	0	0	0	0	Ground survey - Good, 100% surveyed		Barrett et al. (1985)
•	1984	9/24	0	0	0	Ö	28	Ground survey - Good, 100% surveyed		Barrett et al. (1985)
	1984	9/30	Ō	Ō	Ö	Ŏ	0	Ground survey - Excellent, 100% survey		Barrett et al. (1985)
Slough 3A	1981	8/04	0	4	0	0	0	Ground survey - Excellent, 100% survey		ADF&G (1981)

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LOCATION NAME / (RIVER MILE)	YEAR	DATE	CHINDOK	SOCKEYE	сено	CHUK	PINK	SURVEY METHOD *	COMMENTS	DATA SOURCE
(RM 101.9)	1981	8/11	0	7	0	0	0	Ground survey - Fair, 100% survey		ADF&G (1981)
	1981	8/21	0	3	0	0	1	Ground survey - Excellent, 100% survey		ADF16 (1981)
	1981	8/29	0	0	0	0	0	Ground survey - Fair, 100% survey		ADF&G (1981)
	1981	9/06	0	1	0	0	0	Ground survey - Fair, 100% survey		ADF&G (1981)
	1981	9/17	0	0	0	0	0	Ground survey - Fair, 100% survey		ADF&G (1981)
	1981	9/24	0	0	0	0	0	Ground survey - Good, 100% surveyed		ADF&G (1981)
	1981	10/02	0	0	0	0	0	Ground survey - Fair, 100% survey		ADF&6 (1981)
	1982	8/06	0	0	0	0	0	Ground survey - Excellent, 1001 survey		ADF&G (1903b)
	1982	8/13	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADFEG (1983b)
	1982	8/20	0	0	0	0	0	Ground survey - Good, 1001 surveyed		ADF16 (1983b)
	1982	9/01	0	0	0	0	0	Ground survey - Good, 100% surveyed		ADF&G (1983b)
	1982	9/07	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF46 (1983b)
	1982	9/21	0	0	0	Û	0	Ground survey ~ Good, 1002 surveyed		ADF&G (1983b)
	1982	9/25	0	0	0	0	0	Ground survey - Good, 100% surveyed		ADF&6 (1983b)
	1983	7/15	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
	1983	7/27	0	0	0	0	0	Ground survey - Poor, 1001 surveyed		Barrett et al. (19
	1983	B/04	0	0	0	0	0	Ground survey - Poor, 1001 surveyed		Barrett et al. 119
	1983	8/12	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. (19
	1983	8/26	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. (19
	1983	9/05	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
	1983	9/19	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett ot al. (19
	1983	10/01	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
	-1983	10/08	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. 119
	1984	8/17	0	11	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
	1984	8/26	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
	1984	9/06	0	0	0	0	0	Ground survey - Excellent, 1001 survey		Barrett et al. (19
	1984	9/15	0	11	0	1	0	Ground survey - Good, 100% surveyed		Barrett et al. (19
	19B4	9/17	0	8	0	17	0	Ground survey - Good, 100% surveyed		Barrett et al. (19
	1984	9/24	0	3	0	7	0	Bround survey - Good, 100% surveyed		Barrett et al. (19
	1984	9/30	0	0	0	٥	0	Sround survey - Excellent, 100% survey		Barrett et al. (15
Slough 5	1981	8/07	0	0	0	0	0	Ground survey - Good, 1001 surveyed		ADF&6 (1981)
(RM 107.2)	1981	8/19	Ō	0	0	0	٥	Ground survey - Fair, 1001 survey		ADF&G (1981)
	1981	9/25	Ŏ	0	Ó	Ö	0	Ground survey - Good, 100% surveyed		ADF&G (1981)
	1981	8/28	Ŏ	Ŏ	ō	Ŏ	Ŏ	Ground survey - Poor, 100% surveyed		ADF46 (1981)
	1981	9/22	ō	Ö	Ŏ	Ŏ	Ŏ	Ground survey - Excellent, 1001 survey		ADF&G (1981)
	1982	8/07	0	0	0	2	٥	Ground survey - Good, 100% surveyed		ADF&G (1983b)
	1982	8/13	Ŏ	Ŏ	Ŏ	ō	0	Ground survey - Poor, 100% surveyed		ADF&G (1983b)
	1982	8/19	ŏ	Ŏ	ŏ	ŏ	0	Ground survey - Poor, 100% surveyed		ADF46 (1983b)
	1982	8/26	Ŏ	Ŏ	Ŏ	٥		Ground survey - Poor, 100% surveyed		ADF46 (1983b)

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SURVEY METHOD +

COMMENTS

DATA SOURCE

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LOCATION NAME / (RIVER HILE)

YEAR

1983

8/29

DATE CHINOOK

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Ground survey - Poor, 1001 surveyed

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Barrett et al. (1984)

LOCATION NAME / (RIVER MILE)

DATE CHINGOK

1983

1983

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Ground survey - 800d, 100% surveyed

Ground survey - Poor, 100% surveyed

Ground survey - Poor, 100% surveyed

Ground survey - Good, 100% surveyed

Ground survey - Excellent, 100% survey

COMMENTS

DATA SOURCE

Barrett et al. (1984)

OCATION NAME / (RIVER MILE)	YEAR	DATE	CHINOOK	SOCKEYE	СОНО	CHUM	PINK	SURVEY METHOD *	COMMENTS	DATA SOURCE
	1984	8/14	0	0	0	15	ı	Ground survey - Excellent, 100% survey		Barrett et al. (19
	1984	B/21	0	0	0	52	0	Graund survey - Excellent, 100% survey		Barrett et al. 119
	1984	9/05	0	2	0	45	0	Ground survey - Excellent, 100% survey		Barrett et al. 119
	1984	9/16	0	0	0	46	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
	1984	9/21	0	1	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
	1984	9/24	0	0	0	11	0	Ground survey - Good, 100% surveyed		Barrett et al. (19
Mainsten	1984	8/24	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (19
(RM 114.0)	1984	9/01	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (19
	1984	9/08	0	0	0	٥	0	Aerial count, helicopter - Good		Barrett et al. (19
	1984	9/15	Ó	Õ	Č	46	0	Aerial count, helicopter - Good	Spawning	Barrett et al. (1
	1984	9/22	Ŏ	ō	Ŏ	0	ň	Aerial count, helicopter - Good		Barrett et al. (1
	1984	9/29	ŏ	ŏ	ŏ	ŏ	ŏ	Aerial count, helicopter - Good		Barrett et al. ()
Mainstem (RM 114.4)	1982	9/02	0	0	1	В	0	Electroshocking - 200 yards	528 NO4 WO6 CAB,	ADF&G (1983a)
(MI) 117.7/	1982	9/02	0	0	0	10	0	Boat survey - 200 yards	Spawning 528 NO4 NO6 CAB, Spawning	ADF&6 (1983a)
	1984	9/01	0	0	0	8	^	Assist south believedes - Cond	Carraina	Barrett et al. (1
			-		-		V	Aerial count, helicopter - Good	Spawning	
	1984	9/08	0	0	0	69	V	Aerial count, helicopter - Good	Spawning	Barrett et al. (i
	1984	9/22	0	0	0	5	0	Aerial count, helicopter - Good	Spawning	Barrett et al. (1
Mainstea	1984	9/08	0	0	0	8	0	Aerial count, helicopter - Good	Spawning	Barrett et al. (1
(RM 114.5)										
Mainstem (RM 115.0)	1983	9/12	0	0	0	20	0	Bround survey - 300 yards	SO7 N28 NO4 BCD, Spawning	Barrett et al. (i
	1984	8/24	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. ()
	1984	9/01	0	Ó	0	15	0	Aerial count, helicopter - Good	Spawning	Barrett et al. ()
	1984	9/0B	0	0	0	7	0	Aerial count, helicopter - Bood	Spawning	Barrett et al. (1
	1984	9/15	0	Ô	Ö	0	Ŏ	Aerial count, helicopter - Good		Barrett et al. ()
	1984	9/22	ő	ŏ	Ŏ	Ŏ	ň	Aerial count, helicopter - Good		Barrett et al. ()
	1984	9/29	ō	0	0	6	Ŏ	Aerial count, helicopter - Good	Spawning	Barrett et al. (
Mainsten (RM 115.4)	1984	9/08	0	0	0	50	0	Aerial count, helicopter - Good	Spawning	Barrett et al. (
Mainsten (RM 117.6)	1981	9/23	0	0	6	0	0	Drift gill net - 0.01 miles	S29 N13 N2B BBC	ADF&G (1981)
Bushrod Slough	1984	8/13	0	0	0	27	10	Ground survey - Excellent, 100% survey		Barrett et al. ()
(RM 117.8)	1984	8/20	0	Ŏ	ů	90		Ground survey - Excellent, 100% survey		Barrett et al. (!

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OCATION NAME / (RIVER HILE)	YEAR	DATE	CHINDOK	SOCKEYE	COHO	CHUN	PINK	SURVEY METHOD .	COMMENTS	DATA SOURCE
	` 1982	9/20	0	0	0	0	0	Ground survey - Poor, 100% surveyed		ADF&G (1983b)
	1982	9/25	0	0	0	23	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	10/25	0	0	0	0	0	Aerial count, helicopter - Poor, 100% sur	veyed	ADF16 (1983b)
	1983	7/26	0	0	0	0	0	Ground survey - Good, 100% surveyed		Barrett et al. (19
	19B3	8/03	0	0	0	1	0	Ground survey - Poor, 100% surveyed		Barrett et al. 119
	19B3	8/12	0	0	0	0	0	Ground survey - Fair, 100% surveyed		Barrett et al. (19
	1983	B/18	0	0	0	0	0	Ground survey - Good, 100% surveyed		Barrett et al. (19
	1983	8/25	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. (19
	1983	9/01	0	0	0	0	0	Ground survey - Good, 100% surveyed		Barrett et al. (19
	1983	9/09	0	0	0	0	0	Ground survey - Good, 100% surveyed		Barrett et al. (19
	1983	9/17	0	0	0	0	0	Ground survey - Good, 100% surveyed		Barrett et al. (19
	1983	9/25	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. (19
	1983	10/01	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
	1983	10/08	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
	1984	8/06	0	D	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
	1984	B/13	0	0	0	2	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
	1984	8/17	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. (19
	1984	B/20	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. (19
	1984	8/21	0	0	0	0	0	Ground survey - Poor, 1001 surveyed		Barrett et al. (19
	1984	8/31	0	0	0	11	0	Ground survey - Good, 1001 surveyed		Barrett et al. (19
	1984	9/06	0	0	0	49	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
	1984	9/13	0	0	0	0	0	Ground survey - Good, 100% surveyed		Barrett et al. (19
	1984	9/22	0	0	0	0	0	Ground survey - Good, 100% surveyed		Barrett et al. 119
	1984	9/28	0	0	0	0	0	Ground survey - Good, 100% surveyed		Barrett et al. (19
Slough BC	1981	B/01	0	0	0	0	0	Ground survey - Good, 100% surveyed		ADF46 (1981)
(RH 121.9)	1981	8/07	0	0	0	0	0	Ground survey - Poor, 100% surveyed		ADF46 (1981)
	1981	8/20	0	0	0	0	0	Ground survey - Poor, 100% surveyed	•	ADF&G (1981)
	1981	8/27	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF&6 (1981)
	1982	6/06	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	8/15	0	0	0	0	0	Ground murvey - Excellent, 100% survey		ADF&6 (1983b)
	19B2	0/29	0	0	0	23	0	Ground murvey - Excellent, 100% survey		ADF16 (1983b)
	1982	9/12	0	2	0	48	0	Ground survey - Excellent, 100% survey		ADF16 (1983b)
	1982	9/14	0	1	0	31	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	9/20	0	0	0	0	0	Ground survey - Poor, 100% surveyed		ADF46 (1983b)
	1982	9/25	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF46 (1983b)
	1982	10/25	0	0	0	0	0	Aerial count, helicopter - Poor, 100% sur	veyed	ADF&G (1983b)
	1983	7/26	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
	1983	B\03	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. 119
	1983	8/12	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. (19

OCATION NAME / (RIVER HILE)	YEAR	DATE	CHINDOK	SDEKEYE	COHO	CHUM	PINK	SURVEY METHOD .	CONHENTS	DATA SOURCE
	1983	9/18	0	0	0	0	0	Ground survey - Fair, 1001 surveyed		Barrett et al. (19
	1983	8/25	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. (19
	1983	9/01	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. (19
	1983	9/09	0	0	0	4	0	Ground survey - Good, 100% surveyed		Barrett et al. (19
	1983	9/17	0	. 0	0	1	0	Ground survey - Good, 100% surveyed		Barrett et al. (19
	1983	9/25	0	0	0	0	0	Ground survey - Good, 100% surveyed		Barrett et al. (19
	1983	10/01	0	0	0	0	v	Ground survey - Excellent, 100% survey		Barrett et al. (19
	1983	10/08	0	0	v	U	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
	1984	8/06	0	0	0	0	0	Ground survey - Poor, 1002 surveyed		Barrett et al. (19
	1984	9/13	0	0	0	0	1	Ground survey - Poor, 100% surveyed		Barrett et al. (19
	1984	8/17	0	0	0	0	0	Ground survey - Poor, 100% surveyed	•	Barrett et al. 119
	1984	8/20	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. (19
	1984	8/21	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. 119
	1984	8/31	0	0	0	48	0	Ground survey - Good, 100% surveyed		Barrett et al. (19
	1984	9/06	0	0	0	110	0	Ground survey - Excellent, 1002 survey		Barrett et al. (19
	1984	9/13	0	0	0	121	0	Ground survey - Good, 100% surveyed		Barrett et al. (19
	1984	9/22	0	0	0	116	0	Ground survey - Good, 100% surveyed		Barrett et al. (1
	1984	9/2B	0	0	0	0	0	Ground survey - Good, 100% surveyed		Barrett et al. (1
Slough 88	1981	8/01	0	0	0	1	0	Ground survey - Fair, 100% surveyed		ADF&G (1981)
(AM 122.2)	1981	8/07	0	0	0	0	0	Ground survey - Poor, 100% surveyed		ADF&6 (1981)
	1981	8/20	0	0	0	0	0	Ground survey ~ Poor, 1001 surveyed		ADF&G (1981)
	1981	9/27	0	0	0	0	0	Ground survey - Poor, 1001 surveyed		ADF&G (1981)
	1982	8/06	0	0	0	0	0	Bround survey - Excellent, 100% survey		ADF&6 (1983b)
	1982	8/19	` 0	0	0	2	0	Ground survey - Excellent, 1001 survey		ADF&G (1983b)
	1982	8/22	0	0	0	1	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	8/29	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF46 (1983b)
	1982	8/31	0	5	0	23	0	Ground survey - Excellent, 100% survey	•	ADF&G (1983b)
	1982	9/06	0	2	0	80	0	Ground survey - Excellent, 100% survey		ADF46 (1983b)
	1982	9/12	0	2	0	46	0	Ground survey - Excellent, 50% surveyed		ADF&G (1983b)
	1982	9/14	0	1	0	31	0	Ground survey ~ Excellent, 100% survey		ADF&6 (1983b)
	1982	9/20	0	0	0	0	0	Ground survey - Poor, 100% surveyed		ADF&6 (1983b)
	1982	9/25	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	10/25	0	0	0	0	0	Aerial count, helicopter - Good, 100% sur	reyed	ADF&G (1983b)
	1983	7/26	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
	1983	8/03	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. (19
•	1983	8/12	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. (19
	1983	8/18	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. (19
	1983	8/25	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. (19
	1983	9/01	0	0	0	1	0	Ground survey - Poor, 100% surveyed		Barrett et al. (19
	1983	9/09	0	0	0	104	0	Ground survey - Good, 1001 surveyed		Barrett et al. (19

 LOCATION NAME / (RIVER HILE)	YEAR	DATE	CH1NOOK	SOCKEYE	COHD	CHUM	PINK	SURVEY METHOD *	COMMENTS	DATA SOURCE
 ±0.49	1983	9/17	0	0	0	93	0	Ground survey - Good, 100% surveyed		Barrett et al. (1984)
	1983	9/25	0	0	0	19	0	Ground survey - Good, 100% surveyed		Barrett et al. (1984)
	1983	10/01	0	0	0	20	0	Ground survey - Excellent, 100% survey		Barrett et al. (1984)
	1983	10/08	0	0	0	2	0	Ground survey - Excellent, 100% survey		Barrett et al. (1984)
	1984	8/06	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. (1985)
	1984	8/13	0	0	0	5	3	Ground survey - Poor, 1001 surveyed		Barrett et al. (1985)
	1984	8/17	0	1	0	176	84	Ground survey ~ Good, 100% surveyed		Barrett et al. (1985)
	19B4	8/20	0	0	0	0	0	Groupd survey - Poor, 100% surveyed		Barrett et al. (1985)
	1984	8/21	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. (1985)
	1984	8/26	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. (1985)
	1984	0/31	0	0	0	400	0	Ground survey - Good, 100% surveyed		Barrett et al. (1985)
	1984	9/06	0	0	0	349	0	Ground survey - Excellent, 100% survey		Barrett et al. (1985)
	1984	9/08	0	0	0	187	0	Ground survey - Good, 100% surveyed		Barrett et al. (1985)
	1984	9/13	0	0	0	335	0	Ground survey - Good, 100% surveyed		Barrett et al. (1985)
	1984	9/15	0	0	0	76	0	Ground survey - Good, 100% surveyed		Barrett et al. (1985)
	1984	9/22	0	0	0	149	0	Ground survey - Good, 100% surveyed		Barrett et al. (1985)
	1984	9/28	0	0	0	0	0	Ground survey - Good, 100% surveyed		Barrett et al. (1985)
Noose Stough	1981	B/27	0	0	0	139	0	Ground survey - Excellent, 100% survey		ADF&G (1981)
(RM 123.5)	1981	9/04	0	0	0	167	0	Ground survey - Excellent, 100% survey		ADF&6 (1981)
	1981	9/12	0	0	0	153	0	Ground survey - Excellent, 100% survey		ADF&6 (1981)
	1981	9/21	0	0	0	92	0	Ground survey - Excellent, 100% survey		ADF&G (1981)
	1981	9/27	0	0	0	4	0	Ground survey - Excellent, 100% survey		ADF16 (1981)
	1982	8/06		0	0	2	8	Ground survey - Fair, 100% surveyed		ADF&6 (1983%)
	1982	8/12	0	0	0	7	6	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	8/19	0	8	0	9	1	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	B/25	0	0	0	9	0	Ground survey - Good, 100% surveyed		ADF&G (1983b)
	1982	8/31	0	5	0	23	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	9/06	0	0,	0	14	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	9/20	0	0 .	0	0	Õ	Ground survey - Poor, 100% surveyed		ADF&G (1983b)
	1982	9/25	0	0	0	23	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	10/25	0	0	0	0	0	Aerial count, helicopter - Poor, 100% sur	veyed	ADF&G (1983b)
	1983	7/26	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (1984)
	1983	8/05	0	0	0	48	0	Ground survey - Excellent, 100% survey		Barrett et al. (1984)
	1983	8/13	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. (1984)
	1983	8/14	0	3	0	7	0	Ground survey - Poor, 20% surveyed		Barrett et al. (1984)
	1983	8/15	0	Ō	Ô	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. (1984)
	1983	8/17	0	Ō	Ö	8	Ŏ	Ground survey - Poor, 75% surveyed		Barrett et al. (1984)
	1983	8/18	Ó	Ä	ŏ	15	ő	Ground survey ~ Good, 100% surveyed		Barrett et al. (1984)
	1983	B/20	Û	ò	ŏ	0	ů	Ground survey - Poor, 100% surveyed		Barrett et al. (1984)
	1983	8/21	ů	2	ŏ	17	٥	Ground survey - Good, 100% surveyed		Barrett et al. (1984)

				CHINOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD *	COMMENTS	DATA SOURCE
		1983	8/23	0	6	0	33	0	Ground survey - Good, 100% surveyed		Barrett et al. (19)
		1983	8/27	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. (19)
		1983	8/30	0	7	0	30	0	Ground survey - Poor, 100% surveyed		Barrett et al. 1191
		1983	9/01	0	1	0	18	0	Ground survey - Poor, 100% surveyed		Barrett et al. (19)
		1983	9/02	0	2	0	12	0	Ground survey ~ Poor, 100% surveyed		Barrett et al. (19)
		1983	9/03	0	1	0	17	0	Ground survey - Poor, 100% surveyed		Barrett et al. (19
		1983	9/05	0	13	0	19	0	Ground survey - Fair, 100% surveyed		Barrett et al. (19
		1983	9/07	0	19	0	12	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
		19B3	9/09	0	22	0	15	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
		1983	9/11	0	18	0	13	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
		1983	9/18	0	2	0	B	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
		1983	10/01	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
		1983	10/0B	0	0	0	0	0	Graund survey - Excellent, 100% survey		Barrett et al. (19
		1984	8/06	0	0	0	3	25	Graund survey - Poor, 1001 surveyed		Barrett et al. (19
		1984	0/13	0	4	1	150	0	Ground survey - Poor, 100% surveyed		Barrett et al. (19
		1984	8/19	0	8	0	87	2	Ground survey - Poor, 100% surveyed		Barrett et al. (1º
		1984	8/26	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. (1
		1984	9/03	0	0	0	76	0	Ground survey - Excellent, 190% survey		Barrett et al. (1
		1984	9/09	0	0	0	49	0	Ground survey ~ Excellent, 100% survey		Barrett et al. (1
		1984	9/20	0	0	0	0	0	Ground survey - Good, 100% surveyed		Barrett et al. (1
		1984	9/27	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (1)
Hair	ninstea	1984	8/24	0	0	0	0	0	Aerial count, helicopter - Sood		Barrett et al. (19
(RM	124.0)	1984	9/01	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (1
		1984	9/08	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (1
		1984	9/15	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. il
		1984	9/22	0	0	0	18	0	Aerial count, helicopter - 600d	Spawning	Barrett et al. (1
		1984	9/29	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (1
Slo	ough A'	1981	8/27	0	0	0	39	0	Ground survey - Excellent, 100% survey		ADF&G (1981)
(RM	N 124.6)	1981	9/04	0	0	0	140	0	Ground survey - Excellent, 100% survey		ADF&6 (1981)
		1981	9/12	0	0	0	92	0	Ground survey - Excellent, 100% survey		ADF&G (1981)
		1981	9/21	0	0	0	34	0	Ground survey - Excellent, 100% survey		ADF&6 (1981)
		1982	7/29	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
		1982	8/06	0	Ó	Ō	Ō	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
		1982	8/12	0	Ö	Ö	Ō	0	Bround survey - Excellent, 100% survey		ADF&G (1983b)
		1982	8/19	Ō	0	Ö	Ö	Ō	Ground survey - Excellent, 100% survey		ADF&G (1983b)
		1982	8/23	Ö	Ō	ŏ	Ö	ō	Graund survey - Excellent, 100% survey		ADF&G (1983b)
		1982	B/31	Ō	Ŏ	0	Ŏ	Ó	Ground survey - Excellent, 100% survey		ADF&G (1983b)
		1982	9/06	0	ŏ	Ŏ	Ŏ	Õ	Ground survey - Good, 100% surveyed		ADF&6 (1983b)
					-	•	-	•			
		1982	9/13	0	0	0	0	۵	Ground survey - Excellent, 100% survey		ADF&G (1983b)

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LOCATION NAME / (RIVER MILE)	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUM	<b>b1m</b>	SURVEY METHOD . CONNEI	ETS DATA SOURCE
	1982	10/25	0	0	0	0	0	Aerial count, helicopter - Poor, 100% surveyed	ADF&G (1983b)
	1983	7/26	0	0	0	0	0	Bround survey - Excellent, 100% survey	Barrett et al. (198
	1983	B/05	0	0	0	4	0	Ground survey - Good, 100% surveyed	Barrett et al. (198
	1983	8/15	0	0	0	77	0	Ground survey - Excellent, 100% survey	Barrett et al. (196
	1983	8/17	0	0	0	69	0	Ground survey - Excellent, 100% survey	Barrett et al. (19)
	1983	B/19	0	0	0	56	0	Ground survey - Good, 100% surveyed	Barrett et al. (19
	1983	8/20	0	0	0	<b>3</b> 2	0	Ground survey - Excellent, 100% survey	Barrett et al. (19)
	1983	8/21	0	0	0	55	0	Ground survey - Excellent, 100% survey	Barrett et al. (19
	1983	8/23	0	0	0	55	0	Ground survey - Excellent, 100% survey	Barrett et al. (19)
	1983	6/27	0	0	0	10	0	Ground survey - Excellent, 20% surveyed	Barrett et al. (198
	1983	8/28	0	0	0	4	0	Ground survey - Good, 100% surveyed	Barrett et al. (198
	1983	8/30	0	0	0	13	0	Ground survey - Poor, 100% surveyed	Barrett et al. (19)
	1983	9/01	0	0	0	17	0	Ground survey - Good, 100% surveyed	Barrett et al. (19)
	1983	9/02	0	0	0	22	0	Ground survey - Excellent, 100% survey	Barrett et al. (19)
	1983	9/03	0	0	0	11	0	Ground survey - Bood, 100% surveyed	Barrett et al. [19]
	1983	9/05	0	0	0	16	0	Ground survey - Excellent, 100% survey	Barrett et al. (19)
	1983	9/07	0	0	0	21	0	Ground survey - Excellent, 100% survey	Barrett et al. (196
	1983	9/11	0	0	0	43	0	Ground survey - Excellent, 100% survey	Barrett et al. (19)
	1983	9/18	0	0	0	0	0	Ground survey - Excellent, 100% survey	Barrett et al. (196
	1983	10/01	0	0	0	0	0	Ground survey - Excellent, 100% survey	Barrett et al. (190
	1983	10/08	0	0	0	0	0	Ground survey - Excellent, 100% survey	Barrett et al. (196
	1984	8/06	0	0	0	13	24	Ground survey - Excellent, 100% survey	Barrett et al. (198
	1984	B/13	0	0	0	111	23	Ground survey - Excellent, 100% survey	Barrett et al. (196
	1984	B/19	0	0	0	109	3	Ground survey - Excellent, 100% survey	Barrett et al. (196
	1984	8/26	0	0	0	0	0	Ground survey - Poor, 100% surveyed	Barrett et al. (196
	1984	9/03	0	0	0	53	0	Ground survey - Excellent, 100% survey	Barrett et al. 1198
	1984	9/09	0	0	0	0	0	Ground survey - Excellent, 100% survey	Barrett et al. (196
	1984	9/20	0	0	0	0	0	Ground survey - Good, 1001 surveyed	Barrett et al. (196
	1984	9/27	0	0	0	0	0	Ground survey - Excellent, 100% survey	Barrett et al. 1198
Slough A	1981	B/07	0	0	0	20	0	Ground survey - Excellent, 100% survey	ADF&G (1981)
(RM 124.7)	1981	8/11	0	0	0	0	0	Ground survey - Poor, 100% surveyed	ADF&G (1981)
	1981	8/19	0	0	0	26	2	Ground survey - Excellent, 100% survey	ADF&G (1981)
	1981	8/27	0	0	0	34	0	Ground survey - Excellent, 100% survey	ADF&G (1981)
	1981	9/04	0	0	0	23	0	Ground survey ~ Excellent, 100% survey	ADF&G (1981)
	1981	9/12	0	0	0	23	0	Ground survey - Excellent, 100% survey	ADF&G (1981)
	1981	9/24	0	0	0	4	0	Ground survey - Excellent, 100% survey	ADF&6 (1981)
	1982	7/29	0	0	0	0	0	Ground survey - Excellent, 100% survey	ADF&G (1983b)
	1982	8/06	0	0	0	0	0	Ground survey - Excellent, 100% survey	ADF46 (1983b)
	1982	8/12	0	0	0	0	0	Ground survey - Excellent, 100% survey	ADF&G (1983b)
	1982	8/17	0	0	0	0	0	Ground survey - Excellent, 100% survey	ADF&G (1983b)

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LOCATION NAME / (RIVER MILE)	YEAR	DATE	CHINDOK	SOCKEYE	СОНО	CHUM	PINK	SURVEY METHOD +	COMMENTS	DATA SOURCE
*	1982	8/23	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	8/31	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	9/06	0	0	0	0	0	Ground survey - Good, 100% surveyed		ADF&G (19836)
	1982	9/13	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	9/19	0	0	0	0	0	Ground survey - Poor, 100% surveyed		ADF&6 (1983b)
	1982	10/25	0	0	0	0	0	Aerial count, helicopter - Poor, 100% su	rveyed	ADF&G (1983b)
	1983	7/26	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. (1
	1983	8/05	0	0	0	0	0	Ground survey - Good, 1001 surveyed		Barrett et al. (1
	1983	B/13	0	0	0	0	Û	Ground survey - Good, 1001 surveyed		Barrett et al. {
	1983	8/20	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (1
	1983	8/27	0	0	0	2	1	Ground survey - Excellent, 100% survey		Barrett et al. (1
	1983	9/02	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (1
	1983	9/11	0	0	0	0	0	Graund survey - Excellent, 100% survey		Barrett et al. (1
	1983	9/16	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (1
	1983	10/01	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. ()
	1983	10/08	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. ()
	1984	8/06	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. il
	1984	8/13	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. ()
	1984	8/20	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. ()
	1984	8/26	0	0	0	2	0	Ground survey - Excellent, 100% survey		Barrett et al. ()
	1984	9/04	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. ()
Mainstea	1984	8/24	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (1
(RM 124.9)	1984	9/01	0	0	0	4	0	Aerial count, helicopter - Good	Spawning	Barrett et al. {
	1984	9/0B	0	0	0	8	0	Aerial count, helicopter - Good	Spawning	Barrett et al. (1
	1984	9/15	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. ()
	1984	9/22	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. ()
	1984	9/29	0	0	0	4	0	Aerial count, helicopter - Good	Spawning	Barrett et al. ()
Slough 8A	1981	8/07	0	0	0	16	0	Ground survey - Excellent, 100% survey		ADF&G (1981)
(RN 125.1)	1981	8/20	0	0	0	0	0	Ground survey - Poor, 1001 surveyed		ADF&6 (1981)
	1781	8/27	0	0	0	0	0	Ground survey - Poor, 100% surveyed		ADF&6 (1981)
	1981	9/04	0	177	0	620	0	Ground survey - Excellent, 100% survey		ADF&G (1981)
	1981	9/12	0	105	0	311	0	Ground survey - Excellent, 100% survey		ADF&G (1981)
	1981	9/21	0	38	0	7	0	Ground survey - Excellent, 100% survey		ADF&G (1981)
	1981	9/27	0	9	0	0	0	Ground survey - Excellent, 100% survey		ADF&G (1981)
	1962	8/06	0	0	0	1	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	8/12	0	88	0	80	0	Ground survey - Fair, 100% surveyed		ADF&6 (1983b)
	1982	8/17	Ô	62	Ö	190	0	Ground survey - Good, 100% surveyed		ADF&6 (1983b)
	1982	8/23	0	23	Ö	308	ō	Ground survey - Excellent, 100% survey		ADF&6 (1983b)
	1982	8/31	Ô	27	Ô	336	•	Ground survey - Excellent, 100% survey		ADF&G (1983b)

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OCATION WANE / (RIVER MILE)	YEAR	DATE	CHINOOK	SOCKEYE	СОНО	CHUN	PINK	SURVEY METHOD . COMMENTS	DATA SOURCE
	1982	9/06	0	35	0	305	0	Ground survey - Excellent, 100% survey	ADF&G (1983b)
	1982	9/13	0	17	0	230	0	Ground survey - Excellent, 100% survey	ADF&6 (1983b)
	1982	9/20	0	20	3	25	0	Ground survey - Excellent, 100% survey	ADF46 (1983b)
	1982	9/25	0	15	3	13	0	Ground survey - Excellent, 100% survey	ADF16 (1983P)
	1982	10/02	0	2	4	1	Ü	Ground survey - Excellent, 100% survey	ADF&G (1983b)
	1982	10/25	0	0	0	0	0	Aerial count, helicopter - Fair, 100% surveyed	ADF&G (1983b)
	1983	7/26	0	0	0	0	0	Ground survey - Excellent, 100% survey	Barrett et al. (
	1983	8/05	0	i	0	2	3	Ground survey - Good, 100% surveyed	Barrett et al. (
	1983	8/13	0	0	0	16	0	Ground survey - Excellent, 100% survey	Barrett et al. (
	1983	8/14	0	0	0	25	0	Ground survey - Excellent, 100% survey	Barrett et al. (
	1983	8/15	0	0	0	29	1	Ground survey - Excellent, 100% survey	Barrett et al. ()
	1983	8/17	0	0	0	31	0	Ground survey - Excellent, 100% survey	Barrett et al. ()
	1983	8/19	0	30	0	17	0	Ground survey - Excellent, 100% survey	Barrett et al. ()
	1983	8/20	0	0	0	26	0	Ground survey - Good, 100% surveyed	Barrett et al. ()
	1983	8/21	0	0	0	29	0	Ground survey - Good, 100% surveyed	Barrett et al. (
	1983	8/23	0	0	0	25	0	Bround survey - Excellent, 100% survey	Barrett et al. (
	1983	8/27	0	0	0	0	0	Ground survey - Poor, 100% surveyed	Barrett et al. (
	1983	8/28	0	0	0	19	. 0	Ground survey - Fair, 100% surveyed	Barrett et al. (
	1993	8/30	0	32	0	37	0	Ground survey - Fair, 100% surveyed	Barrett et al. (
	1983	9/01	0	30	0	34	0	Ground survey - Good, 100% surveyed	Barrett et al. (
	1983	9/03	0	36	0	36	0	Ground survey - Excellent, 100% survey	Barrett et al. (
	1983	9/05	0	54	0	19	0	Ground survey - Excellent, 100% survey	Barrett et al. (
	1983	9/07	0	42	0	21	0	Ground survey - Excellent, 100% survey	Barrett et al. (
	1983	9/09	0	57	0	18	0	Ground survey - Excellent, 100% survey	Barrett et al. (
	1983	9/11	0	66	0	11	0	Ground survey - Excellent, 100% survey	Barrett et al. (
	1983	9/18	0	56	0	2	0	Ground survey - Excellent, 100% survey	Barrett et al. (
	1983	10/01	0	28	0	1	0	Ground survey - Excellent, 100% survey	Barrett et al. (
	1983	10/08	Ō	8	0	i	Ŏ	Ground survey - Excellent, 100% survey	Barrett et al. (
	1984	8/06	0	3	0	46	5	Ground survey - Excellent, 1001 survey	Barrett et al. (
	1984	8/13	0	17	0	280	46	Ground survey ~ Excellent, 75% survey	Barrett et al. (
	1984	8/19	Ö	59	Ŏ	593	134	Ground survey - Excellent, 100% survey	Barrett et al. (
	1984	8/26	0	0	Ō	0	0	Ground survey - Poor, 100% surveyed	Barrett et al. (
	1984	9/03	Ŏ	128	0	917	3	Ground survey - Excellent, 100% survey	Barrett et al. (
	1984	9/09	Ŏ	125	Ŏ	562	Ŏ	Ground survey - Excellent, 100% survey	Barrett et al. (
	1984	9/20	Ŏ	40	Ö	20	Ŏ	Ground survey - Excellent, 100% survey	Barrett et al. (
	1984	9/26	Ŏ	45	ŏ	27	Õ	Ground survey - Excellent, 100% survey	Barrett et al. (
	1984	10/04	ŏ	3	Ŏ	1	0	Ground survey - Excellent, 1001 survey	Barrett et al. (
	1984	10/11	Ö	ŏ	Ö	ò	ò	Ground survey - Excellent, 100% survey	Barrett et al. (
Slough B	1982	8/12	0	0	0	1	32	Ground survey ~ Excellent, 100% survey	ADF&G (1983b)
(RM 126.3)	1982	8/19	Ŏ	2	ō	11	0	Ground survey - Excellent, 100% survey	ADF&G (1983b)
	1982	9/23	Ŏ	i	Ŏ	47	12	Ground survey - Excellent, 100% survey	ADF46 (1983b)

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LOCATION NAME / (RIVER MILE)	YEAR	DATE	CHINDOK	SOCKEYE	СОНО	CHUM	PINK	SURVEY NETHOD 4	COMMENTS	DATA SOURCE
	1981	9/27	0	0	0	2	0	Ground survey - Excellent, 100% survey		ADF&G (1981)
	1982	8/04	0	0	0	1	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	8/17	0	0	0	21	0	Bround survey - Excellent, 100% survey		ADF16 (1983b)
	1982	8/23	0	1	0	47	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	8/30	0	5	0	211	0	Ground survey - Excellent, 100% survey		ADF&6 (1983b)
	1982	9/05	0	3	0	300	_0	Ground survey - Excellent, 100% survey		ADF&G (1983b1
	1982	9/13 9/19	0	0	0	295 0	0	Ground survey - Excellent, 100% survey		ADF&G (1983b) ADF&G (1983b)
	1982 1982	9/17	0	0	0	Ŏ	0	Ground survey - Poor, 1001 surveyed		ADF&G (1983b)
	1982	10/25	0	0	0	0	0	Ground survey - Excellent, 100% survey	auad .	ADF&G (1983b)
	1702	10/23	U	V	v	v	v	Aerial count, helicopter - Fair, 100% surv	eyeu	HUF 40 (1703B)
	1983	7/26	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (1
	19B3	8/13	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. (1
	1983	8/18	0	0	0	5	0	Ground survey - Poor, 50% surveyed		Barrett et al. (1
	1983	B/20	0	0	0	51	0	Ground survey - Excellent, 100% survey		Barrett et al. (1
	1993	8/27	0	0	0	0	0	Ground survey - Poor, 100% survey		Barrett et al. (1
	1983	9/03 9/05	0	0	0	0 152	0	Ground survey - Poor, 100% survey		Barrett et al. (1
	1983	9/03	0	2	0	162	0	Ground survey - Good, 100% surveyed		Barrett et al. (1 Barrett et al. (1
	1983 1983	9/07	0	0	0	156	V	Ground survey - Excellent, 100% survey Ground survey - Excellent, 100% survey		Barrett et al. ()
	1783	9/11	0	,	٥	156	0			Barrett et al. ()
	1783 1983	9/18	0	9	0	165	0	Ground survey - Excellent, 100% survey		Barrett et al. ()
	1983	10/01	0	0	0	0	0	Ground survey - Excellent, 1001 survey Ground survey - Excellent, 100% survey		Barrett et al. (1
	1983	10/01	ů	Ö	ò	ŏ	0	Ground survey - Excellent, 100% survey		Barrett et al. (1
	1984	8/06	0	0	0	0	0	Erouad survey - Page 1007 surveyed		Barrett et al. (1
	1984	8/13	0	0	0	4	v	Ground survey - Poor, 100% surveyed Ground survey - Poor, 100% surveyed		Barrett et al. (1
	1984	8/20	0	0	0	0	9	Bround survey - Poor, 100% surveyed		Barrett et al. (1
	1984	8/26	0	0	0	0	0	Ground survey - Poor, 100% surveyed	,	Barrett et al. ()
	1984	9/04	0		0	350	0	Ground survey - Excellent, 100% survey		Barrett et al. ()
	1984	9/11	ŏ	Ŏ	Ŏ	138	ŏ	Ground survey - Excellent, 100% survey		Barrett et al. ()
	1984	9/21	ŏ	Ŏ	ŏ	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (
Mainstes	1982	9/05	0	0	0	10	0	Ground survey - 200 yards	S30 NO3 N16 BCA	ADF&6 (1983a)
(RM 128.6)			-	-	•	••			Spawning	
	1982	9/07	0	0	0	7	0	Ground survey - 200 yards	530 NO3 W16 BCA	ADF&G (1983a)
									Spawning	
	1984	8/24	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (1
	1984	9/01	0	0	0	27	0	Aerial count, helicopter - Good	Spawning	Barrett et al. ()
	1984	9/08	0	0	0	15	0	Aerial count, helicopter - Good	Spawning	Barrett et al. (i
	1984	9/15	0	0	0	77	0	Aerial count, helicopter - Good	Spawning	Barrett et al. ()
	1984	9/22	0	Ô	0	0	0	Aerial count, helicopter - Good	•	Barrett et al. (1

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LOCATION NAME / (RIVER MILE)	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUN	PINK	SURVEY METHOD +	COMMENTS	DATA SOURCE
	1984	8/24	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (198
	19B4	9/01	0	0	0	18	0	Aerial count, helicopter - 600d	Spawning	Barrett et al. 1198
	1984	9/08	0	0	0	0	, 0	Aerial count, helicopter - Good		Barrett et al. (198
	1984	9/15	0	0	0	1	0	Aerial count, helicopter - Good	Spawning	Barrett et al. (198
	1984	9/22	0	0	0	0	0	Aerial count, helicopter - Sood		Barrett et al. 1198
	1984	9/29	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (198
Mainsten	1984	9/08	0	0	0	5	0	Aerial count, helicopter - Good	Spawning	Barrett et al. (196
(RM 130.0)										
Mainstes	1981	9/08	0	0	0	3	0	Drift gill net - 0.1 miles	S30 NO3 N10 B	ADF&6 (1981)
(RM 130.5)									Redds not visible	
	1984	B/24	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (19)
	19B4	9/01	0	0	0	16	0	Aerial count, helicopter - Good	Spawning	Barrett et al. (19)
	1984	9/08	0	0	0	36	0	Aerial count, helicopter - Good	Spauning	Barrett et al. (19)
	1984	9/15	0	0	0	1	0	Aerial count, helicopter - Good	Spawning	Barrett et al. (19)
	1984	9/22	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (19)
	1984	9/29	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. 119
Mainsten	1984	B/24	0	0	0	0	0	Aerial count, helicopter - Good	Left bank	Barrett et al. (19
(RM 131.0)	1984	9/01	0	0	0	32	0	Aerial count, helicopter - Good	· Left bank, spawning	Barrett et al. (19
	1984	9/08	0	0	0	0	0	Aerial count, helicopter - Good	Left bank	Barrett et al. (19
	1984	9/15	0	0	0	10	0	Aerial count, helicopter - Good	Left bank, spawning	Barrett et al. (19
	1984	9/22	Ò	Ō	0	0	0	Aerial count, helicopter - Good	Left bank	Barrett et al. (19
	1984	9/29	0	0	Ō	0	0	Aerial count, helicopter - 6000	Left bank	Barrett et al. (19
Mainstem (RM 131.0)	1984	9/15	0	1	0	0	0	Aerial count, helicopter - Good	Right bank, spawning	Barrett et al. (19
Mainstem (RM 131.1)	1981	9/07	0	0	0	3	0	Drift gill net - 0.2 miles	S30 NO3 NO3 DA R <b>edds</b> not visible	ADF&6 (1981)
	1983	10/01	0	0	2	4	0	Ground survey - 200 yards	SO3 NO3 NO3 DAB, Spawning	Barrett et al. (19
	1984	8/24	0	0	0	0	0	Aerial count, helicopter - Good	Left bank	Barrett et al. (19)
	1984	9/01	0	0	0	11	0	Aerial count, helicopter - Good	Left bank, spawning	Barrett et al. (19)
	1984	9/08	0	0	0	81	0	Aerial count, helicopter - Good	Left bank, spawning	Barrett et al. (19
	1984	9/22	0	0	0	0	0	Aerial count, helicopter - Good	Left bank	Barrett et al. (19
	1984	9/29	0	0	0	0	0	Aerial count, helicopter - Good	Left bank	Barrett et al. (19
Mainstem	1984	9/08	0	0	0	18	0	Aerial count, helicopter - Good	Spawning	Barrett et al. (19
(RM 131.2)	1984	9/15	0	0	0	15	0	Aerial count, helicopter - Good	Spawning	Barrett et al. 119

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LOCATION NAME / (RIVER MILE)	YEAR	DATE	CHINDOK	SOCKEYE			ž	SURVEY RETHOD *	DAIN SUUNCE	1
	1982	10/01	-	•	۰	٥	0	Ground survey - Excellent, 100% survey	ADF46 (1983b)	
	1982	10/25	•	•	•	•	•	Aerial count, helicopter - Good, 100% surveyed	ADF46 (1983b)	
	1983	1/26	•	•	٥	•	•	Ground survey - Poor, 100% surveyed	Barrett et al. (	(1984)
	1983	8/13	•	•	•	•	•	survey - Excellent,	Barrett et al. (	(1984)
	1983	8/20	•	•	•	•	•	Survey	Barrett et al. (	(1984)
	1983	B/27	•	۰	•	•	•	Ground survey - Poor, 100% surveyed	Barrett et al. (	1984
	1983	9/03	•	۰	•	•	•	Ground survey - Excellent, 100% survey	Barrett et al. (	11984)
	1983	11/6	•	_	•	43	•	Survey	Barrett et al. (	1984
	1983	9/18	•	۰	•	501	•	Ground survey - Excellent, 100% survey	Barrett et al. (	1984
	1983	10/01	•	•	•	•	•	Survey	Barrett et al. (	(1984)
	1983	80/01	•	•	•	=	•	survey - Excellent,	Barrett et al. (	(1984)
	1984	8/0 <del>/</del>	•	•	٥	۰	•	Ground survey - Popr. 100% surveyed	Barrett et al. 4	(1985)
	1984	8/10		•		*	•	survey - Excellent.	Barrett et al. (	(1982)
	7001	11/0	• <	•	• =	: =	• <	survey - Free lant.	1	(1985)
	1984	2,78	• •	• •	• =	: -	• •	survey - Excellent.	1	(1985)
			• •	• •	•	• <	• <	The Part 1007	7	1005
	¥841	97/8	•	•	> <	> 5	•	Sur vey	; ;	1005
	1961	6/4	> .	>	-	3	> .	Survey - Excellent,	:	2
	1984	9/11	•	•	•	2	•	survey - Excellent, 1001	: :	G .
	1984	9/21	•	•	•	=	•	survey - Excellent,	<u>.</u>	(1982)
	1984	12/6	•	٥	•	٠	•	Ground survey - Excellent, 100% survey	Barrett et al. (	(1985)
41 110	1901		•	•	•	•	•	Course to the land a second bearing	ADFLE (1991)	
or unnois	1941		> <	> <	> <	•	•	Bulvey - Excessency	ADELE (1991)	
(KR 155.9)	1861	01/8	> -	-	•	•	•	Survey - rair, 1004		
	1981	8/50	•	•	•	•	•	Survey		
	1961	8/2/	•	•	•	•	•	Survey		
	1861	9/20	•	٥	•	•	•	Ground survey - Excellent, 100% survey	ADF46 (1981)	
	1982	B/08	•	•	•	•	•	Ground survey - Excellent, 100% survey	ADF46 (1983b)	
	1982	8/12	•	•	•	•	•	survey - Excellent.	ADF46 (1983b)	
	1982	8/17	•	•	•	~	0	Survey - Excellent, 100%	ADF46 (1983b)	
	1987	R/73	•	•		•	•	survey - Excellent, 100%	ADF46 (1983b)	
	1982	B/30	-			-	•	survey - Freelient, 1002		
	1987	9/05			. ~		•	survey - Excellent 1002		
	1907	2/13	•		• •	• <	• •	survey - Excellent, 100%	ADFLE (1983b)	
	1001	21/0	• <	•	•	• <	•	August Excellent 1007		
•	7941	7/17	> <	•	• <	> <	•	aurvey - Carelleni		
	704	27/2	> -	> -	> -	> -	•	SW YEY - EALEILENING		
	1982	10/22	•	0	•	•	•	Aerial count, helicopter - Excellent, 100% survey	ADF46 (1983b)	
	1983	1/28	•	•	•	•	•	Ground survey - Excellent, 100% survey	Barrett et al. (	(1984)
	1983	R/13	-			. ~	•	Girvey - Excellent, 1001	÷	(1984)
	1001	06/0		•	•	• <		anguar - Errallant 1007		11984)
	1703	27/0	۰ د	•	> <	> <	•	TOOL STREET, 1000		
	ě		-	=	•	-	•	bround survey - excellent, 1002 Kurvey		-

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OCATION NAME / (RIVER MILE)	YEAR	DATE	CHINDOK	SOCKEYE	СОНО	CHUM	PINK	SURVEY METHOD *	COMMENTS	DATA SOURCE
	1981	9/01	0	635	0	384	0	Ground survey - Excellent, 100% survey		ADF&G (1981)
	1981	9/11	0	893	0	343	0	Ground survey - Excellent, 1001 survey		ADF&6 (1981)
	1981	9/20	0	806	0	306	0	Ground survey - Excellent, 100% survey		ADF&G (1981)
	1981	9/26	0	<b>603</b>	0	32	0	Ground survey - Excellent, 100% survey		ADF&G (1981)
	1982	8/02	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	8/06	0	40	0	10	0	Ground survey - Excellent, 100% survey		ADF&6 (1983b)
	1982	8/11	0	116	0	20	39	Ground survey - Fair, 100% survey		ADF&G (1983b)
	1982	9/17	0	196	0	43	131	Ground survey - Excellent, 100% survey		ADFLE (1983b)
	1982	0/23	0	299	0	145	113	Ground survey - Excellent, 100% survey		ADF&6 (1983b)
	1982	8/30	0	456	0	411	B7	Ground survey - Excellent, 100% survey		ADF&B (1983b)
	1982	9/05	0	348	0	377	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	9/13	0	434	0	459	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	9/19	0	335	0	223	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	9/25	0	205	0	130	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	10/01	0	169	0	68	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	10/05	0	111	0	12	0	Ground survey - Excellent, 100% survey		ADF&6 (1983b)
	1982	10/25	0	0	0	0	0	Aerial count, helicopter - Excellent, 100	a survey	ADF&G (1983b)
	1983	7/26	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (
	1983	9/05	0	68	0	71	0	Ground survey - Good, 100% surveyed		Barrett et al. (
	1983	8/11	0	48	0	12	7	Ground survey - Excellent, 50% surveyed		Barrett et al. (
	1983	8/12	0	52	0	33	0	Ground survey - Excellent, 100% survey		Barrett et al. (
	1983	0/13	0	36	0	55	0	Ground survey - Good, 100% surveyed		Barrett et al. (
	1983	8/14	0	40	0	52	0	Bround survey - Excellent, 100% survey		Barrett et al. (
	1983	9/15	0	27	0	91	0	Ground survey - Excellent, 100% survey		Barrett et al. (
	1983	8/18	0	4	0	71	0	Ground survey - Excellent, 100% survey		Barrett et al. (
	1983	8/20	0	34	0	75	0	Ground survey - Excellent, 100% survey		Barrett et al. (
	1983	8/22	0	64	0	108	0	Ground survey - Good, 100% surveyed		Barrett et al. (
	1983	8/25	0	56	0	78	0	Ground survey - Good, 100% surveyed		Barrett et al. (
	1983	8/27	0	98	0	125	0	Ground survey - Good, 100% surveyed		Barrett et al. (
	1983	8/28	0	92	0	139	0	Ground Survey - Good, 100% surveyed		Barrett et al. (
	1983	8/30	0	105	0	151	0	Ground survey - Good, 100% surveyed		Barrett et al. (
	1983	9/01	0	109	0	130	0	Ground survey - Good, 100% surveyed		Barrett et al. (
	1983	9/03	0	130	0	103	0	Ground survey - Excellent, 100% survey		Barrett et al. (
	1983	9/05	0	138	0	165	0	Ground survey - Excellent, 100% survey		Barrett et al. (
	1983	9/07	0	197	0	200	0	Ground survey - Excellent, 100% survey		Barrett et al. (
	1983	9/09	0	241	0	107	0	Ground survey - Excellent, 100% survey		Barrett et al. (
	1983	9/11	0	248	0	150	0	Ground survey - Excellent, 100% survey		Barrett et al. (
	1983	9/18	0	239	0	238	0	Ground survey - Excellent, 100% survey		Barrett et al. (
	1983	9/25	0	201	0	161	0	Ground survey - Excellent, 100% survey		Barrett et al. (
	1983	10/03	0	124	0	80	0	Ground survey - Excellent, 100% survey		Barrett et al. (
	1983	10/11	0	73	0	75	0	Ground survey - Excellent, 100% survey		Barrett et al. (

1944   67.2   0	1994         8721         0         0         12         0         Grand 1994         8724         0         0         0         0         0         Grand 1994         9872         0         <	1941   872   0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	LOCATION NAME / (RIVER MILE)	YEAR	DATE	CHINDOK	SOCKEYE	COHO	CKUM	Z.	SURVEY METHOD .		CONNENTS	DATA SOURCE	
1941   2672   67   67   67   67   67   67	1984   8725   0   0   0   0   0   0   0   0   0	1941   2672   10   10   10   10   10   10   10   1		1984	8/21	0	0	0	12	•	survey - Good.	surveyed		Barrett et al.	(1985)
1911   1922   1922   1922   1922   1922   1922   1923   1923   1924   1924   1924   1924   1924   1924   1924   1924   1924   1924   1924   1924   1924   1925	1944   9724   973   9   9   9   9   9   9   9   9   9	1931   57.25   10.00		1001	200	•	• «	•	: •	•					
1914   9121   912   912   912   913   914   915   91	1984   9/72   0 0 0 22   0 0 0 0 0 0 0 0 0 0 0 0 0	1941   972   0.0   0.0   0.0   0.0   0.0   10.0		1404	07/0	-	>	>	> ;	•				=	
1914   9724   9.0   9   0   6   Found survey - Excellent, 1001 surveyed     1917   8.30   2   6   6   6   6   6   6   6   6   6	1984         9/44         0 </td <td>  1934   7/21   0   0   0   0   6   Franka survey - Escriptori, 1001 surveyed     1931   1/21   0   0   0   0   0   0   0   0   0     1931   1/21   0   0   0   0   0   0   0   0   0     1931   1/21   0   0   0   0   0   0   0   0   0     1931   1/21   0   0   0   0   0   0   0   0   0     1931   1/21   0   0   0   0   0   0   0   0   0     1931   1/21   0   0   0   0   0   0   0   0   0     1931   1/21   0   0   0   0   0   0   0   0     1931   1/21   0   0   0   0   0   0   0   0     1932   1/21   0   0   0   0   0   0   0     1933   1/21   0   0   0   0   0   0   0     1934   1/21   0   0   0   0   0   0     1935   1/21   0   0   0   0   0   0     1935   1/21   0   0   0   0   0     1935   1/21   0   0   0   0   0     1935   1/21   0   0   0   0   0     1935   1/21   0   0   0   0   0     1935   1/21   0   0   0   0   0     1935   1/21   0   0   0   0   0     1935   1/21   0   0   0   0   0     1935   1/21   0   0   0   0   0     1935   1/21   0   0   0   0   0     1935   1/21   0   0   0   0   0     1935   1/21   0   0   0   0   0     1935   1/21   0   0   0   0   0     1935   1/21   0   0   0   0   0     1935   1/21   0   0   0   0     1935   1/21   0   0   0   0     1935   1/21   0   0   0   0     1935   1/21   0   0   0   0     1935   1/21   0   0   0   0     1935   1/21   0   0   0   0     1935   1/21   0   0   0   0     1935   1/21   0   0   0   0     1935   1/21   0   0   0   0     1935   1/21   0   0   0   0     1935   1/21   0   0   0   0     1935   1/21   0   0   0   0     1935   1/21   0   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0    </td> <td></td> <td>1484</td> <td>17/8</td> <td>•</td> <td>•</td> <td>•</td> <td>77</td> <td>•</td> <td></td> <td>surveyed</td> <td></td> <td>Barrett et al.</td> <td></td>	1934   7/21   0   0   0   0   6   Franka survey - Escriptori, 1001 surveyed     1931   1/21   0   0   0   0   0   0   0   0   0     1931   1/21   0   0   0   0   0   0   0   0   0     1931   1/21   0   0   0   0   0   0   0   0   0     1931   1/21   0   0   0   0   0   0   0   0   0     1931   1/21   0   0   0   0   0   0   0   0   0     1931   1/21   0   0   0   0   0   0   0   0   0     1931   1/21   0   0   0   0   0   0   0   0     1931   1/21   0   0   0   0   0   0   0   0     1932   1/21   0   0   0   0   0   0   0     1933   1/21   0   0   0   0   0   0   0     1934   1/21   0   0   0   0   0   0     1935   1/21   0   0   0   0   0   0     1935   1/21   0   0   0   0   0     1935   1/21   0   0   0   0   0     1935   1/21   0   0   0   0   0     1935   1/21   0   0   0   0   0     1935   1/21   0   0   0   0   0     1935   1/21   0   0   0   0   0     1935   1/21   0   0   0   0   0     1935   1/21   0   0   0   0   0     1935   1/21   0   0   0   0   0     1935   1/21   0   0   0   0   0     1935   1/21   0   0   0   0   0     1935   1/21   0   0   0   0   0     1935   1/21   0   0   0   0   0     1935   1/21   0   0   0   0     1935   1/21   0   0   0   0     1935   1/21   0   0   0   0     1935   1/21   0   0   0   0     1935   1/21   0   0   0   0     1935   1/21   0   0   0   0     1935   1/21   0   0   0   0     1935   1/21   0   0   0   0     1935   1/21   0   0   0   0     1935   1/21   0   0   0   0     1935   1/21   0   0   0   0     1935   1/21   0   0   0   0     1935   1/21   0   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0     1935   1/21   0   0   0		1484	17/8	•	•	•	77	•		surveyed		Barrett et al.	
1974   97.2   0   0   0   0   0   0   0   1   1   1	1944   9/21   0   0   0   0   0   0   0   0   0	1971   873   873   8   9   9   6   6   6   6   6   6   6   6		1984	40/6	•	•	•	•	•	survey	surveyed		Barrett et al,	
1974   67.20   67.00   67.000   67.0000   67	1991         7/31         0 </td <td>  1911   20.30   1920   1920   1920   1920   1920   1920   1920   1931   1931   1932   1933  </td> <td></td> <td>1984</td> <td>9/21</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>survey</td> <td>1001 survey</td> <td></td> <td>Barrett et al.</td> <td>. (1985)</td>	1911   20.30   1920   1920   1920   1920   1920   1920   1920   1931   1931   1932   1933		1984	9/21	•	•	•	•	•	survey	1001 survey		Barrett et al.	. (1985)
1941   17.31   10.0   10   10   10   10   10   10	1941   7/31   0   0   0   0   0   0   0   0   0	1981   7/3   5/3   6   6   6   6   6   6   6   6   6	:		•										
1981   7/31   0   0   0   0   0   0   0   0   0	1981         7/31         0 </td <td>  1981   27,31   0   0   0   0   0   0   0   0   0  </td> <td>Slough 14</td> <td><b>*</b></td> <td>9 9</td> <td></td> <td></td> <td></td> <td>7</td> <td></td> <td>bround survey</td> <td></td> <td>Feat Count</td> <td>Barrett (1974</td> <td>_</td>	1981   27,31   0   0   0   0   0   0   0   0   0	Slough 14	<b>*</b>	9 9				7		bround survey		Feat Count	Barrett (1974	_
1981   17.31   10.0	1981         1/31         0 </td <td>  1981   675   6   6   6   6   6   6   6   6   6  </td> <td>IND 133. 7J</td> <td></td> <td>;</td> <td>•</td> <td>•</td> <td></td> <td></td> <td>•</td> <td></td> <td></td> <td></td> <td></td> <td></td>	1981   675   6   6   6   6   6   6   6   6   6	IND 133. 7J		;	•	•			•					
1981   8/66   0   0   0   6   6   6   6   6   6	1981         8/06         0 </td <td>  1991   80.06   0   0   0   0   0   0   0   0   0  </td> <td></td> <td>1861</td> <td>1/31</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>Survey</td> <td></td> <td></td> <td>ADF &amp; (1981)</td> <td></td>	1991   80.06   0   0   0   0   0   0   0   0   0		1861	1/31	•	•	•	•	•	Survey			ADF & (1981)	
1981   8720	1981         8/20         0         0         0         6 Found           1981         9/27         0	1981   97.20   0   0   0   0   0   0   0   0   0		1881	9/08	•	•	•	•	•	SULVRY			ADF16 (1981)	
1981   9/25   0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1981         8/27         0         0         0         6 Frontal 1981         9/44         0         0         0         6 Frontal 1981         9/44         0	1981   9/24   0   0   0   0   0   0   0   0   0		1981	<b>B/</b> 20	•	•	۰	•	•	Survey	1001		ADF&6 (1981)	
1981   1970   9	1981         9/04         0 </td <td>  1981   9704   0</td> <td></td> <td>1981</td> <td>8/27</td> <td>۰</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>SULVRY</td> <td>1001</td> <td></td> <td>ADF&amp;6 (1981)</td> <td></td>	1981   9704   0		1981	8/27	۰	•	•	•	•	SULVRY	1001		ADF&6 (1981)	
1981   9/19   0   0   0   0   0   6   6   6   6   6	1981         9/19         0 </td <td>  1981   71,19   0   0   0   0   0   0   0   0   0  </td> <td></td> <td>1981</td> <td>4/04</td> <td>•</td> <td>۰</td> <td>•</td> <td>•</td> <td>0</td> <td>SUL VEV</td> <td>1001</td> <td></td> <td>ADF&amp;6 (1981)</td> <td></td>	1981   71,19   0   0   0   0   0   0   0   0   0		1981	4/04	•	۰	•	•	0	SUL VEV	1001		ADF&6 (1981)	
1982   9726   0   0   0   0   0   0   0   0   0	1981         9726         0 </td <td>  1982   8/04   9.2   9.0   9.</td> <td></td> <td>1981</td> <td>01/0</td> <td>•</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>ğ</td> <td></td> <td>ANFLG (1981)</td> <td></td>	1982   8/04   9.2   9.0   9.		1981	01/0	•						ğ		ANFLG (1981)	
1982   97.06   0   0   0   0   0   0   0   0   0	1982   87,08   0   0   0   0   0   0   0   0   0	1781   77.28   10.00				•	•	•	•	•		100 au 100			
1982   8/06   0   0   0   0   0   0   0   0   0	1982         8706         0 </td <td>  1982   80.06   0   0   0   0   0   0   0   0   0  </td> <td></td> <td>1481</td> <td>4/ /4</td> <td>&gt;</td> <td>-</td> <td>-</td> <td>-</td> <td>&gt;</td> <td></td> <td>1007 Burvey</td> <td></td> <td></td> <td></td>	1982   80.06   0   0   0   0   0   0   0   0   0		1481	4/ /4	>	-	-	-	>		1007 Burvey			
1922   8111   812   813   812   813   812   813   812   812   813   812   812   812   813   812   812   813   812   81	1982   8/13   0   0   0   0   0   0   0   0   0	1982   8/11   0   0   0   0   0   0   0   0   0		1982	40/8	<	-	<	-	•	2	TOOL		ADELS (10936)	
1982   1911   0	1982         8/11         0 </td <td>  1992   8/17   10   10   10   10   10   10   10  </td> <td></td> <td></td> <td></td> <td>•</td> <td>• «</td> <td>• «</td> <td>• •</td> <td>•</td> <td></td> <td>8</td> <td></td> <td>1120011</td> <td></td>	1992   8/17   10   10   10   10   10   10   10				•	• «	• «	• •	•		8		1120011	
1982   872   0	1982         8717         0 </td <td>  1922   817   100 aurvey   1922   100 aurvey   1923   100 aurvey   1923   100 aurvey   1924   100 aurvey   1925   100 aurvey</td> <td></td> <td>7861</td> <td>3 3</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>&gt; &lt;</td> <td>SULVEY</td> <td></td> <td></td> <td>MUTED (17830)</td> <td></td>	1922   817   100 aurvey   1922   100 aurvey   1923   100 aurvey   1923   100 aurvey   1924   100 aurvey   1925   100 aurvey		7861	3 3	•	•	•	•	> <	SULVEY			MUTED (17830)	
1982   8722   0   0   0   0   6   6   6   6   6   6	1982         8/72         0         0         0         0         6 Fround           1982         8/73         0	1982   9/22   0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		1487	<u>/</u>	3	-	•	•	•	Survey	3		ADF 46 (1983b)	
1982   8/23   0   0   0   0   6 found survey - Excellent, 1001 survey   1982   8/30   0   0   0   0   0   0   0   0   0	1982         8/23         0         0         0         0         6 Fround           1982         8/30         0	1922   8/23   0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		1982	8/22	•	•	•	۰	•	Survey	100		ADFL6 (1983b)	
1982   9/30   0   0   0   0   0   0   0   0   0	1982         8/30         0         0         0         0         0         6 Found           1982         9/05         0	1982   8/36   0   0   0   0   0   6   6   6   6		1982	8/23	•	٠	•	•	•	Survey	100		ADF16 (1983b)	
1982   9/05   0   0   0   0   6   6   6   6   6   6	1962         9/05         0         0         0         0         0         6 Found           1982         9/19         0	1982   9/05   0   0   0   0   0   0   0   0   0		1982	8/30	•	۰	•	۰	•	Survey	1001		ADF&6 (1983b)	
1982   9/13   0   0   0   0   0   6   6   6   6   6	1982         9/13         0         0         0         0         0         6 Fround           1982         9/19         0	1982   9/13   0   0   0   0   0   0   0   0   0		1982	9/05	•	•	•	•	•	Survey	1001		ADF&B (1983b)	
1982   9/19   0   0   0   0   0   0   0   0   0	1982         9/19         0         0         0         0         0         6 Fround           1962         9/25         0	1982         9/19         0         0         Ground survey - Excellent, 1001 survey           1982         1975         0         0         0         Ground survey - Excellent, 1001 survey           1982         10/25         0         0         0         6 Found survey - Excellent, 1001 survey           1983         8/20         0         0         0         6 Found survey - Excellent, 1001 survey           1983         9/11         0         0         0         0         6 Found survey - Excellent, 1001 survey           1983         9/11         0         0         0         0         6 Found survey - Excellent, 1001 survey           1983         9/18         0         0         0         0         6 Found survey - Excellent, 1001 survey           1983         9/18         0         0         0         0         6 Found survey - Excellent, 1001 survey           1984         8/16         0         0         0         0         6 Found survey - Excellent, 1001 survey           1984         8/18         0         0         0         0         0         0         0           1984         9/14         0         0         0         0         0         0         0		1982	9/13	٠	•	•	•	•	SULVEY			ADF46 (1983b)	
1982         9/25         0         0         0         6 Found survey - Excellent, 1001 surveyed           1983         10/25         0         0         0         6 Found survey - Excellent, 1001 surveyed           1983         8/20         0         0         0         6 Found survey - Excellent, 1001 surveyed           1983         9/11         0         0         0         6 Found survey - Excellent, 1001 surveyed           1983         9/11         0         0         0         0 Ground survey - Excellent, 1001 surveyed           1983         9/11         0         0         0         0 Ground survey - Excellent, 1001 surveyed           1983         9/18         0         0         0         0 Ground survey - Excellent, 1001 surveyed           1984         8/06         0         0         0         0 Ground survey - Excellent, 1001 surveyed           1984         8/12         0         0         0         0 Ground survey - Foor, 1001 surveyed           1984         8/26         0         0         0         0 Ground survey - Good, 1001 surveyed           1984         9/24         0         0         0         0 Ground survey - Foor, 1001 surveyed           1984         9/24         0 <t< td=""><td>1982         9/25         0         0         0         0         0         6 Found           1983         10/25         0</td><td>1982         9/25         0         0         0         6 Found survey - Excellent, 1001 surveyed           1982         10/25         0         0         0         6 Found survey - Excellent, 1001 surveyed           1983         8/20         0         0         0         6 Found survey - Excellent, 1001 surveyed           1983         9/01         0         0         0         6 Found survey - Excellent, 1001 surveyed           1983         9/11         0         0         0         0         6 Found survey - Excellent, 1001 survey           1983         9/11         0         0         0         0         6 Found survey - Excellent, 1001 survey           1984         8/18         0         0         0         0         6 Found survey - Excellent, 1001 surveyed           1984         8/12         0         0         0         0         6 Found survey - Excellent, 1001 surveyed           1984         8/12         0         0         0         0         0         0           1984         8/12         0         0         0         0         0         0         0           1984         9/21         0         0         0         0         0         0</td><td></td><td>1982</td><td>61/6</td><td>•</td><td>۰</td><td>•</td><td>•</td><td>•</td><td>SULVEY</td><td></td><td></td><td>ADF46 (1983b)</td><td></td></t<>	1982         9/25         0         0         0         0         0         6 Found           1983         10/25         0	1982         9/25         0         0         0         6 Found survey - Excellent, 1001 surveyed           1982         10/25         0         0         0         6 Found survey - Excellent, 1001 surveyed           1983         8/20         0         0         0         6 Found survey - Excellent, 1001 surveyed           1983         9/01         0         0         0         6 Found survey - Excellent, 1001 surveyed           1983         9/11         0         0         0         0         6 Found survey - Excellent, 1001 survey           1983         9/11         0         0         0         0         6 Found survey - Excellent, 1001 survey           1984         8/18         0         0         0         0         6 Found survey - Excellent, 1001 surveyed           1984         8/12         0         0         0         0         6 Found survey - Excellent, 1001 surveyed           1984         8/12         0         0         0         0         0         0           1984         8/12         0         0         0         0         0         0         0           1984         9/21         0         0         0         0         0         0		1982	61/6	•	۰	•	•	•	SULVEY			ADF46 (1983b)	
1982   10/25   0   0   0   0   0   0   0   0   0	1982         10/25         0         0         0         0         6 Fround           1983         8/20         0         0         0         0         0         6 Fround           1983         9/01         0         0         0         0         0         6 Fround           1983         9/11         0         0         0         0         6 Fround           1983         9/18         0         0         0         0         6 Fround           1984         8/06         0         0         0         0         6 Fround           1984         8/18         0         0         0         0         0         6 Fround           1984         8/18         0         0         0         0         0         0         0         0           1984         8/26         0	1982         10/25         0         0         Aerial count, helicopter - Fair, 1001 surveyed           1983         8/20         0         0         6 round survey - Excellent, 1001 surveyed           1983         8/21         0         0         0         6 round survey - Excellent, 1001 survey           1983         9/11         0         0         0         6 round survey - Excellent, 1001 survey           1983         9/18         0         0         0         0         6 round survey - Excellent, 1001 survey           1984         8/10         0         0         0         0         0 stound survey - Excellent, 1001 surveyed           1984         8/18         0         0         0         0         0 stound survey - Facellent, 1001 surveyed           1984         8/26         0         0         0         0         0 stound survey - Boor, 1001 surveyed           1984         8/26         0         0         0         0         0 stound survey - Boor, 1001 surveyed           1984         8/26         0         0         0         0         0 stound survey - Boor, 1001 surveyed           1984         9/21         0         0         0         0         0 stound survey - Boor, 1001 surveyed		1982	9/25	•	•	•	•	٥	Survey	100% survey		ADF&6 (1983b)	
1983   8/20   0   0   0   0   0   6   6   6   1001   5   1001	1983         8/20         0         0         0         0         6         Found           1983         8/27         0	1983         8/20         0         0         0         6 Found survey - Bood, 1001 surveyed           1983         8/21         0         0         0         6 Found survey - Excellent, 1002 survey           1983         9/11         0         0         0         0         6 Found survey - Excellent, 1001 survey           1983         9/18         0         0         0         0         6 Found survey - Excellent, 1001 survey           1983         9/18         0         0         0         0         6 Found survey - Excellent, 1001 survey           1984         8/06         0         0         0         0         6 Found survey - Foor, 1001 surveyed           1984         8/16         0         0         0         0         6 Found survey - Foor, 1001 surveyed           1984         8/26         0         0         0         0         6 Found survey - Foor, 1001 surveyed           1984         8/26         0         0         0         0         6 Found survey - Foor, 1001 surveyed           1984         8/26         0         0         0         0         6 Found survey - Foor, 1001 surveyed           1984         9/24         0         0         0         0 <td< td=""><td></td><td>1982</td><td>10/25</td><td>•</td><td>•</td><td>•</td><td>•</td><td>•</td><td></td><td>Fair, 100% surveyed</td><td></td><td>ADF&amp;6 (1983b)</td><td></td></td<>		1982	10/25	•	•	•	•	•		Fair, 100% surveyed		ADF&6 (1983b)	
1983   8/20   0   0   0   0   0   6 Found survey - Boad, 100X surveyed   1983   8/27   0   0   0   0   0   0   0   6 Found survey - Excellent, 100X survey   1983   9/11   0   0   0   0   0   0   0   0   0	1983         8/20         0         0         0         0         6 Fround           1983         8/27         0         0         0         0         0         6 Fround           1983         9/11         0         0         0         0         0         6 Fround           1983         9/11         0         0         0         0         0         6 Fround           1984         8/06         0         0         0         0         0         6 Fround           1984         8/18         0         0         0         0         0         6 Fround           1984         8/26         0         0         0         0         0         6 Fround           1984         9/21         0         0         0         0         0         6 Fround           1984         9/21         0         0         0         0         0         0         6 Fround           1984         9/21         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0	1983         8/20         0         0         6 round survay - Bood, 100X survay           1983         8/27         0         0         0         6 round survay - Excellent, 100X survay           1983         9/11         0         0         0         6 round survay - Excellent, 100X survay           1983         9/11         0         0         0         0         6 round survay - Excellent, 100X survay           1983         9/18         0         0         0         0         6 round survay - Excellent, 100X survay           1984         8/06         0         0         0         6 round survay - Excellent, 100X survay           1984         8/18         0         0         0         0         6 round survay - Bood, 100X survay           1984         8/16         0         0         0         0         6 round survay - Bood, 100X survay           1984         8/12         0         0         0         0         6 round survay - Poor, 100X survay           1984         9/21         0         0         0         0         0         0           1984         9/21         0         0         0         0         0         0           1984 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>													
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1983   9/01   0   0   0   0   0   0   6   6   6   6	1983         9/01         0         0         0         0         6 Found           1983         9/11         0	1983         9/01         0         0         0         6 Found survey - Excellent, 1001 survey           1983         9/11         0         0         0         0         6 Found survey - Excellent, 1001 survey           1983         9/18         0         0         0         0         6 Found survey - Excellent, 1001 survey           1984         8/06         0         0         0         6 Found survey - Poor, 1001 surveyed           1984         8/12         0         0         0         0         6 Found survey - Poor, 1001 surveyed           1984         8/12         0         0         0         0         6 Found survey - Foor, 1001 surveyed           1984         8/12         0         0         0         0         6 Found survey - Foor, 1001 surveyed           1984         9/04         0         0         0         0         6 Found survey - Foor, 1001 surveyed           1984         9/11         0         0         0         0         6 Found survey - Foor, 1001 surveyed           1984         9/12         0         0         0         0         6 Found survey - Foor, 1001 surveyed           1982         8/12         0         0         0         0         6		1983	8/2/	•	•	•	•	•	survey			Barrett et al.	(1984)
1983   9/11   0   0   0   0   0   6 Found survey - Excellent, 100X survey   1983   19/03   0   0   0   0   0   0   0   0   0	1983         9/11         0         0         0         0         0         6 Fround           1983         9/18         0	1983         9/11         0         0         0         6 Found survey - Excellent, 1001 survey           1983         9/18         0         0         0         0         6 Found survey - Excellent, 1001 survey           1983         10/03         0         0         0         0         0         survey           1984         8/06         0         0         0         6 Found survey - Boor, 1001 surveyed           1984         8/12         0         0         0         0         6 Found survey - Boor, 1001 surveyed           1984         8/12         0         0         0         0         6 Found survey - Boor, 1001 surveyed           1984         9/04         0         0         0         0         6 Found survey - Boor, 1001 surveyed           1984         9/04         0         0         0         0         6 Found survey - Foor, 1001 surveyed           1984         9/12         0         0         0         0         6 Found survey - Excellent, 1001 surveyed           1982         8/12         0         0         0         0         6 Found survey - Excellent, 1001 survey           1982         8/12         0         0         0         0         0		1983	9/01	•	•	•	۰	•	Survey	1001		Barrett et al.	(1984)
1983         9/18         0         0         0         6 Found survey - Excellent, 1001 survey           1983         10/03         0         0         0         6 Found survey - Excellent, 1001 surveyed           1984         8/06         0         0         0         0         0 Ground survey - Poor, 1001 surveyed           1984         8/18         0         0         0         0         0 Ground survey - Poor, 1001 surveyed           1984         8/26         0         0         0         0         0 Ground survey - Foor, 1001 surveyed           1984         9/21         0         0         0         0         0 Ground survey - Foor, 1001 surveyed           1984         9/21         0         0         0         0         0 Ground survey - Foor, 1001 surveyed           1984         9/21         0         0         0         0         0 Ground survey - Foor, 1001 surveyed	1983         9/18         0         0         0         0         0         6 Enumd           1983         10/03         0	1983         9/18         0         0         0         6 Found aurwey - Excellent, 1001 survey           1983         10/03         0         0         0         6 Found survey - Excellent, 1001 surveyed           1984         8/06         0         0         0         0         9 Found survey - Poor, 1001 surveyed           1984         8/12         0         0         0         0         6 Found survey - Poor, 1001 surveyed           1984         8/12         0         0         0         0         6 Found survey - Foor, 1001 surveyed           1984         9/04         0         0         0         0         6 Found survey - Foor, 1001 surveyed           1984         9/21         0         0         0         0         6 Found survey - Foor, 1001 surveyed           1984         9/21         0         0         0         0         6 Found survey - Foor, 1001 surveyed           1982         8/12         0         0         0         0         6 Found survey - Fixellent, 1001 survey           5paming         0         0         0         0         0         6 Found survey		1983	11/6	۰	•	•	•	•	Survey			Barrett et al.	(1984)
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1984   8/06   0   0   0   0   0   Ground survey - Poor, 100I surveyed   1984   8/18   0   0   0   0   0   0   0   0   0	1984         8/0b         0         0         0         0         0         0         0         10         0<	1984         8706         0         0         6 Ground survey - Poor, 1001 surveyed           1984         8718         0         0         0         0         6 Ground survey - Bood, 1001 surveyed           1984         8726         0         0         0         0         0         1001 surveyed           1984         9704         0         0         0         0         6 Ground survey - Bood, 1001 surveyed           1984         9721         0         0         0         0         6 Ground survey - Excellent, 1001 surveyed           1982         8/12         0         0         4         14         20 Electroshocking - 400 yards         S31 NO2 NI9 AD		1983	10/03	٠	•	•	0	•	Ground survey - Excellent,	1001 survey		Barrett et al.	. (1984)
1984 8/18 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1984 8/18 0 0 0 0 0 8 Fround 1984 8/26 0 0 0 2 1 0 6 Fround 1984 9/21 0 0 0 0 0 0 6 Fround 1984 9/21 0 0 0 0 0 0 6 Fround 1984 9/21 0 0 0 0 0 0 6 Fround 1982 8/12 0 0 4 14 20 Electron	1984   8/18   0   0   0   0   0   0   0   1984   1985		1994	A/0/8	٥	•	•	•	G	Ground survey - Pror. 1007	200		Barrott at al	(1985)
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	1982 8/12 0 0 4 14 20	1982 8/12 0 0 4 14 20 Electroshocking - 400 yards S31 NO2 N19 AD Spanning		1984	9/21	•	•	•	•	•	Ground survey - Excellent,	1001 survey		Barrett et al.	(1985)
	1982 8/12 0 0 4 14 20	1982 8/12 0 0 4 14 20 Electroshocking - 400 yards S31 NO2 N19 AD Spanning													
1762 0/12 V O 4 14 20 CIRCL(TONICKING - 400 / 4EGS			Mainstea	1982	8/12	•	•	-	=	90	Electroshocking - 400 yard	•	S31 NO2 N19 AD	ADF16 (1983a)	

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1/25   1   0   0   0   0   0   0   0   0   0		LCAN	3	CHINGS	SULACTE	Cong			**************************************	CONTRACTO		1
187   1974   1974   1974   1975   1974   1975   1		1001	7/75	-	•	•	•	•	survey - Fair, 1007		-	1984
1922   1911   1912   1913   1914   1915   1914   1914   1914   1915   1914   1915		200	270	• •	•	•	• <	•	707.117		-	18617
1872   1973   1974   1975   1974		1001	17.0	> <	•	•	• •	•			1	198
1915   972		1783	11/0	•	•	•	•	• <	TOOL   Dark   1004			700
1985   970		1783	01/0	> <	•	•	• •	•	survey - Good 1005		: -	1984
1983   9709   970   97	/	146	27/0	•	> <	> :	٠.	• •	survey sucue, two		-	0
1983   9/100   9   9   9   9   9   9   9   9   9		1463	4/02	-	•	= -	> -	•	aniver - excellent,		:	
1913   97.13   9 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		1983	60/6	•	•	•	-	•	survey -		÷	
1983   10,003   10		1983	4/15	•	•	•	•	•	survey - Good, 1001		÷	<b>8</b>
1962   10/05   10   10   10   10   10   10   10		1983	9/24	0	•	2	•	•	SULVRY		÷	(1984)
1994   60.08   0   0   0   0   0   0   0   0   0		1981	10/01	•	•	•	•		SHEVEV			(1984)
1944   60.08   0   1   10   100   500 Ground survey - Poor, 1001 surveyed   Barrett et al.     1944   90.24   0   0   0   0   0   0   0   0   0     1944   90.24   0   0   0   0   0   0   0   0   0     1949   90.24   0   0   0   0   0   0   0   0   0     1949   90.24   0   0   0   0   0   0   0   0   0     1949   90.24   0   0   0   0   0   0   0   0   0     1949   90.24   0   0   0   0   0   0   0   0   0     1949   90.24   0   0   0   0   0   0   0   0   0     1949   90.24   0   0   0   0   0   0   0   0     1940   90.24   0   0   0   0   0   0   0   0     1941   90.24   0   0   0   0   0   0   0   0     1941   90.24   0   0   0   0   0   0   0   0     1941   90.24   0   0   0   0   0   0   0   0     1941   90.24   0   0   0   0   0   0   0   0     1941   90.24   0   0   0   0   0   0   0   0     1942   90.24   0   0   0   0   0   0   0   0     1943   90.24   0   0   0   0   0   0   0   0     1944   90.24   0   0   0   0   0   0   0   0     1955   90.24   0   0   0   0   0   0   0     1956   90.24   0   0   0   0   0   0   0     1957   90.24   0   0   0   0   0   0   0     1958   90.24   0   0   0   0   0   0   0     1958   90.24   0   0   0   0   0   0   0     1959   90.24   0   0   0   0   0   0     1950   90.24   0   0   0   0   0   0     1950   90.24   0   0   0   0   0   0     1950   90.24   0   0   0   0   0   0     1950   90.24   0   0   0   0   0   0     1950   90.24   0   0   0   0   0   0     1950   90.24   0   0   0   0   0   0     1950   90.24   0   0   0   0   0   0     1950   90.24   0   0   0   0   0   0     1950   90.25   0   0   0   0   0   0     1950   90.25   0   0   0   0   0     1950   90.25   0   0   0   0   0   0     1950   90.25   0   0   0   0   0   0     1950   90.25   0   0   0   0   0   0     1950   90.25   0   0   0   0   0   0     1950   90.25   0   0   0   0   0   0     1950   90.25   0   0   0   0   0   0     1950   90.25   0   0   0   0   0   0     1950   90.25   0   0   0   0   0   0     1950   90.25   0   0   0   0   0   0     1950   90.25   0   0   0   0   0   0     1950		1983	B0/01		•		•	•	SULVEY			(1984)
1994   91/10   0   0   0   0   0   0   0   0   0									•			
1984   9/17   0   0   0   0   0   0   0   0   0		1984	8/08	•	-	9	901	200	SULVEY		÷	(1982)
1984   9/23   0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		1984	8/17	0	•	•	•	•	SULVEY		7	(1985)
1984   972   972   972   972   972   973   974   975		100	10/0	•		•		. <	Port and a new 1007		-	5001
1944   9702   9   9   9   9   9   9   9   9   9		136	67/9	•	•	•	•	•	aurey run 1004			
1984   9710   0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		186	4/02	•	-	-	-	-	Survey - bood, 1004			2
1984   9726   0   0   0   0   0   0   0   0   0		1984	9/10	•	•	•	•	•	survey -			386
194   9/1948/30   2   6   5   5   6   6   6   6   6   6   6		1984	9/20	•	•	•	•	•	Survey -			(1982)
1975   8/1948/30   2   5   5   5   5   5   5   5   5   5		1984	9/26	0	•	•	•	•	Survey -			(1985)
1975   8726   12   12   12   13   14   15   15   15   15   15   15   15			45.010.0				•			dent dead	17017 110270	
1975   81/2b   128   1	Slough 16		8/1448/30				7		proup survey	Lest count	11/4/	
8/06         0         0         6 Fround survey - Poor, 1001 surveyed           8/10         0         0         6 Fround survey - Poor, 1001 surveyed           8/21         0         0         0         6 Fround survey - Poor, 1001 surveyed           9/26         0         0         0         6 Fround survey - Fair, 1001 surveyed           9/19         0         0         0         6 Fround survey - Excellent, 1002 surveyed           9/19         0         0         0         6 Fround survey - Excellent, 1002 surveyed           8/11         0         0         0         0         6 Fround survey - Excellent, 1002 surveyed           8/11         0         0         0         0         6 Fround survey - Excellent, 1002 surveyed           8/11         0         0         0         0         0         0         0           8/11         0	(RM 137.3)	1975	B/26				13				Friese (1975)	
8/10   0   0   0   0   0   0   6   6   6		1981	10/4	٠	-	-	-	0	VAV TIE		ADF46 (1981)	
8/21				•	•	• •	•	•			Ancte (1991)	
8/21         0         0         6 fround survey - Poor, 1001 surveyed           9/25         0         0         0         6 fround survey - Pair, 1001 surveyed           9/19         0         0         0         0         6 fround survey - Excellent, 1001 surveyed           9/19         0         0         0         0         0         0         0           9/19         0		14.	0/10	•	•	>	> -	-	Survey - roor, 1004		MUTEO (1701)	
8/26         0         0         6 Found survey - Poor, 1001 surveyed           9/03         0         0         0         6 Found survey - Fair, 1001 surveyed           9/19         0         0         0         0         6 Found survey - Excellent, 1001 surveyed           8/04         0         0         0         0         6 Found survey - Excellent, 1001 surveyed           8/11         0         0         0         0         0 stound survey - Excellent, 1001 surveyed           8/17         0         0         0         0         0 stound survey - Excellent, 1001 surveyed           8/17         0         0         0         0         0 stound survey - Excellent, 1001 surveyed           8/20         0         0         0         0 stound survey - Excellent, 1001 surveyed           9/12         0         0         0         0 stound survey - Excellent, 1001 surveyed           9/12         0         0         0         0 stound survey - Excellent, 1001 surveyed           9/18         0         0         0         0 stound survey - Excellent, 1002 surveyed           9/18         0         0         0         0 stound survey - Excellent, 1002 surveyed           10/2         0         0         0 <td></td> <td>1961</td> <td>8/21</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>•</td> <td>survey - Poor, 1001</td> <td></td> <td>ADF [6 (1981)</td> <td></td>		1961	8/21	•	•	•	•	•	survey - Poor, 1001		ADF [6 (1981)	
9/03 0 0 0 0 3 0 6round survey - Fair, 1001 surveyed 9/19 0 0 0 0 0 6round survey - Excellent, 1002 survey 9/26 0 0 0 0 6round survey - Excellent, 1002 survey 8/11 0 0 0 0 6round survey - Excellent, 1002 survey 8/17 0 0 0 0 6round survey - Excellent, 1002 survey 8/20 0 0 0 0 6round survey - Excellent, 1002 survey 9/10 0 0 0 0 6round survey - Excellent, 1002 survey 9/10 0 0 0 0 6round survey - Excellent, 1002 survey 9/12 0 0 0 0 6round survey - Excellent, 1002 survey 9/18 0 0 0 0 6round survey - Excellent, 1002 survey 9/18 0 0 0 0 6round survey - Excellent, 1002 survey 9/18 0 0 0 0 6round survey - Excellent, 1002 survey 9/18 0 0 0 0 6round survey - Excellent, 1002 survey 9/18 0 0 0 0 6round survey - Excellent, 1002 survey 9/18 0 0 0 0 6round survey - Excellent, 1002 survey 9/19 0 0 0 0 6round survey - Excellent, 1002 survey 9/10 0 0 0 0 6round survey - Excellent, 1002 survey 9/10 0 0 0 0 6round survey - Excellent, 1002 survey 9/10 0 0 0 0 6round survey - Excellent, 1002 survey 9/10 0 0 0 0 0 6round survey - Excellent, 1002 survey 9/10 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		1861	9/29	•	•	•	•	•	Survey - Poor, 100%		ADF&6 (1981)	
9/19 0 0 0 0 6 Fround survey - Escellent, 1001 survey 9/12b 0 0 0 0 6 Fround survey - Escellent, 1001 survey 9/12b 0 0 0 0 6 Fround survey - Escellent, 1001 survey 8/11 0 0 0 0 0 6 Fround survey - Escellent, 1001 survey 9/12 0 0 0 0 0 6 Fround survey - Escellent, 1001 survey 9/12 0 0 0 0 0 6 Fround survey - Escellent, 1001 survey 9/12 0 0 0 0 0 6 Fround survey - Escellent, 1001 survey 9/12 0 0 0 0 0 6 Fround survey - Escellent, 1001 survey 9/12 0 0 0 0 0 6 Fround survey - Escellent, 1001 survey 9/12 0 0 0 0 0 6 Fround survey - Escellent, 1001 survey 9/12 0 0 0 0 0 6 Fround survey - Escellent, 1001 survey 9/12 0 0 0 0 0 6 Fround survey - Escellent, 1001 survey 9/12 0 0 0 0 0 6 Fround survey - Escellent, 1001 survey 9/12 0 0 0 0 0 6 Fround survey - Escellent, 1001 survey 9/12 0 0 0 0 0 6 Fround survey - Escellent, 1001 survey 10/12 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		1981	10/6	-	•	•		•	KIITVEV			
8/04 0 0 0 6 Ground Survey - Excellent, 1002 Survey 8/11 0 0 0 0 6 Ground Survey - Excellent, 1002 Survey 8/11 0 0 0 0 6 Ground Survey - Excellent, 1002 Survey 8/12 0 0 0 0 6 Ground Survey - Excellent, 1002 Survey 8/30 0 0 0 0 6 Ground Survey - Excellent, 1002 Survey 9/04 0 0 0 0 6 Ground Survey - Excellent, 1002 Survey 9/12 0 0 0 0 6 Ground Survey - Excellent, 1002 Survey 9/12 0 0 0 0 6 Ground Survey - Excellent, 1002 Survey 9/12 0 0 0 0 6 Ground Survey - Excellent, 1002 Survey 9/12 0 0 0 0 6 Ground Survey - Excellent, 1002 Survey 10/25 0 0 0 0 6 Ground Survey - Excellent, 1002 Survey 10/25 0 0 0 0 6 Ground Survey - Excellent, 1002 Survey 10/25 0 0 0 0 6 Ground Survey - Excellent, 1002 Surveyed		1881	6/10	-	-	-	•	•	787.113		A0F16 (1981)	1
8/04 0 0 0 0 6 found survey - Good, 1001 surveyed 8/11 0 0 0 0 6 found survey - Excellent, 1001 surveyed 8/17 0 0 0 0 6 found survey - Excellent, 1001 survey 8/23 0 0 0 0 0 6 found survey - Excellent, 1001 survey 8/30 0 0 0 0 6 found survey - Excellent, 1001 survey 9/12 0 0 0 0 6 found survey - Excellent, 1001 survey 9/12 0 0 0 0 6 found survey - Excellent, 1001 survey 9/18 0 0 0 0 0 6 found survey - Excellent, 1001 survey 10/25 0 0 0 0 6 found survey - Excellent, 1001 survey 10/25 0 0 0 0 6 found survey - Excellent, 1001 survey 10/25 0 0 0 0 6 found survey - Excellent, 1001 surveyed		1861	9/29		•			•	SULVEY		ADF46 (1981)	
8/04         0         0         6 Found survey - Good, 1001 surveyed           8/11         0         0         0         6 Found survey - Excellent, 1001 survey           8/17         0         0         0         0         6 Found survey - Excellent, 1001 survey           8/30         0         0         0         0         0 sround survey - Excellent, 1001 survey           9/04         0         0         0         0         6 Found survey - Excellent, 1001 survey           9/12         0         0         0         0         8 Found survey - Excellent, 1001 survey           9/18         0         0         0         0         6 Found survey - Excellent, 1001 survey           9/18         0         0         0         0         0         0           9/18         0         0         0         0         0         0           9/18         0         0         0         0         0         0           9/18         0         0         0         0         0         0           9/18         0         0         0         0         0         0         0           9/15         0         0         0		•	!	•	•	•	•	•				
8/11         0         0         0         6 Found aurvey - Excellent, 1001 survey           8/17         0         0         0         6 Found survey - Excellent, 1001 survey           8/23         0         0         0         0         6 Found survey - Excellent, 1001 survey           8/30         0         0         0         0         6 Found survey - Excellent, 1001 survey           9/12         0         0         0         0         6 Found survey - Excellent, 1001 survey           9/12         0         0         0         0         0         0         survey           9/18         0         0         0         0         0         0         survey           9/18         0         0         0         0         0         0         survey           9/18         0         0         0         0         0         survey         Excellent, 1001 survey           9/25         0         0         0         0         0         survey           10/25         0         0         0         0         survey		1982	8/04	0	0	•	0	0	SULVEY		ADF46 (1983b)	
8/17     0     0     0     6 Found survey - Excellent, 1001 survey       8/23     0     0     0     6 Found survey - Excellent, 1001 survey       8/30     0     0     0     0     6 Found survey - Excellent, 1001 survey       9/04     0     0     0     0     0     0     0       9/12     0     0     0     0     0     0     0       9/18     0     0     0     0     0     0     0       9/25     0     0     0     0     0     0     0       10/25     0     0     0     0     0     0     0       10/25     0     0     0     0     0     0     0		1982	8/11	•	•	a	•	•	survey - Excellent.			
8/33			21/0	•		• •	•	• •	Freellant			
9/30 0 0 0 6 6 found survey - Excellent, 1001 survey 9/30 0 0 0 6 found survey - Excellent, 1001 survey 9/12 0 0 0 0 6 found survey - Excellent, 1001 survey 9/12 0 0 0 0 6 found survey - Excellent, 1001 survey 9/12 0 0 0 0 6 found survey - Excellent, 1001 survey 9/12 0 0 0 0 6 found survey - Excellent, 1001 survey 9/12 0 0 0 0 6 found, helicopter - Good, 1001 survey 6 for 1001 survey 6 f		7047	11/0	•	•	> <	•	•	Bullet Catelline			
8/30 0 0 0 0 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6		7941	7/8	-	•	-	-	•	Survey - Excellent,			
9/04 0 0 0 0 6 Ground survey – Escellent, 100% survey 9/12 0 0 0 0 6 Ground survey – Escellent, 100% survey 9/18 0 0 0 0 6 Ground survey – Escellent, 100% survey 9/25 0 0 0 0 6 Ground survey – Escellent, 100% survey 10/25 0 0 0 0 Aerial count, helicopter – Bood, 100% surveyed		1982	9/30	•	•	•	0	•	Survey			
9/12 0 0 0 0 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6		1982	40/6	•	•	•	•	•	survey - Excellent,			
9/18 0 0 0 0 6 Ground survey - Excellent, 1001 survey 9/25 0 0 0 0 6 Ground survey - Excellent, 1001 survey 10/25 0 0 0 0 0 Aerial count, helicopter - Bood, 1001 surveyed 10/25 0 0 0 0 0 Ground Surveyed		1982	9/12	•	•	0	0	•	survey - Excellent,			
9/25 0 0 0 0 6 Ground survey - Escellent, 1001 survey 10/25 0 0 0 0 Aerial count, helicopter - Bood, 1001 surveyed		1982	81/6	•	•	0	•	•	survey - Excellent,			
10/25 0 0 0 0 Agrial count, helicopter - Bond, 1002 surveyed		1982	97.5	•	•	•	•	0	survey - Excellent.			
ned a contract and of the contract person of the contract and the contract		1907	10/25	•		• •	• •			P=7	ADELG (1987h)	
1/15 A A A County - Evellant IAM section		7941	C7 /01	•	•	•	>	>			100011 05 104	
		1001	3671	•	•	<	<	•	Cross described - Eventland 1007 survey		to be thousand	11987

LOCATION NAME / (RIVER HILE)	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY NETHOD +	COMMENTS	DATA SOURCE
	4000							Consideration - 200 mode	671 MAG HAD 505	ADERC (1007-1
Mainstem (RM 130.9)	1982	9/04	0	0	0	16	0	Ground survey - 200 yards	S31 NO2 NO9 DBD Spawning	ADF&G (1983a)
Daniel 12	1974	9/13				24		Ground survey	Peak count	Barrett (1974)
Slough 17 (RM 138.9)	17/4	7/13				24		ordena survey	reax Count	Dell'ett (1774)
	1981	8/06	0	0	0	9	0	Ground survey - Excellent, 100% survey		ADF&6 (1981)
	1981	B/10	0	0	0	3	0	Ground survey - Poor, 100% surveyed		ADF&G (1981)
	1981	8/21	0	1	0	22	0	Ground survey - Excellent, 75% survey		ADF&G (1981)
	1981	8/26	0	0	0	3 <b>B</b>	0	Ground survey - Excellent, 100% survey		ADF&G (1981)
	1981	9/03	0 ·	5	0	37	0	Ground survey - Excellent, 100% survey		ADF&6 (1981)
	1981	9/11	0	6	0	30	0	Ground survey - Excellent, 100% survey		ADF&G (1981)
	1981	9/19	0	3	0	4	0	Ground survey - Excellent, 100% survey		ADF&6 (1981)
	1981	9/26	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF&G (1981)
	1982	8/04	0	0	0	0	0	Ground survey - Good, 100% surveyed		ADF&G (1983b)
	1982	8/11	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	8/16	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	8/22	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF&6 (1983b)
	1982	8/30	0	0	0	4	0	Ground survey - Excellent, 100% survey		ADF&6 (1983b)
	1982	9/04	0	0	0	2	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	9/12	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	9/18	0	0	0	2	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	9/23	0	0	0	21	0	Ground survey - Excellent, 100% survey		ADF&6 (1983b)
	1982	9/30	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	10/25	0	0	0	0	0	Aerial count, helicopter - Excellent, 100%	survey	ADF&G (1983b)
	1983	7/25	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
	1983	8/04	Ö	Ö	Ö	Ö	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
	1983	B/11	0	0	5	28	0	Ground survey - Good, 100% surveyed		Barrett et al. (19
	1983	8/10	0	ì	Ō	33	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
	1983	0/25	Ö	2	0	90	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
	1983	9/03	0	1	Ö	2	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
	1983	9/09	0	3	Ö	6	Ò	Ground survey - Excellent, 100% survey		Barrett et al. (19
	1983	9/15	0	0	Ŏ	3	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
	1993	9/22	0	6	0	Ō	0	Bround survey - Excellent, 100% survey		Barrett et al. (19
	1983	10/03	Ŏ	0	Ó	Õ	Ô	Bround survey - Excellent, 100% survey		Barrett et al. (19
	1983	10/08	Ō	2	Ō	0	0	Ground survey - Excellent, 1002 survey		Barrett et al. (19
	1984	8/08	0	16	0	39	1	Ground survey ~ Excellent, 100% survey		Barrett et al. (19
	1984	8/17	ŏ	1	Ŏ	29	i	Ground survey - Excellent, 100% survey		Barrett et al. (19
	1984	8/24	ŏ	15	٥	70	ŏ	Ground survey - Poor, 100% surveyed		Barrett et al. (19
	1984	9/02	0	3	0	66	0	Ground survey - Good, 100% surveyed		Barrett et al. (19
	1984	9/10	0	0	0	0	٥	Ground survey - Good, 100% surveyed		Barrett et al. (19

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LOCATION NAME / (RIVER HILE)	YEAR	DATE	CHINOOK	BOCKEYE	СОНО	CHUM	PINK	SURVEY METHOD #	CONNENTS	DATA SOURCE
	1984	9/20	0	0	0	0	0	Ground survey - Excellent, 1001 survey		Barrett et al. 115
	1984	9/26	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (19
	1984	10/03	0	0	0	0	0	Bround survey ~ Excellent, 100% survey		Barrett et al. (19
Mainsten	1984	8/24	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (19
(RM 139.0)	1984	9/01	0	2	0	46	0	Amrial count, helicopter - Bood	Spawni ng	Barrett et al. (19
	1984	9/06	0	0	0	87	0	Aprial count, helicopter - Good	Spawning	Barrett et al. (1
	1984	9/15	0	3	0	15	0	Aerial count, helicopter - Good	Spawning	Barrett et al. ()
	1984	9/22	0	0	0	0	0	Aerial count, helicopter - Bood		Barrett et al. (1
	1984	9/29	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (1
Mainstea	1984	8/24	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (1
(RM 139.4)	1984	9/01	0	0	0	6	0	Aerial count, helicopter - Good	Spawning	Barrett et al. []
	1984	9/08	0	0	0	37	0	Aerial count, helicopter - Good	Spawning	Barrett et al. ()
	1984	9/15	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (1
	1984	9/22	0	0	0	0	0	Aprial count, helicopter - Bood		Barrett et al. (1
	1984	9/29	0	0	0	0	0	Aerial count, helicopter - Bood		Barrett et al. (1
Slough 19	1974	8/21		3				Ground survey	Peak count	Barrett (1974)
(RM 139.7)	1974	9/24				4		Ground survey	Peak count	Barrett (1974)
	1975	9/26		20						Friese (1975)
	1981	8/04	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF&S (1981)
	1981	B/10	0	0	0	0	0	Bround survey - Fair, 100% surveyed		ADF&6 (1981)
	1981	8/21	, 0	13	0	3	0	Bround survey - Excellent, 100% survey		ADF&G (1981)
	1961	8/26	0	20	0	0	0	Ground survey - Excellent, 100% survey		ADF&6 (1981)
	1981	9/03	0	23	0	1	0	Bround survey - Excellent, 100% survey		ADF&G (1981)
	1991	9/11	0	19	0	0	0	Ground survey - Excellent, 100% survey		ADF&G (1981)
	1981	9/19	0	B	0	0	0	Ground survey - Excellent, 100% survey		ADF&6 (1981)
	1981	9/26	0	6	0	0	0	Ground survey - Excellent, 100% survey	•	ADF&G (1981)
	1982	6/04	0	0	0	0	1	Bround survey - Excellent, 100% survey		ADF&6 (1983b)
	1982	8/11	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADFEB (1983b)
	1982	8/14	0	0	0	0	0	Bround survey - Excellent, 100% survey		ADF&B (1983b)
	1982	8/22	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	8/30	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	9/04	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF&8 (1983b)
	1982	9/12	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	9/18	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	9/23	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF46 (1983b)
	1982	9/30	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF&6 (1983b)
	1982	10/25	0	0	0	0	0	Aerial count, helicopter - Excellent, 100	l survey	ADF&G (19836)
	1983	7/25	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (1

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LOCATION NAME / (RIVER MILE)	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUN	PINK	SURVEY METHOD +	CONNENTS	DATA SOURCE
	1983	B/04	0	0	0	0	0	Ground survey - Excellent, 100% surve	:y	Barrett et al. (198
	1983	B/11	0	0	0	0	1	Ground survey - Good, 100% surveyed		Barrett et al. (198
	1983	8/18	0	0	0	0	0	Ground survey - Excellent, 100% surve	ey .	Barrett et al. (198
	1983	8/25	0	0	0	2	0	Ground survey ~ Excellent, 100% surve	ey .	Barrett et al. (198
	1983	9/03	0	1	0	3	0	Ground survey - Excellent, 100% surve	ey .	Barrett et al. (198
	1983	9/09	0	5	0	0	0	Ground survey - Excellent, 100% surve	!y	Barrett et al. (198
	1983	9/15	0	3	Ú	0	0	Ground survey - Excellent, 100% surve	ey .	Barrett et al. (198
	1983	9/22	0	3	0	0	0	Ground survey - Excellent, 100% survi	ty	Barrett et al. (198
	1983	10/03	0	0	0	0	0	Ground survey - Excellent, 100% surve	ey	Barrett et al. (198
	1984	8/08	0	0	0	19	0	Ground survey - Good, 100% surveyed		Barrett et al. (198
	1984	B/17	0	0	0	3	0	Ground survey ~ Excellent, 100% surve	ey .	Barrett et al. (198
	1984	8/24	0	4	0	40	0	Ground survey - Good, 100% surveyed		Barrett et al. (198
	1984	9/02	0	9	0	45	0	Ground survey - Excellent, 100% surve	ey .	Barrett et al. (198
	1984	9/10	0	11	0	5	0	Ground survey - Good, 100% surveyed		Barrett et al. (198
	1984	9/20	0	6	0	0	0	Ground survey - Excellent, 100% surve	Py	Barrett et al. (198
	1984	9/26	0	4	0	1	0	Ground survey - Excellent, 100% surve	ey	Barrett et al. (196
	1984	10/03	0	0	0	0	0	Bround survey - Excellent, 100% surve	EY	Barrett et al. (198
Slough 20 (RM 140.1)	1974	9/05				107		Ground survey	Peak count	Barrett (1974)
100 170717	1981	8/04	0	0	0	0	0	Ground survey - Poor, 100% surveyed		ADF&G (1981)
	1981	8/10	ň	ŏ	ŏ	ŏ	Ď	Ground survey - Poor, 100% surveyed		ADF&G (1981)
	1981	8/21	<b>^</b>	ŏ	٨	Ŏ	Ň	Ground survey - Poor, 100% surveyed		ADF&G (1981)
	1981	B/26	^	2	<b>n</b>	11	۸	Ground survey - Excellent, 100% surve	•	ADF&6 (1981)
	1981	9/03	'n	0	^	14	, A	Ground survey - Excellent, 100% surve		ADF&6 (1981)
	1981	9/11	^	0	Ŏ	17	V	Ground survey - Excellent, 100% surve	•	ADF&6 (1981)
	1981	9/19	ŏ	0	0	ŏ	0	Bround survey - Excellent, 100% surve		ADF&G (1981)
	1982	B/04	0	0	0	0	0	Ground survey - Excellent, 100% surve	ey ·	ADF&6 (19836)
	1982	8/11	0	0	0	٥	51	Ground survey - Excellent, 100% surve	•	ADF&G (1983b)
	1982	8/16	0	0	0	0	64	Ground survey - Excellent, 100% surve	PY	ADF&G (1983b)
	19B2	8/22	Ò	0	0	3	50	Ground survey - Excellent, 100% surve	•	ADF&G (1983b)
	1982	B/30	Õ	ō	0	3		Ground survey - Excellent, 100% surve	•	ADF&G (1983b)
	1982	9/04	Ŏ	Ŏ	ŏ	30	0	Ground survey - Excellent, 100% surve	•	ADF&G (1983b)
	1982	9/12	Õ	Õ	Ŏ	9	Ŏ	Ground survey - Excellent, 100% surve	•	ADF&G (1983b)
	1982	9/18	ň	ŏ	0	ò	٥	Ground survey - Poor, 100% surveyed	••	ADF&G (1983b)
	1982	9/23	0	0	0	2	Δ	Ground survey - Excellent, 100% survey	av .	ADF&G (1983b)
•	1982	9/30	0	0	0	0	0	Ground survey - Excellent, 100% survey		ADF&6 (1983b)
	1982	10/25	0	ŏ	0	0	0	Aerial count, helicopter - Fair, 100	•	ADF&G (1783b)
	1983	7/25	0	0	0	0	0	Ground survey ~ Excellent, 100% surve	PY	Barrett et al. (198
	1983	B/04	0	Ö	0	7	7	Ground survey - Excellent, 100% surve		Barrett et al. (196
	1983	8/11	Ŏ	Ō	Ŏ	Ö		Ground survey - Poor, 100% surveyed	,	Barrett et al. (196

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LOCATION MANE / (RIVER MILE)	YEAR	DATE	CHINDOK	SOCKEYE	COHO	CHUN	PINK	SURVEY METHOD .	COMMENTS	DATA SOURCE
	1983	8/18	0	0	0	62	0	Graund survey - Excellent, 100% survey		Barrett et al. (1984
	1983	B/25	0	0	0	0	0	Bround survey - Poor, 100% Eurveyed		Barrett et al. (198
	1983	9/03	0	0	0	92	0	Ground survey - Good, 100% surveyed		Barrett et al. (198
	1983	9/09	0	0	0	39	0	Ground survey - Excellent, 100% survey		Barrett et al. (198
	1983	9/15	0	0	0	23	0	Ground survey - Excellent, 1001 survey		Barrett et al. (198
	1983	9/22	0	0	0	0	0	Bround survey - Excellent, 100% survey		Barrett et al. (198
	1983	10/03	0	0	0	0	0	Ground survey - Excellent, 1001 survey		Barrett et al. (198
	1984	8/08	0	0	0	39 -	37	Ground survey - Good, 100% surveyed		Barrett et al. (198
	1984	8/17	0	0	0	136	95	Ground survey - Excellent, 1001 survey		Barrett et al. (198
	1984	8/24	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. (198
	1984	9/02	0	0	0	280	0	Ground survey - Good, 100% surveyed		Barrett et al. (198
	1984	9/10	0	0	0	116	0	Ground survey - Good, 100% surveyed		Barrett et al. (198
	1984	9/20	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (198
	1984	9/26	0	0	0	0	0	Sround survey - Excellent, 100% survey		Barrett et al. (198
Mainsten	1984	6/24	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (198
(RM 140.5)	1984	9/01	0	0	0	6	0	Aerial count, helicopter - Good	Spawning	Barrett et al. (198
	1984	9/08	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (198
	1984	9/15	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (196
	1984	9/22	0	0	0	0	0	Aerial count, helicopter - Bood		Barrett et al. (196
	1984	9/29	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (190
Mainsten	1984	9/15	0	0	0	2	0	Aerial count, helicopter - Sood	Spawning	Barrett et al. (196
(RM 140.8)								,		
Slough 21	1974	9/18		13		668		Ground survey	Peak count	Barrett (1974)
(RM 141.0)	1975	9/06				250		·	Peak count	Friese (1975)
	1975	9/25		75						Friese (1975)
	1981	8/06	0	0	0	0	0	Ground survey - Poor, 100% surveyed		ADF&G (1981)
	1981	8/10	0	0	Ō	0	0	Ground survey - Poor, 100% surveyed		ADF&G (1981)
	1981	8/21	Ò	Ō	0	0	Ō	Ground survey - Poor, 100% surveyed		ADF&6 (1981)
	1981	8/26	ō	1	0	169	0	Ground survey - Excellent, 50% surveyed		ADF&6 (1981)
	1981	9/03	ò	26	Ò	274	0	Ground survey - Excellent, 75% surveyed		ADF&8 (1981)
	1981	9/11	Ö	38	Ò	136	Ö	Ground survey - Excellent, 100% survey		ADF&6 (1981)
	1981	9/19	Ō	33	0	67	Ó	Ground survey - Excellent, 100% survey		ADF&6 (1981)
	1981	9/26	0	3	Ö	0	0	Ground survey - Excellent, 100% survey		ADF&6 (1981)
	1982	8/04	0	0	0	0	0	Ground survey - Excellent, 1001 survey		ADF&G (1983b)
	1982	8/11	Ŏ	ŏ	Ŏ	i	Ŏ	Ground survey - Good, 100% surveyed		ADF&G (1983b)
	1982	B/16	ō	0	ŏ	Ó	64	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	8/22	Õ	10	ŏ	235	7	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	8/29	ů	15	0	613	,	Bround survey - Good, 100% surveyed		ADF&G (1983b)
	1792	0,21	٧	13	v	010	0	minning and sell onned tony and selen		1181 40 1170007

LOCATION NAME / (RIVER HILE)	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUM	PINK	SURVEY METHOD +	COMMENTS	DATA SOURCE
	1982	9/04	0	44	0	736	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	9/12	0	53	0	508	0	Bround survey - Excellent, 100% survey		ADFRG (19836)
	1982	9/18	0	32	0	36	0	Ground survey - Good, 100% surveyed		ADFEG (1983b)
	1982	9/23	0	19	0	31	0	Ground survey - Excellent, 100% survey		ADF&G (1983b)
	1982	9/30	0	5	0	3	0	Ground survey - Excellent, 100% survey		ADF&6 (1983b)
	1982	10/25	0	0	0	0	0	Aerial count, helicopter - Fair, 100% surv	eyed	ADF&6 (1983b)
	1983	7/25	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (1
	1983	B/04	0	0	0	ı	0	Ground survey ~ Poor, 100% surveyed		Barrett et al. (1
	1983	8/11	0	0	0	4	0	Ground survey - Poor, 100% surveyed		Barrett et al. ()
	1983	8/18	0	45	0	154	0	Ground survey - Excellent, 100% survey		Barrett et al. (1
	1983	B/20	0	0	0	i	0	Ground survey - Poor, 21 surveyed		Barrett et al. (1
	1983	B/22	0	34	0	81	0	Graund survey - Poor, 75% surveyed		Barrett et al. ()
	1983	8/23	0	53	0	118	1	Ground survey - Poor, 100% surveyed		Barrett et al. (
	1983	8/25	0	1	0	1	0	Ground survey - Poor, 100% surveyed		Barrett et al. (
	1993	9/02	0	86	0	81	0	Ground survey - Excellent, 50% survey		Barrett et al. (
	1983	9/09	0	197	0	319	0	Ground survey - Excellent, 100% survey		Barrett et al. (
	1983	9/15	0	169	0	247	0	Ground survey - Excellent, 100% survey		Barrett et al. (
	1983	9/22	0	78	0	200	0	Ground survey - Excellent, 100% survey		Barrett et al. (
•	1983	10/03	0	10	0	16	0	Ground survey - Excellent, 100% survey		Barrett et al. (
	1993	10/08	0	0	0	i	0	Ground survey - Excellent, 100% survey		Barrett et al. (
	1984	8/08	0	0	0	12	0	Ground survey - Excellent, 35% survey		Barrett et al. (
	1984	8/17	0	58	0	981	8	Ground survey - Excellent, 100% survey		Barrett et al. (
	1984	B/24	0	12	0	458	0	Ground survey - Good, 35% surveyed		Barrett et al. (
	1984	9/02	0	115	0	2354	0	Ground survey - Good, 100% surveyed		Barrett et al. (
	1984	9/10	0	122	0	1520	0	Ground survey - Good, 100% surveyed		Barrett et al. (
	1984	9/20	0	62	0	823	0	Ground survey - Excellent, 100% survey		Barrett et al. (
	1984	9/26	0	40	0	605	0	Ground survey - Excellent, 100% survey		Barrett et al. (
	1984	10/03	0	20	0	1	0	Ground survey - Excellent, 100% survey		Barrett et al. (
	1984	10/08	0	6	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (
Mainsten	1984	8/24	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (
(RM 141.4)	1984	9/01	0	0	0	45	0	Aerial count, helicopter - Bood	Spawning	Barrett et al. (
	1984	9/08	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (
	1984	9/15	0	0	0	0	0	Aerial count, helicopter - Soud		Barrett et al. (
	1984	9/22	0	0	0	Ö	Ō	Aerial count, helicopter - Good		Barrett et al. (
	1984	9/29	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (
Mainstes	1984	8/24	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (
(RM 141.6)	1984	9/01	0	0	0	0	0	Aerial count, helicopter - Bood		Barrett et al. (
	1984	9/08	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. (
	1984	9/15	0	9	0	1	0	Aerial count, helicopter - Good	Spawning	Barrett et al. ()
	1984	9/22	0	0	0	0	0	Aerial count, helicopter - Good		Barrett et al. ()

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LOCATION NAME / (RIVER MILE)	YEAR	DATE	CHINOOK	SOCKEYE	COHO	CHUN	PINK	SURVEY METHOD .	COMMENTS	DATA SOURCE
	1984	8/24	0	0	0	0	0	Ground survey - Poor, 100% surveyed		Barrett et al. (1985)
	1984	9/01	0	0	0	6	0	Ground survey - Good, 100% surveyed		Barrett et al. (1985)
	19B4	9/02	0	0	Ú	6	0	Ground survey - Excellent, 100% survey		Barrett et al. (1985)
	1984	9/08	0	0	0	7	0	Aerial count, helicopter - Good, 100% surv	eyed	Barrett et al. (1985)
	1984	9/10	0	0	0	7	0	Bround survey - Good, 100% surveyed		Barrett et al. (1985)
	1984	9/20	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (1985)
	1984	9/26	0	0	0	0	0	Ground survey - Excellent, 100% survey		Barrett et al. (1985)
Mainsten (RM 148.2)	1982	9/19	0	0	0	400	0	Electroshocking - 125 yards	S32 NO1 N26 DCA Spawning	ADF&6 (1983a)
	1982	9/05	0	1	i	4	0	Electroshocking - 100 yards	S32 NO1 W26 DCA Spawning	ADF&G (1983a)

<sup>-</sup> Additional survey method information obtained from the original field data forms and interviews with Susitna Aquatic Studies staff.

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## APPENDIX 2

Fishwheel Daily and Cumulative Catches, by Station.

Appendix Table 2-1. Flathorn Station east channel daily and cumulative fishwheel catch by species, 1985.

052685 052785 052885 052985	2 2	Wheel Hours	Daily	Cum.									Misce				pecies
052785 052885 052985	2	10.50			Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Bering Cisco	Other	Cum.	Daily	 Cum.
052885 052985		10.30	o	0	1	1	0	0	0	0	•						
052985	_	47.00	3	3	2	ŝ	ŏ	Ö	o	Ö	0	0	0	0	0	1	1
	3	51.00	4	7	2	5	ŏ	ŏ	0	o	0	0	0	0	0	5	6
	3	72.00	6	13	2	7	ŏ	ŏ	ŏ	ő	Ö	0	0	2	2	8	14
053085	3	72.00	8	21	5	12	ŏ	ŏ	ŏ	ŏ	ŏ	o	0	8 10	10 20	16 23	30 53
053185	3	72.00	10	31	3	15	0	0	0	0	o	0	0	11	31	24	77
060185	3	72.00	16	47	7	22	0	ō	Ö	ō	o	ŏ	ŏ	22	53	45	122
060285	4	<b>65.5</b> 0	13	60	8	30	o	ō	Ö	ŏ	o	ŏ	ŏ	1	54	73 22	144
060385	3	70.00	88	148	12	42	Ō	ŏ	ŏ	ŏ	ŏ	ŏ	1	3	58	104	248
060485	3	70.00	71	219	9	51	0	0	ō	ō	ŏ	ŏ	ò	2	60	82	330
060585	3	71.00	102	321	26	77	0	0	0	0	0	o	0	12	72	140	470
060685	4	77.50	83	404	15	92	0	0	Ö	ō	ŏ	ŏ	ŏ	4	76	102	572
060785	4	95.50	101	505	9	101	0	0	0	Ö	o	ŏ	Ö	12	88	122	694
060885	4	78.00	293	798	13	114	0	0	ō	ō	ŏ	ŏ	ŏ	20	108	326	1020
060985	4	96.00	457	1255	29	143	0	0	0	0	o	o	o	31	139	517	1537
061085	4	95.50	537	1792	29	172	0	0	0	0	^	_	_				
061185	4	96.00	553	2345	17	189	o	ő	0	0	0	0	0	23	162	589	2126
061285	4	95.50	476	2821	12	201	ŏ	o	0	0	0	0	0	5	167	575	2701
061385	4	95.50	420	3241	10	211	ŏ	ő	Ö	o	0	_	0	4	171	492	3193
061485	4	96.00	264	3 <b>5</b> 05	8	219	ŏ	ŏ	ŏ	o	0	0	0 0	15 8	186 194	445 280	3638 3918
061585	4	96.00	492	3997	6	225	0	0	0	0	0	0	o	17	24.4	E4E	
061685	4	95.50	470	4467	2	227	ŏ	ŏ	ő	ő	ŏ	Ö	Ö	12	211 223	515	4433
061785	4	96.00	439	4906	1	228	ŏ	ŏ	ŏ	ő	0	0	0	23	246	484	4917
061885	4	96.00	322	5228	2	230	ŏ	ŏ	ŏ	ő	ŏ	Ö	0	23 15	261	463	5380
061985	4	96.00	259	5487	7	237	ŏ	ŏ	1	1	ŏ	ŏ	0	15	276	339 282	571 <b>9</b> 6001
062085	4	96.00	3 <b>65</b>	5852	1	238	0	0	0	1	0	0	0	13	289	379	6380
062185	4	96.00	318	6170	5	243	ŏ	Ö	ŏ	i	ŏ	ŏ	Ö	13 5	294	379 328	670B
062285	4	95.50	259	6429	3	246	1	1	ŏ	i	ŏ	ŏ	ŏ	11	305	3∠6 274	6982
062385	4	95.50	315	6744	4	250	i	2	ō	i	ŏ	ŏ	ŏ	9	314	329	7311

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Appendix Table 2-1. Continued.

			Chin	ook	Soci	keye	Pi	nk	Chi	um	Cal	ho	Misco	el l aneou	19		Catch pecies
Date	No. of Wheels		Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Bering Cisco	Other	Cum.	Daily	C
															LUM.	naira	Cum.
070705	_																
072385	2	48.00	0	7719	262	764	47	509	23	36	36	87	0	8	471	376	9606
072485	2	47.00	1	7720	271	1035	82	591	37	73	55	142	0	8	499	454	10060
072585 072685	2 2	48.00	2	7722	189	1224	159	750	29	102	69	211	0	23	522	471	10531
072785	2	48.00	0	7722	214	1438	205	955	42	144	81	292	0	9	531	551	11082
0/2/63	2	48.00	0	7722	254	1692	182	1137	44	188	88	380	0	4	535	572	11654
072885	2	46.00	1	7723	414	2106	148	1285	43	231	93	473	0	11	546	710	12364
072985	2	44.50	0	7723	262	2368	115	1400	74	305	72	545	ŏ	13	559	536	12900
073085	2	<b>48.00</b>	0	7723	199	2567	189	1589	105	410	7B	623	ŏ	16	575	587	13487
073185	2	48.00	1	7724	101	2668	191	1780	96	506	118	741	1	4	5B0	512	13999
080185	2	<b>4B.00</b>	0	7724	84	2752	213	1993	66	572	88	829	ō	10	570	461	14460
													•	•••	• • • • • • • • • • • • • • • • • • • •	101	11100
080285	2	48.00	3	7727	87	2839	111	2104	5 <b>5</b>	627	79	908	0	16	606	351	14811
080385	2	48.00	1	7728	62	2901	73	2177	34	661	42	950	1	15	622	228	15039
080485	2	<b>4B.</b> 00	0	7728	84	2985	179	2356	59	720	31	981	2	28	652	383	15422
080585	2	<b>4B.</b> 00	2	7730	79	3064	116	2472	29	749	18	999	0	15	667	259	15681
080685	2	48.00	0	7730	96 `	3160	154	2626	38	787	19	101B	2	15	684	324	16005
080785	2	48.00	1	7731	78	3238	181	2807	27	814	11	1029	0	25	709	323	16328
080885	2	<b>48.0</b> 0	1	7732	65	3303	144	2951	59	873	23	1052	1	10	720	303	16631
080985	2	<b>4B.</b> 00	O	7732	<del>9</del> 8	3401	301	3252	66	939	34	1086	o	13	733	512	17143
081085	2	48.00	o	7732	125	3526	275	3527	152	1071	31	1117	1	10	744	594	17737
081185	2	48.00	o	7732	107	3633	264	3791	285	1376	34	1151	7	12	763	709	18446
	_																
081285	2	48.00	0	7732	89	3722	260	4051	301	1677	34	1185	8	13	784	705	19151
081385	2	48.00	0	7732	35	3757	61	4112	128	1805	7	1172	8	7	799	246	19397
081485	2	48.00	2	7734	37	3794	53	4165	<b>49</b> 2	2297	22	1214	5	12	816	623	20020
081585	,2	48.00	1	7735	<b>26</b>	<b>382</b> 0	47	4212	622	2919	48	1262	9	14	839	767	20787
081485	2	48.00	1	7736	29	3849	25	4237	385	3304	44	1306	3	7	849	494	21281
081785		40.00	^	7774		7000											
081785	. 2	48.00	0	7736	53	3902	34	4271	416	3720	17	1323	10	5	864	535	21816
081985	2	48.00	0	7736	33	3935	13	4284	339	4059	36	1359	14	19	897	454	22270
	2	48.00	0	7736	28	3963	30	4314	245	4304	19	1378	22	39	<b>95</b> 8	383	22653
082085	2	48.00	o	7736	13	3976	17	4331	143	4447	14	1392	26	46	1030	259	22912

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Appendix Table 2-1. Continued.

			Chine	ook	Soci	ceye	Pi	nk	Chi	1W	Col	ho	Misce	el l aneou	15		Catch pecies
Date	No. of Wheels		Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Bering Cisco	Other	Cum.	Daily	Cum.
082185	2	48.00	0	7736	6	3982	13	4344	62	4509	14	1406	57	38	1125	190	23102
082285	2	48.00	0	7736	5	3987	9	4353	16	4525	6	1412	53	34	1212	123	23225
082385	2	48.00	0	7736	4	3991	4	4357	23	4548	9	1421	26	38	1276	104	23329
082485	2	48.00	0	7736	2	3993	5	4362	20	4568	6	1427	37	55	136B	125	23454
082585	2	48.00	0	7736	4	3 <del>99</del> 7	6	4368	15	4583	6	1433	37	42	1447	110	23564
082685	2	45.00	0	7736	3	4000	1	4369	7	<b>45</b> 90	4	1437	11	16	1474	42	23606
082785	2	48.00	0	7736	2	4002	1	4370	4	4594	3	1440	23	26	1523	59	23665
082885	2	48.00	0	7736	0	4002	1	4371	4	4598	3	1443	29	31	1503	68	23733
082985	2	48.00	0	7736	1	4003	1	4372	6	4604	3	1446	19	20	1622	50	23783
083085	2	4B.00	0	7736	4	4007	1	4373	3	4607	2	1448	20	18	1660	48	23831
083185	2	48.00	o	7736	0	4007	2	4375	2	4609	3	1451	24	18	1702	49	23880
090185	2	48.00	0	7736	.3	4010	1	4376	4	4613	0	1451	4	4	1710	16	23898
090285	2	48.00	0	7736	0	4010	0	4376	1	4614	2	1453	17	9	1736	29	23925
090385	2	24.00	0	7736	0	4010	0	4376	4	4618	7	1460	50	13	1799	74	23999

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Appendix Table 2-2. Flathorn Station west channel daily and cumulative fishwheel catch by species, 1985.

				Chin	ook 	Soc	keye	Pi	nk	Ch	um 	Co	ho	Misce	ellaneou	ıs		Catch pecies
	Date	No. of Wheels		Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Bering Cisco	Other	Cum.	Daily	Cum.
	052685	2	20.00	2	2	o	0	0	0	0	o	0	0	1	2	3	5	5
	052785	2	48.00	2	4	2	2	Ö	ō	o	ŏ	Ö	ő	1	15	19	20	5 25
	052885	3	55.50	7	11	1	3	Ō	ō	ō	ŏ	ŏ	ŏ	ó	4	23	12	37
	052985	3	72.00	7	18	1	4	o	ō	o	o	ŏ	ŏ	ŏ	8	31	16	53
	053085	3	69.00	13	31	4	8	o	o	Ö	ŏ	ŏ	ŏ	ŏ	6	37	23	76
	053185	3	72.00	11	42	7	15	o	0	0	o	o	, O	0	5	42	23	99
	060185	4	66.75	7	49	9	24	0	0	0	0	0	0	0	7	49	23	122
	060285	3	72.00	11	60	7	31	0	0	0	0	O	0	0	2	51	20	142
	060385	3	70.00	32	92	10	41	o	0	O	0	0	0	2	2	55	46	188
	060485	3	71.00	51	143	12	53	0	0	0	O	0	0	0	ō	55	63	251
	060585	3	70.00	43	186	8	61	0	o	0	0	0	0	0	1	56	52	303
	060685	3	58.75	35	221	4	65	O	0	0	0	0	0	Ō	2	58	41	344
	060785	2	48.00	78	299	13	78	O	0	O	0	o	ō	ō	2	60	93	437
>	040885	2	46.50	17 <del>9</del>	478	17	95	0	0	0	0	0	Ō	1	2	63	199	636
ž	060985	2	47.50	272	750	13	108	0	O	O	0	0	o	o	3	66	288	924
~	061085	2	47.50	226	976	10	118	0	0	0	0	0	0	0	1	<b>6</b> 7	237	
	061185	2	48.00	215	1191	6	124	ŏ	ŏ	ő	ŏ	ő	o	ŏ	2	67 69	·223	1161 1384
	061285	2	48.00	152	1343	5	129	ŏ	Ŏ	ŏ	ŏ	ő	ŏ	Ö	2	71	159	1543
	061385	2	48.00	134	1477	3	132	Ö	ŏ	ŏ	ŏ	ő	ŏ	ŏ	4	75	141	1684
	061485	2	48.00	119	1596	1	133	o	o	ŏ	o	o	ŏ	<b>o</b> .	3	78	123	1807
	061585	2	48.00	201	1797	2	135	o	o	o	0	0	0	0	7	85	210	2017
	061685	2	48.00	210	2007	4	139	0	0	0	0	o	ō	ō	8	93	222	2239
	061785	2	48.00	168	2175	4	143	O	0	0	0	0	0	Ö	7	100	179	2418
	061885	2	48.00	157	2332	2	145	0	0	o	0	0	ō	o	5	105	164	2582
	061985	2	40.50	108	2440	3	148	O	0	О	O	o	o	o	1	106	112	2694
	062085	ž	30.50	93	2533	o	148	o	o	o	o	0	o	o	1	107	94	2788
	062185	2	48.00	162	2695	1	149	0	0	0	0	0	0	O	8	115	171	2959
	062285	2	48.00	126	2821	1	150	O	0	0	0	o	Ō	ō	5	120	132	3091
	062385	2	48.00	123	2944	2	152	0	0	0	0	0	o	o	6	126	131	3222

Appendix Table 2-2. Continued.

			Chin	ook	Soci	keye	Pi	nk	Chi	7W	Co	ha	Misce	el l aneou	15		Catch pecies
Date	No. of Wheels		Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Bering Cisco	Other	Cum.	Daily	Cum.
062485	2	47.50	82	3026	2	154	0	0	0	o	0	0	0	6	132	90	3312
062585	2	48.00	56	3082	0	154	0	0	o	ō	o	ŏ	ŏ	19	151	75 75	3387
062685	2	46.00	35	3117	0	154	0	0	Ö	ō	ō	ō	o	21	172	56	3443
062785	2	48.00	26	3143	0	154	0	Ō	ō	ō	ŏ	ŏ	ŏ	20	192	46	3485
062885	2	48.00	25	3168	0	154	0	0	o	ō	Ŏ	ō	ŏ	8	200	33	3522
062985	2	48.00	14	3182	0	154	0	0	0	o	0	o	0	4	204	18	3540
063085	2	<b>48.</b> 00	25	3207	1	155	0	0	0	0	0	0	0	1	205	27	3567
070185	2	47.00	6	3213	2	157	0	0	0	0	0	0	0	1	206	9	3576
070285	2	45.50	4	3217	1	158	0	0	0	0	0	0	0	1	207	6	3582
070385	2	47.00	2	3219	0	158	0	0	0	0	0	0	0	0	207	2	3584
070485	2	48.00	4	3223	7	165	0	0	o	o	0	0	0	o	207	11	3595
<b>07</b> 0 <b>5</b> 85	2	48.00	6	3229	5	170	1	1	0	0	0	0	0	2	209	14	3605
070685	2	48.00	11	3240	13	183	1	2	1	1	0	0	0	4	213	30	3639
07,0785	2	4B.00	5	3245	16	199	7	9	1	2	0	0	0	4	217	33	3672
070885	2	48.00	10	3255	7	206	9	18	2	4	0	0	0	1	218	29	3701
070985	2	48.00	3	3258	14	220	11	29	0	4	2	2	0	0	218	30	3731
071085	2	48.00	4	3262	6	226	16	45	0	4	ī	3	o.	5	223	32	3763
071185	2	<b>48.0</b> 0	2	3264	8	234	26	71	0	4	4	7	Ö	4	227	44	3807
071285	2	48.00	2	3266	14	248	31	102	0	4	5	12	0	4	231	56	3863
071385	2	48.00	3	3269	6	254	22	124	1	5	3	15	0	3	234	38	3901
071485	2	48.00	5	3274	8	262	38	162	o	5	3	18	0	4	238	58	3959
071585	2	48.00	2	3276	38	300	53	215	0	5	7	25	0	2	240	102	4061
071685	2	<b>4B.0</b> 0	3	327 <b>9</b>	38	<b>338</b>	29	244	1	6	7	32	0	8	248	86	4147
071785	2	48.00	1	3280	29	367	29	273	0	6	4	36	0	4	252	67	4214
071885	2	47.50	1	3281	14	381	20	293	0	6	3	39	0	2	254	40	4254
0 <b>719</b> 85	2	48.00	2	3283	5	386	18	311	o	6	2	41	o	11	265	38	4292
072085	2	48.00	2	3285	3	389	12	323	0	6	0	41	O	2	267	19	4311
072185	2	<b>48.0</b> 0	0	3285	2	391	21	344	0	6	0	41	0	2	269	25	4336
072285	2	<b>48.</b> 00	1	3286	61	452	29	373	1	7	2	43	0	4	273	98	4434

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Appendix Table 2-2. Continued.

			Chin	ook	Soci	keye	Pi	nk	Ch	LIM .	Col	ho	Misce	el l'aneou	15		Catch pecies
Date	No. of Wheels		Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Bering Cisco	Other	Cum.	Daily	Cum.
072385	2	48.00	2	3288	457	909	47	420	17	24	47	90	o	5	278	575	5009
072485	2	48.00	1	3289	516	1425	94	514	25	49	107	197	ŏ	5	203	748	5757
072585	2	48.00	o	3289	400	1825	184	698	22	71	112	309	Ö	8	291	726	6483
072685	2	48.00	2	3291	451	2276	191	889	15	86	87	396	Ö	5	296	751	7234
072785	2	48.00	1	32 <b>9</b> 2	481	2757	126	1015	20	106	96	492	ŏ	4	300	728	7962
0 <b>72885</b>	2	48.00	0	3292	546	3303	116	1131	. 22	128	76	568	o	8	308	768	8730
072985	2	48.00	0	3292	470	3773	117	1248	18	146	97	665	0	4	312	706	9436
073085	2	48.00	0	3292	133	3906	148	1396	10	156	52	717	o	1	313	344	9780
073185	2	48.00	0	3292	68	3974	115	1511	7	163	62	779	0	2	315	254	10034
080185	2	48.00	0	3292	54	4028	83	1594	8	171	37	816	0	4	319	186	10220
080285	2	48.00	o	3292	131	4159	85	1679	7	178	41	857	o	1	320	265	10485
080385	2	48.00	1	3293	103	4262	74	1753	4	182	44	901	0	7	327	233	10718
080485	2	48.00	1	3294	95	4357	85	1838	2	184	19	920	0	3	330	205	10723
080585	2	<b>48.00</b>	0	3294	60	4417	44	1882	0	184	8	928	o	1	331	113	11036
080685	2	48.00	0	3294	124	4541	72	1954	5	189	24	952	0	2	333	227	11263
080785	2	48.00	o	3294	63	4604	78	2032	3	192	18	970	0	1	334	163	11426
080885	2	48.00	2	32 <del>9</del> 6	43	4647	76	2108	0	192	19	989	0	1	335	141	11567
080985	2	<b>48.</b> 00	0	3296	39	4686	35	2143	1	193	3	992	Ο.	0	335	78	11645
081085	2	48.00	0	3296	39	4725	59	2202	5	198	7	999	0	2	337	112	11757
081185	2	48.00	0	3296	31	4756	41	2243	3	201	11	1010	0	0	337	86	11843
081285	2	48.00	o	3296	55	4811	109	2352	10	211	15	1025	o	1	338	190	12033
081385	2	48.00	o	3296	25	4836	22	2374	10	221	4	1029	1	3	342	65	12098
081485	2	47.00	0	3296	23	4859	24	2398	74	295	8	1037	0	11	353	140	12238
081585	2	48.00	o	3296	21	<b>48B</b> 0	35	2433	70	365	13	1050	o	4	357	143	12381
081685	2	48.00	2	3298	15	4895	12	2445	50	415	8	1058	1	0	358	88	12469
081785	2	48.00	o	3298	15	4910	19	2464	73	488	8	1066	3	0	361	118	12587
081885	2	48.00	0	3298	16	4926	15	2479	13	501	7	1073	o	2	363	53	12640
081 <b>98</b> 5	2	48.00	O	3298	9	4935	19	2498	8	509	2	1075	2	3	368	43	12683
082085	2	48.00	0	3298	2	4937	12	2510	5	514	2	1077	o	3	371	24	12707

Appendix Table 2-2. Continued.

			China	ook	Sock	eye	Pir	ık	Chi	TW.	Col	10	Mi sce	el laneou	15		Catch pecies
Date	No. of Wheels		Daily	Cum.	Bering Cisco	Other	Cum.	Daily	Cum.								
082185	2	48.00	0	3298	5	4942	2	2512	8	522	2	1079	0	10	381	27	12734
082285	2	48.00	0	3298	3	4945	1	2513	1	523	3	1082	7	23	411	38	12772
082385	2	48.00	0	3298	2	4947	6	2519	3	526	1	1083	3	30	444	45	12817
082485	2	48.00	0	3298	3	4950	5	2524	10	536	4	1087	4	46	494	72	12889
082585	2	<b>4</b> B.00	0	3298	0	4950	2	2526	4	540	3	1090	4	22	520	35	12924
082685	2	48.00	0	3298	3	4953	1	2527	1	541	4	1094	5	7	532	21	12945
082785	2	48.00	1	3299	1	4954	0	2527	4	545	2	1096	3	3	538	14	12959
082885	2	48.00	0	3299	1	4955	1	2528	3	548	1	1097	1	5	544	12	12971
082985	2	47.00	0.	3299	1	4956	1	2529	0	548	3	1100	1	4	549	10	12981
083085	2	48.00	0	3299	2	4958	0	2529	1	549	2	1102	1	0	550	6	12987
083185	2	48.00	0	3299	2	4960	0	2529	0	549	1	1103	0	0	550	3	12990
090185	2	48.00	o	3299	0	4960	0	2529	o	549	0	1103	0	0	550	o	12990
090285	2	48.00	0	3299	0	4960	0	2529	1	550	0	1103	1	0	551	2	12992
090385	2	24.00	0	3299	0	4960	0	2529	0	550	0	1103	0	1	552	1	12993

Appendix Table 2-3. Flathorn Station daily and cumulative fishwheel catch by species, 1985.

els F 4 3 4 5 6 10 6 14 6 14 7 13 7 13	Wheel Hours  30.50 95.00 06.50 44.00 41.00 44.00 38.75	Daily  2 5 11 13 21	Cum. 2 7 18 31 52	Daily 1 4 3 3 9	Cum. 1 5 8	Daily 0 0	Cum. 0	Daily 	Cum.	Daily	Cum.	Bering Cisco	Other	Cum.	Daily	Cum.
4 9 9 6 10 6 14 6 14 7 13 7 13	95.00 06.50 44.00 41.00	5 11 13 21	7 18 31	4 3 3	5 8	0		·								
4 9 9 6 10 6 14 6 14 7 13 7 13	95.00 06.50 44.00 41.00	5 11 13 21	7 18 31	4 3 3	5 8	0		0	•							
6 10 6 14 6 14 7 13 7 13	06.50 44.00 41.00	11 13 21	18 31	3	5 8	0			0	0.	0	1	2	3		,
6 14 6 14 7 13 7 13	44.00 41.00 44.00	13 21	31	3	_	^	U	0	ŏ	Õ	ő	1	15	19	6 25	31
6 14 6 14 7 13 7 13	41.00	21			11	U	0	' o	ō	Ö	ŏ	ō	6	25	20	51 51
6 14 7 13 7 13	44.00		52	9		0	Q	0	0	Ö	ŏ	ŏ	16	41	32	83
7 13 7 13		21			20	0	0	0	0	0	0	ō	16	57	46	129
7 1	70 75		73	10	30	0	0	0	0	0	0	0	16	73	47	176
		23	96	16	46	0	0	0	0	0	0	0	29	102	68	244
	37.50	24	120	15	61	0	0	0	0	0	0	0	3	105	42	286
	40.00	120	240	22	83	0	0	o	0	0	0	3	5	113	150	436
6 14	41.00	122	362	21	104	0	0	o	0	0	0	0	2	115	145	581
		145	507	34	138	0	o	0	0	0	0	o	13	128	192	773
						o	0	0	0	0	0	o	6	134	143	916
			•			0	0	o	0	0	0	0	14	148	215	1131
						-	_	0	0	0	0	1	22	171	525	1656
6 14	43.50	729	2005	42	251	0	0	0	0	0	0	0	34	205	805	2461
6 14	43.00	763	2768	39	290	0	0	0	0	٥	0	0	24	220	924	3297
6 14	44.00	768	3536	23					_	-						4085
6 14	43.50	628	4164	17	330	O	Ō	_	-	-	_	_	-			4736
6 14	43.50	554	4718	13	343	0	0	o	ō			•				5322
6 14	44.00	283	5101	9	352	0	0	o	0	O	0	o	11	272	403	5725
6 14	44.00	693	5794	8	360	o	0	o	0	0	0	0	24	296	725	6450
6 14	<b>43.5</b> 0	680	6474	6	366	0	0	0	0	Ō	0	Ō	20			7156
6 14	44.00	607	7081	5	371	0	0	0	0	Ö	ō	Ö	30			7798
6 14	44.00	479	7560	4	375	0	0	0	0	0	0	0	20			8301
6 13	36.50	367	7927	10	385	o	0	1	1	0	0	0	16	382	394	8695
6 13	26.50	458	8385	1	386	0	o	o	1	0	0	0	14	396	473	9168
6 14	44.00	480	8865	6	392	0	0	0	1	o	0	ō	13			9667
6 1	43.50	385	9250	4	396	1	1	0	1	ō	Ō	ŏ	16		406	10073
6 1	43.50	438	9688	6	402	1	2	0	1	0	0	Ō	15	440	460	10533
- 67666 66666 6666	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	141.00 136.25 143.50 124.50 143.50 143.00 144.00 143.50 144.00 144.00 144.00 144.00 144.00 144.00 144.00 144.00 144.00 144.00 144.00	141.00 145 136.25 118 143.50 179 124.50 472 143.50 729 143.50 768 144.00 768 143.50 628 143.50 554 144.00 383 144.00 693 144.00 693 144.00 607 144.00 479 136.50 458 144.00 479 136.50 458 144.00 480 143.50 385	141.00 145 507 136.25 118 625 143.50 179 804 124.50 472 1276 143.50 729 2005 143.00 763 2768 144.00 768 3536 143.50 628 4164 143.50 554 4718 144.00 383 5101 144.00 693 5794 144.00 607 7081 144.00 607 7081 144.00 479 7560 136.50 367 7927 126.50 458 8385 144.00 480 8865 143.50 385 9250	141.00 145 507 34 136.25 118 625 19 143.50 179 804 22 124.50 472 1276 30 143.50 729 2005 42 143.00 763 2768 39 144.00 768 3536 23 143.50 628 4164 17 143.50 554 4718 13 144.00 383 5101 9 144.00 693 5794 8 144.00 693 5794 8 144.00 607 7081 5 144.00 479 7560 4 136.50 367 7927 10	141.00 145 507 34 138 136.25 118 625 19 157 143.50 179 804 22 179 124.50 472 1276 30 209 143.50 729 2005 42 251 143.00 763 2768 39 290 144.00 768 3536 23 313 143.50 628 4164 17 330 143.50 554 4718 13 343 144.00 383 5101 9 352 144.00 693 5794 8 360 144.00 693 5794 8 360 144.00 607 7081 5 371 144.00 479 7560 4 375 136.50 367 7927 10 385 126.50 458 8385 1 386 144.00 480 8865 6 392 144.00 480 8865 6 392 144.00 480 8865 6 392 143.50 385 9250 4 396	141.00 145 507 34 138 0 136.25 118 625 19 157 0 143.50 179 804 22 179 0 124.50 472 1276 30 209 0 143.50 729 2005 42 251 0 143.00 763 2768 39 290 0 144.00 768 3536 23 313 0 143.50 628 4164 17 330 0 143.50 554 4718 13 343 0 144.00 383 5101 9 352 0 144.00 693 5794 8 360 0 144.00 693 5794 8 360 0 144.00 697 7081 5 371 0 144.00 479 7560 4 375 0 136.50 367 7927 10 385 0	141.00	141.00	141.00	141.00	141.00	141.00	141.00	141.00	141.00

Appendix Table 2-3. Continued.

			Chir	nook	Soci	keye	Pir	nk	Chi	1M	Co	ho	Misce	el l aneou	15	Total All Sp	Catch pecies
Date		Wheel Hours	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Bering Cisco	Other	Cum.	Daily	Cum.
0 <b>6248</b> 5	6	143.50	309	9997	4	406	1	3	0	1	0	0	0	17	457	331	10864
062585	6	144.00	218	10215	5	411	0	3	0	1	0	0	o	40	497	263	11127
062685	6	142.00	156	10371	4	415	0	3	o	1	0	0	0	33	530	193	11320
062785	6 '	144.00	111	10482	7	422	0	3	0	1	o	0	0	29	559	147	11467
062885	6	144.00	91	10573	2	424	1	4	0	1	0	0	o	17	576	111	11578
062985	6	124.75	84	10657	0	424	2	6	0	1	0	0	0	5	581	91	11669
063085	4	96.00	82	10739	2	426	1	7	O	1	o	0	O	4	585	89	11756
070185	4	93.00	35	10774	4	430	0	7	0	1	0	_ 0	0	2	587	41	11799
070285	4	93.50	/ 18	10792	4	434	2	9	O	1	0	0 0	0	2	589	26	11825
070385	4	95.00	/ 12	10804	4	438	1	10	O	1	O	0	0	1	590	18	11843
070485	4	96.00	10	10814	14	452	3	13	o	1	o	0	0	1	591	28	11871
970585	4	96.00	27	10841	10	462	3	16	1	2	0	0	0	4	595	45	11916
070685	4	96.00	29	10870	24	486	7	23	1	3	0	0	O	6	601	67	11983
070785		96.00	23	10893	27	513	15	38	1	4	o	0	O	7	60B	73	12056
070885	4	96.00	29	10922	19	532	23	61	3	7	0	0	0	3	611	77	12133
070985	4	95.50 96.00	671,7 8	10930	26	558	26	87	1	8	2	15 2	0	o	611	63	12196
071085		96.00	10		17	575	33	120	Ö	8	2	4	σ	9	620	71	12267
071185		96.00	9	10949	12	587	45	165	0	8	5	9	0	15	635	86	12353
071285		96.00	5		19	606	54	219	0	8	6	15	0	7	642	91	12444
071385		96.00	10		15	621	47	266	established at the contract of	1 th or 1700 th the said <b>9</b> 00	6	21	0.000	er segre accessive and Bernaldon and a	850	······································	1255
071485	4	96.00	9	10973	14	635	89	355	0	9	7	28	0	6	656	125	12656
071585	4	94.50	25 7	10980	60	695	107	462	1	10	13	, 41	0	8	664	196	12852
071685		94.50 96.00	, 64° B		63	758	68	530	1	11	12	by 53	o	21	685	173	13025
071785	4	96.00	4	10992	52	810	69	599	1	12	13	66	0	19	704	158	13183
071885	4	95.00	2	10994	24	834	42	641	0	12	9	75	0	8	712	85	13268
_07 <b>19</b> 85	4	96.00	3	10997	11	845	34	675	0	12	8	83		19	731	75	13343
072085		96.00	4	11001	11	856	32	707	0	12	1	84	2	10	743	40	1340
072185	4	96.00	2	11003	8	864	50	757	0	12	2	86	o	6	749	68	1347
072285	4	96.00	2	11005	90	954	78	835	8	20	8	94	0	7	756	193	13664

Appendix Table 2-3. Continued.

			Chir	ook	Soci	keye	Pi	nk	Chu	ım	Co1	10	Misce	ellaneou	·s	Total All Sp	Catch Decies
Date	No. of Wheels		Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Bering Cisco	Other	Cum.	Daily	Cum.
	_											`	_				
072385	4	96.00	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	11007	719	1673	94	929	40	60	. 83	5 177	0	13	769	951	1461
072485	4	95.00		11009	787	2460	176	1105	62	122	162 6	339	0	13	782	1202	1581
072585	4	96.00 96.00	2	11011	589	3049	343	1448	51	173	181	520	0	31	813	1197	1701
.072685 072785	4	96.00		11013	665 735	3714 4449	396 308	1844	57 64	230 294	168	688 872	0	14	827 835	1302	1831
07.2763	~	76.00	1	11014	/35	4447	308	2152	64	294	184	8/2	U	8	835	1300	1961
072885	4	94.00	1	11015	960	5409	264	2416	65	359	169	1041	0	19	854	1478	2109
07:2985	4			11015	732	6141	232	2648	92	451		A1210	Ö	17	871	1242	2233
073085	4	96.00	,50	11015	332	6473	337	2985	115	566	130	1340	Ō	17	888	931	2326
073185	4	96.00	1 العاماما	11016	169	6642	306	3291	103	669	180	1520	1	6	895	766	2403
080185	4	96.00 96.00 96.00	ŏ	11016	138	6780	296	3587	74	743	125	1645	Ō	14	909	647	2468
		,															
080285	4	96.00	3	11019	218	6998	196	3783	62	805	120	1765	o	17	926	616	2529
080385	4	96.00	2	11021	165	7163	147	3930	38	<b>B43</b>	86	1851	1	22	949	461	2575
080485	4	96.00	1	11022	179	7342	264	4194	61	904	50	1901	2	31	982	588	2634
080585	4	96.00	2	11024	139	7481	160	4354	2 <b>9</b>	933	26	1927	0	16	998	372	2671
080685	4	96.00	ە <sub>دا</sub> رى	11024	220	7701	226	4580	43	976	43,	131970	2	17	1017	551	2726
			610								-						
080785	4	96.00	1	11025	141	7842	259	4839	30	1006	29	1999	Ò	26	1043	48 <b>6</b>	2775
08 <b>0885</b>	4	96.00	3		108	7950	220	5059	59	1065	42	2041	1	11	1055	444	2019
080985	4	96.00	0	1102日	137	8087	336	5395	67	1132	37	2078	0	13	106日	590	2878
081085	4	96.00	0	11028	164	8251	334	5729	157	1289	38	2116	1	12	1081	706	2949
081185	4	96.00	0	11028	138	8389	305	6034	288	1577	45	2161	7	12	1100	795	3028
			11,0 o										_				~
081285	4	96.00	J., 0	11028	144	8533	369	6403	311	1888	49	2210	8	14	1122	895	3118
081385	. 4	96.00	v 0	11028	60	8593	83	6486	138	2026		6°2221	9	10	1141	311	3149
081485	4	95.00	2	11030	60	8653	77	6563	566	2592	30	2251	5	23	1169	763	3225
081585	4	96.00	1	11031	47	8700	82	6645	692	3284	61	2312	9	18	1196	910	3316
081485	4	96.00	3	11034	44	8744	37	6682	435	3719	52	2364	4	7	1207	582	3375
081785	4	96.00		11034	68	8812	53	6735	489	<b>420B</b>	25	2389	13	5	1225	653	3440
081885		96.00	0 0		49	8861	28	6763	352	4560		40 2432	14	21	1260	507	3491
081985		96.00	12/10		37	8878	49	6812	253	4813	21	2453	24	42	1326	426	3533
082085		96.00	δ ', O		15	8913	29	6841	148	4961	16	2469	26	49	1401	283	3561

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Appendix Table 2-3. Continued.

			Chin	ook	Soci	eye	Pir	nk	Che	ım	Col	no	Misca	el l aneou	ıs		Catch pecies
Date	No. of Wheels	Wheel Hours	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Bering Cisco	Other	Cum.	Daily	Cum.
082185	4	96,00	o	11034	11	8924	15	6856	70	5031	16	2485	57	48	1506	217	35836
082285	4	96.00	0	11034	8	8932	10	6866	17	5048	9	2494	60	57	1623	161	35997
082385	4	96.00	0	11034	6	8938	10	6876	26	5074	10	2504	29	68	1720	149	36146
082485		96.00	0	11034	5	8943	10	6886	30	5104	10	2514	41	101	1862	197	36343
082585	4	96.00	0	11034	4	8947	8	6894	19	5123	9	<b>252</b> 3	41	64	1967	145	36488
082685	4	93.00	00	11034	6	8953	2	6896	8	5131	8	2531	16	23	2006	63	36551
082785	4	96.00	(8' 1	11035	3	8956	1	6897	8	5139	5 4	2536	26	29	2061	73	36624
082885	4	96.00	(° o	11035	1	8957	2	6899	7	5146	44	<sup>17</sup> 2540	30	36	2127	BO	36704
082985	4	95.00	0	11035	2	8959	2	6901	6	5152	6	2546	20	24	2171	60	36764
_083085	4	96.00	0	11035	6	8965	1	6902	4	5156	4	2550	21	18	2210	54	36818
083185	4	96.00	0	11035	2	8967	2	6904	2	5158	4	2554	24	18	2252	52	36870
090185	4	96.00	1 0	11035	3	8970	1	6905	4	5162	0.	2554	4	4	2260	16	36886
090285	4	96.00	47 O	11035	0	8970	0	6905	2	5164	2 V	<sup>5</sup> 2556	18	9	2287	31	36917
090385	4	48.00	0	11035	0	8970	0	6905	4	5168	7	2563	50	14	2351	75	36992
040382	4	48.00	0	11035	0	8970	0	6905	4	5168	7	2563	50	14	2351	75	34

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Appendix Table 2-4. Sunshine Station daily and cumulative fishwheel catch by species, 1985.

			Chine	ook	Soci	(eye	Pi	nk	Chi		Col	ho	Misce	el 1 aneou	15		Catch pecies
Date	No. of Wheels		Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Bering Cisco	Other	Cum.	Daily	Cum,
060385	2	12.50	o	o	o	o	0	0	 O	0	0	o	0	0			
060485	′ 2	48.00	0	0	0	ō	Ö	ŏ	ŏ	ŏ	Ö	0	0	1	0	0	C
060585	4	64.50	o	ō	ŏ	ŏ	ŏ	ŏ	o	ő	o	0	0	0	1	1	1
060685	4	83.00	0	ō	ŏ	ŏ	ŏ	ŏ	ŏ	0	0	0	_	-	1	0	1
060785	4	96.00	1	1	2	2	ŏ	ŏ	ŏ	ŏ	ŏ	o	0 0	1 1	2 3	1 4	2
060885	4	96.00	2	3	8	10	0	0	0	0	0	o	0	8	11	18	24
060985	4	96.00	18	21	21	31	0	0	0	ō	ō	ŏ	ŏ	19	30	58	82
061085	4	91.00	24	45	19	50	0	0	o	o	ō	Ö	ŏ	16	46	59	141
061185	4	96.00	45	90	31	81	0	0	0	ō	Ō	ŏ	ŏ	33	79	109	250
061285	4	93.00	71	161	45	126	0	O	o	o	ō	ŏ	ŏ	14	93	130	380
061385	4	B9.00	63	224	18	144	0	0	o	0	o	0	0	5	98	86	466
061485	4	94.00	94	318	37	181	0	0	o	0	0	0	0	5	103	136	602
061585	4	96.00	182	500	27	208	0	0	o	0	0	0	0	4	107	213	815
061685	4	94.00	162	662	22	230	0	0	o	0	o	0	o	8	115	192	1007
061785	4	96.00	132	794	14	244	0	0	0	0	0	0	0	3	118	149	1156
061885	4	96.00	166	960	3	247	0	0	0	o	Q	0	0	2	120	171	1327
061985	4	96.00	210	1170	8	255	0	0	0	0	0	0	0	2	122	220	1547
062085	4	96.00	292	1462	3	258	o	0	o	0	0	o	0.	7	129	302	1849
062185	4	92.00	329	1791	1	259	0	0	o	0	o	0	0	2	131	332	2181
062285	4	95.50	402	2193	5	264	. 0	0	. <sub>14</sub> . <b>O</b>	0	0	0	0	0	131	407	2586
062385	4	96,00	422	2615	4	268	0	o	o	0	o	o	0	o	131	426	3014
062485	4	94.00	334	2 <b>94</b> 9	3	271	0	0	0	0	o	o	o	2	133	339	3353
062585	4	96.00	210	3159	1	272	0	0	0	0	o	0	o	2	135	213	3566
062685	4	94.00	201	3360	1	273	1	1	o	0	0	0	o	0	135	203	3769
062 <b>78</b> 5	4	93.00	343	3703	3	276	0	1	0	0	Q	0	0	1	136	347	4116
062885	4	92.50	512	4215	4	280	o	1	o	o	o	o	o	1	137	517	4633
062985	4	94.00	444	4659	1	281	0	1	0	0	o	0	o	2	139	447	5080
063085	4	95.00	<b>379</b>	5038	5	286	0	1	0	0	o	0	0	0	139	384	5464
070185	4	94.00	213	5251	4	290	0	1	o	0	0	0	0	2	141	219	5683

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Appendix Table 2-4. Continued.

			Chin	ook	Soc	keye	Pi	nk	Chi	TW	Col	ho	Misce	el l aneou	15		Catch pecies
Date	No. of Wheels		Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Bering Cisco	Other	Cum.	Daily	Cum.
070285	4	96.00	56	5307	1	291	•										
070385	4	76.00	35	5342	0	291 291	0	. 1	0	0,	0	0	0	1	142	58	5741
070485	4	76.00	96	5438	1	291	0	1	0	0	0	0	0	0.	142	35	5776
070585	4	76.00	119	5557	2	292 294	0	1	•	0	0	0	0	1	143	98	5874
070685	4	96.00	173	5730	5	29 <del>4</del> 299	0	1	0	0	0	0	0	0	143	121	5995
***************************************	•	70.00	1/3	3/30		277	U	•	U	U	0	o	o	1	144	179	6174
070785	4	<b>96.0</b> 0	174	5904	6	305	0	1	0	0	0	0	0	1	145	181	6355
070885	4	95.00	149	6053	8	313	0	1	0	0	0	0	o	Ö	145	157	6512
070985	4	96.00	185	6238	11	324	0	1	0	0	0	0	ō	1	146	197	6709
071085	4	96.00	106	6344	17	341	1	2	1	1	0	o	Ō	o	146	125	6834
071185	4	96.00	102	6446	40	381	4	6	2	3	0	0	0	0	146	148	6982
071285	4	94.00	68	6514	26	407	o	6		7	•	•	•	_			
071385	4	93.00	52	6566	26	433	15	21	4 0	7	0	0	0	2	148	100	7082
071485	4	96.00	43	6609	25	458	17	38	4	11	0	0	0	3	151	96	7178
071585	4	94.00	47	6656	22	480	26	5 <b>6</b>	2	13	1	1	0	2 3	153	91	7269
071685	4	96.00	34	6690	31	511	29	93	2	15	1		•	_	156	101	7370
٠, ١٥٥٥		70.00	34	0070	31	311	27	73	2	13	1	2	o <sub>,</sub>	1	157	98	7468
071785	4	93.00	34	6724	33	544	35	128	3	18	0	2	0	2	159	107	7575
071885	4	96.00	19	6743	50	594	69	197	3	21	4	- 6	o	4	163	149	7724
071 <b>985</b>	4	96.00	14	6757	72	666	54	251	1	22	2	8	Ö	2	165	145	7869
072085	4	93.00	13	6770	42	70B	50	301	Ō	22	3	11	Ö	3	168	111	7980
072185	3	72.00	6	6776	17	725	6	307	0	22	0	11	o	Õ	168	29	8009
072285	4	79.25	10	67B6	11	736	29	336	0	22	1	12	o	2	170	53	00/0
072385		96.00	13	6799	20	756	57	393	1	23	6	18	0	1	170	53 98	B062
072485	4	96.00	9	6808	18	774	80	473	1	23 24	6	24	ő	2	171	. –	8160
072585	•	74.00	é	6816	216	990	48	541	4	28	12	36	0	0	173	116 308	8276
072685		96.00	2	6818	1732	2722	46	587	37	45	14	50	0	1	173	1832	8584
	•		-	0010	17.02	2,22	70	207	37	60	14	30	U		1/4	1832	10416
072785	4	93.25	3	6821	2353	5075	101	688	242	307	12	62	o	1	175	2712	13128
072885	4	86.25	3	6824	2005	7080	175	863	735	1042	31	93	0	3	178	2952	16080
072985	4	86.50	2	6826	2068	9148	399	1262	1013	2055	29	122	0	Ō	178	3511	19591
073085	4	<b>95.5</b> 0	2	6828	1547	10695	461	1723	697	2752	42	164	0	Ō	178	2749	22340

Total Catch Chinook Sockeye Pink Chum Coho Miscellaneous Date No. of Wheel Bering Wheels Hours Daily Cum. Daily Cum. Daily Cum. Daily Cum. Daily Cum. Cisco Other Cum. Daily 95.25 96.00 93.75 77.50 O O 96.00 95.00 95.75 218 17672 96.00 96.00 142 17989 607 17532 96.00 94.50 95.00 96.00 96.00 96.00 96.00 96.00 96.00 O **671B** 92.00 96.00 96.00 91.00 96.00 96.00 94.00 96.00 А 96.00 89.00 96.00 

Appendix Table 2-4. Continued.

			China	ook	Soc	keye	Pir	nk	Ch	um	Col	ho	Misce	e <b>l l aneo</b> u	15		Catch pecies
Date	No. of Wheels		Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Bering Cisco	Other	Cum.	Daily	Cum.
082985	4	96.00	0	6837	2	19493	1	6959	72	25413	21	6059	o	6	263	102	65024
083085	4	94.00	ō	6837	5	19498	1	6960	79	25492	37	6096	3	5	271	130	65154
083185	4	96.00	Õ	6837	1	19499	0	6960	124	25616	28	6124	2	7	280	162	65316
090185	4	96.00	0	6837	0	19499	0	6960	30	25646	8	6132	2	1	283	41	65357
090285	4	96.00	0	6837	1	19500	o	6960	21	25667	8	6140	0	1	284	31	65388
090385	4	96.00	0	6837	2	19502	0	6960	15	25682	7	6147	0	0	284	24	65412
090485	4	96.00	0	6837	2	19504	0	6960	15	25697	8	6155	2	o	286	27	65439
0 <b>9</b> 0585	4	96.00	0	6837	0	19504	0	6960	41	25738	15	6170	2	9	297	67	65506
090685	3	72.00	0	6837	0	19504	0	6960	24	25762	3	6173	4	4	305	35	65541
090785	3	72.00	0	6837	1	19505	0	6960	15	25777	4	6177	12	4	321	36	65577
090885	3	60.00	0	6837	o	19505	0	6960	8	25785	1	6178	3	4	328	16	65593
090985	2	48.00	ō	6837	o	19505	Ō	6960	4	25789	0	6178	2	0	330	6	<b>65599</b>
091085	2	24.00	Ō	6837	0	19505	0	6960	1	25790	0	6178	4	0	334	5	65604

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Appendix Table 2-5. Curry Station daily and cumulative fishwheel catch by species, 1985.

			Chin	00k	Soc	keye	Pi	nk	Che	TW	Со	ho	Misce	el l aneou	ıs	Total All S	Catch pecies
Date	No. of Wheels		Daily	Cum.	Bering Cisco	Other	Cum.	Daily	Cum.								
061085	2	14.50	o	0	0	0	0	o	0	0	0	•					
061185	2	48.00	0	0	ō	ŏ	ŏ	Ö	Ö	0	0	0	0	0	0	0	
061285	2	4B.00	0	0	o	ō	ŏ	ŏ	ŏ	ŏ	0	0	_	0	0	0	
061385	2	4B.00	0	0	Ō	ŏ	ŏ	ŏ	Ö	Ö	Ö	0	0	0	0	0	
061485	2	48.00	0	0	0	ō	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	Ö	0	0	0	
061585		48.00	o	o	o	0	0	0	0	o	0	o	0	1	1	1	
061685	2	44.00	0	0	0	0	0	0	Ō	ō	ō	ŏ	ŏ	ó	1	0	
061785		47.00	0	0	o	0	0	0	ō	ō	Ö	ŏ	ŏ	Ö	1	Ö	
061885	2	47.00	0	0	0	0	0	0	0	ō	Ö	ŏ	ŏ	5	Ġ	5	
061 <b>985</b>	2	46.50	O	0	0	0	o	0	0	ō	ō	ŏ	ŏ	ŏ	6	ŏ	
062085		48.00	2	2	o	0	0	0	0	0	0	o	0	0	6	2	
062185		48.00	1	3	0	0	0	0	0	Ó	Ö	Ö	ŏ	1	7	2	
062285		48.00	0	3	0	0	0	0	0	0	o	ō	Ö	ī	é	ī	
062385	-	48.00	0	3	0	0	0	0	0	0	o	ŏ	Ö	1	9	i	
062485	2	48.00	1	4	o	0	0	0	0	0	O	ō	ō	1	10	2	
062585		48.00	4	8	0	0	0	0	0	0	0	0	o	1	11	5	
062 <b>68</b> 5	2	4B.00	5	13	o	0	0	0	O	ō	ŏ	ŏ	ŏ	ō	11	5 5	
062785	2	48.00	22	35	o	0	0	0	Ō	ō	ŏ	ŏ	ŏ	ŏ	11	22	
042885	2	<b>48.00</b>	26	61	o	0	0	Ö	Ō	ō	ŏ	ŏ	ŏ.	1	12	27	
062985	2	48.00	32	93	0	0	0	0	0	o	ō	ō	ŏ	ō	12	32	10
063085	2	48.00	48	141	o	o	0	o	0	0	o	0	0	2	14	50	13
070185	_	48.00	62	203	0	0	0	0	0	0	0	0	0	1	15	63	2
070285	2	31.75	9	212	o	0	0	0	0	0	0	Ö	ō	ō	15	9	2
070385	_	24.00	4	216	0	0	0	0	0	0	0	o	o	ō	15	4	2
070485	1	24.00	17	233	O	0	0	0	0	0	O	o	o	1	16	18	2
070585	-	37.00	49	282	o	o	0	. 0	o	o	o	0	o	1	17	50	2
070685	2	48.00	60	342	O	0	0	0	0	0	Ō	ō	Ŏ	ī	18	61	3
070785		<b>48.00</b>	87	429	o	0	0	0	0	0	ō	ō	ō	2	20	89	4
070885	2	4B.00	98	527	0	0	0	0	0	Ō	ŏ	ŏ	ŏ	ī	21	99	5

			Chin	ook	Soci	k <b>e</b> ye	Pi	nk	Chi	TW.	Col	ho	Misc	ellaneou	15	Total All S	
Date	No. of Wheels		Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Daily	Cum.	Bering Cisco	Other	Cum.	Daily	Cum.
								- <u>-</u>									
70985	2	4B.00	41	568	0	0	0	0	0	0	0	0	0	0	21	41	58
71085	2	48.00	43	611	0	0	0	0	0	0	0	0	0	0	21	43	6
71185	2	48.00	73	684	0	0	0	0	0	0	0	0	0	1	22	74	7
71285	2	4B.00	54	738	0	0	0	0	0	0	0	0	0	Ō	22	54	7
71385	2	4B.00	42	780	0	0	0	0	0	0	0	0	0	1	23	43	8
71485	2	4B.00	41	821	0	0	0	0	0	0	0	0	0	2	25	43	8
71585	2	4B.00	50	871	0	0	2	2	0	0	0	0	o	ī	26	<b>5</b> 3	8
71685	2	4B.00	52	923	1	1	0	2	0	0	0	0	Ō	ō	26	53	9
71785	2	<b>4B.</b> 00	25	948	0	1	2	4	1	1	ō	ō	ō	2	28	30	9
71885	2	48.00	26	<b>974</b>	1	2	4	8	0	1	o	o	o	ō	28	31	10
71985	2	4B,00	21	995	1	3	4	12	0	1	0	0	0	0	28	26	
72085	2	44.00	16	1011	ō	3	6	18	1	2	ŏ	ŏ	Ö	ŏ	28	23	10
72185	2	32.50	7	1018	ĭ	4	1	19	ó	2	o	ŏ	ŏ	1	29	10	10 10
72285	1	24.00	1	1017	ō	4	ō	19	ŏ	2	ŏ	ŏ	ŏ	0	27 29		10
72385	2	37.00	5	1024	ŏ	4	3	22	ŏ	2	ŏ	ŏ	ŏ	ŏ	29	1 8	10
72485	2	46.00	12	1036	0	4	1	23	1	3	0	0	ø	0	29	14	10
72585	2	48.00	11	1047	2	6	2	25	ō	3	ŏ	ő	ŏ	í	30	16	11
72685	2	4B.00	8	1055	ō	6	12	37	Ö	3	o	Ö	ŏ	0	30	20	11
72785	2	4B.00	6	1061	1	7	15	52	i	4	ŏ	ŏ	ŏ	Ö.	-30	23	
72885	2	4B.00	4	1065	2	9	20	72	i	5	ŏ	ŏ	ŏ	2	32	29	11 11
72985	2	4B.00	8	1073	3	12	14	86	2	7	0	0	0	2	34	29	12
73085	2	4B.00	1	1074	10	22	31	117	7	14	0	0	0	2 .	36	51	12
73185	2	4B.00	7	1081	5	<b>'27</b>	54	171	11	25	0	0	Ō	o	36	77	13
80185	2	4B.00	4	1085	16	43	57	228	23	48	ō	ō	ō	ō	36	100	14
B0285	2	48.00	0	1085	20	63	50	278	34	82	0	0	o	Ö	36	104	15
80385	2	48.00	2	1087	22	85	83	361	93	175	4	4	0	1	37	205	17
B04B5	2	4B.00	3	1090	24	109	138	499	94	269	5	9	ŏ	ō	37	264	20
80585	2	4B.00	4	1094	18	127	137	636	113	382	5	14	ŏ	Ö	37	277	22
B0665	2	4B.00	i	1095	29	156	147	783	166	548	7	21	ŏ	Ö	37	350	26

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A. A.

Appendix Table 2-5. Continued.

			Chin	ook	Soci	keye	Pi	nk	Che	ım	Col	ho	Misce	el laneou	15		Catch pecies
Date	No. of Wheels		Daily	Cum.	Bering Cisco	Other	Cum.	Daily	Cum.								
80785	2	48.00	1	1096	22	178	88	871	143	691	12	33	0		·		
080885	2	48.00	Ō	1096	15	193	92	963	89	780	10	43	0	0 3	37	266	2906
80985	2	48.00	1	1097	14	207	49	1012	45	825	11	54	o	0	<b>4</b> 0 <b>4</b> 0	209	3115
81085	2	48.00	0	1097	7	214	50	1062	61	886	13	67	ŏ	1	40	120	323
81185	2	40.00	0	1097	10	224	24	1086	25	911	4	71	ŏ	o	41	132 63	336) 3430
)812 <b>85</b>	2	48.00	o	1097	6	230	17	1103	37	948	9	во	0	o	41	69	3499
81385	2	48.00	0	1097	4	234	18	1121	8	956	2	82	Ö	i	42	33	353
081485	2	48.00	0	1097	4	238	8	1129	19	975	2	84	ŏ	ō	42	33	3565
81585	2	48.00	0	1097	3	241	6	1135	21	996	6	90	ō	ŏ	42	36	360
81685	2	48.00	1	1098	10	251	9	1144	24	1020	0	90	Ō	Ö	42	44	364
01785	2	48.00	0	1098	7	258	4	1148	7	1027	8	98	0	0	42	26	367
981885	2	48.00	0	1098	5	263	2	1150	17	1044	15	113	0	1	43	40	371
81985	2	48.00	0	1098	17	280	6	1156	32	1076	10	123	0	Ö	43	65	377
82085	2	48.00	0	1098	7	287	4	1160	29	1105	18	141	0	1	44	59	383
82185	2	48.00	o	1098	2	289	3	1163	20	1125	9	150	o	ō	44	34	386
82285	2	48.00	О	1098	4	293	o	1163	15	1140	6	156	0	0	44	25	389
82385	2	48.00	0	1098	2	295	1	1164	12	1152	6	162	0	3	47	24	391
82485	2	<b>4B.</b> 00	0	1098	2	297	3	1167	18	1170	1	163	0	2	49	26	394
82585	2	48,00	0	1098	4	301	2	1169	7	1177	2	165	0	3	52	18	396
82685	2	48.00	0	1098	5	306	1	1170	29	1206	7	172	0	2	54	44	400
82785	2	48.00	0	1098	6	312	1	1171	26	1232	4	176	o	0	54	37	404
002005	2	48.00	0	1098	3	315	1	1172	14	1246	6	182	o	0	54	24	406
82985	2	48.00	0	1098	3	318	O	1172	15	1261	2	184	0	3	57	23	4090
83085	2	48.00	0	1098	1	319	0	1172	7	1268	2	186	0	2	59	12	4102
83185	2	48.00	O	1098	2	321	O	1172	5	1273	1	187	0	1	60	9	411
90185	2	48.00	О	1098	2	323	0	1172	11	1284	1	188	o	2	62	16	4127
90285	2	48.00	0	109B	0	323	O	1172	4	1288	1	189	0	1	63	6	4133
90385	2	4B.00	o	1098	o	323	0	1172	1	1289	0	189	0	2	65	3	4136
90485	2	<b>48.</b> 00	0	1098	1	324	o	1172	1	1290	5	194	0	2	67	9	4145

AL8

			Chin	ook	Soci	keye	Pi	nk	Chi	TW	Col	ho	Misce	llaneou	15	Total All Sp	Catch Decies
Date	No. of Wheels		Daily	Cum.	Bering Cisco	Other	Cum.	Daily	Cum.								
090585	2	4B, 00	o	1098	o	324	0	1172	2	1292	4	198	o	1	68	7	4152
090685	2	48.00	0	1098	0	324	0	1172	2	1294	2	200	0	0	68	4	4156
090785	2	48.00	0	1098	0	324	0	1172	2	1296	0	200	0	0	68	2	4158
090885	2	4B.00	0	1098	o	324	0	1172	2	1298	0	200	o	0	68	2	4160
090985	2	48.00	0	1098	0	324	0	1172	0	1298	0	200	0	1	69	1	4161
091085	2	48.00	0	1098	0	324	0	1172	0	1298	1	201	o	0	69	1	4162
091185	2	48.00	o	1078	0	324	0	1172	O	1298	0	201	O	o	69	0	4162
091285	2	48.00	0	1098	0	324	0	1172	7	1305	2	203	0	3	72	12	4174

## APPENDIX 3

Escapement and Tag Recovery Surveys

Appendix Table 3-1. Escapement survey counts of Susitna River streams between RM 10.0 and 165.0, 1985.

Spawning Site	RM :	sk <sup>i</sup>	Dat		sc <sup>2</sup>	Chi Live (	nook Dead	Total	Live	Socke Dead	ye Total	Live	Pink Dead	Total	Live	Chua Dead	Total	Live	Coho Dead	Total
ALEXANDER CREEK	10.1					4	0	4		0	3	0		0	0		0		0	0
FISH CRK RED SHIRT LAKE DOWN	13.5	H	80	20	E	1	1	2	136	0	136	0	0	0	0	0	0	0	0	0
FISH CREEK KROTO SLOUGH	28.0 28.0 28.0 28.0 28.0 28.0	B B B B	07 08 08	18 18 27 04	P P PF P	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0	0	Ŏ
SHELL CREEK	28.0	В	80	27	6	0	0	0	1	0	1	0	0	0	0	0	0	201	0	201
TALACHULITNA RIVER TALACHULITNA RIVER	28.0 28.0	R BF	07 08	22 27	GE PF	1357 0	12 0	1369 0	0	0	0	4 28	0 54	<b>4</b> 82	2	0	2	0 7	0	0 7
YENTNA RIVER FISH CREEK YENTNA RIVER FISH CREEK YENTNA RIVER FISH CREEK YENTNA RIVER FISH CREEK	28.0 28.0 28.0 28.0	F F	07 07	12 19	E	12 11 15 0	0 0 0	12 11 15 0	0 43 1737 0	1	44	0 0 0	0 0 0	0 0 0	0 0 0 0	0 0 0	0 0 0	0 0 0	0 0 0	0 0 0
YENTHA RIVER LAKE CREEK YENTHA RIVER LAKE CREEK	28.0 28.0	BF B	07 0B	12 26	F	0	0	0	0	0	0	0 12	0 9	0 21	0 50	0	0 <b>5</b> 2	0	0	0
NO NAME CREEK	31.7 31.7 31.7 31.7 31.7 31.7 31.7	8 8 8 8 8	07 07 07 08 08 09 09	18 29 17 26 03 12	P P P P P	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0			0 0 0 0	0 0 0 0 0	0 0 0 0	0 0 0 0 0	0 0 0 0	0 0 0 0 0	0	0	0 0 0 1 0

<sup>1/</sup> Survey Method (SM) - B = boat, F = foot, H = helicopter
2/ Survey Conditions (SC) - P = poor, F = fair, G = good, E = excellent

Appendix Table 3-1. Continued.

Spanning Site	RM	SM	Dat	e	sc	Ch Live	inook Dead	Total	So Live D	ckeye ead T	otal	Live	Pink Dead	Total	Live	Chua Dead	Total	Live	Coho Dead	Total
WHITSOL CREEK	35.2 35.2 35.2 35.2 35.2 35.2 35.2	B B F B B		12 18 29 09 18 27 04	F F F F F	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0	0	0 0 0 0 0 0 0	0	0	0	0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 24 307 285 17	0 0 0	0 0 0 24 307
ROLLY CREEK	39.0 39.0 39.0 39.0 39.0 39.0	8 B B B B B	07 07 07 08 09 09	18 29 17 03 12	P P P P	0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0		0000	0 0 0 0 0	000000			0	0 0 0 0	0 0 0 0 0
DESHKA RIVER WEST FORK DESHKA RIVER MOOSE CREEK DESHKA RIVER TRAPPER CREEK	40.6 40.6 40.6	R	07 07 08	30	6	4064 3494 0	22 83 58	4086 3577 58	0 0 0	0	0	0 1 0	0 0 1	0 1 1	0 1 0	0	0 1 0		0 0 0	35 0
WILLOW CREEK	49.1 49.1 49.1 49.1 49.1 49.1 49.1 49.1	B B B B B B B B B	07 07 07 08 08 09 09 09	17 28 08 17 25 03 12 19 27	F69946494	000000000000000000000000000000000000000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000000000000000000000000000000000000000	0 0 34 0 0 0 0 0 0	Ó	0 0 34 0 0 1 0 0 0	0	000000000000000000000000000000000000000		0 0 0 0 0 0 0 0	000000000000000000000000000000000000000	000000000000000000000000000000000000000

<sup>1/</sup> Survey Method (SM) - B = boat, F = foot, H = helicopter
2/ Survey Condition SC) - P = poor, F = fair, G = good, E = excellent

Appendix Table 3-1. Continued.

Spawning Site	RM SI	M <sup>l</sup> Date	SC <sup>2</sup> Liv	Chinook Dead	Total	S Live	ockeye Dead To	otal Li	Pink ve Dead	Total	Live	Chua Dead	Total	Live	Coho Dead	Total
LITTLE WILLOW CREEK LITTLE WILLOW CREEK LITTLE WILLOW CREEK LITTLE WILLOW CREEK LITTLE MILLOW CREEK LITTLE MILLOW CREEK LITTLE WILLOW CREEK	50.5 B 50.5 F 50.5 B 50.5 B 50.5 B 50.5 B 50.5 B 50.5 B 50.5 B	07 11 07 17 F 07 26 08 06 08 17 08 25 09 03	F6 (FP) FF	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0	0	0 0 0 0 0 0 0	0	0 0 0 0 0 0
GRAYS CREEK	59.5 B 59.5 B 59.5 B 59.5 B 59.5 B 59.5 B	07 11 07 17 07 28 08 06 08 17 08 25	P P P	0 0 0 0 0 0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0	0 0 0 0 0 0 0 0	0 0 0	0		0 0 0 0 0			
CASMELL CREEK	64.0 F 64.0 F 64.0 F 64.0 B 64.0 B 64.0 B 64.0 B 64.0 B	09 03 09 11 09 16 09 26	F 2: F 6:		0 23 0 0 0 0 0 0 0		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Ō	000000000000000000000000000000000000000	0	Ŏ	0 67 52 237 238	000000000000000000000000000000000000000	0 67 52 237 238 122 0
SHEEP CREEK	66.1 F 66.1 F 66.1 F 66.1 F 66.1 F 66.1 F 66.1 F 66.1 F 66.1 F	08 06 08 16 08 24 09 03 09 11 09 16	F F P F F	3 0 5 1 0 0 0 24 0 0 0 0 0 0 0 0 0 0	3 7 0 24 0 0 0 0 0	Λ.	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000000000000000000000000000000000000000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 4 0 0 0 0 0 0 0	0 0 1 0 1 0	0 7 0 2 0 0	0	0 0 0 0 0 0 0	0 0 0	Ō

<sup>1/</sup> Survey Method (SM) - B = boat, F = foot, H = helicopter
2/ Survey Condition (SC) - P = poor, F = fair, G = good, E = excellent

Spawning Site	RM	SH	Dat	e 9	CLive	hinool Dead	k Total	Live	Sockey Dead	e Total	Live	Pink Dead	Total	Live	Chua Dead	Total	Live	Coho	Total
GOOSE CREEK	72.0 72.0 72.0 72.0 72.0 72.0 72.0 72.0	BF	07 07 07 08 08 08 09	11 F 17 E	15 27 0 2 0 0 0 0	000000000000000000000000000000000000000	29 15 27 0 2 0 0 3	000000		1 0 0 0 0 0 0 0	00°, 00°, 00°, 00°, 00°, 00°, 00°, 00°,	0 0 0 0 0 0	30 6 21 9 0	0 2 2 0 59 6 4	0 0 0 0 0 0 2 12 5	59 8 16	0 0 0 4 10 3	0 0 0	0 0 0 0 0 4 10 3 3 0
MONTANA CREEK	77.0 77.0 77.0 77.0 77.0 77.0 77.0 77.0	*****	07 07 08 08 08 09 09 09	11 F 17 F 17 E 01 G 02 E 16 F 24 F 03 F 03 F	2 99 99 96 230 739 9F 00 00 00 00 00 00 00 00 00 00 00 00 00	0 0 2 24 0 1 0 0 0	1	000000000000000000000000000000000000000	000000000000000000000000000000000000000	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 1 0	0 0 2	0 0 1 0 0 0	0 0 3 0 0 0 0 0 1 4 1	0 0 0 1 0 0 1 0 0 1	0 0 0 4 0 0 1 1 5 1 1	0 1 0 0 0 0 0 7 13 11	0 0 0 0 2 0	0 0 1 1 0 0 0 0 7 15 11
RABIDEUX CREEK	83.1 83.1 83.1 83.1 83.1 83.1 83.1 83.1	BF BF BF BF FF FF	07 07 07 08 08 09 09 09	10 6 16 8 27 8 28 8 07 8 16 8 23 8 11 8 18 8 26 8	3 6 0 114 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 4 0 0 0 0	14 3 0 118 0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	000000000000000000000000000000000000000	0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 32 43	0 0 0 0 0 0 0 12 13 0	0

<sup>1/</sup> Survey Method (SM) - B = boat, F = foot, H = helicopter
2/ Survey Condition (SC) - P = poor, F = fair, G = good, E = excellent

Appendix Table 3-1. Continued.

Spawning Site	RM	SM	Dat	e	sc²l	Ch .i v <b>e</b>	inook Dead	Total	Live	Socke Dead	ye Total	Live	Pink Dead	Total	Live	Chua Dead	Total	Live	Coho Dead	Total
ANSWER CREEK ANSWER CREEK ANSWER CREEK ANSWER CREEK	84.1 84.1 84.1	F F F	09 09 09 10	24	F	0 0 0	0 0 0 0	0 0 0	0 0 0 0	0 0 0	0	0 0 0	0 0 0	0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 27 8 9	0 0 1 0	0 27 9
QUESTION CREEK QUESTION CREEK QUESTION CREEK	84.1 84.1 84.1	F	09 09 10	05 24 02	E 6 6E	0	0 0 0	0	0 0 0	0	0 0 0	0	0 0	0 0 0	0	0 0 0	0 0 0	0 75 43	0 1 4	0 76 47
SUNSHINE CREEK	85. 1 85. 1 85. 1 85. 1 85. 1 85. 1 85. 1	FFFFFBB8	07 07 07 08 08 09 09 09	07 16 23 02 10 17 25	E P P G F F	31 0 0 0 0 0 0 0	000000000000000000000000000000000000000	31 2 0 0 0 0 0 0	0 0 0 0 0 0 1 0 0	0 0 1 0 0 0 0 0 0	0 0 1 0 0 0 1 0 0		0 0 1 0 12 0 0 0 0 0	0 17 44 74 90 0 0 0 0		0000	0 0 0 0 3 0 3 1 3 1	0 0 0 7 11 0 64 39 4 0	0 0 0 0	0 0 7 11 0 65 39 4
BIRCH CREEK	89.2 89.2 89.2 89.2 89.2 89.2 89.2 89.2	+++++++++++++++++++++++++++++++++++++++	07 07 07 08 08 09 09 09	28 07 15 23 02 10 17 25	E66EEEF6	0 0 5 1 5 5 0 0 0 0	0 0 6 4 5 0 0 0	0 0 5 22 9 10 0 0 0	0	000000000000000000000000000000000000000	0	0 3 117 564 502	0 0 2 15 75 71 0 0	0 3 119 579 577 88 0 0	0 0 0 0 0 0	0 0 0 0 0 0 1 0 0	0 1 B 3	0 0 0 0 2 0 0 9 13		0 0 0 0 2 0 0 9 13 14 6
TRAPPER CREEK	91.5 91.5 91.5 91.5 91.5	BF F F BF	07 08 08 08	17 07 15 23	6 F6 F P	22 0 3 0 0	0	22 0 3 0 0	0 0 4 0 0	0 0 0 0		0 0 31 1 0 0		Ó	0	0 0 0 0 0	0 0 0 0 0	0 294 9 0	Ŏ	0 0 294 9 0

<sup>1/</sup> Survey Method (SM) - B = boat, F = foot, H = helicopter
2/ Survey Condition (SC) - P = poor, F = fair, G = good, E = excellent

Spawning Site	RM	SM	Dat	te	sc	Ch Live	inook Dead						Pink Dead	Total	Live	Chua Dead	Total	Live	Coho Dead	Total
CACHE CREEK	95.5 95.5 95.5 95.5 95.5 95.5 95.5	FFFFF	08 08 08 09 09	07 15 23 02 10	6 P P F 6 P	000000000000000000000000000000000000000	0	0 0 0 0 0 0 0	0 0 1 0 0 2 7 0	0 0 0 0 0 0 0 0 0 0	0 0 1 0 0 2 7 0	0 0 3 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 2 0 0 45 40 2 7	Ŏ	0 0 2 0 0 45 42 2 10 0	- 2	Ă	0 0 0 0 0 2 0 0
BYERS CREEK BYERS CREEK	97.8 97.8	F	07 08	27 14	E 6	3	0	2	139	0	139	0	0	0	0	0	0	0 3	0	0
CHULITNA RIVER MIDDLE FORK CHULITNA RIVER MIDDLE FORK	97.8 97.8	RF RF	07 08	27 06	6	3039 447	433	3039 880	0	0	0	0	0	0	0	0	0	0	0	0
PAPA BEAR LAKE INLET STREAM PAPA BEAR LAKE INLET STREAM PAPA BEAR LAKE INLET STREAM	97.8 97.8 97.8	F F	07 07 07	12 12 19	E P G	0 0 0	0 0 0	0 0 0	53B 750 399	2 0 0	540 750 399	0	0 0 0	0 0 0	0	0 0 0	0 0 0	0	0 0 0	0 0 0
PRAIRIE CREEK PRAIRIE CREEK	97.8 97.8	F	07 07	19 28	6	1193 1941	0 B0	1193 2021	5 0	0	5 0	0	0	0	0	0	. 0	0	0	0
TALKEETNA RIVER CLEAR CREEK	97.8	H	07	17	F	2421	0	2421	0	0	0	0	0	0	0	0	0	0	0	0
TALKEETNA RIVER FISH CREEK TALKEETNA RIVER FISH CREEK	97.8 97.8	F	80 80	15 22	6	0	1	1	45 0	0	45 0	293 161	15 0	30B 161	62 33	1	22 72	13 55	0	13 55
TOKOSITNA RIVER UNNAMED CREEK	97.8	F	08	22	F	0	0	0	12	0	12	0	0	0	В	0	8	0	0	0
TROUBLESOME CREEK Troublesome Creek	97.8 97.8	F F	07 08	27 14	E	23 0	2	25 1	0	0	0	0	0	0	0	0	0	0	0	0

<sup>1/</sup> Survey Method (SM) - B = boat, F = foot, H = helicopter 2/ Survey Condition (SC) - P = poor, F = fair, G = good, E = excellent

Appendix Table 3-1. Continued.

Spawning Site	RM S	M <sup>I</sup> Date	SC <sup>2</sup> Liv	Chinoo e Dead	k Total	So Live D	ckeye ead Tot	al Live	Pink Dead	Total	Live	Chua Dead	Total	Live	Coho Dead	Total
WHISKERS CREEK 10	01.4 H 01.4 H 01.4 H 01.4 H 01.4 F 01.4 F 01.4 F 01.4 F 01.4 F	07 17 07 25 08 25 09 04 09 11 09 11 08 25 09 05 09 15 09 15 09 16 09 17 09 17 09 27	75 E 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6 6	7 0 1 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0	87	000000000000000000000000000000000000000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000000000000000000000000000000000000000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000000000000000000000000000000000000000	000000000000000000000000000000000000000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 68 208 442 227 150 215 151 0 0 0 135 108 65 10	0	0 68 208 443 227 150 221 166 0 0 0 135 108 65 11
CHASE CREEK 10	06.9 H 06.9 H 06.9 H 06.9 H 06.9 F 06.9 F 06.9 F 06.9 F 06.9 F	07 24 08 28 09 04 09 11 09 18 09 26 10 02 07 27 08 02 08 13 08 22 09 10 09 17	16666EPPP66EE6F6EE6F	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		000000000000000000000000000000000000000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000000000000000000000000000000000000000	0 0 0 0 0 0 0 0 0 0 0 1 1 1 1 0 0 0 0	000000000000000000000000000000000000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000	0 0 2 177 779 533 0 13 255 0 0 0 0 132 102 218 84 30 28	000000000000000000000000000000000000000	0 0 2 17 79 53 0 13 29 0 0 0 0 13 102 218 84 34

0.

<sup>1/</sup> Survey Method (SM) - B = boat, F = foot, H = helicopter 2/ Survey Condition (SC) = P = poor, F = fair, G = good, E = excellent

Spawning Site	ŘĦ	SH	Dat	e e	C <sup>2</sup> Live								Total	Live	Chua Dead	Total	Live	Coho Dead	Total
SLASH CREEK SLASH CREEK SLASH CREEK SLASH CREEK	111.2 111.2 111.2 111.2 111.2 111.2	FFF	08 08 09 09 09 09	25 02 09	6 0 6 0 6 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0	0000	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 5 0	0000	0 0 0 0 5 0	0 0 0 0 0 8 5	0 0 0 0 0	Ú
GASH CREEK	111.6 111.6 111.6 111.6 111.6 111.6 111.6 111.6	H H H H H F F F F F	08 09 09 09 09 10 08 09 09	28 04 11 18 25 02 18 25 07 16 23	6 0 6 0 7 0 8 0 8 0 9	000000000000000000000000000000000000000	0 0 0 0 0 0 0 0 0 0	000000000000000000000000000000000000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000	0 0 0 0 0 0 0 0 1 2 0 0 0	000000000000000000000000000000000000000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000000000000000000000000000000000000000	000000000000000000000000000000000000000		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1	0 0 0 0 3 0 0 0 0 0 71 13
LAME CREEK LANE CREEK	113.6 113.6 113.6 113.6 113.6 113.6 113.6 113.6 113.6 113.6 113.6 113.6	***	07 08 09 09 09 09 10 07 07 08 08 09 09	23 28 04 11 18 20 21 27 20 11 18 25 20 16 23	66 00 00 00 00 00 00 00 00 00 00 00 00 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 17	000000000000000000000000000000000000000		0	00 20 00 00 00 00 00 00 64 97 125 67 20 00 00	1	0 0 0 0 0 0 0 0 0 0 0 8 127 74 2 0 0	000000000000000000000000000000000000000		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0	0 0 0 7 13 12

<sup>1/</sup> Survey Method (SM) - B = boat, F = foot, H = helicopter
2/ Survey Condition (SC) - P = poor, F = fair, G = good, E = excellent

Appendix Table 3-1. Continued.

Spawning Site	RX	SX	Dat	: e	SC <sup>2</sup> Liv	Chir e De	nook ead To	otal	S Live	ockey Dead	e Total	Live	Pink Dead	Total	Live	Chua Dead	Total	Live	Coho Dead	Total
LITTLE PORTAGE CREEK	117.7 117.7 117.7 117.7 117.7 117.7 117.7	FFFFFF	08 08 09 09 09	11 18 25 02 09 16 23	E 6 6 6 9 9 9 9	0 0 0 0 0 0	0	000000000000000000000000000000000000000	0	0 0 0 0 0 0 0	0	1 6	0	1 7	0	0	0 0 4 1 0 0	0	0	0 0 0 0 0 0 0 2
FROMUNDA CREEK FROMUNDA CREEK FROMUNDA CREEK FROMUNDA CREEK FROMUNDA CREEK FROMUNDA CREEK	119.3 119.3 119.3 119.3 119.3	F F F	08 08 09 09 09	25 02 16 23	E 6 P 6	0 0 0 0	0	0 0 0 0 0	0 0 0 0	0000	0 0 0 0	0 0 0 0 0		0 4 0 0 0	0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0	0 0 0 0
DOWNUNDA CREEK DOWNUNDA CREEK DOWNUNDA CREEK DOWNUNDA CREEK DOWNUNDA CREEK DOWNUNDA CREEK	119.4 119.4 119.4 119.4 119.4	F F F	08 08 09 09 09	25 02 16 23	E 6 6	0 0 0 0	0 0 0 0	0 0 0 0 0	0 0 0 0	0000	0 0 0 0	0 0 0 0	0 0 0 0		0	0 0 0 0	0 0 0 0 0	0		0 0 0 0
DEADHORSE CREEK	120.8 120.8 120.8 120.8 120.8 120.8 120.8	F	07 08 08 09 09 09 09	18 25 02 09 16 23	6 6 6 P 6	0 0 0 0 0 0	0	0 0 0 0 0 0 0 0	000000000000000000000000000000000000000	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0		0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0

<sup>1/</sup> Survey Method (SM) - B = boat, F = foot, H = helicopter
2/ Survey Condition (SC) - P = poor, F = fair, G = good, E = excellent

Spawning Site	RM	SH	Dat	 e	SC <sup>2</sup> Live	hinoo Dead	k Total	Live	Socke Dead	ye Total	Live	Pink Dead	Total	Live	Chua Dead	Total	Live	Coho Dead	Total
MAGGOT CREEK	113.6 113.6 113.6 113.6 113.6 113.6 113.6	F	0B 0B 0B 09	11 18 25 02 09 16	E 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	00000	Δ	Δ		0 0	0		0	0	0	0	0 0 0 0 0 0 0 0	0	0
CLYDE CREEK	113.8 113.8 113.8 113.8 113.8 113.8 113.8	F F F	0B 09 09	18 25 02 09 16 23	E 0	000000000000000000000000000000000000000	0 0 0 0 0 0	0 0 0 0 0	(	0 0 0 0 0 0 0 0 0 0 0 0 0	0 7 2 0 0 0 0	0 0 2 0 0 0 0		Ō			0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0
LOWER MCKENZIE CREEK	116.2 116.2 116.2 116.2 116.2 116.2 116.2	F	09 09 08 08 09 09 09	11 11 18 25 02 09	6 0 6 0 6 0		000000000000000000000000000000000000000	0 0 0 0 0 0 0		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Ō	000000000000000000000000000000000000000	0 0 0 3 0 0 0 0	000000000000000000000000000000000000000			0 0 0 0 0 0 11 24 24	0 0 0 0 0 0 0 0	0 0 0 0 0 0 11 24 24 50
UPPER MCKENZIE CREEK	116.7 116.7 116.7 116.7 116.7 116.7 116.7		08 08 08 09 09 09	18 25 02 09 16 23	6 0 6 0 6 0	00000		0 0 0 0 0 0						0 0 0 0 0		0 0 0 1 0 0	Ŏ	0 0 0 0 0	0

<sup>1/</sup> Survey Method (SM) - B = boat, F = foot, H = helicopter
2/ Survey Condition (SC) - P = poor, F = fair, G = good, E = excellent

Appendix Table 3-1. Continued.

Spawning Site	RM	SH	Date	sc²	Ch Live	inook Dead	Total	Live	Socke Dead	ye Total	Live	Pink Dead	Total	Live	Chum Dead	Total	Live	Coho Dead	Total
FIFTH OF JULY CREEK	123.7 123.7 123.7 123.7 123.7 123.7 123.7 123.7 123.7 123.7	***********	07 17 07 20 07 26 08 02 08 09 08 18 08 25 09 02 09 05 09 09 09 16 09 23 09 30		18 21 11 0 0 0 0 0	000000000000000000000000000000000000000	18 21 11 1 0 0 0 0 0		) (		0	0	0 0 0 3	0	0	0	0	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
SKULL CREEK	124.7 124.7 124.7 124.7 124.7 124.7 124.7		08 09 08 16 08 22 08 29 09 05 09 12 09 20 09 27 10 03	9 M M M M M M	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	000000000000000000000000000000000000000						0 0 3 0 0 0 0	0 2 2 0 0 0 0 0 0 0 0 0 0 0 0		•			0 0 0 0 0 0 0
SHERMAN CREEK	130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8 130.8		07 24 07 20 07 27 08 02 08 09 08 17 08 22 08 29 09 05 09 12 09 19 09 26 10 03	EEE6666E666	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 1 0 0 0 0 0	(				0 0 0	0 0 0 0 0 8 12 3 1 0 0 0 0				•	000000000000000000000000000000000000000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

11 -

<sup>1/</sup> Survey Method (SM) - B = boat, F = foot, H = helicopter
2/ Survey Condition (SC) = P = poor, F = fair, G = good, E = excellent

Spawning Site	RM	SM	Date	SC <sup>2</sup> Live	ninook Dead	Total	S Live	ockeye Dead T	otal	Live	Pink Dead	Total	Live	Chua Dead	Total	Live	Coho	Total
FOURTH OF JULY CREEK	131.1 131.1 131.1 131.1 131.1 131.1 131.1 131.1 131.1 131.1 131.1	++++++	09 04 09 11 09 18 09 19 09 26 10 02 07 20	66 02 00 00 00 00 00 00 00 00 00 00 00 00	030000000000000000000000000000000000000	0 85 27 0 2 0 0 0 0 0 0 5 20 0 0 0 0 0 0 0 0 0	00000000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000	00 00 00 00 00 00 00 00 125 175 777 4	0 0 0 0 0 0 0 0 0 2 7 86	0 12 177 99 163 75	43 140 48 23 0	0 0 16 0	43 140 51 39 0	0	0 0 0 0 0	000000000000000000000000000000000000000
GOLD CREEK	136.7 136.7 136.7 136.7 136.7 136.7 136.7 136.7 136.7 136.7 136.7 136.7 136.7	****	07 31 08 23 08 28 09 04 09 11 09 18 09 25 10 02 07 30 08 06 08 12 08 19 08 26	6 35 6 00 6 00 F 00 6 00 F 00 6 00 F 00 F 00	1	2 36 30 0 0 0 0 0 0 23 0 0 1 0 0 0	000000000000000000000000000000000000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000000000000000000000000000000000000000			-	0 0 0 0 0 0 0 0		000000000000000000000000000000000000000	000000000000000000000000000000000000000

<sup>1/</sup> Survey Method (SM) - B = boat, F = fair, H = helicopter
2/ Survey Condition (SC) - P = poor, F = fair, G = good, E = excellent

Appendix Table 3-1. Continued.

Spawning Site	RM	sn'	Date	SC <sup>2</sup> Liv	Chinoo Pead	k Total	Live	ockey Dead	e Total	Live	Pink Dead	Total	Live	Chua Dead	Total	Live	Caho De ad	Total
INDIAN RIVER	138.6 138.6	HHHHHHHHHHHFBFFFFFFFFFF	07 17 07 24 08 16 08 23 08 28 09 04 09 11 09 18 09 25 10 02 07 18 07 19 07 26 08 01 08 08 08 16 08 24 09 04 09 10 09 10 00 00 00 00 00 00 00 00 00 00 00 00 0	77 77 77 51 51 66 66 66 66 66 66 66 66 66 66 66 66 66	1 1 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	775 977 616 00 00 00 00 263 117 1167	000020000000000000000000000000000000000		000000000000000000000000000000000000000	00 00 00 00 00 00 00 00 00 00 00 00 00	00 00 00 00 00 00 00 00 00 00 00 00 00	0	0 0 0 0 1153 473 171 93 26 0 0 0 17 36 65 0 425 331 139 512	00 00 00 75 46 56 8 00 00 00 00 1 04 142 175 16 20	0 0 0 0 1228 519 227 101 26 0 0 0 17 36 66 469 473 334 132 28 21	0 0 0 0 20 63 71 32 48 37 35 0 0 0	000000000000000000000000000000000000000	0 0 0 20 63 71 32 48 37 35 0 0 0 0 28 65 73 39 38 31 31
JACK LONG CREEK	144.5 144.5 144.5 144.5 144.5 144.5 144.5 144.5 144.5 144.5 144.5	***	07 17 07 24 08 01 09 04 09 11 09 25 10 02 08 08 08 16 08 24 08 30 09 06 09 13 09 20 09 28 10 04		2 0 0 0 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 0 7 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000000000000000000000000000000000000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000	0 0 0 0 0 0 0 0 0	0 0 0 11 4 3 1 0 0 0 0	000000000000000000000000000000000000000	0 0 0 11 4 3 1 0 0 0 0

<sup>1/</sup> Survey Method (SM) - B = boat, F = foot, H = helicopter
2/ Survey Condition (SC) = P = poor, F = fair, G = good, H = helicopter

Spawning Site	RM	SM	†Date	SC <sup>2</sup> Live	ninool Dead	Total	S Live	ockeye Dead T	otal L	ive [	Pink Dead	Total	Live	Chum Dead	Total	Live	Coho Dead	Total
PORTAGE CREEK	148.9 148.9 148.9 148.9 148.9 148.9 148.9 148.9 148.9 148.9 148.9 148.9 148.9 148.9	HXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	08 23 08 28 09 04 09 11 09 18 09 25 10 02 07 18 07 19 07 25	6 1767 P 0 3 2 2 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	08 93 00 00 00 00 00 00 00 00 00 00 00 00 00	1900 2629 1860 0 3 2 0 0 0 147 19 262 22 243 7 0 0	0	000000000000000000000000000000000000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000	000000000000000000000000000000000000000	0 0 0 0 0 520 524 285 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0 0 0 25 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
CHEECHAKO CREEK	152.5 152.5 152.5 152.5 152.5 152.5 152.5 152.5 152.5	H H H H H	07 31 08 16 08 23 08 28	E 18 10 P 0 0 E 0 0 G 0 G 0 G 0 E 0 E 0 0 E	0 0 0 0 0 0 0	0 18 10 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000000000000000000000000000000000000000	000000000000000000000000000000000000000	0 0 0 0 0 0 0 0 0 0 0	000000000000000000000000000000000000000	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	000000000000000000000000000000000000000	000000000000000000000000000000000000000	0 0 0 0 0 0 0	000000000000000000000000000000000000000	000000000000000000000000000000000000000	0 0 0 0 0 0 0 0 0

<sup>1/</sup> Survey Method (SM) - B = boat, F = foot, H = helicopter
2/ Survey Condition (SC) - P = poor, F = fair, G = good, E = excellent

Appendix Table 3-1. Continued.

Spawning Site	RM	SM	Da	te	SC <sup>2</sup>	Ch	inool Dead	Total	Live	ockey Dead	e Total	Live	Pink Dead	Total	Live	Chum	Total	Live	Coho Dead	Total
CHINOOK CREEK	156.6 156.6 156.6 156.6 156.6 156.6 156.6	3 H 3 H 3 H 3 H 3 H 3 H	07 07 07 08 08 08 09 09		EE696EE6EE	0 0 0 0 1 0 0 0	000000000000000000000000000000000000000	0	0 0 0	0	0	000000000000000000000000000000000000000	0			0 0	0	0	0	0
DEVIL CREEK	161. 161. 161. 161. 161. 161. 161.		07 07 08 08 09 09 09	17 24 31 16 23 28 04 11 18 25	E626EE66E	000000000000000000000000000000000000000	000000000000000000000000000000000000000	0 0 0 0 0 0 0 0	Ó	000000000000000000000000000000000000000	0 0 0 0 0 0 0 0	(				0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0 0 0 0 0 0 0		0
FOG CREEK FOG CREEK FOG CREEK	176. 176. 176.	L H L H	07 07 07	17 24 31	E 6	0 0 0	0	0	0	0	0	(	0 0			. 0	0	0	0	0 0 0
BEAR CREEK BEAR CREEK BEAR CREEK	178.0 178.0 178.0	) H	1 07	24	Ε	0 0 0	0	0	0	0	0	(	0 0			0 0	0	0	0	0 0 0
TSUSENA CREEK TSUSENA CREEK TSUSENA CREEK	181. 181. 181.	3 H 3 H 3 H	07 07 07	17 24 31	E 6	0 0 0	0	0	0 0 0	0 0 0	0	0	0 0	) (	) (	0 0	0	0	0	0 0 0

(ı.

<sup>1/</sup> Survey Method (SM) - B = boat, F = foot, H - helicopter
2/ Survey Condition (SC) - P = poor, F = fair, G = good, E = excellent

Appendix Table 3-2. Escapement survey counts of Susitna River sloughs between RM 98.6 and 161.0, 1985.

Spawning Site	RM	SD	Dat	e SC	C Live	hinool Dead	k Total	S Live	ockey Dead	Total	Live	Pink Dead	Total	( Live	hua Dead	Total	( Live	oho Dead	Total	ob <b>s</b>
SLOUGH 1	99.6 99.6 99.6 99.6 99.6 99.6	100 100 100 100 100	08 08 09 09 09	20 6 27 E 03 E 10 6 17 E 24 E	0 0 0 0 0	0 0 0 0	0 0 0 0 0	0	Õ	0 0 0 0 0 0 0	0 0 0 0 0 0	Ō	0 0 0 0 0 0	0 0 0 0 0 2	0 0 0 0 0 0 0 0	0 0 0 0 0 2	0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0	0 0 0	009 033 043 055 069 079 091 104
SLOUGH 2 SLOUGH 2 SLOUGH 2 SLOUGH 2 SLOUGH 2 SLOUGH 2 SLOUGH 2 SLOUGH 2 SLOUGH 2	100.2 100.2 100.2 100.2 100.2 100.2 100.2	100 100 100 100 100	0B 0B 09 09 09	20 6 27 E 03 E 10 6 17 6 24 6	0 0 0 0 0	0	0000	0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 13 15	0 0 1 1 0 0 4 6	0 0 1 1 0 0 17 21	0000	000000000000000000000000000000000000000	0 0 0 0 0	010 032 043 056 068 080 092 104
STONEH 3B STONEH 3B STONEH 3B STONEH 3B STONEH 3B STONEH 3B	101.4 101.4 101.4 101.4 101.4 101.4	100 100 BRE 100 BRE 100	08 09 09 09	20 6 27 P 03 P 10 6 17 P 24 6	0 0 0 0 0 0	0000	0 0 0 0 0	0000		0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 2 1	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	019 032 045 056 069 080 092 105
SLOUGH 3A SLOUGH 3A SLOUGH 3A SLOUGH 3A SLOUGH 3A SLOUGH 3A SLOUGH 3A	101.9 101.9 101.9 101.9 101.9 101.9 101.9	100 100 100 100 100 100	08 09 09 09	20 6 27 6 03 6 10 6 17 E 24 6	0 0 0 0 0 0	Ů	0 0 0 0 0 0	0	00000	0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 2	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 2	0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0	019 032 045 056 069 080 092 105

Appendix Table 3-2. Continued.

,	1 101	1				
	S do	051 051 051 051 051 051	021 031 057 058 068 093	021 031 044 057 067 093	009 030 043 043 053 053 075 091	
	Dead Total	3300000		0000000	0000000	
		000000	0000000	0300000	0000000	!
	Coho Live	0000000	0000000	0000000	0000000	<u> </u>
		0000000	0000000	0000000	0000000	
	Dead Total	0000000	0300000	0000000	0000000	
	Live	3333333	0000000	0000000	0000000	
	Chum Total Live	0000000	•••••	0000000	00-0000	
į	Dead	0000000	0000000	0000000	00-0000	
	Pink Live	0000000	0000000	0000000	0000000	
	otal F	0000000	•••••	0000000	000-000	500
	Sockeye Il Live Dead Total	0000000	0000000	•••••	0000000	Survey conditions
	ckeye	0000000	0000000	0000000	000-000	'ey co
	Total	0000000	•••••	0000000	0000000	Sur
	Dead	0000000	0000000	0000000	0000000	ဘ္တ
-	Chinook Live Dead	3393999	0000000	0000000	0000000	yed;
	ភ្ន	<b>66777666</b>	<b>00000000</b>	<b>-</b> 000000	постогос	slough surveyed;
į	Date	22253222	22753722	227203725	335 925 BI	5
į		8886666	8885555	99955559	8885555	20.5
	S	88888888	33233333	2222222	2222222	<b>*</b>
*******	æ	105.2 105.2 105.2 105.2 105.2 105.2	001000000000000000000000000000000000000	108.22 108.22 108.22 108.22 108.22	22222222	* Percent
						8
						aile;
	Site					
			സവവവവവ	<b>444444</b>	£\$£\$\$\$\$\$	River
	Spawning	SLOUGH SLOUGH SLOUGH SLOUGH SLOUGH SLOUGH SLOUGH SLOUGH SLOUGH	0.000	SCOUGH SC	E SE	# ~

Z.

Spawning Site	RM	SD	Dat	e 9	Chino C Live	k Dead	Total	Sockey Live	e Dead	Total	Pink Live	Dead	Total	Chu <b>a</b> Live	Dead	Total	Coho Live	Dead	Total	obs
SLOUGH 7 SLOUGH 7 SLOUGH 7	113.2 113.2 113.2	CO CO	08 08	13 6 18 6 25 6	0	0 0 0	0 0 0	0 0	0	0	0	0	0	0	0	0	0 0 0	Ú	0	020 030 042
SLOUGH 8 SLOUGH B	113.7 113.7 113.7 113.7 113.7 113.7 113.7	100 100 100 100 BRE 100	0B 0B 09 09 09	18 6 25 6 02 6 09 6 16 F 23 8	0	0 0 0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0	0 0 2 0 0 0 0	0 0 2 0 0 0	24 47 47 26 0 26	0 0 5 29 30 0 28	24 52 76 56 0	000000000000000000000000000000000000000		0 0 0 0 0	009 030 042 053 065 079 091 103
BUSHROD SLOUGH BUSHROD SLOUGH BUSHROD SLOUGH BUSHROD SLOUGH BUSHROD SLOUGH BUSHROD SLOUGH BUSHROD SLOUGH BUSHROD SLOUGH	117.8 117.8 117.8 117.8 117.8 117.8 117.8	100 100 100 100 BRE 100	0B 0B 09 09 09	18 F 25 E 02 E 09 F 16 F 23 E	0 0 0 0	0 0 0 0 0 0	0000	0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 1 0 0 0	0	0 0 1 0 0 0 0 0		Õ	00000	0 0 0 0	Ó	0 0 0 0	0 0 0 0 0	008 029 041 053 065 078 090
ELMO SLOUGH ELMO SLOUGH ELMO SLOUGH ELMO SLOUGH ELMO SLOUGH ELMO SLOUGH ELMO SLOUGH	117.9 117.9 117.9 117.9 117.9 117.9	100 100 100 BRE 100	0B 09 09 09	25 E 02 G 09 E 16 F 23 E	0	0 0 0 0 0	0	0 0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0	0 0 0	0 0 0 0 0 0	0000	0 0 0 0 0	0 0 0 0 0	0 0 0	0 0 0 0 0	0 0	0 0 0 0 0	029 042 054 066 078 090 103
SLOUGH 8D SLOUGH 8D SLOUGH 8D SLOUGH 8D SLOUGH 8D SLOUGH 8D SLOUGH 8D SLOUGH 8D	121.8 121.8 121.8 121.8 121.8 121.8 121.8	100 100 100 100 100	08 08 09 09 09	1B 6 25 E 02 6 09 E 16 E 23 E	0	0 0 0 0 0 0 0	0000		0 0 0 0 0 0 0 0 0	0 0 0 0 0 0		0	0 0 0 0 0 0	0 0 0 1	0 0 0 0 1 - 0	Ú	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Ú	0 0 0 0 0	008 029 041 054 067 077 090 102

RM = River mile; SD = Percent of slough surveyed; SC = Survey conditions

Appendix Table 3-2. Continued.

Canalas Cika	6M	cn	n		Ch	inook	T-4-1	Soc	keye			ink	*	(	Lhua		Coho	<del></del> -	
Spawning Site		 au			L1 A6	 D690	10191	rive D	<b></b>	10591		neso	lotal		Dead	lotal	Live Dea	d lotal	005
SLOUGH BC SLOUGH BC SLOUGH BC SLOUGH BC SLOUGH BC SLOUGH BC SLOUGH BC SLOUGH BC SLOUGH BC	121.9 121.9 121.9 121.9 121.9 121.9 121.9	100 100 100 100 100	08 08 09 09 09	18 6 25 E 02 G 09 E 16 G 23 G	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0 0	0	2	0 2 0 0 8 65	0 0 0 0 0 0	0 0 0 0 0 0 0 0	008 028 041 054 066 078 089
SLOUGH 88 SLOUGH 88 SLOUGH 88 SLOUGH 88 SLOUGH 88 SLOUGH 88 SLOUGH 88 SLOUGH 88	122.2 122.2 122.2 122.2 122.2 122.2 122.2	100 100 100 100 BRE 100	0B 0B 09 09 09	18 P 25 E 02 6 09 E 16 P 23 6	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 2	0 0 0 0 0 0	0 0 0 0 0 0 2	0 0 0 0 0 0 0	0 0 2 0 0 0 0	0 0 2 0 0 0 0	177 151 70 0	0 6 16 27 0	0 183 167 97 0	0 0 0 0 0	0 0 0 0 0 0 0 0 0 1	007 028 040 055 066 077 089
MOOSE SLOUGH	123.5 123.5 123.5 123.5 123.5 123.5 123.5	100 100 100 100 BRE 100	0B 09 09 09	18 6 25 6 02 6 09 6 16 P 23 6	0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0		0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	0 0 2 22 0	0	· 0 3 24 0	Û 0 0 0 0	0 0 0 0 0 0 0 0 0 0	007 028 040 055 067 067 089
SLOUGH AI SLOUGH AI SLOUGH AI SLOUGH AI SLOUGH AI SLOUGH AI SLOUGH AI SLOUGH AI	124.6 124.6 124.6 124.6 124.6 124.6 124.6	100 100 100 100 100 100	08 08 09 09 09	16 6 22 6 29 E 05 6 12 6 20 E 27 E	0 0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0	000000000000000000000000000000000000000	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	1	0 0 0 0 0	0 1 0 0 0 0 0	0 0 0 0	0 0 0 0 0 0 0 0 0 0	006 027 036 049 061 073 085 097

Pg. s

Spawning Site	RH	SD	Date	SC	Ch Live	nnool Dead	Total	S Live	ockeyi Dead	Total	Live	ink Dead	Total	Live	Chum Dead	Total	Live	oho Dead	Total	obs
SLOUGH A	124.7 124.7 124.7 124.7 124.7 124.7 124.7 124.7 124.7	100 100 100 CD CD	08 1 08 2 09 0 09 1 09 2	6 6 22 6 29 E 05 6 12 6 20 6 27 6	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0	000000000000000000000000000000000000000	0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0	007 027 037 049 061 073 085 097
SLOUGH BA SLOUGH BA SLOUGH BA SLOUGH BA SLOUGH BA SLOUGH BA SLOUGH BA SLOUGH BA SLOUGH BA	125.4 125.4 125.4 125.4 125.4 125.4 125.4	100 100 100 100 100 100	08 08 09 09 09	16 6 22 6 29 E 05 6 12 6 20 E 27 E	0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0 0 0	161	0 0 0 1 4 9 13 20 30	54 39 114 130 165 155 125 70 49	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0	41 68 292 221 174 95	0 0 7 24 77 70 139 80 63	41 6B 299 245 251 165 24B 106 63	0 0 1 0 0 0 9 3	0 0 0 0 0 0 0 0 0	0 0 1 0 0 0 9	006 027 036 049 061 073 085 096
SLOUGH B	126.3 126.3 126.3 126.3 126.3 126.3	100 100 075 100 100	08 2 08 2 09 0 09 1 09 2	22 P 29 6 05 6 12 6 20 E	0 0 0 0 0	0 0 0 0 0	0 0 0 0 0 0	0	0 0 0 0 0	0 0 2 5 1 1 0	0 0 0 0 0 0	0 0 0 0 0 0 0	0 0 0 0 0	0 0 25 54 72 47 0	0 0 1 19 17 15 26 0	0 26 73 89 62 26	0 0 0 0 0 0 0 0	0 0 0 0 0	0 0 0 0 0	026 036 048 060 072 084 096
SLOUGH 9 SLOUGH 9 SLOUGH 9 SLOUGH 9 SLOUGH 9 SLOUGH 9 SLOUGH 9 SLOUGH 9 SLOUGH 9	128.3 128.3 128.3 128.3 128.3 128.3 128.3	100 100 100 100 100 100	08 1 08 2 09 0 09 1 09 1	16 6 22 P 29 6 15 6 12 6 19 6	0 0 0 0 0 0	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 0	000000000000000000000000000000000000000	0 0 0 0 0 0 0 0	0000000	0 0 1 0 0 0	0 0 0 61 6 0 1B 6	0 0 1 33 28 29 6 5	0 0 1 94 34 29 24 11	0 0 0 0 0 0	0 0 0 0 0 0 0 0	0 0 0 0 0 1 0	006 026 035 048 060 072 084 096

Consumina CiAn	nu.	0.0			, , C	hinool	k	, S	ockey	·		Pink	<b>.</b>		Chue		(	oho	
Spawning Site	RH	20	Dat	e SC	LIVE	Dead	iotal	Live	Desd	iotal	LIVE	Dead	lotal	Live	Dead	Total	Live	Dead	Total obs
SLOUGH 9B	129.2	co	08	16 6	0	٥	0	0	٥	0	٥	٥	۵	٥	٥	Δ	۸	0	0 026
SLOUGH 9B	129.2	CO	08	22 6	ŏ	ŭ	Ŏ	Ŏ	ŏ	Ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ő	ŏ	0 035
SLOUGH 98	129.2	CO	08	29 G	0	0	0	0	Ŏ	Ŏ	0 0 0 0	Ŏ	Ŏ	0 0 0 0 0 0	0	0 0 0 0 0	Ű	ŏ	0 048
SLOUGH 99	129.2	CO	09	05 G	Ó	Ō	0	Õ	Õ	0	0	Q	Ō	0	0	0	Ú	Ú	0 060
SLOUGH 9B	129.2	ČÜ	09	13 6	Ŏ	0 0 0 0 0	Ŏ	0 0 0	0	0 0 0 0	Ŏ	0	0 0 0	Ŏ	Ò	Ō	0 0 0	0	0 072
SLOUGH 9B SLOUGH 9B	129.2 129.2	CO		19 6 27 6	ŏ	V	V	V	V	Ň	Ņ	Ŏ	Ŏ	Ŏ	Ŏ.	Ŏ	0	Ŏ	0 084
SLOUGH 79	129.2				ŏ	Ŏ	ŏ	ň	0	ŏ	Ň	Ň	V	Ň	Ň	Ň	0	V	0 095
		-	••	V	v	v	٧	v	v	V	v	V	v	v	v	v	V	v	0 10B
SLOUGH 9A	133.B 133.B	030	08	08 E	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 005
SLOUGH 9A	133.8	025	08	16 G	0	Ō	O	0	0	0	0	0	0	Ō	Ŏ	Ŏ	Ŏ	Ŏ	0 025
SLOUGH 9A SLOUGH 9A	133.B	025	ÓΒ	22 6	Ŏ	0	Ŏ	Ŏ	0 0 0 0 0	Ŏ	00000	0 0 0 0 0	0	0 0 0 11 0	0	0 0 0 0 11 0	0 0 0 0 0	0	0 035
SLOUGH 9A	133.8 133.8				V	0	Ň	0 0 0 0	V	0 0 0 0	Ŏ	Ŏ	Ŏ	.0	Ŏ	.0	Ŏ	Ó	0 047
SLOUGH 9A	133.8	100	09	12 P	ŏ	Ö	Ň	Ň	7	Ň	4	۸	0	11	0	11	V	0	0 059 0 071
SLOUGH 9A	133.8	BŘE	09	19 P	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	۸	ň	٨	Ŏ	0 083
SLOUGH 9A	133.8	100	09	26 G	Ŏ	0	Ŏ	Ŏ	Ŏ	ŏ	ŏ	Ŏ	ŏ	118	13	131	ĭ	ŏ	1 095
SLOUGH 9A	133.8	100	10	03 B	0	0	Ō	0	0	Ö	0	Ö	Ŏ	47	47	94	ō	ŏ	0 108
SLOUGH 10	133.9	100	08	0 <del>0</del> E	0	0	0	Ú	0	0	0	0	٥	6	0	0	0	0	0 005
SLOUGH 10	133.9	100	80	16 G	Ú		Ŏ	Ŭ	Ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ			ŏ	0 025
SLOUGH 10	133.9				Ó	0	Ö	0	0	Ō	Ü	Ŏ	Ŏ	Û	Ŏ	ŏ	ŏ	ŏ	0 034
SLOUGH 10	133.9	100	ÓΒ	29 E	0	0	0	Ō	0	Ŏ	0	0	0	0	0 .	0	Ö	Ŏ	0 047
SLOUGH 10 SLOUGH 10	133.9	100	09	05 E	Ŏ	0	Ŏ	0	0	0	0 0 0 0	0	0 0 0	0 0 0	0	0 0 0 0 0	0 0 0 0 0	0	0 059
SLOUGH 10	133.9 133.9				Ņ	V	Ņ	Ņ	Ņ	Ņ	0	0	0	Ŏ	Ŏ	Ŏ	Ŏ	Ó	0 071
SLOUGH 10	133.7	100	07	37 E	Ă	٨	V	ŏ	V	Ö	V	0	0	Ů.	0	Ŏ	0	Ú	0 083
SLOUGH 10	133.9				ŏ	ŏ	Õ	ŏ	Ž	ŏ	Ň	Ň	Ň	Ň	Ň	Ņ	Ň	0	0 095 0 10B

RM = River mile; SD = Percent of slough surveyed; SC = Survey conditions

						Chino	ok		Socke	ye		Pinl	(		Chus	·		Coho	·	
Spawning Site	RM	SD 	Dat	e SC	Live	Dead	Total	Live	Dead	fotal	Live	Dead	Total	Live	peaq	Total	Live	Dead	Total	ob s
SLOUGH 11	135.3	100	08	08 E	0	0	0	0	0	0	0	0	0	0	0	0	Û	0	0	005
SLOUGH 11	135.3	100	08	15 6	Ó	Õ	Ŏ	9	Ō	Š	Ŏ	Ŏ	Ŏ	52	Ŏ	52	ŏ	-		022
SLOUGH 11	135.3	100	08	22 6	Ó	0	0	70	4	74	0	0	0		6	342	0	0	0	034
SLOUGH 11 SLOUGH 11	135.3 135.3	100	08	29 6	0	Ŭ	0		1	290	Ŏ	0	Õ			552	0	0		047
SLOUGH 11	135.3	100	07	12 E	0	0	0		1	500 676	V	0	0		151 276	421	0	0		059
SLOUGH 11	135.3	100	Ů9	19 6	ŏ	0	ŏ		22	694	ŏ	Ö	ŏ			422 606	Ů	V		071 083
SLOUGH 11	135.3	100	09	26 6	ŏ	Ŏ	ŏ		28	412	ŏ	ŏ	ŏ		359	415	ŏ	ŏ		094
SLOUGH 11	135.3	100	10	03 E	Ó	0	Ö	147	472	619	Ŏ	Ŏ	Ŏ		410	416	ŏ	ŏ	ŏ	107
SLOUGH 12	135.4				0	0	0	0	0	0	0	0	0	Û	0	0	0	Û	0	034
SLOUGH 12	135.4				Õ	0	0	0	0	0	0	0	0		0	Ó	0	0	0	046
SLOUGH 12 SLOUGH 12	135.4 135.4				V	0	Ŏ	Ŏ	0	0	0 0 0	Ŏ	Ŏ		0	0	0	Û		058
SLOUGH 12	135.4				Ň	V	Ň	0	0	0 0 0	Ņ	0	Û	0 0 0	0	0	0	0		070
SLOUGH 12	135.4				ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	٥	Ö	Ň	V	0	0	0	0	082 094
SLOUGH 12	135.4			03 6	Ŏ	Ŏ	Ŏ	ŏ	ŏ	Ŏ		ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	Ŏ	107
SLOUGH 13	135.8	100	08	20 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	٥	033
SLOUGH 13	135.8	100	08	29 G	Ŏ	Ŏ	Ŏ	Ŏ	ŏ	ŏ	ŏ	ŏ	ŏ		ŏ	ŏ				046
SLOUGH 13	135.8	100	09	05 E	0	0	0	0	0	0	0	Ō	0	Ö	Ŏ		0 0 0 0	ŏ		058
SLOUGH 13 SLOUGH 13	135.8	100	09	12 6	0	Ŏ	0	0 0	0	0 0 0	Ŏ	0	Ŏ	0 0 0	Ō	0	0	0	0	070
SLOUGH 13	135.0 135.8	100	04	14 6	0	ů V	0	Ŏ	0	0	Ŏ	Ŏ	Ŏ	Ŏ	0		Ó	Ó	0	082
SLOUGH 13	135.8				Ň	Ň	V	٨	ŏ	V	V	V	0		Ú	. 0	0	0	0	094
			•••		·	v	v	V	v	v	v	v	v	U	v	U	U	U	U	107
SLOUGH 14	135.9	100	08	20 G	0	0	0		-	0	-	0	0		0	0	0	Ú	0	033
SLOUGH 14 SLOUGH 14	135.9	100	00	29 6	Ŏ	Ŏ	0	0	Ò	0	0	0	0	0	0	0	0	0		046
SLOUGH 14	135.9 135.9	100	07	12 E	0	V	0	0	0	0	0 0 0	Ŏ	0	Ó	Ó	Õ	Ó	Ó		058
SLOUGH 14	135.9	100	00	14 6	V	V	V	0	0	0	Ů,	0	0	0	0	0	Ŏ	Ŏ		070
SLOUGH 14	135.9	100	ŏý	26 6	ŏ	Õ	ŏ	ŏ	ŏ	ő	Ň	۸	0	0 0	V	0 0 -0	V	0		082
SLOUGH 14	135.9				ŏ	Ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	Õ	0	Ű	0	ő	Ô	0		093 106

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No.

Appendix Table 3-2. Continued.

0									inook		S	ockeye			Pink		(	Chum			Coho		
Spawning	5110	RM	5	i)	Dat	e St	Liv	12	Dead	lotal	Live	Dead	Total	Live	Dead	Total	Live	Dead	Total	Li v₽	Dead	Total	obs
SLOUGH	15	137.	2 1	00	08	16 F		٥	0	٥	0	٥	0	0	0	٥	٥	٥	٥	٥	٥	0	025
SLOUGH		137.						Ŏ	Ŏ	ŏ	ō	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ		040
SLOUGH	15	137.	2 1	00	08	30 E		Ō	Ō	Ō	Ŏ	Ŏ	Ŏ	Ŏ	ŏ	ŏ	Ŏ	ŏ	ŏ	ŏ	ŏ		052
SLOUGH	15	137.	2 1	100	09	06 E		0	0	Ō	Ö	Ō	Ö	Ō		Ŏ	Ŏ	0 0 0 0 0	Ŏ	0 0 0 0 0	Õ		064
SLOUGH	15	137.	2 1	00	09	13 6		0	0	0	0	0				Ŏ	0000	Ŏ	Ŏ	Ŏ	Ŏ		076
SLOUGH	15	137.	2 1	100	09	20 6		0	0	0	0	( 0	0 0 0	0	0	0	Ó	Ō	0 0 0	Ó	Ō		088
SLOUGH	15	137.	2 1	00	09	27 6	i	0	0	0	0		0	0	0	0	Ó	Ō	Ö	0	0		097
SLOUGH	15	137.						O		Ģ	0	0			0	0	0	0	0	0	0	0	099
SLOUGH	15	137.	2 1	00	10	04 6	i	0	0	0	0	0	0	0	0	0	0	0	0	0	0		113
SLOUGH	14	177	, ,	۸۸.	۸۵	A0 F		^	^														
SLOUGH		137.						Ŏ	0	Ŏ	Ŏ	Ň	Ŏ	0		0	Õ		0	0			004
SLOUGH		137. 137.						Ŏ	V	Ň	0	Ň	V	. 0	Ū	õ	2	0	. 2	Ò	0		024
SLOUGH		137.						Ň	V	V	V	Ň	Ņ	V	, 5	Ď	Ä	0 2 2 2 0 0	10 6 2 0 0	Ó		0	039
SLOUGK		137.						X	X	Ž	×	V	V	Ű		Ň	•	4	ŏ	Ň	Ŏ	Ň	052
SLOUGH		137.						Ň	Ň	Ň	ŏ	V	V	V	Ó	0	0 0 0	4	4	Ŏ	Ó	Ů	064
SLOUGH		137.	3 1	M	NO	20 6		ň	Ň	V	Ŏ	Ň	Ň	V	V	0	Ň	Ň	Ň	Ň	Ň		076
SLOUGH	16	137.	ži	00	ΛĢ	27 E	•	ň	0	Ň	ŏ	Ň	V	0	0	0	V	X	V	Ņ	0		088
SLOUGH	16	137.	3 1	00	ΛĢ			ň	ŏ	Ň	ŏ	ň	0	ŏ	. ,	Ů	×	Ň	V	0 0 0	V		098
SLOUGH	16	137.						ň	ŏ	Ň	ŏ	ň	ŏ			V	Ŏ	Ÿ		V	V		099
		••••	٠.		••	** •		٧	٧	v	v	v	v	V	•	v	v			v	U	v	112
SLOUGH	17	138.	9 1	00	08	08 E		0	0	0	0	0	0	0	0	0	0	0	٥	0	0	0	004
<b>SLOUGH</b>	17	138.						Õ	Ŏ	ŏ	ŏ	ŏ	ŏ			ŏ	ŏ	ŏ	ŏ	ŏ	Ň		024
SLOUGH	17	130.						Ŏ	Ŏ	Ŏ	Ŏ	Ŏ	ŏ	ŏ	ŏ	Ď	ŏ	ŏ	ŏ	ŏ	Ŏ		039
SLOU6H		130.	9 1	00	08	30 E		Ŏ	Ŏ	Ŏ	Ŏ	Ŏ	ō	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ň	ň	052
SLOUGH	17	130.	9 1	00	09	06 E		0	Ŏ	Ŏ	Ŏ	ŏ	ŏ	Ŏ	ŏ	ŏ		ĭ	ĭ				064
SLOUGH		130.	9	03	09	13 8		0	Ó	Ŏ	Ŏ	Ŏ	0	0 0 0 0	ŏ	ŏ	ŏ	ó	i	ŏ	ŏ		076
SLOUGH	17	130.	9 1	0ú	09	20 G		Û	Ŏ	Ŏ	Ŏ	Õ	Ŏ	ŏ	0	0	0 0 0	0	1 0 0	0	ŏ		088
SLOUGH		138.				28 6		0	0	Ó	Ò	Ŏ	Ŏ	Ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ		101
SLOUGH	17	130.	9 1	00	10	04 6		0	Ô	0	Ō	Ò	Ŏ	Ŏ	Ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	Õ	112
2F008H	1 <i>/</i>	128.	7 l 		10	V4 6		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	112

RM = River mile; SD = Percent of slough surveyed; SC = Survey conditions

O	 			- 00	Cl	inool	( T. A. A	Se	ockey	 }	F	ink	Total		Chua .			Coho		
Spawning Site	RM	SD		6 2r	ri ve	n690	10191	F3 46	 hego	iptai		head	local	F1 A6	D690	IDTAL	LIVE	Dead	10131	0D5
CLOUCH TO	.70 .	20	۸۵		^	^		^	^		^									40.
SLOUGH 18 SLOUGH 18	139.1			16 G 24 G	0	Ŏ,	Ŏ	0	0	0	Ņ	Ŏ	0	Ŏ	Ŏ	Õ	Ó	0		024
SLOUGH 18	139.1 139.1			30 6	V	۸	V	V	V		V	V	V	V	V	V		, ,		039
SLOUGH 18	139.1			04 6	ň	Ň	ň	ŏ	ŏ	0	X	V	Ϋ́	Ϋ́	Ň	0 0 0 0	Č	, ,		051 063
SLOUGH 18	139.1			13 6	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ň	ň	ŏ	ň	ň	ď			075
SLOUGH 18	139.1			20 6	ŏ	ŏ	ő	ŏ	ő	0	ŏ	Ď	ŏ	ŏ	ň	ň	í	ĭ		087
SLOUGH 18	139.1			28 G	Ŏ	Ŏ	Ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ď	ŏ	ŏ	101
SLOUGH 19	139.7	100	۵۸	ΛD E	Ú	۸	0	^	Λ	0	^	0	^	^	^	^	. ,		^	444
SLOUGH 19	139.7	100	AA	14 6	ň	Ň	Ň	ĭ	0	ĭ	X	V	0	Ň	0	0	,	0		004
SLOUGH 19	139.7				ŏ	Õ	ŏ	ò	ŏ	ń	ň	ň	Ň	ň	Ň	Ň		. ,	V	023 03B
SLOUGH 19	139.7				ŏ	ŏ	ŏ	. 0	ŏ	ŏ	ŏ	Ŏ	ŏ	ŏ	ň	Ň		Ň		051
SLOUGH 19	139.7				ŏ	Ŏ	ŏ	ŏ	ĭ	ĭ	ŏ	ŏ	ŏ	ă	ŏ	ŏ	Č	ă	ň	063
SLOUGH 19	139.7				Ŏ	Ŏ	ŏ	Ŏ	ō	ō	ŏ	Ŏ	ŏ	ŏ	ŏ	0 0 0	Ŏ	ŏ	ŏ	075
SLOUGH 19	139.7			20 G	Ō	Ŏ	Ŏ	Ú	Ŏ	Ŏ	Ŏ	Ŏ	ŏ	ŏ	ŏ	ŏ	Ö	ŏ		087
SLOUGH 19	139.7				0	Ó	Ö	Ō	Ŏ	Ŏ	Ŏ	Ŏ	ŏ	0	Ŏ	Ŏ	Ò	ŏ		100
SLOUGH 19	139.7	100	10	04 G	0	0	0	Û	0	0	0	0	Ō	Ŏ	Ö	Ö	Ò	Ò	Ŏ	112
SLOUGH 20	140.0	100	ΛA	08 F	0	٥	0	0	0	0	Λ	0	Λ		۸	. 1			۸	007
SLOUGH 20	140.0	100	08	16 6	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	13	ŏ	13	ì	Ň		003 023
SLOUGH 20	140.0				ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	13 54	ŏ	13 54	Ò	ŏ		038
SLOUGH 20	140.0				ŏ	Ŏ	ŏ	ŏ	ŏ	ŏ	ž	ŏ	2	Ä	10	16	Č	ŏ		051
SLOUGH 20	140.0				Ŏ	Ŏ	Ŏ	Ŏ	Ŏ	Ŏ	ō	Ŏ	ō	ō	Ŏ	16	Ò	ŏ	ŏ	063
SLOUGH 20	140.0			13 6	0	0	Ō	0	Ó	0	Ö	Ŏ	Ŏ	i	Ŏ	i	i	Ò		075
SLOUGH 20	140.0			20 G	0	0	0	0	0	0	Ŏ	Ŏ	Ŏ	3	Ŏ	3	Ò	Ŏ	ŏ	087
SLDUGH 20	140.0	100	09	28 6	0	0	0	0	0	0	0	0	0	0	1	1	(	) 0		100
SLOUGH 20	140.0	100	10	04 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	111

Appendix Table 3-2. Continued.

					C	hinool	k	£c	ckey	}		Pink			Chum			coho		
Spawning Site	RH	5D 	Dati	SC	Live	Dead	Total	Live'	Dead	Total	Live	Dead	Total	Live	Dead	Total	Live	Dead	lotal	obs
SLOUGH 21	141.1	050	AO (	OR F	٥	٥	٥	٥	٥	٥	٨	٨	۸	2	۸	2	4	۸		667
SLOUGH 21	141.1	025	60	16 6	0	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	42	ŏ	42	ŏ	Õ	Ů	003
SLOUGH 21	141.1				0	0	Ò	11	Ō	11	Õ	Ō	Ŏ	258	17		Ŏ	ŏ	Ŏ	03B
SLOUGH 21 SLOUGH 21	141.1				0	Ŏ	Ŏ	11 28 28 47	Ŏ	11 28 28 49 53 20	Ŏ	Ŏ	Ŏ	258 151 260 131 36 22 38	17 51 19 27	275 202 279 158 38 23 43	Ŏ	0	0	050
SLOUGH 21	141.1				Ň	Ň	Ň	47	0	70	V	V	Ů	260	17	2/9	0	0	0	042
SLOUGH 21	141.1	100	09	20 6		ŏ	ŏ	53	ō	53	ŏ	0	ŏ	36	2,	38	ŏ	Õ		074 086
SLOUGH 21	141.1	100	99	28 6	Q	Ŏ	Ó	53 20 5	Ò	20	Ŏ	Ŏ	Ŏ	22	ī	23	Ŏ	ŏ	0	100
SLOUGH 21	141.1	100	) 10	04 6	0	0	0	5	0	5	0	0	0	38	5	43	0	Û	(	111
SLOUGH 22	144.5	100	08	08 6	0	0	0	0	0	٥	0	٥	0	0	٥	٥	٥	٥		003
SLOUGH 22	144.5	100	08	16 P	Ō	0	0	Ō	Ŏ	Ŏ	Ŏ	Ŏ	Ŏ	Ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	022
SLOUGH 22	144.5				•	0	0	0	0	0	0	0	Ó	20	4	24	Ŏ	Ŏ	0	037
SLOUGH 22 SLOUGH 22	144.5 144.5				Ŏ	0	Ü	0	0	0	Ŏ	Ŏ	Ŏ	ě	0	6	0	Õ		050
SLOUGH 22	144.5				ŏ	ŏ	ŏ	Ŏ	Ö	0	V	V	0	6 0 0	0 2 0 0	0	0	0		062
SLOUGH 22	144.5					ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	Ô	ŏ	ŏ	Ŏ	ŏ	ŏ		074 086
SLOUGH 22	144.5					0	0	0	0	Ō	Ŏ	Ō	Ŏ	Ŏ	Ŏ	Ŏ	Ŏ	ŏ	č	098
SLOUGH 22	144.5	100	10	04 6	0	0	0	0	0	0	0	0	0	0	0	0	0	0		111
SLOUGH 21A	145.3	100	08	16 G	0	٥	٥	٥	٥	6	۸	Δ	0		- 0		۸	۸	,	. 022
SLOUGH 21A	145.3	100	08	24 6	0	ō	Ŏ	ŏ	ě	ŏ	ŏ	ŏ	ŏ	ò		Ó	ŏ	0		022
SLOUGH 21A	145.3	100				0	Ó	0		Ō	Ŏ	Ō	Ŏ	Ŏ	0	ŏ	ŏ	ŏ		050
SLOUGH 21A SLOUGH 21A	145.3 145.3			06 G		0	0	Ŏ	Ò	0	0	0	0	0	0	0	0	0	0	062
SLOUGH 21A	145.3			13 6 20 6	0	V	V	V	0	Ŏ	0	0	0	Ŏ	0	0	Ŏ	Ŏ		074
SLOUGH 21A	145.3	CC	09	28 6	ú	ŏ	ŏ	۵	ŏ	Ŏ	Ň	0	0	0 0 0 0	0	0	0	0	0	086 098
SLOUGH 21A	145.3	CC	10	04 6	Ŏ	Ŏ	Ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	ŏ	Ŏ	ŏ	0		110

Appendix Table 3-3. Chinook salmon spawning ground surveys of selected streams and resultant tagged to untagged ratios, 1995.

						thorn	laon tagged			nshine			C	urry	
Spawning Site	river mile	date	survey conditions	tagged	un-		tag/untag ratio	tagged	un- tagged	total	tag/untag ratio	tagged	un- tagged	total	tag/untag ratio
ALEIANDER CREEK	10.1	07 13	F	0	4	4	0.0	0	4	4	0.0	0	4	4	0.0
YENTNA RIVER FISH CREEK YENTNA RIVER FISH CREEK YENTNA RIVER FISH CREEK	28.0 28.0 28.0	07 05 07 12 07 19	E E	1 3 0	11 8 15	12 11 1 <b>5</b>	0.091 0.375 0.0	0 0 0	12 11 1 <b>5</b>	12 11 15	0.0 0.0 0.0	0 0 0	12 11 15	12 11 15	0.0 0.0 0.0
ALACHULITNA RIVER	28.0	07 22	EG	6	1351	1357	0.004	0	1357	1357	0.0	0	1357	1357	0.0
ESHKA RIVER NEST FORK ESHKA RIVER MOOSE CREEK	40.6 40.6	07 <u>22</u> 07 30	FG G	86 53	3978 3441	4064 3494	0.022 0.015	3	4061 3490	4064 3494	0.001 0.001	12 1	4052 3493	4064 3494	0.003
CASWELL CREEK	64.0	07 17	F	2	21	23	0.095	2	21	23	0.095	0	23	23	0.0
HEEP CREEK HEEP CREEK	66.1 66.1	07 11 07 17	F 6	0	3	3	0.0 0.0	0	2	3	0.0	0	3	3 6	0.0
GOOSE CREEK GOOSE CREEK GOOSE CREEK GOOSE CREEK	72.0 72.0 72.0 72.0	07 11 07 11 07 17 07 28	P E E	0 0 0	15 29 27 2	15 29 27 2	0.0 0.0 0.0 0.0	0 2 1 0	15 27 26 2	15 29 27 2	0.0 0.074 0.038 0.0	0 0 1 0	15 29 26 2	15 29 27 2	0.0 0.0 0.038 0.0
IONTANA CREEK IONTANA CREEK IONTANA CREEK IONTANA CREEK IONTANA CREEK IONTANA CREEK	77.0 77.0 77.0 77.0 77.0 77.0	07 11 07 17 07 17 07 28 08 01 08 02	F6 P E 6E 6	0 0 0 1 4 2	31 2 99 20 226 737	31 2 99 21 230 739	0.0 0.0 0.0 0.050 0.018 0.003	0 0 8 4 8	31 2 91 17 222 722	31 99 21 230 739	0.0 0.0 0.088 0.235 0.036 0.023	1 0 1 0 3	30 2 98 21 227 738	31 2 99 21 230 739	0.033 0.0 0.010 0.0 0.013 0.001
RABIDEUX CREEK RABIDEUX CREEK RABIDEUX CREEK	83. 1 83. 1 83. 1	07 10 07 16 07 28	6 F E	0 0 1	14 3 113	14 3 114	0.0 0.0 0.009	7 1 8	7 2 106	14 3 114	1.0 0.500 0.075	0 0 1	14 3 113	14 3 114	0.0 0.0 0.009

Appendix Table 3-3 (Continued).

					Chinook	29) <b>8</b> 00	tagged to u	ntagged r	atios, 19	85					
Spawning Site	river pile	date	survey conditions		Flathorn un- tagged	total	tag/untag ratio	tagged		nshine total	tag/untag ratio	tagged	untagg	Curry ed total	tag/untag ratio
SUNSHINE CREEK SUNSHINE CREEK	85.1 85.1	07 10 07 16	E 6	5 0	26 2	31 2	0.192 0.0	7	24 2	31 2	0.292 0.0	0	31 2	31 2	0.0
BIRCH CREEK BIRCH CREEK BIRCH CREEK BIRCH CREEK	89.2 89.2 89.2 89.2	07 28 08 07 08 15 08 23	E 6 E	0 0 0	5 16 5 5	5 16 5 5	0.0 0.0 0.0 0.0	0 0 0 1	5 16 5 4	5 16 5 5	0.0 0.0 0.0 0.250	0 0 0	5 16 5 5	5 16 5 5	0.0 0.0 0.0 0.0
TRAPPER CREEK TRAPPER CREEK TRAPPER CREEK	91.5 91.5 91.5	07 11 07 11 08 07	E EF BF	0 0 0	17 3	17 3	0.0 0.0 0.0	1 2 0	15 3	17 3	0.250 0.133 0.0	0 0 0	17 3	17 3	0.0 0.0 0.0
BYERS CREEK	98.7	07 27	E	0	3	3	0.0	0	3	3	0.0	0	3	3	0.0
CHULITMA RIVER MIDDLE FORK Chulitma River Middle Fork	98.7 98.7	07 27 08 06	6 6	7	3032 447	3039 447	0.002 0.0	56 4	2983 443	3039 447	0.019 0.009	0	3039 447	3039 447	0.0 0.0
PRAIRIE CREEK PRAIRIE CREEK	98.7 98.7	07 19 07 28	6	2 1	1191 1940	1193 1941	0.002 0.001	18 61	1175 1880	1193 1941	0.015 0.032	0	1193 1941	1193 1941	0.0
TROUBLESOME CREEK	98.7	07 27	E	0	23	23	0.0	2	20	23	0.150	0	23	23	0.0
WHISKERS CREEK WHISKERS CREEK	101.4 101.4	07 21 08 02	E 6	0	13 3	14	0.077 0.0	0	13 3	14 3	0.077 0.0	0	14 3	14 3	0.0 0.0
Chase Creek Chase Creek	106.9 106.9	07 21 07 27	E E	0	31 1	31 1	0.0 0.0	1 0	30 1	31 1	0.033 0.0	1 0	30 1	31 1	0.033 0.0

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Chinook salmon tagged to untagged ratios, 1985

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Spawning Site	river mile	date	survey conditions	tagged	un- tagged	total	tag/untag ratio	tagged	un- tagged	total	tag/untag ratio	tagged	un- tagged	total	tag/untag ratio
LANE CREEK LANE CREEK LANE CREEK LANE CREEK	113.6 113.6 113.6 113.6	07 21 07 27 08 02 08 11	E E E	0	17 5 6 2	17 5 6 2	0.0 0.0 0.0 0.0	0 0 3	14 5 6 2	17 5 4 2	0.214 0.0 0.0 0.0	0	17 5 6 2	17 5 6 2	0.0 0.0 0.0 0.0
FIFTH OF JULY CREEK FIFTH OF JULY CREEK FIFTH OF JULY CREEK FIFTH OF JULY CREEK	123.7 123.7 123.7 123.7	07 20 07 26 08 02 08 09	E E E	1 0 0 0	17 21 11 1	18 21 11 1	0.059 0.0 0.0 0.0	1 0 1 0	17 21 10 1	18 21 11 1	0.059 0.0 0.100 0.0	9 4 1 0	9 15 10 1	18 21 11 1	1.000 0.400 0.100 0.0
FOURTH OF JULY CREEK	131.0 131.0 131.0 131.0	07 26 08 02 08 09 08 17 08 28	E 6 6 6	0 0 0 0	5 20 7 1 2	5 20 7 1 2	0.0 0.0 0.0 0.0 0.0	1 0 1 0	20 6 1 2	5 20 7 1 2	0.250 0.0 0.167 0.0 0.0	1 2 1 0 0	18 6 1 2	5 20 7 1 2	0.250 0.111 0.167 0.0 0.0
GOLD CREEK	136.7	07 30	6	0	22	22	0.0	1	21	22	0.048	4	18	22	0.222
INDIAN RIVER INDIAN RIVER INDIAN RIVER INDIAN RIVER INDIAN RIVER INDIAN RIVER	138.6 138.6 138.6 138.6 138.6 138.6	07 18 07 19 07 26 08 01 08 08 08 24	E E E 6	0 0 1 0 0	263 115 161 110 24	263 115 162 110 24	0.0 0.006 0.0 0.0 0.0	6 4 8 7 2 0	257 111 154 103 22 1	263 115 162 110 24	0.023 0.036 0.052 0.068 0.091 0.0	9 14 9 1	254 107 148 101 23 0	263 115 162 110 24	0.035 0.075 0.095 0.089 0.044 0.0
PORTAGE CREEK	148.9 148.9 148.9 148.9 148.9 148.9	07 18 07 19 07 25 07 26 08 01 08 08 08 24	BRBBBBB	0 0 0 0 0	147 19 261 22 210 3	147 19 261 22 210 3 2	0.0 0.0 0.0 0.0 0.0	5 0 7 0 9	142 19 254 22 201 3	147 19 261 22 210 3	0.035 0.0 0.028 0.0 0.045 0.0	9 0 14 0 22 3 0	138 19 247 22 188 0	147 19 261 22 210 3	0.065 0.0 0.057 0.0 0.117 0.0

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Appendix Table 3-4. Chinook salmon spawning ground surveys of selected sloughs and resultant tagged to untagged ratios, 1985.

## Chinook salaon tagged to untagged ratios, 1985

						thorn				unshi n <del>e</del>				urry	
Spawning Site	river mile	date	survey conditions	tagged	un- tagged	total	tag/untag ratio	tagged	un- tagged	total	tag/untag ratio	tagged	un- tagged	total	tag/untag ratio
SHEEP CREEK SLOUGH SHEEP CREEK SLOUGH SHEEP CREEK SLOUGH	66.1 66.1 66.1	07 11 07 17 07 28	P 6 F6	0 6	45 251 5	45 257 5	0.0 0.024 0.0	3 B 0	42 249 5	45 257 5	0.071 0.032 0.0	0 1 0	45 256 5	45 257 5	0.0 0.004 0.0
BIRCH CREEK SLOUGH BIRCH CREEK SLOUGH BIRCH CREEK SLOUGH BIRCH CREEK SLOUGH BIRCH CREEK SLOUGH BIRCH CREEK SLOUGH	88.4 86.4 86.4 88.4 88.4	07 10 07 16 07 28 08 07 08 15 08 23	6 8 F6 E F F6	3 2 0 0 0 0	11B 396 291 107 12	121 398 291 107 12	0.025 0.005 0.0 0.0 0.0 0.0	10 19 28 10 1	111 379 263 97 11	121 398 291 107 12 6	0.090 0.050 0.106 0.103 0.091	1 0 1 0 0	120 398 290 107 12	121 398 291 107 12	0.008 0.0 0.003 0.0 0.0

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Appendix Table 3-5. Sockeye salmon spawning ground surveys of selected streams and resultant tagged to untagged ratios, 1985.

Sockeye	541 <b>a</b> on	tagged	t٥	untagged	ratios,	1985

	Spawning Site         river eile date conditions         survey un tagged tagged total ratio         tagged tagged tagged tagged total ratio         tagged														
	Fiver		SUPVAV		un-	Flathor			IIA-	Sunshine			un-	Curr	y tao/unta
Spawning Site	eile	date	conditions	tagged		total		tagged		total		tagged		total	
ALEXANDER CREEK	10.1	07 13	F	0	3	3	0.0	0	3	3	0.0	0	3	3	0.0
FISH CRK RED SHIRT LAKE DOWN	13.5	08 2B	E	4	132	136	0.030	0	136	136	0.0	0	136	136	0.0
YENTNA RIVER FISH CREEK YENTNA RIVER FISH CREEK	28.0 28.0	07 12 07 19	E	7 34	36 1703	43 1737	0.194 0.020	0	43 1737	43 1737	0.0	0	43 1737	43 1737	0.0 0.0
SHELL CREEK	28.0	08 27	6	0	1	1	0.0	0	1	1	0.0	0	1	1	0.0
CASWELL CREEK	64.0	07 17	F	0	1	1	0.0	0	1	i	0.0	0	1	ı	0.0
BOOSE CREEK	72.0	07 11	E	0	1	1	0.0	0	1	ı	0.0	0	1	1	0.0
SUNSHINE CREEK	85.1	09 02	E	0	1	1	0.0	0	1	1	0.0	0	1	1	0.0
BIRCH CREEK BIRCH CREEK	89.2 89.2	00 07 09 02	6 E	0	3 1	3	0.0	0	3	3	0.0	0	3 1	3 1	0.0
TRAPPER CREEK	91.5	08 07	GF	1	3	4	0.333	0	4	4	0.0	0	4	4	0.0
CACHE CREEK CACHE CREEK CACHE CREEK	95.5 95.5 95.5	08 07 09 02 09 10	6 F6 6	0 0 1	1 2 6	1 2 7	0.0 0.0 0.167	0 0 1	1 2 6	1 2 7	0.0 0.0 0.167	0 0 1	1 2 6	1 2 7	0.0 0.0 0.167
BYERS CREEK	97.8	OB 14	6	3	136	139	0.022	33	106	139	0.311	0	139	139	0.0

Appendix Table 3-5 (Continued).

## Sockeye saleon tagged to untagged ratios, 1985

						lathorn				Sunshi				Curry	A 4 4
Spawning Site	river	date	survey conditions	tagged	un- tagged	total	tag/untag ratio	tagged	un- tagged	total	tag/untag ratio	tagged	un- tagged	total	tag/untag ratio
PAPA BEAR LAKE INLET STREAM	97.8	07 19	6	17	382	399	0.045	34	345	399	0.093	0	399	399	0.0
PRAIRIE CREEK	97.8	07 19	6	0	5	5	0.0	0	5	5	0.0	0	5	5	0.0
TALKEETNA RIVER FISH CREEK	97.8	08 15	6	1	44	45	0.023	13	32	45	0.406	0	45	45	0.0
TOKOSITNA RIVER UNNAMED CREEK	97.8	08 22	F	0	12	12	0.0	4	8	12	0.500	0	12	12	0.0
INDIAN RIVER	138.6	08 23	6	0	2	2	0.0	0	2	2	0.0	0	2	2	0.0

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Appendix Table 3-6. Sockeye salmon spawning ground surveys of selected sloughs and resultant tagged to untagged ratios, 1985.

					So	ckey <b>e sa</b>	lmon tagged	to untag	ged ratios	s, 1985					
	-1		**************************************		แก-	Flathorn	tag/untag		un-	Sunshir	ne tag/untag		un-	Curry	tag/untag
Spawning Site	river mile	date	survey conditions	tagged	tagged	total	ratio	tagged	tagged	total	ratio	tagge	s tagged	total	ratio
BIRCH CREEK SLOUGH BIRCH CREEK SLOUGH BIRCH CREEK SLOUGH BIRCH CREEK SLOUGH BIRCH CREEK SLOUGH BIRCH CREEK SLOUGH BIRCH CREEK SLOUGH	88.4 88.4 88.4 88.4 88.4 88.4	07 16 07 28 08 07 08 23 09 02 09 10 09 25	6 F8 E F8 E E	0 4 0 0	31 207 2 1 2 2	31 211 2 1 2 2	0.0 0.0 0.019 0.0 0.0 0.0	0 2 45 0 0 0	29 166 2 1 2 2 2	31 211 2 1 2 2 2	0.0 0.049 0.271 0.0 0.0 0.0	0	3 31 211 2 1 2 2 2	3 31 211 2 1 2 2	0.0 0.0 0.0 0.0 0.0 0.0
PERDIDULA SLOUGH PERDIDULA SLOUGH PERDIDULA SLOUGH	97.1 97.1 97.1	09 02 09 10 09 25	FG F FG	1 4 0	69 60 11	70 64 11	0.014 0.067 0.0	13 8 2	57 56 9	70 64 11	0.228 0.143 0.222	0 0 0	70 64 11	70 64 11	0.0 0.0 0.0
SLOUGH 6A	112.3	09 02	E	0	1	1	0.0	0	1	1	0.0	0	i	1	0.0
BUSHROD SLOUGH	117.8	09 02	6	0	1	1	0.0	0	ı	1	0.0	0	1	1	0.0
SLOUGH 9C	121.9	09 23	6	0	1	i	0.0	0	1	1	0.0	0	1	1	0.0
SLOUGH 88	122.2	09 23	6	0	2	2	0.0	0	2	2	0.0	0	2	2	0.0
SLOUGH BA SLOUGH BA SLOUGH BA SLOUGH BA SLOUGH BA SLOUGH BA SLOUGH BA SLOUGH BA SLOUGH BA	125.4 125.4 125.4 125.4 125.4 125.4 125.4 125.4	08 09 08 16 08 22 08 29 09 05 09 12 09 20 09 27 10 03	E 6 6 E E 6	0 0 2 1 4 6 2 2	54 39 112 128 157 140 110 48	54 39 114 129 161 146 112 50	0.0 0.018 0.008 0.025 0.043 0.018 0.042 0.056	8 19 16 16 11	46 31 95 111 145 135 106 46 18	54 39 114 129 161 146 112 50	0.174 0.258 0.200 0.162 0.110 0.081 0.057 0.087	7 8 15 17 14 9 4 3	47 31 99 112 147 138 108 47	54 39 114 129 161 146 112 50 19	0.149 0.258 0.152 0.152 0.095 0.058 0.037 0.064

Appendix Table 3-6 (Continued).

Sockeye salmon tagged to untagged ratios, 1985

Spanning Site	river mile	date	survey conditions	tagged	nu-	lathorn total	tag/untag ratio	tagged	un- tagged	Sunshin <del>e</del> total	tag/untag ratio	tagged	un- tagged	Curry total	tag/untag ratio
SLOUGH B SLOUGH B SLOUGH B SLOUGH B	126.3 126.3 126.3 126.3	0B 29 09 05 09 12 09 20	6 6 6 E	0 0 0	2 5 1	2 5 1 1	0.0 0.0 0.0 0.0	0 0 0	2 5 1 1	2 5 1 1	0.0 0.0 0.0 0.0	1 4 1 0	1 1 0 1	2 5 1 1	1.000 4.000 
SLOUGH 11 SLOUGH 11 SLOUGH 11 SLOUGH 11 SLOUGH 11 SLOUGH 11 SLOUGH 11 SLOUGH 11	135.3 135.3 135.3 135.3 135.3 135.3 135.3	0B 15 0B 22 0B 29 09 05 09 12 09 19 09 26 10 03	6 6 6 6 6	2 4 4 0 5 13 2 2	7 66 285 498 664 659 382 145	70 289 498 669 672 384 147	0.286 0.061 0.014 0.0 0.008 0.020 0.005 0.014	3 15 56 80 98 85 41 12	55 233 418 571 587 343 135	70 289 498 669 672 384 147	0.500 0.273 0.240 0.191 0.172 0.145 0.120 0.089	0 9 32 59 72 54 18	61 257 439 597 618 366 139	9 70 289 498 669 672 384 147	0.0 0.148 0.125 0.134 0.121 0.087 0.049 0.058
SLOUGH 19	139.7	08 16	6	0	1	i	0.0	0	1	1	0.0	0	1	i	0.0
SLOUGH 21 SLOUGH 21 SLOUGH 21 SLOUGH 21 SLOUGH 21 SLOUGH 21 SLOUGH 21	141.1 141.1 141.1 141.1 141.1 141.1	08 24 08 30 09 06 09 13 09 20 09 28 10 04	E E E G G G G G	1 1 1 1 0 0	10 27 27 46 52 20 5	11 28 28 47 53 20 5	0.100 0.037 0.037 0.022 0.019 0.0	2 5 6 5 9 4 0	9 23 22 42 44 16 5	11 29 28 47 53 20 5	0.222 0.217 0.273 0.119 0.205 0.250 0.0	0 2 5 2 1 0	11 26 23 45 52 20 5	11 28 28 47 53 20 5	0.0 0.077 0.217 0.044 0.019 0.0

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Appendix Table 3-7. Pink salmon spawning ground surveys of selected streams and resultant tagged to untagged ratios, 1985.

					Pi	nk salmo	n tagged to	untagged	ratios, i	1985					
	river		entisea		Flathor un-		tag/untag	tag/untag	44	un-	urry	tag/untag			
Spawning Site	aile	date	conditions	tagged	tagged	total	ratio	tagged	tagged	total	ratio	tagges	tagged	COLAI	ratio
TALACHULITNA RIVER TALACHULITNA RIVER	28.0 28.0	07 22 08 27	EG PF	0	27	28	0.0 0.037	0	4 28	<b>4</b> 28	0.0	0	<b>4</b> 28	4 28	0.0 0.0
YENTNA RIVER LAKE CREEK	28.0	08 26	F	1	11	12	0.091	0	12	12	0.0	0	12	12	0.0
DEGHKA REVER MOOSE CREEK	40.6	07 30	6	0	1	1	0.0	0	1	1	0.0	0	1	1	0.0
WILLOW CREEK	49.1	07 28	6	0	34	34	0.0	0	34	34	0.0	0	34	34	0.0
CASWELL CREEK	64.0	08 08	F	0	16	16	0.0	0	16	16	0.0	0	16	16	0.0
SHEEP CREEK	66.1	08 08	F	0	4	4	0.0	0	4	4	0.0	0	4	4	0.0
GOOSE CREEK	72.0 72.0	07 17 07 28	E	0	2 1	2 1	0.0	0	2 !	2 1 2	0.0 0.0 1.000	0	2 1	1	0.0 0.0 0.0
GOOSE CREEK GOOSE CREEK	72.0 72.0	07 28 08 08	, <b>6</b>	ŏ	30	30	0.0 0.0	į	29	30	0.034	Ŏ	2 30	30	0.0
GOOSE CREEK Goose Creek	72.0 72.0	0B 16 0B 24	F B	0	3	3	0.0	0	3	3	0.0 0.0	. 0	2	3	0.0
MONTANA CREEK MONTANA CREEK	77.0 77.0	07 17 07 28	€ GE	2 1	8 29	10 30	0.250 0.034	0	10 26	10 30	0.0 0.154	0	20 10	10 30	0.0 0.0 0.0
MONTANA CREEK	77.0	OB 24	P	0	1	1	0.0	0	1	1	0.0	0	1	ı	0.0
SUNSHINE CREEK SUNSHINE CREEK	85.1 85.1	07 16 07 27	GE GE	0 2	17 41	17 43	0.0 0.049	5	12 40	17 43	0.417 0.075	0	17 43	17 43	0.0 0.0
SUNSHINE CREEK SUNSHINE CREEK	85.1 85.1	08 07 08 16	E	1	73 9	74 9	0.014 0.0	12 4	62 5	74 9	0.194 0.800	0	74	74 9	0.0 0.0
SUNSHINE CREEK	85. i	61 80	FP	ŏ	69	69	0.0	19	50	69	0.380	0	69	69	0.0

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Appendix Table 3-7 (Continued).

Pink salmon tagged to untagged ratios, 1985

		river		FILFUOY		un- Fl	athorn	tag/untag		Sur un-	nshine	tag/untag		un-	Curry	tag/untag
_	Spawning Site	aile	date	survey conditions	tagged	tagged	total	ratio	tagged	tagged	total	ratio	tagged	tagged	total	ratio
	91RCH CREEK BIRCH CREEK BIRCH CREEK BIRCH CREEK BIRCH CREEK	89.2 89.2 89.2 89.2 89.2	07 28 08 07 08 15 08 23 09 02	E 00E E	0 0 3 2 0	3 117 561 500 17	3 117 564 502 17	0.0 0.0 0.005 0.004 0.0	0 21 134 83 0	3 96 430 419 17	3 117 564 502 17	0.0 0.219 0.317 0.198 0.0	0	3 117 564 502 17	3 117 564 502 17	0.0 0.0 0.0 0.0
	TRAPPER CREEK	91.5	08 07	6F	0	31	31	0.0	6	25	31	0.240	0	31	31	0.0
	TRAPPER CREEK	91.5	OB 15	F	0	1	1	0.0	1	0	1		0	1	1	0.0
	CACHE CREEK	95.5	08 07	6	0	3	3	0.0	0	3	3	0.0	0	3	3	0.0
	TALKEETNA RIVER FISH CREEK TALKEETNA RIVER FISH CREEK	97.8 97.8	08 15 08 22	6 6	2 4	291 157	293 161	0.007 0.025	69 21	224 140	293 161	0.308 0.150	0	292 161	293 161	0.003 0.0
	CHASE CREEK CHASE CREEK CHASE CREEK	106.9 106.9 106.9	07 21 08 13 08 20	, 6 E	2 0 0	2 1 1	1	1.000 0.0 0.0	0 1 0	4 0 1	1 1	0.0  0.0	0 0 0	1 1	1 1	0.0 0.0 0.0
	GASH CREEK BASH CREEK	111.6 111.6	08 18 08 25	6 E	0	1 2	1 2	0.0	0	1 1	1 2	0.0 1.000	. 0	1 2	1 2	0.0
	LANE CREEK LANE CREEK LANE CREEK LANE CREEK LANE CREEK	113.6 113.6 113.6 113.6 113.6	08 02 08 11 08 18 08 25 09 02	E G E	0 0 1 0	97 124 67 2	97 125 67 2	0.0 0.0 0.08 0.0	1 19 22 7 0	5 78 103 60 2	97 125 67 2	0.200 0.244 0.214 0.117 0.0	1 12 9 6	5 85 116 61 2	97 125 67 2	0.200 0.141 0.078 0.098 0.0
ı	MAGGOT CREEK	113.6	08 18	6	0	4	4	0.0	0	4	4	0.0	3	i	4	3.000
_	CLYDE CREEK CLYDE CREEK	113.8 113.8	08 18 08 25	E E	0	7 2	7 2	0.0 0.0	0	7 2	7 2	0.0 0.0	2 0	5 2	7 2	0.400 0.0

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Appendix Table 3-7 (Continued).

2	*					Diat	salmon tagg	ad to unt	anned mak	ioe 100	•				
					Fla	thorn	seraun cayy	60 fo aut		nshine	J			Curry	
Spawning Site	river mile	date	survey conditions	tagged	un- tagged	total	tag/untag ratio	tagged	un- tagged	total	tag/untag ratio		un- tagged	total	tag/untag ratio
LOWER MCKENZIE CREEK	116.2	08 18	6	0	3	3	0.0	0	3	3	0.0	0	3	3	0.0
UPPER MCKENZIE CREEK UPPER MCKENZIE CREEK	116.7 116.7	0B 18 08 25	G E	0	2 1	2 1	0.0	0	2 1	2 1	0.0 0.0	0 .	2 1	2 1	0.0
LITTLE PORTAGE CREEK LITTLE PORTAGE CREEK	117.7 117.7	0B 11 0B 18	E 6	0	^ 1 6	1 6	0.0	0	1 6	1 6	0.0	<u>3</u>	3	1 6	0.0 1.00
FROMUNDA CREEK	119.3	08 25	£	0	3	3	0.0	0	3	3	0.0	1	2	3	0.500
FIFTH OF JULY CREEK FIFTH OF JULY CREEK FIFTH OF JULY CREEK FIFTH OF JULY CREEK	123.7 123.7 123.7 123.7	08 02 08 09 08 18 08 25	E G E	0 0 0	3 21 35 13	3 21 35 13	0.0 0.0 0.0 0.0	0 7 4 1	3 14 31 12	3 21 35 13	0.0 0.500 0.129 0.083	0 5 10 3	3 16 25 10	3 21 35 13	0.0 0.313 0.400 0.300
SKULL CREEK	124.7	08 22	E	0	2	3	0.0	2	1	2	2.000	1 .	.3	3	0.500
SHERMAN CREEK SHERMAN CREEK SHERMAN CREEK SHERMAN CREEK	130.8 130.8 130.8 130.8	08 09 08 17 08 22 08 29	6 6 6	0 0 0	10 3 1	10 3 1	0.0 0.0 0.0 0.0	2 2 1 0	10 2 1	8 12 3 1	0.333 0.200 0.500 0.0	1 0 0	7 11 3 1	B 12 3 1	0.143 0.091 0.0 0.0
FOURTH OF JULY CREEK FOURTH OF JULY CREEK FOURTH OF JULY CREEK FOURTH OF JULY CREEK FOURTH OF JULY CREEK	131.0 131.0 131.0 131.0	0B 02 0B 05 0B 17 0B 22 0B 25	6 6 F	0 1 0 3 0	12 174 92 74	12 17 <b>5</b> 92 77 4	0.0 0.006 0.0 0.041	2 40 11 13 0	10 135 B1 64 4	12 175 92 77	0.200 0.296 0.136 0.203 0.0	1 23 12 13 0	11 152 80 64	12 175 92 77 4	0.091 0.151 0.150 0.203 0.0
GOLD CREEK	136.7	0B 19	6	0	2	2	0.0	0	2	2	0.0	ļ	1	2	1.000

--- DENOTES 1/0

Appendix Table 3-7 (Continued).

Pink salmon tagged to untagged ratios, 1985

	river		zni. Ash		Flath		tag/untag		nu-	ınshine	tag/untag		un-		tag/untag
Spawning Site	aile	date	conditions	tagged	tagged	total	ratio	tagged	tagged	total	ratio	tagged	tagged	total	ratio
INDIAM RIVER INDIAN RIVER INDIAN RIVER INDIAN RIVER INDIAN RIVER	138.6 138.6 138.6 138.6 138.6	07 26 08 01 08 08 08 24 08 30	E E E G G	0 0 1 0	12 46 644 339 7	12 46 645 339 7	0.0 0.0 0.002 0.0 0.0	0 7 93 3 0	12 39 552 336 7	12 46 645 339 7	0.0 0.179 0.168 0.009 0.0	B9	12 35 556 332 7	12 46 645 339 7	0.0 0.314 0.160 0.021 0.0
PORTAGE CREEK PORTAGE CREEK PORTAGE CREEK	148.9 148.9 148.9	08 01 08 08 08 24	E E 6	0 0 0	9B 1	1 98 1	0.0 0.0 0.0	1 11 0	0 87 1	1 98 1	0.126 0.0	0 18 0	80 1	98 1	0.0 0.225 0.0

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Pink salmon tagged to untagged ratios, 1985

								••	•						
Spawning Site	river mile	date	Survey conditions	tagged	un-	athorn total	tag/untag ratio	tagged	un- tagged	Sunshine total	tag/untag ratio	tagged	un- tagged	Curry total	tag/untag ratio
SHEEP CREEK SLOUGH SHEEP CREEK SLOUGH	66.1 66.1	07 17 08 08	6 F6	0	10 62	10 62	0.0	0	10 62	10 62	0.0	0	10 58	10 62	0.0 0.069
BIRCH CREEK SLOUGH BIRCH CREEK SLOUGH BIRCH CREEK SLOUGH BIRCH CREEK SLOUGH BIRCH CREEK SLOUGH BIRCH CREEK SLOUGH	88.4 88.4 88.4 88.4 88.4	07 16 07 28 08 07 08 15 08 23 09 02	6 F6 F F6 E	0 0 0 0	41 748 2833 457 110	748 2833 457 110	0.0 0.0 0.0 0.0 0.0 0.0	2 7 17 5 2	39 741 2816 452 108	41 748 2833 457 110 3	0.051 0.009 0.006 0.011 0.019	8 97 486 94 17 0	33 661 2347 363 93	41 748 2833 457 110	0.242 0.132 0.207 0.259 0.183 0.0
SLOUGH 9	128.3	08 29	6	0	1	ı	0.0	0	1	1	0.0	0	i	1	0.0
SLOUGH 20	140.0	08 30	E	0	2	2	0.0	0	2	2	0.0	0	2	2	0.0

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Appendix Table 3-9. Chum salmon spawning ground sunlys .. beleted solms free fant ged untagged ratios, 1985.

Chum salmon tagged to untagged ratios, 1985

					Flath	orn.	1 to=1			unshine	(0)			shine (B	) /		Cur		/u
Spanning Site	river	date	survey conditions	tagged	un- tagged	total	tag/untag ratio	tagged	un- tagged	total	tag/untag ratio	tagged	un- tagged	total	tag/untag ratio	tagged	un- tagged	total	tag/untag ratio
TALACHULITNA RIVER TALACHULITNA RIVER	28.0 28.0	07 22 08 27	E6 PF	0	2 1	2 1	0.0 0.0	0	2	2 1	0.0	0	2 1	2 1	0.0 0.0	0	2 1	2 1	0.0 0.0
YENTNA RIVER LAKE CREEK	28.0	08 26	F	2	48	50	0.042	0	50	50	0.0	0	50	50	0.0	0	50	50	0.0
DESHKA RIVER MODSE CREEK	40.6	07 30	6	0	1	1	0.0	0	1	1	0.0	0	1	1	0.0	0	1	1	0.0
NILLON CREEK	49.1	07 28	6	0	13	13	0.0	0	13	13	0.0	0	13	13	0.0	0	13	13	0.0
CASWELL CREEK	64.0	09 11	F6	0	4	4	0.0	0	4	4	0.0	0	4	4	0.0	0	4	4	0.0
SHEEP CREEK SHEEP CREEK	66.1 66.1	08 08 08 24	F PF	0	1	1	0.0	1	1	0 1	0.0 0.0	0	i	1	0.0 0.0	0	1	1	0.0 0.0
GOOSE CREEK GOOSE CREEK GOOSE CREEK GOOSE CREEK GOOSE CREEK GOOSE CREEK GOOSE CREEK	72.0 72.0 72.0 72.0 72.0 72.0 72.0	07 17 07 28 08 08 08 16 08 24 09 03 09 11	EP 6+ 8 6 6	0	2 2 59 6 4 1	2 2 59 6 4	0.0 0.0 0.0 0.0 0.0 0.0	0 0 1 1 0	2 2 51 5 3 4	2 2 59 6 4	0.0 0.0 0.157 0.200 0.333 0.0	0	2 2 59 6 4 1	2 2 59 4 4	0.0 0.0 0.0 0.0 0.0 0.0	0	2 2 59 6 4 1	2 2 59 6 4 4	0.0 0.0 0.0 0.0 0.0 0.0
MONTANA CREEK MONTANA CREEK MONTANA CREEK MONTANA CREEK	77.0 77.0 77.0 77.0	07 28 09 03 09 11 09 18	GE G G F	0 0 0	3 1 4 1	3 1 4 1	0.0 0.0 0.0 0.0	0 0 0	3 1 4 1	3 1 4 1	0.0 0.0 0.0 0.0	0 0 0	3 1 4 1	3 1 4 1	0.0 0.0 0.0 0.0	0	3 1 4 1	3 1 4 1	0.0 0.0 0.0 0.0
SUNSHINE CREEK BUNGHINE CREEK	85.1 85.1	08 16 09 10	FP 6	0	3 1	3	0.0 0.0	0	3	3	0.0	0	3	3 1	0.0	0	3	3 1	0.0 0.0
SUNSHINE CREEK SUNSHINE CREEK	85.1 85.1	09 17 09 25	F F	0	3	3 1	0.0 0.0	1 0	2	3	0.500 0.0	0	3	1	0.0 0.0	0	3 1	3 1	0.0 0.0

Sunshine (0) denotes those fish tagged with orange tags prior to 21 July. Sunshine (B) denotes those fish tagged with blue tags after 21 July.

Chum salmon tagged to untagged ratios, 1985

	river		Survey		un-	Flathor	n tag/untag		un-	unshine (	(D) tag/untag		ua-	Sunshine	(B) tag/untag		un-	Curry	tag/untag
Spawning Site	aile	date	conditions	tagged	tagged	total	ratio	tagged	tagged	total		tagged	tagged	total	ratio	tagged	tagged		ratio
BIRCH CREEK BIRCH CREEK	89.2 89.2	09 10 09 17	E F	0	3	3	0.0	0	2	8	0.0	0	2	2 8	0.0	0	2 8	2 8	0.0
CACHE CREEK	95.5 95.5 95.5 95.5 95.5 95.5	08 07 09 02 09 10 09 17 09 25 10 02	F6 6 P F	0 4 0 0 1	41 40 2 6 5	45 40 2 7 5	0.0 0.098 0.0 0.0 0.167 0.0	0 3 2 0 0	2 42 38 2 7 5	45 40 2 7 5	0.0 0.071 0.053 0.0 0.0 0.0	0 1 2 0 0	2 44 38 2 7 5	45 40 2 7 5	0.0 0.023 0.053 0.0 0.0 0.0	0	45 40 2 7 5	45 40 2 7 5	0.0 0.0 0.0 0.0 0.0
BYERS CREEK	97.8	08 14	6	2	6	8	0.333	2	6	8	0.333	0	8	8	0.0	0	8	8	0.0
TALKEETNA RIVER FISH CREEK TALKEETNA RIVER FISH CREEK	97.8 97.8	08 15 08 22	6	0	62 33	62 33	0.0	18	44 30	23 23	0.409 0.100	0	62 33	62 33	0.0	0	62 33	62 33	0.0
TOKOSITMA RIVER UNNAMED CREEK	97.6	08 22	F	0	8	8	0.0	0	8	8	0.0	0	8	8	0.0	0	8	8	0.0
SLASH CREEK	111.2	09 16	8	0	5	5	0.0	0	5	5	0.0	0	5	5	0.0	0	5	5	0.0
LAME CREEK	113.6	08 11	E	0	1	1	0.0	0	1	1	0.0	0	1	1	0.0	1	0	1	
LITTLE PORTAGE CREEK LITTLE PORTAGE CREEK	117.7 117.7	08 25 09 02	6	0	4	4	0.0	0	4	1	0.0	0	4	1	0.0	0	1 3	4	0.333
FIFTH OF JULY CREEK	123.7	09 05	6	0	2	3	0.0	0	3	3	0.0	0	3	3	0.0	0	3	3	0.0
SKULL CREEK	124.7	08 16	6	0	2	2	0.0	2	0	2	1.0	0	2	2	0.0	0	2	2	0.0
FOURTH OF JULY CREEK FOURTH OF JULY CREEK FOURTH OF JULY CREEK FOURTH OF JULY CREEK	131.0 131.0 131.0 131.0	08 09 08 17 08 22 08 29	6 6 6	0 1 0 0	43 139 48 23	43 140 48 23	0.0 0.007 0.0 0.0	28 2 2 2	37 112 46 21	43 140 48 23	0.162 0.250 0.043 0.095	0 0 0	43 140 48 23	43 140 48 23	0.0 0.0 0.0 0.0	10 10 9	41 130 39 23	43 140 48 23	0.049 0.077 0.231 0.0

Sunshine (0) denotes those fish tagged with orange tags prior to 21 July. Sunshine (B) denotes those fish tagged with blue tags after 21 July. --- DEMOTES I/O

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										••	•								
					Flathorn				Sunshine	(0)				shine (B			Cur	ry	
Spawning Site	river mile	date	survey conditions	tagged	un- tagged	total	tag/untag ratio	tagged	un- tagged	total	tag/untag ratio	tagged	un- tagged	total	tag/untag ratio	tagged	un~ tagged	total	tag/untag ratio
INDIAN RIVER	138.6 138.6 138.6 138.6 138.6 138.6 138.6 138.6	08 01 08 08 08 08 08 24 08 30 09 06 09 13 09 20 09 27	E P 6 6 6 6 F 6	0	17 65 36 425 331 139 54 12	17 65 36 425 331 139 54 12	0.0 0.0 0.0 0.0 0.0 0.0 0.0	2 6 0 31 16 7 1 0	15 59 36 394 315 132 53 12	17 65 36 425 331 139 54 12	0.133 0.102 0.0 0.079 0.051 0.053 0.019 0.0	0 0 0 4 4 0	17 65 36 425 327 135 54 12	17 65 36 425 331 139 54 12	0.0 0.0 0.0 0.012 0.030 0.0	1 0 27 9 9 2 0	16 57 36 398 322 130 32 12	17 65 36 425 331 139 54 12	0.063 0.140 0.0 0.068 0.028 0.069 0.038 0.0
PORTAGE CREEK Portage Creek Portage Creek	148.9 148.9 148.9	08 20 08 30 08 08	E P 6	0	14 6 1	14 6 1	0.0 0.0 0.0	9	11 6 1	14 6 1	0.273 0.0 0.0	0	14 6 1	14 6 1	0.0 0.0 0.0	.2 0 0	12 6 1	14 6 1	0.167 0.0 0.0

Sunshine (0) denotes those fish tagged with orange tags prior to 21 July. Sunshine (8) denotes those fish tagged with blue tags after 21 July.

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Appendix Table 3-10. Chum salmon spawning ground surveys of selected sloughs and resultant tagged to untagged ratios, 1985.

		Chue saleon tagged to untagged ratios, 1985																	
Spawning Site	river mile	date	survey conditions	tagged	un- tagged	Flathorn total	tag/untag ratio	tagged	un- tagged	Sunshin total	(0) tag/untag ratio	tagged	un- tagged	Sunshine total	tag/untag	tagged	un- tagged	Curry total	tag/untag ratio
SHEEP CREEK SLOUGH SHEEP CREEK SLOUGH SHEEP CREEK SLOUGH	66.1 66.1 66.1	08 08 09 03 09 11	F6 PF G	1 0 0	473	474 5	0.002 0.0 0.0	27 0 0	447 5 9	474 5	0.057 0.0 0.0	0	474 5	474 5 9	0.0 0.0 0.0	0	474 5 9	474 5 9	0.0 0.0 0.0
BIRCH CREEK SLOUGH	88. 4 88. 4 88. 4 88. 4 88. 4 88. 4 88. 4	07 16 07 28 08 07 08 15 08 23 09 02 09 10 09 17 09 25 10 03	FB FB FB	0 0 2 0 2 11 6 0	2 10 142 25 138 349 151 69 57	2 10 144 25 140 360 157 69 57	0.0 0.0 0.014 0.0 0.014 0.032 0.040 0.0	0 42 4 16 4 0 2	2 10 102 21 124 356 157 67 57	2 10 144 25 140 360 157 69 57	0.0 0.412 0.190 0.129 0.011 0.0 0.030	0 0 0 7 15 7 6	2 10 144 25 133 345 150 63 56	2 10 144 25 140 360 157 69 57	0.0 0.0 0.0 0.0 0.053 0.043 0.047 0.095 0.018	0	2 10 144 25 140 360 157 68 57	2 10 144 25 140 360 157 69 57	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.015
PERDIDULA SLOUGH PERDIDULA SLOUGH PERDIDULA SLOUGH PERDIDULA SLOUGH PERDIDULA SLOUGH	97.1 97.1 97.1 97.1 97.1	08 23 09 02 09 10 09 25 10 03	F6 F6 F F6 6	2 9 13 3 0	73 317 541 496 237	75 326 554 499 237	0.027 0.028 0.024 0.006 0.0	9 18 7 0	308 547 499 237	75 326 554 499 237	0.0 0.058 0.013 0.136	3 8 17 3 0	72 318 537 496 237	75 326 554 499 237	0.042 0.025 0.032 0.006 0.0	0 0 0 1	75 326 554 498 237	75 326 554 499 237	0.0 0.0 0.0 0.002 0.002
GLOUGH 1	99.6	09 17	E	0	2	2	0.0	0	2	2	0.0	0	2	2	0.0	0	2	2	0.0
SLOUGH 2 SLOUGH 2	100.2 100.2	09 24 10 01	6	0	13 15	13 15	0.0	0	13 15	13 15	0.0	0	13 15	13 15	0.0	0	13 15	13 15	0.0
BLONGH 38	101.4	09 24	6	0	1	1	0.0	0	1	1	0.0	0	1	1	0.0	0	1	1	0.0
SLOUGH 3A	101.9	09 24	6	0	2	2	0.0	0	2	2	0.0	0	2	2	0.0	0	2	2	0.0

Sunshine (0) denotes fish earked with orange tags prior to 21 July. Sunshine (8) denotes fish earked with blue tags after 21 July.

Appendix Table 3-10 (Continued).

Chum salmon tagged to untagged ratios, 1985

	_1				un-	Flathor	n tag/untag		<b>un-</b>	Sunshi	ine (D) tag/untag		un-	Sunshin	(B) tag/untag		un-	Curry	tag/untag
Spawning Site	river alle	date	survey conditions	tagged	taggná	total	ratio	tagged	tagged	total	ratio	tagged		total	ratio	tagged	tagged		ratio
SLOUGH 8 SLOUGH 8 SLOUGH 8 SLOUGH 8 SLOUGH 8 SLOUGH 8	113.7 113.7 113.7 113.7 113.7 113.7	08 18 08 25 09 02 09 09 09 23 09 30	e e e e e e e e e e e e e e e e e e e	0 1 1 0 0	24 46 46 26 26 5	24 47 47 26 26 5	0.0 0.022 0.022 0.0 0.0 0.0	4 4 3 0 0	20 43 44 26 26 5	24 47 47 26 26 5	0.200 0.093 0.068 0.0 0.0	0 4 0 0	24 47 43 26 26 5	24 47 47 26 26 5	0.0 0.0 0.093 0.0 0.0	1 4. 4 0 0	23 43 43 26 26 5	24 47 47 26 26 5	0.043 0.093 0.093 0.0 0.0 0.0
SLOUGH 80	121.8	09 16	6	0	1	1	0.0	0	1	1	0.0	i	0	ľ	••-	0	1	1	0.0
SLOUGH BC SLOUGH BC SLOUGH BC SLOUGH BC	121.9 121.9 121.9 121.9	08 25 09 16 09 23 09 30	E 6 6	0 0 0	2 6 47 27	2 6 47 27	0.0 0.0 0.0 0.0	0 0 0	2 6 47 27	2 6 47 27	0.0 0.0 0.0 0.0	0	2 6 47 27	2 47 27	0.0 0.0 0.0 0.0	0 0 0	2 6 47 27	2 47 27	0.0 0.0 0.0 0.0
SLOUGH 8B SLOUGH 8B SLOUGH 8B GLOUGH 8B	122.2 122.2 122.2 122.2 122.2	08 25 09 02 09 09 09 23 09 30	E 6 6	0 0 1 0	177 151 69 111 50	177 151 70 111 50	0.0 0.0 0.014 0.0 0.0	14 6 0 0	163 145 70 111 50	177 151 70 111 50	0.084 0.041 0.0 0.0 0.0	0 0 2 1 0	177 151 68 110 50	177 151 70 111 50	0.0 0.0 0.029 0.009 0.0	19 13 4 2 1	158 138 66 109 49	177 151 70 111 50	0.120 0.094 0.061 0.018 0.020
NOOSE SLOUGH NOOSE SLOUGH	123.5 123.5	09 02 09 09	6 6	0	2 21	2 22	0.0 0.048	0	22	22	0.0 0.0	0	22	22	0.0 0.0	0	22	22	0.0 0.0
SLOUGH A PRIME	124.6	08 16	6	0	1	1	0.0	0	i	1	0.0	0	1	ı	0.0	0	1	1	0.0
SLOUGH BA SLOUGH BA SLOUGH BA SLOUGH BA SLOUGH BA SLOUGH BA SLOUGH BA SLOUGH BA	125.4 125.4 125.4 125.4 125.4 125.4 125.4	08 09 08 16 08 22 08 29 09 05 09 12 09 20 09 27	F 6 6 F 6 F 6 F 6 F 6 F 6 F 6 F 6 F 6 F	0 0 0 0 1 1	41 68 292 221 174 94 108 26	41 68 292 221 174 95 109 26	0.0 0.0 0.0 0.0 0.0 0.011 0.009	11 9 29 10 4 0	30 59 263 211 170 95 109	41 68 292 221 174 95 109 26	0.367 0.153 0.110 0.047 0.024 0.0 0.0	0 0 0 1 2 3 0	41 68 292 220 172 92 109 26	41 68 292 221 174 95 109 26	0.0 0.0 0.0 0.005 0.012 0.033 0.0	7 6 25 15 0 2 2	34 62 267 206 174 93 107 26	41 68 292 221 174 95 109 26	0.206 0.097 0.094 0.073 0.0 0.022 0.019

Bunshine (B) denotes fish earked with orange tags prior to 21 July. Sunshine (B) denotes fish earked with blue tags after 21 July.

--- DENOTES 1/0

Chue saleon tagged to untagged ratios, 1985

										,	,								
Spawning Site	river mile	date	survey conditions	tagged	un- tagged	Flathorn total	tag/untag ratio	tagged	un- tagged	Sunshine total	tag/untag ratio	tagged	un- tagged	Sunshin total	e (B) tag/unta ratio	tagged	un- tagged		tag/untag ratio
SLOUGH B SLOUGH B SLOUGH B SLOUGH B	126.3 0	8 29 9 05 9 12 9 20	6 6 8	0 0 2 0	25 54 70 47	25 54 72 47	0.0 0.0 0.029 0.0	0 1 0	22 54 71 47	25 54 72 47	0.136 0.0 0.014 0.0	0 0 0	25 54 72 47	25 54 72 47	0.0 0.0 0.0 0.0	1 1 0	. 24 53 71 47	25 54 72 47	0.042 0.019 0.014 0.0
SLOUGH 9 SLOUGH 9 SLOUGH 9 SLOUGH 9	128.3 0/ 128.3 0/ 128.3 0/ 128.3 0/	8 29 9 05 9 19 9 27	6 6 E	0 0 0	61 18 6	61 18 6	0.0 0.0 0.0 0.0	4 0 0 0	57 19 6	61 19 6	0.070 0.0 0.0 0.0	0 0 0	61 6 19 6	61 6 19 6	0.0 0.0 0.0	B 2 0 0	53 4 18 6	61 19 6	0.151 0.500 0.0 0.0
SLOUGH 9A SLOUGH 9A SLOUGH 9A	133.0 0	9 05 9 26 0 03	P 6 6	0	11 116 47	11 118 47	0.0 0.0 0.0	0	11 118 47	110 110 47	0.0 0.0 0.0	0	11 118 47	11 118 47	0.0 0.0 0.0	0	118 118 47	11 118 47	0.0 0.0 0.0
SLOUGH 11 SLOUGH 11 SLOUGH 11 SLOUGH 11 SLOUGH 11 SLOUGH 11 SLOUGH 11 SLOUGH 11	135.3 135.3 135.3 135.3	0B 15 0B 22 0B 29 09 05 09 12 09 19 09 26 10 03	988E8888	0 0 0 1 1 0	52 336 485 270 145 114 56	52 336 485 270 146 115 56	0.0 0.0 0.0 0.0 0.007 0.009 0.0	9 28 29 10 1 0 0	43 308 456 260 145 115 56	52 334 485 270 146 115 56	0.209 0.091 0.064 0.03B 0.007 0.0	0 3 5 1 0 0	52 336 402 265 145 115 56	52 336 485 270 146 115 56	0.0 0.006 0.019 0.007 0.007 0.0	4 18 33 7 4 2 1	48 318 452 263 142 113 55	52 336 485 270 146 115 56	0.083 0.057 0.073 0.027 0.028 0.018 0.018
SLOUGH 16 SLOUGH 16 SLOUGH 16	137.3 137.3 137.3	08 16 08 24 08 30	F 6 E	0 0 0	· 2 4	2 8 4	0.0 0.0 0.0	0 2 1	2 6 3	2 8 4	0.333 0.333	0	2 0 4	2 8 4	0.0 0.0 0.0	0	2 8 4	2 8 4	0.0 0.0 0.0
SLOUGH 20 SLOUGH 20 SLOUGH 20 SLOUGH 20 SLOUGH 20 SLOUGH 20 SLOUGH 20	140.0 140.0 140.0 140.0 140.0	08 08 08 16 08 24 08 30 09 13 09 20	EGEEGG	0 0 0 0	13 54 6 1 3	1 13 54 6 1 3	0.0 0.0 0.0 0.0 0.0	0 1 5 0 0	1 12 49 6 1 3	1 13 54 6 1 3	0.0 0.083 0.102 0.0 0.0	0 0 0 0	1 13 54 6 1	13 54 6 1 3	0.0 0.0 0.0 0.0 0.0	0 2 1 0 0	1 11 53 6 1 3	13 54 6 1 3	0.0 0.182 0.019 0.0 0.0

Sunshine (0) denotes fish marked with orange tags prior to 21 July. Sunshine (8) denotes fish earked with blue tags after 21 July.

--- DENOTES 1/0

Chus saleon tagged to untagged ratios, 1985

	river		SULASA	FI	athorn ua-		tag/untag		Sunshine un-	(D)	tag/untag		Sunsi un-	hine (B)	tag/untag		Curi un-		tag/untag
Spawning Site	aile	date	conditions	tagged	tagged	total	rátio	tagged	tagged	total	ratio	tagged	tagged	total	ratio	tagged	tagged	total	ratio
SLOUGH 21 SLOUGH 21 SLOUGH 21 SLOUGH 21 SLOUGH 21 SLOUGH 21 SLOUGH 21 SLOUGH 21 SLOUGH 21 SLOUGH 21	141.1 141.1 141.1 141.1 141.1 141.1 141.1 141.1	OB O	#6####668	0 0 0 1 0 0	2 42 258 151 259 131 36 22 38	2 42 258 151 260 131 36 22 38	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	1 19 8 8 1 0	1 41 239 143 252 130 36 22 38	2 42 258 151 260 131 36 22 38	1.000 0.024 0.079 0.056 0.032 0.008 0.0	0 0 1 1 3 0 0	2 42 258 150 259 128 36 22 38	2 42 258 151 260 131 36 22 38	0.0 0.0 0.0 0.007 0.004 0.023 0.0 0.0	1 8 21 5 11 5 0	1 34 237 146 249 126 36 22 38	2 42 258 151 260 131 36 22 38	1.000 0.235 0.089 0.034 0.044 0.040 0.0
SLDUGH 21A	141.1	08 16	6	0	1	1	0.0	0	1	1	0.0	0	1	1	0.0	1	0	1	
SLOUGH 22 Slough 22	144.5 144.5	08 24 08 30	6	0	20 6	20 6	0.0 0.0	1	19 6	20	0.053 0.0	0	20	20 6	0.0 0.0	0	20 6	20 6	0.0 0.0

Sunshine (0) denotes fish marked with orange tags prior to 21 July. Sunshine (8) denotes fish marked with blue tags after 21 July.

--- DENOTES 1/0

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Appendix Table 3-11. Coho salmon spawning ground surveys of selected streams and resultant tagged to untagged ratios, 1985.

					Co	ho sala	on tagged to	o untagger	d ratios,	1985					
						thorn				unshine				Curry	
Spawning Site	river aile	date	survey conditions	tagged	un- tagged	total	tag/untag ratio	tagged	un- tagged	total	tag/untag ratio	tagged	un- tagged	total	tag/untag ratio
SHELL CREEK	28.0	08 27	6	3	198	201	0.015	0	201	201	0.0	0	201	201	0.0
TALACHULITNA RIVER	28.0	08 27	PF	0	7	7	0.0	0	7	7	0.0	0	7	7	0.0
NO NAME CREEK	31.7	08 26	FP	0	1	1	0.0	0	1	1	0.0	0	1	1	0.0
WHITSOL CREEK WHITSOL CREEK WHITSOL CREEK	35.2 35.2 35.2	08 09 08 18 08 27	F F6 F	2 7 8	22 300 277	24 307 285	0.091 0.023 0.029	0	24 307 285	24 307 285	0.0 0.0 0.0	0	24 307 285 17	24 307 285 17	0.0 0.0 0.0
WHITSOL CREEK	35.2	09 04	FP	1	16	17	0.063	0	17	17	0.0	0	17	17	0.0
DESHKA RIVER MOOSE CREEK	40.6	07 30	6	1	34	35	0.029	0	35	35	0.0	0	35	35	0.0
CASWELL CREEK CASWELL CREEK CASWELL CREEK	64.0 64.0 64.0	08 08 08 16 08 24	F FG F	0	67 51 233	67 52 237	0.0 0.020 0.017	0	67 52 234	67 52 237	0.0 0.0 0.013	0	. 67 52 237	67 52 237	0.0 0.0 0.0
CASNELL CREEK CASNELL CREEK	64.0 64.0	09 03 09 11	F& FG	10	228 119	238 122	0.044 0.025	7 9	231 113	238 122	0.030 0.06B	0	238 122	238 122	0.0
GOOSE CREEK GOOSE CREEK	72.0 72.0	08 08 80 80	6 F	0	4 10	4 10	0.0 0.0	0 2	4 B	4 10	0.0 0.250	0	4 10	4 10	0.0
600SE CREEK 600SE CREEK	72.0 72.0	08 24 09 03	6	0	3 10	10 3 3	0.0	0	8 2 3	2	0.500 0.0	0	10 3 3	10 3 3	0.0
MONTANA CREEK Montana Creek	77.0 77.0	07 17 09 03	E G	0 1	1 6	17	0.0 0.167	0	17	17	0.0	0	17	17	0.0 0.0
MONTANA CREEK MONTANA CREEK	77.0 77.0	09 11 09 18	6 F	0	13 11	13 11	0.0 0.0	0	13 10	13 11	0.0 0.100	0	13 11	13 11	0.0

Coho salmon tagged to untagged ratios, 1985

								••	•						
Spawning Site	river aile	date	survey conditions	tagged	F1 un- tagged	athorn total	tag/untag ratio	tagged	Sur un- tagged	nshine total	tag/untag ratio	tagged	Cu un- tagged	rry total	tag/untag ratio
RABIDEUX CREEK RABIDEUX CREEK RABIDEUX CREEK	83.1 83.1 83.1	09 03 09 11 09 11	PF F PF	0 1 1	32 25 16	32 26 17	0.0 0.040 0.063	4	26 22 16	32 26 17	0.231 0.182 0.063	0 0 0	32 26 17	32 26 17	0.0 0.0 0.0
ANSWER CREEK Answer Creek Answer Creek	84.1 84.1 84.1	09 09 09 24 10 02	G F G	0 0 0	27 8 9	27 8 9	0.0 0.0 0.0	4 1 1	23 7 8	27 8 9	0.174 0.143 0.125	0 0 0	27 B 9	27 8 9	0.0 0.0 0.0
QUESTION CREEK QUESTION CREEK	84.1 84.1	09 24 10 02	6 6E	0	75 43	75 43	0.0	4 3	71 40	75 43	0.056 0.075	0	75 43	75 43	0.0
SUMSHINE CREEK SUMSHINE CREEK SUMSHINE CREEK SUMSHINE CREEK SUMSHINE CREEK SUMSHINE CREEK	85.1 85.1 85.1 85.1 85.1 85.1	08 07 08 16 08 16 09 02 09 10 09 17	E F FP F6 F	0 0 1 4	7 2 9 63 35	7 2 9 64 39 4	0.0 0.0 0.0 0.016 0.114 0.0	0 1 4 22 8 4	7 1 5 42 31 0	7 2 9 64 39	0.0 1.000 0.800 0.524 0.258	0 0 0 0 0	7 2 9 64 39	7 2 9 64 39	0.0 0.0 0.0 0.0 0.0
BIRCH CREEK BIRCH CREEK BIRCH CREEK BIRCH CREEK BIRCH CREEK	89.2 89.2 89.2 89.2 89.2	08 15 09 10 09 17 09 25 10 03	6 F G	0 0 0 0	2 9 13 14	2 9 13 14 6	0.0 0.0 0.0 0.0	0 1 3 3 0	2 8 10 11 6	2 9 13 14 6	0.0 0.125 0.300 0.273 0.0	0 0 0 0	2 9 13 14	2 9 13 14 6	0.0 0.0 0.0 0.0
TRAPPER CREEK TRAPPER CREEK	91.5 91.5	08 07 08 15	F F F	0	294 9	294 9	0.0	39 2	255 7	294 9	0.153 0.286	0	294 9	294 9	0.0
CACHE CREEK CACHE CREEK CACHE CREEK	95.5 95.5 95.5	09 02 09 25 10 02	F F G	0 0 0	2 2 2	2 2 2	0.0 0.0 0.0	0 0 0	2 2 2	2 2 2	0.0 0.0 0.0	0	2 2 2	2 2 2	0.0 0.0 0.0
BYERS CREEK	97.8	08 14	6	i	2	3	0.500	0	3	3	0.0	0	3	3	0.0
TALKEETNA RIVER FISH CREEK TALKEETNA RIVER FISH CREEK	97.8 97.8	08 15 08 22	6	0	13 55	13 55	0.0	3 13	10 42	13 55	0.300 0.310	0	13 55	13 55	0.0

Coho salmon tagged to untagged ratios, 1985

	*****		#11#11#11			thorn	***/****			unshine	***/***		Cur	ry	***/***
Spawning Site	river mile	date	survey conditions	tagged	un- tagged	total	tag/untag ratio	tagged	un- tagged	total	tag/untag ratio	tagged	un- tagged	total	tag/untag ratio
WHISKERS CREEK WHISKERS CREEK WHISKERS CREEK WHISKERS CREEK	101.4 101.4 101.4 101.4	08 27 09 03 09 10 09 17	6 P P	0	129 108 65 10	135 108 65 10	0.047 0.0 0.0 0.0	24 21 14 2	111 87 51 8	135 108 65 10	0.216 0.241 0.275 0.250	0 0 0	135 108 65 10	135 108 65 10	0.0 0.0 0.0 0.0
CHASE CREEK CHASE CREEK CHASE CREEK CHASE CREEK CHASE CREEK CHASE CREEK	106.9 106.9 106.9 106.9 106.9 106.9	0B 27 09 03 09 10 09 17 09 24 10 01	E 6	0 0 3 1 0	13 102 215 83 30 28	13 102 218 84 30 28	0.0 0.0 0.014 0.012 0.0	1 25 41 15 5 0	12 77 177 177 69 25 28	13 102 218 84 30 28	0.083 0.325 0.232 0.217 0.200	0 1 3 2 1 0	13 101 215 82 29 28	13 102 218 84 30 28	0.0 0.010 0.014 0.024 0.034
SLAGH CREEK SLASH CREEK	111.2 111.2	09 23 09 30	6	0	8 5	8 5	0.0	0	8	8 5	0.0 0.250	0	8 5	8 5	0.0
GASH CREEK GASH CREEK GASH CREEK GASH CREEK	111.6 111.6 111.6 111.6	09 16 09 16 09 23 09 30	6 6 6	0 1 0 0	46 23 13 14	46 24 13 14	0.0 0.043 0.0 0.0	6 2 2 0	40 22 11 14	46 24 13 14	0.150 0.091 0.182 0.0	0 0 0	46 24 13 14	46 24 13 14	0.0 0.0 0.0 0.0
LANE CREEK LANE CREEK	113.6 113.6	09 23 09 30	6	1 0	0	1	0.0	0	1	1	0.0	0	1	1 1	0.0
LOWER MCKENZIE CREEK LOWER MCKENZIE CREEK LOWER MCKENZIE CREEK LOWER MCKENZIE CREEK	116.2 116.2 116.2 116.2	09 09 09 16 09 23 09 30	6 E 6	0 0 0	11 24 24 41	11 24 24 41	0.0 0.0 0.0 0.0	0 4 2 B	11 20 22 33	11 24 24 41	0.0 0.200 0.091 0.242	0 1 2 1	11 23 22 40	11 24 24 41	0.0 0.043 0.091 0.025
LITTLE PORTAGE CREEK LITTLE PORTAGE CREEK	117.7 117.7	09 23 09 30	6 E	0	2 1	2 1	0.0 0.0	0	2 1	2 1	0.0 0.0	0	2	2 1	0.0 0.0

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Appendix Table 3-11 (Continued).

## Coho salaon tagged to untagged ratios, 1985

					F	lathorn				Sunshine			(	urry	
Spawning Site	river aile	date	survey conditions	tagged	un- tagged	total	tag/untag ratio	tagged	un- tagged	total	tag/untag ratio	tagged	un- tagged	total	tag/untag ratio
INDIAN RIVER INDIAN RIVER INDIAN RIVER INDIAN RIVER INDIAN RIVER INDIAN RIVER INDIAN RIVER	138.6 138.6 138.6 138.6 138.6 138.6 138.6	08 24 08 30 09 06 09 13 09 20 09 27 10 04	e e e e e e e e e e e e e e e e e e e	0	28 56 57 35 38 32 14	28 56 57 35 38 32 14	0.0 0.0 0.0 0.0 0.0 0.0	2 5 4 3 1 2	26 51 53 32 37 30 14	28 56 57 35 38 32 14	0.077 0.098 0.075 0.094 0.027 0.067	5 8 9 1 3 0	23 48 48 34 35 29	28 56 57 35 38 32 14	0.217 0.167 0.188 0.029 0.086 0.103 0.0
PORTAGE CREEK	148.9	08 30	P	0	7	7	0.0	2	5	1	0.400	1	6	7	0.167

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Appendix Table 3-12. Coho salmon spawning ground surveys of selected sloughs and resultant tagged to untagged ratios, 1985.

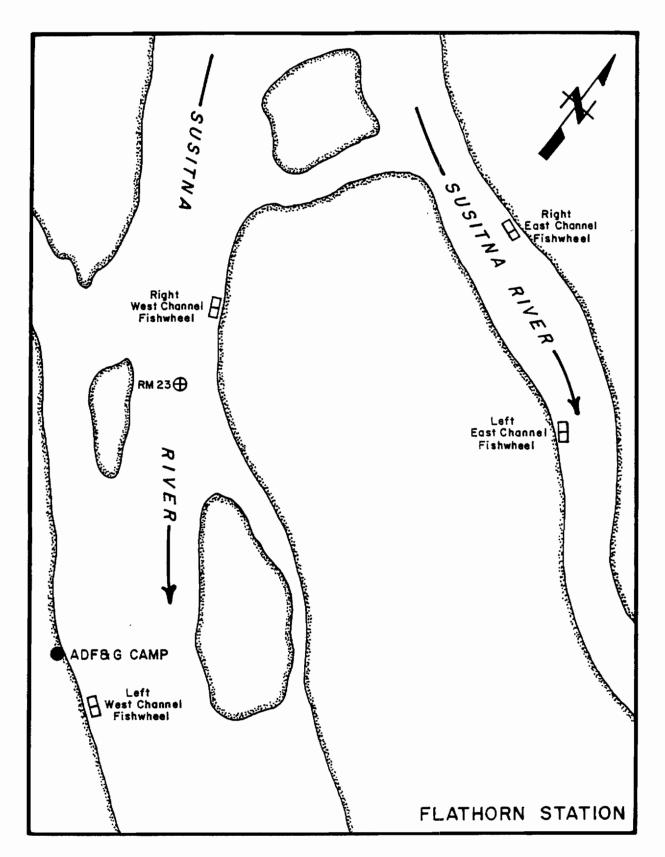
Coho salmon tagged to untagged ratios, 1985

					L	OBO 2418	on tagged to	o untagge		1703					
					F1	athorn	tag/untag		ยก~	Sunshine	tag/untag		un-	urry	tag/untag
Spawning Site	river mile	date	survey conditions	tagged		total	ratio	tagged	tagged	total	ratio	tagged	tagged	total	ratio
SHEEP CREEK SLOUGH	66.1	OB 24	FP	1	12	13	0.083	0	13	13	0.0	0	13	13	0.0
WHITEFISH SLOUGH	79.4	OB 24	PF	0	13	13	0.0	4	9	13	0.444	0	13	13	0.0
BIRCH CREEK SLOUGH BIRCH CREEK SLOUGH BIRCH CREEK SLOUGH BIRCH CREEK SLOUGH BIRCH CREEK SLOUGH BIRCH CREEK SLOUGH	88.4 88.4 88.4 88.4 88.4	0B 07 0B 23 07 02 07 10 07 25 10 03	E F6 E E 6 F6	0 0 1 2 0 0	55 261 287 150 9	55 261 288 152 9	0.0 0.0 0.003 0.013 0.0	8 67 55 35 1 0	47 194 233 117 8 3	55 261 289 152 9	0.170 0.345 0.447 0.299 0.125 0.0	0 1 0 0 0	55 260 288 152 9	55 261 268 152 9	0.0 0.0 0.0 0.0 0.0
PERDIDULA SLOUGH PERDIDULA SLOUGH PERDIDULA SLOUGH PERDIDULA SLOUGH PERDIDULA SLOUGH	97.1 97.1 97.1 97.1 97.1	08 23 09 02 09 10 09 25 10 03	F6 F6 F F6	4 4 2 0 0	367 256 194 8 15	371 260 196 8 15	0.011 0.016 0.010 0.0	76 40 22 2	295 220 174 6 11	371 260 196 8 15	0.258 0.182 0.126 0.333 0.364	0 0 0 1 1	371 260 196 7	371 260 196 B 15	0.0 0.0 0.0 0.14 0.07
SLOUGH BD	121.8	09 23	6	0	1	1	0.0	0	1	1	0.0	0	1	1	0.0
SLOUGH 88	122.2	09 23	6	0	1	1	0.0	0	1	ı	0.0	0	ì	1	0.0
SLOUGH BA SLOUGH BA SLOUGH BA SLOUGH BA	125.4 125.4 125.4 125.4	0B 22 09 20 09 27 10 03	6 E E	0 0 0	1 9 3 9	1 9 3 9	0.0 0.0 0.0 0.0	0 0 0	1 9 3 9	1 9 3 9	0.0 0.0 0.0 0.0	1 2 1 1	0 7 2 8	1 9 3 9	0.28 0.50 0.12
SLOUGH 9	128.3	09 19	6	0	1	1	0.0	0	1	ı	0.0	0	1	1	0.0
SLOUGH 9A	133.8	09 26	6	0	ì	ı	0.0	0	1	1	0.0	0	1	1	0.0

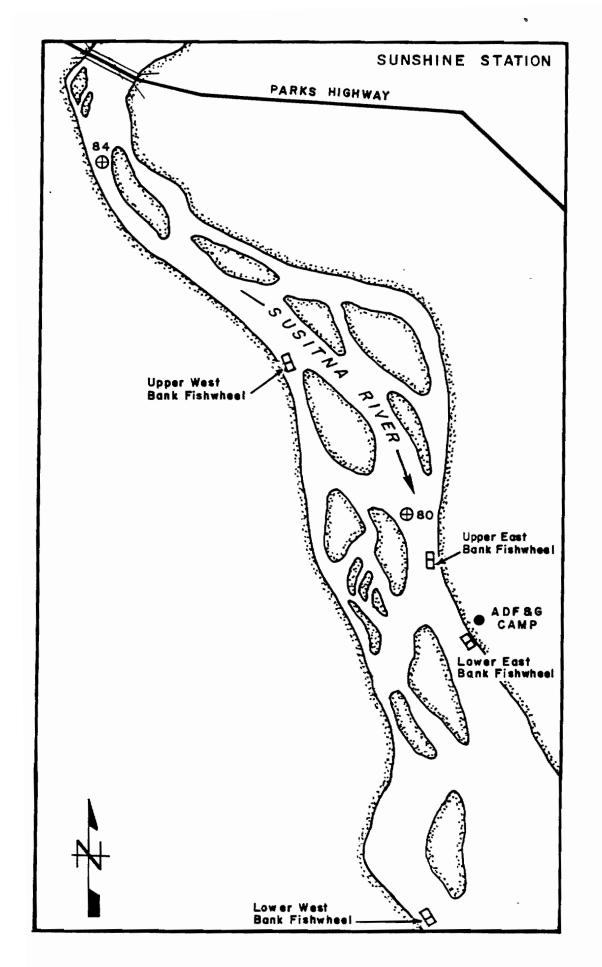
--- DENOTES 1/0

## APPENDIX 4

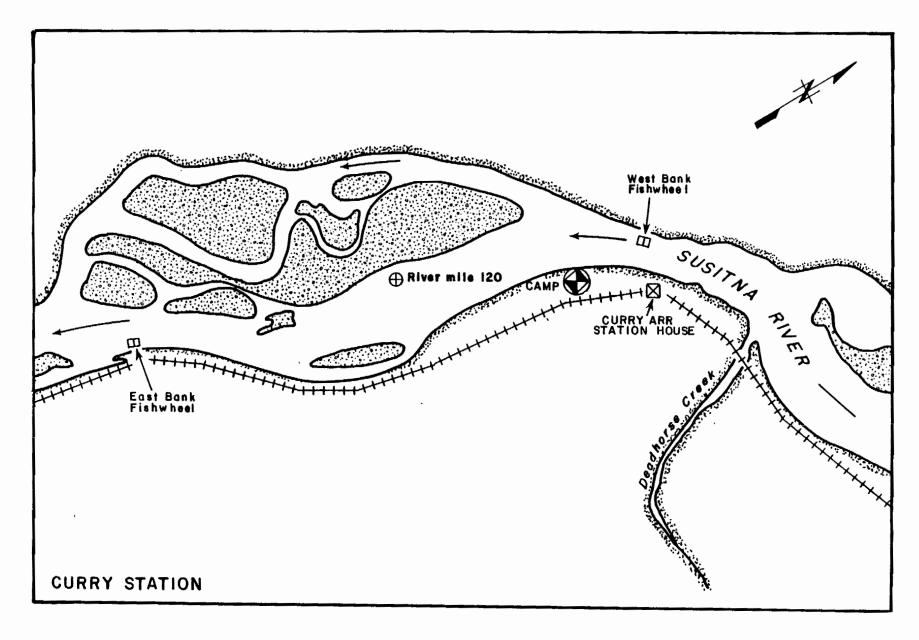
Station Locations and Middle River Survey Areas



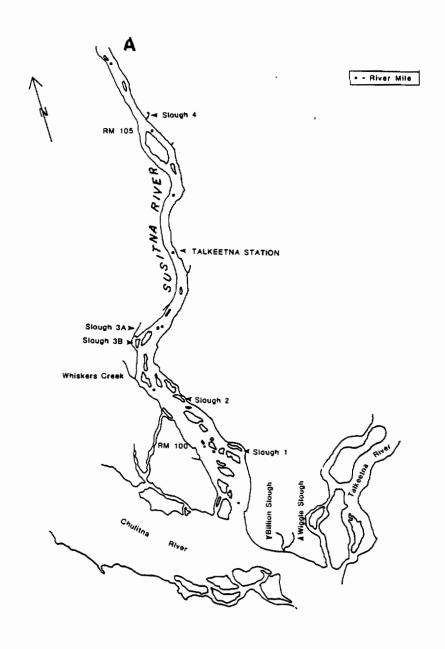
Appendix Figure 4-1. Flathorn Station with fishwheel sites defined, 1985.



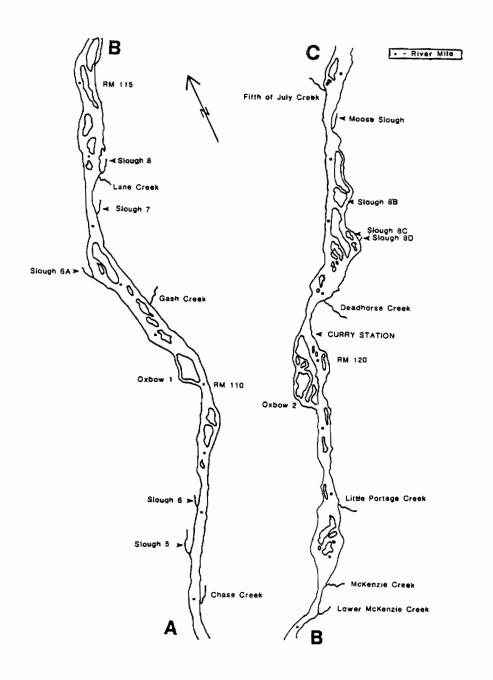
Appendix Figure 4-2. Sunshine Station with fishwheel sites defined, 1985.



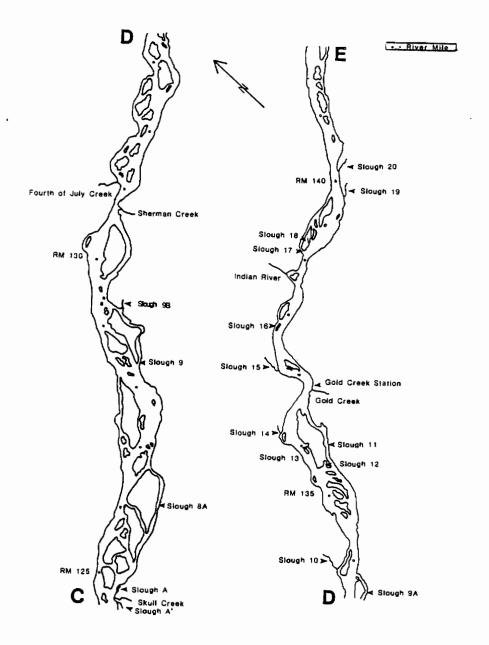
Appendix Figure 4-3. Curry Station with fishwheel sites defined, 1985.



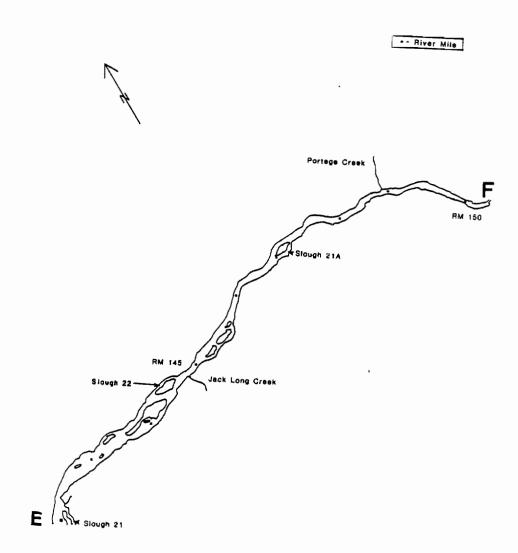
Appendix Figure 4-4. Susitna River slough, stream and mainstem spawning locations from the confluence of the Talkeetna and Chulitna rivers to RM 150.0, 1985.



Appendix Figure 4-4 (Continued).



Appendix Figure 4-4 (Continued).



Appendix Figure 4-4 (Continued).

## APPENDIX 5

Migrational Timing Based on Cumulative Fishwheel Catch Weighted by CPUE

Appendix Table 5-1 Migrational timing of salmon, by species at main channel sampling locations of Flathorn, Sunshine and Curry stations based on cumulative percent of fishwheel catch, 1985.

Station	Species	Cumulativ	e Percent of T	otal Fishwheel	Catches	
		5%	25%	50%	75%	95%
Flathorn Station	Chinook	6/06	6/11	6/15	6/20	6/28
(eastbank)	Sockeye (1st run)	5/31	6/05	6/09	6/11	6/19
(casosam)	Sockeye (2nd run)	7/17	7/25	7/29	8/06	8/16
	Pink	7/15	7/27	8/04	8/10	8/14
	Chum	7/28	8/11	8/15	8/17	8/20
	Coho	7/23	7/27	7/31	8/10	8/20
Flathorn Station	Chinook	6/05	6/10	6/15	6/20	6/27
(westbank)	Sockeye (1st run)	5/30	6/03	6/07	6/10	6/17
•	Sockeye (2nd run)	7/21	7/24	7/27	7/29	8/10
	Pink	7/14	7/25	7/30	8/06	8/15
	Chum	7/24	7/29	8/14	8/16	8/22
	Coho	7/23	7/25	7/28	8/02	8/15
Flathorn Station	Chinook	6/06	6/10	6/10	6/20	6/27
(combined banks)	Sockeye (1st run)	5/30	6/04	6/08	6/11	6/18
	Sockeye (2nd run)	7/18	7/25	7/28	8/02	8/13
	Pink	7/14	7/26	8/01	8/09	8/15
	Chum	7/27	8/11	8/14	8/17	8/20
	Coho	7/22	7/26	7/30	8/05	8/19
Sunshine Station	Chinook	6/15	6/21	6/27	7/01	7/12
	Sockeye (1st run)	6/09	6/11	6/13	6/16	6/23
	Sockeye (2nd run)	7/26	7/28	7/30	8/02	8/14
	Pink	7/23	7/31	8/02	8/04	8/14
	Chum	7/29	8/02	8/04	8/15	8/26
	Coho	8/01	8/06	8/14	8/19	8/25
Curry Station	Chinook	6/28	7/05	7/09	7/15	7/25
	Sockeye	7/30	8/03	8/07	8/16	8/22
	Pink	7/28	8/03	8/05	8/08	8/13
	Chum	8/02	8/05	8/07	8/15	8/28
	Coho	8/05	7/09	8/18	8/22	9/04