KUSKOKWIM AREA SALMON ESCAPEMENT OBSERVATION CATALOG
1984 - 1988

Compiled and Edited by

D. J. Schneiderhan
Kuskokwim Escapement Biologist

Regional Information Report[1] No. 3B88-29

Alaska Department of Fish and Game
Division of Commercial Fisheries, AYK Region
333 Raspberry Road
Anchorage, Alaska 99518-1599

September, 1988

---

[1] The Regional Information Report Series was established in 1987 to provide an information access system for all unpublished division reports. These reports frequently serve diverse and ad hoc informational purposes or archive basic uninterpreted data. To accomodate needs for up-to-date information, reports in this series may contain preliminary data.

FOREWARD

The Kuskokwim Area Salmon Escapement Catalog is intended to present all of the known adult salmon escapement observations for the streams and tributaries which eventually drain into Kuskokwim Bay. Although the data consists mainly of aerial observations by Alaska Department of Fish and Game personnel, it may also include observations from foot or boat surveys, literature review, department escapement projects, and oral or written communications from various agencies and private citizens.

This data is easily misinterpreted and misused by persons who are unfamiliar with the limitations of aerial observation techniques or by those without experience observing salmon in Kuskokwim area streams. It is therfore requested that this data not be cited or used in any manner except in consultation with the Kuskokwim Escapement Biologist, whose duties normally include responsibility for the database.

The information contained in this report is of a type which was originally recorded on special forms and filed in loose leaf notebook binders. Gary Schaefer (ADFG) coordinated the task of establishing a database and reporting system on the University of Alaska Honeywell computer in 1976. This was transferred to the State of Alaska IBM mainframe computer in 1983. Escapement survey data for 1983 was the last information added to the mainframe database. For several years thereafter, the hand written escapement observation forms were simply copied and distributed as basic data.

There were several factors which made the mainframe computer system unsuitable as a tool for managing the data. Primary was the lack of emphasis for professional computer personnel to maintain the database and produce annual reports. Secondary was the problem of gaining access to a timesharing system with a burgeoning subscriber base. In 1983 the decision was made to implement the database in one of the microcomputer systems which were then becoming available. A programmer was assigned to design a database management system using RBase 4000, the new commercial database management software from MicroRim Corporation. Before the assignment was completed, the programmer transferred to another position.

In December 1985, I received a copy of RBase 5000, MicroRim Corporation's successor to RBase 4000. Because of the continued frustation in establishing a user friendly database system, I began to experiment with the new program. The software proved easy to learn and I quickly established that it was capable of handling the Kuskokwim escapement data.

After two months of intensive effort, I was able to produce a working database management system that used a series of menus to lead the user through the processes of entering data, reviewing and

editing data, and printing reports. Several months of refinement followed, and an updated Kuskokwim salmon observation catalog was produced in October 1986. It was the first comprehensive report of the Kuskokwim salmon escapement data to be issued since 1983.

In February 1987, the A-Y-K Region upgraded the RBase software to the most recent version, RBase System V. The new program corrected some problems with RBase 5000 which caused compromises to be made in the organization of the Kuskokwim database system. Recently, MicroRim Corporation has produced another upgrade, RBase for DOS. This catalog was produced using that software. It presents all available Kuskokwim Area salmon escapement data for the period 1984 through 1988.

The catalog is organized with the stream observations followed by three reference indexes: 1) data type definitions, 2) observer and agency index, and 3) stream location index.

Data prior to 1984 is available as a separate document titled "Kuskokwim Salmon Escapement Observations, 1954-1983" which is available upon request.

This catalog may contain errors and omissions. Please notify me of any deficiencies. Also, the format can be easily changed for future editions. I anticipate revisions to the system application as suggestions and comments are received from users.

TABLE OF CONTENTS

	Page
FOREWARD	ii
LIST OF APPENDICES	vi
SALMON ESCAPEMENT OBSERVATIONS	1
Aniak River	1
Aniak Sonar Project	6
Arolik Lake	8
Arolik River	9
Barnum Creek	10
Bear Creek (Tuluksak)	11
Bessie Creek	13
Canyon Creek (Kwethluk)	14
Canyon Creek (Goodnews)	18
Canyon Lake	19
Carter Creek	20
Cheeneetnuk River	21
Chineekluk Creek	24
Chukowan River	26
Cripple Creek (Kuskokwim Bay)	27
Eek River	28
Fish River	30
Fog River	31
Gagaryah River	32
Goodnews Lake	33
Goodnews River	36
Granite Creek (Tuluksak)	43
Holitna River	44
Holokuk River	47
Indian Creek	50
Jacksmith Creek	51
Kanektok River	52
Kanektok Sonar Project	64
Kanuktik Creek	65
Kanuktik Lake	66
Kasigluk River	67
Kinegnak River	68
Kipchuk River	69
Kisaralik River	71
Kogrukluk River	75
Kogrukluk Weir Project	76
Kristin Creek	81
Kwethluk River	82
Little Swift Creek	85
Middle Fork Goodnews Tower Project	86
Middle Fork Eek River	87
Middle Fork Goodnews Lakes	88
Middle Fork Goodnews River	94

TABLE OF CONTENTS (Continued)

	Page
Nixon Fork	101
Oskawalik River	102
Oyak Creek	104
Salmon River (Kuskokwim Bay)	105
Salmon River Weir Project	106
Salmon River (Aniak)	107
Salmon River (Pitka Fork)	110
Slate Creek (Goodnews)	112
Slate Creek (Tuluksak)	113
South Fork Arolik River	114
South Fork Goodnews River	115
Takotna River	116
Tatlawiksuk River	117
Telaquana Lake	118
Tevyaraq Lake	119
Tuluksak River	122
Two Lakes	130
Unnamed Creek (Magaktlek)	131
APPENDICES	132

LIST OF APPENDICES

		Page
APPENDIX A:	Data type definitions for Kuskokwim Area salmon escapement observation database	132
APPENDIX B:	Observer and agency index for Kuskokwim Area salmon escapement observation database	133
APPENDIX C:	Stream location index for Kuskokwim Area salmon escapement database	134

Stream: ANIAK RIVER Drainage: KUSKOKWIM RIVER Latitude: 613440N Longitude: 1592910W

07/14/84 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
2	6	DS	ADFG	1	3	1	2	2	2	1	100

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	8	0	0	8510	0	0	0	0	0	0	0
102	8	0	0	490	0	0	0	0	0	0	0
103	49	0	0	125	0	0	0	0	0	0	0
104	52	0	0	14	0	0	0	200	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	117			9139		0		200		0	

0

08/05/84 Quality: 0.7 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
4	6	DS	ADFG	3	1	4	1	3	2	1	36

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	778	0	130	1985	7000	0	0	0	0	0	0
103	36	0	12	372	400	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	814			2357		0		0		0	

DID NOT SURVEY AREA 101. ENDED SURVEY AT MOUTH OF KIPCHUK R. IN AREA 103. SURVEYED FROM MOUTH OF BUCKSTOCK R. TO MOUTH OF KIPCHUK R.

Stream: ANIAK RIVER Drainage: KUSKOKWIM RIVER Latitude: 613440N Longitude: 1592910W

08/05/84 Quality: 0.7 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
3	6	KF	ADFG	3	1	4	1	3	2	1	35

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	91	0	106	2052	0	0	0	0	0	0	0
103	15	0	7	500	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	106			2552		0		0		0	

IN 101 MANY 100S OF CHUM CARCASSES, ALSO MANY SPAWNING AREAS OF CHUMS. UNABLE TO SURVEY BECAUSE OF POOR LIGHT AND NATURAL TURBIDITY. 102 AGAIN EVERY BAR HAD MANY CARCASSES - MOSTLY CHUM. COUNTED 23 LARGE CHUM SPAWNING AREAS. LIGHT AND BOTTOM MADE LIVE CHUM ALMOST INVISIBLE AS DISCOVERED WHEN SUN CAME OUT FOR FEW MILES. ENDED 103 AT KIPCHUK RIVER DUE TO IMPOSSIBLE LIGHT CONDITIONS.

08/27/84 Quality: 0.65 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
5	6	DS	ADFG	1	3	1	3	3	2	1	100

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	4260	0
103	0	0	0	0	0	0	0	0	0	711	0
104	0	0	0	0	0	0	0	0	0	233	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		5204	

BEGAN AT BUCKSTOCK R. ENDED AT ANIAK LAKE. SURVEY RATED POOR DUE TO HIGH TURBIDITY AND EARLY SURVEY.

Stream: ANIAK RIVER Drainage: KUSKOKWIM RIVER Latitude: 613440N Longitude: 1592910W

07/30/85 Quality: 0.6 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
67	6	DS	ADFG	3	2	3	3	3	2	1	12

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	3	0	0	50	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	40	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	43			50		0		0		0	

AREA 104 WAS A FAIR SURVEY. ALL ELSE WAS POOR.

07/28/86 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
101	6	DS	ADFG	3	1	1	2	2	2	2	100

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	17	0	0	440	1	0	0	180	0	0	0
103	359	0	0	170	0	0	0	14	0	0	0
104	48	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	424			610		0		194		0	

SURVEY BEGAN BUCKSTOCK R. WATER = 3. ABOVE SALMON RIVER WATER = 2. ABOVE GEMUK MTN. WATER = 1. THIS WAS PRIMARILY A CHINOOK SURVEY; AS SUCH RATED 2. POOR (3) CHUM SURVEY. ELAPSED TIME 95 MINUTES.

07/27/87 Quality: 0.75 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
124	6	DS	ADFG	2	1	1	3	3	2	2	75

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	15	0	5	1030	0	0	0	20	0	0	0
102	30	2	2	976	3	0	0	38	0	0	0
103	131	0	21	100	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	176			2106		0		58		0	

Very turbid in lower 101 (T=4), turbid in upper area 101 (t=3) and 102 (t=3), slightly turbid in area 103 (t=2), area 104 not surveyed. Survey ended at Gemuk Mt. Spawn stage: chinook=2, chum=2.

07/18/88 Quality: 0.7 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
199	6	DS	ADFG	1	3	2	3	2	1	1	25

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	61	0	0	0	0	0	0	0	0	0	0
104	38	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	99			0		0		0		0	

Complete survey of 104; partial survey of 103. Water became too turbid to continue survey. Began at lake and ended about 25 miles downriver. C-172RG.

Stream: ANIAK RIVER Drainage: KUSKOKWIM RIVER Latitude: 613440N Longitude: 1592910W

07/24/88 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
208	6	DS	ADFG	2	2	2	2	2	2	1	100

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	8250	0	0	0	100	0	0	0
102	530	8	0	15750	440	0	0	1355	0	0	0
103	299	1	0	508	200	0	0	220	0	0	0
104	116	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	945			24508		0		1675		0	

Began at Aniak Lake, ended 1/2 mile below sonar camp. Water=2-3 in lower river, water=1-2 in upper/middle river. C-172RG.

08/14/81 Quality: 1.25 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
6	12	DS	ADFG	0	0	0	0	0	0	0	0

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	42060	0	0	526320	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	42060			526320		0		0		0	

TOTAL SEASON ESCAPEMENT ESTIMATE APPORTIONED BY TEST NET SPECIES COMPOSITION 6/15-8/14.

08/01/82 Quality: 1.25 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
7	12	DS	ADFG	0	0	0	0	0	0	0	0

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	33864	0	0	389226	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	33864			389226		0		0		0	

TOTAL SEASON ESCAPEMENT ESTIMATE APPORTIONED BY TEST NET SPECIES COMPOSITION 6/21-8/1

Stream: ANIAK SONAR PROJECT Drainage: ANIAK RIVER Latitude: 613009N Longitude: 1592226W

07/28/83 Quality: 1.25 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
8	12	DS	ADFG	0	0	0	0	0	0	0	0

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	4911	0	0	114869	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	4911			114869		0		0		0	

TOTAL SEASON ESCAPEMENT ESTIMATE APPORTIONED BY TEST NET SPECIES COMPOSITION. 6/19-7/28.

07/30/84 Quality: 1.25 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
9	12	DS	ADFG	0	0	0	0	0	0	0	0

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	254747	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			254747		0		0		0	

TOTAL SEASON ESCAPEMENT ESTIMATE INCLUDES CHUM AND CHINOOK COUNTS. PROBABLY 90 PERCENT OR GREATER ARE CHUM. TEST NET SAMPLE SIZE TOO SMALL FOR APPORTIONMENT.

Stream: AROLIK LAKE Drainage: AROLIK RIVER Latitude: 592900N Longitude: 1610600W

07/27/87 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
125	3	KS	ADFG	2	1	1	2	2	2	1	2

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	78	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		78		0	

0

Stream: AROLIK RIVER Drainage: KUSKOKWIM BAY Latitude: 593800N Longitude: 1613600W

07/27/87 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
126	3	KS	ADFG	2	1	1	2	2	2	1	35

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	764	0	0	2205	0	0	0	1363	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	764			2205		0		1363		0	

0

Stream: BARNUM CREEK Drainage: GOODNEWS RIVER Latitude: 591500N Longitude: 1612300W

07/28/87 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
127	3	KS	ADFG	2	2	2	2	2	2	1	10

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	9	0	0	277	0	0	0	252	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	9			277		0		252		0	

The majority of the sockeye salmon were in the mouth of the creek.

Stream: BEAR CREEK Drainage: TULUKSAK RIVER Latitude: 610000N Longitude: 1595800W

10/14/85 Quality: 0.6 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
75	7	KF	ADFG	3	2	4	2	3	2	3	10

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	3	1
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		3	

LOWER 2 MILES NYAC TO SHAMROCK CREEK UNSURVEYABLE DUE TO TURBIDITY CAUSED BY HIGH WATER. CREEK WAS BANK FULL BUT VISIBILITY IMPROVED AS WE PROCEEDED UPSTREAM. CARCASS WAS FOUND ABOVE PREVIOUS UPPER LIMIT. EXTENSION WAS CONFIRMED BY ELECTROFISHING ON THE 10/15 WHICH TOOK A 70MM COHO FRY. AERIAL SURVEYS NOT POSSIBLE ON 15TH DUE TO WEATHER.

08/02/86 Quality: 0.75 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
121	2	DW	TDCO	2	3	2	2	2	1	1	5

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		0	

SEE 7/7/86 DW TULUKSAK SURVEY

Stream: BEAR CREEK Drainage: TULUKSAK RIVER Latitude: 610000N Longitude: 1595800W

08/01/87 Quality: 1. Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
187	9	DW	NGCO	2	1	1	1	1	1	1	3

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	3	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	3			0		0		0		0	

0

Stream: BESSIE CREEK Drainage: AROLIK RIVER Latitude: 594230N Longitude: 1614400W

09/04/84 Quality: 1. Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
19	1	KF	ADFG	2	1	1	1	1	1	1	1

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	14	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		14	

ON GOODNEWS TO BETHEL FLIGHT CROSSED THREE UPPER TRIBS OF BESSIE CREEK FLOWING OUT OF THUMB MOUNTAIN AT 90 DEGREES AND SAW TOTAL OF 14 SPAWNING PAIRS OF COHO.

07/13/84 Quality: 0.85 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
20	6	KF	ADFG	1	1	2	1	3	1	1	15

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	9	0	0	102	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	9			102		0		0		0	

I WAS ON WRONG SIDE OF AIRPLANE FOR SURVEY. SEE DS SURVEY OF SAME DATE.

07/23/85 Quality: 0.8 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
92	6	DS	ADFG	2	1	3	1	2	2	1	25

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	80	0	0	26	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	80			26		0		0		0	

KWETHLUK RIVER AREA 103 AND DOWNSTREAM VERY TURBID DUE TO SNOWMELT IN HEADWATERS CAUSING HIGH WATER LEVELS UPSTREAM OF CONFLUENCE WITH CANYON CREEK.

Stream: CANYON CREEK Drainage: KWETHLUK RIVER Latitude: 601400N Longitude: 1601500W

07/31/85 Quality: 0.9 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
97	6	KF	ADFG	1	1	3	1	1	1	1	30

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	9	0	0	0	0	0	0	0	0	0	0
102	3	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	12			0		0		0		0	

BEGAN AT LITTLE SWIFT CREEK. CLOUD LAYER FORMING AT 1000 FT. REACHED KWETHLUK RIVER UNDER LOW LIGHT LEVELS. QUIT.

07/23/87 Quality: 0.65 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
130	2F	DS	ADFG	0	2	3	2	3	2	1	18

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		0	

Canyon Creek high; relatively turbid.

Stream: CANYON CREEK Drainage: KWETHLUK RIVER Latitude: 601400N Longitude: 1601500W

07/31/87 Quality: 0.95 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
186	2F	DH	ADFG	2	1	2	1	1	1	1	18

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	124	0	0	310	1	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	124			310		0		0		0	

Surveyed entire Canyon Creek to Kwethluk River. Kwethluk very turbid. USFWS furnished the plane and pilot. USFWS observer Ray Jones was aboard.

07/16/88 Quality: 0.8 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
196	6	DS	ADFG	1	2	2	2	2	1	1	10

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	7	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	7			0		0		0		0	

Survey early. C-172RG.

Stream: CANYON CREEK Drainage: KWETHLUK RIVER Latitude: 601400N Longitude: 1601500W

08/02/88 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
214	2F	DS	ADFG	3	2	3	1	2	2	1	15

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	142	2	39	30	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	142			30		0		0		0	

Began SE of Icebox Lake, ended at confluence with Kathluk River. Low, clear water made chinook easily visible. Good numbers of chinook redds; few redds abandoned. USFWS aircraft piloted by George Walters.

Stream: CANYON CREEK/GOODNEWS RIVER Drainage: GOODNEWS BAY Latitude: 592000N Longitude: 1610100W

07/28/87 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
129	3	KS	ADFG	2	2	2	2	2	2	1	13

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	47	0	0	24	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	47			24		0		0		0	

0

Stream: CANYON LAKE Drainage: CANYON CREEK/GOODNEWS RIVER Latitude: 592600N Longitude: 1610900W

07/28/87 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
128	3	KS	ADFG	2	2	2	2	2	2	1	4

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	200	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		200		0	

0

Stream: CARTER CREEK Drainage: KUSKOKWIM BAY Latitude: 591700N Longitude: 1615600W

07/27/87 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
131	3	KS	ADFG	2	1	1	2	2	2	1	5

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	14	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			14		0		0		0	

0

Stream: CHEENEETNUK RIVER Drainage: SWIFT RIVER Latitude: 614850N Longitude: 1560030W

07/23/84 Quality: 0.9 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
21	6	DS	ADFG	2	2	2	1	1	1	2	50

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	511	0	0	30	0	0	0	0	0	0	0
102	666	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1177			30		0		0		0	

SURVEY ENDED AT SHOELEATHER CREEK.

07/26/85 Quality: 0.9 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
94	6	DS	ADFG	2	1	1	2	2	1	1	50

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	927	0	0	30	0	0	0	0	0	0	0
102	75	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1002			30		0		0		0	

0

Stream: CHEENEETNUK RIVER Drainage: SWIFT RIVER Latitude: 614850N Longitude: 1560030W

07/27/86 Quality: 0.85 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
114	6	DS	ADFG	2	1	1	3	2	1	1	35

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	110	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	110			0		0		0		0	

BEGAN AT MOUTH. RIVER HIGH, TURBID. AREA 101 UNSURVEYABLE. AREA 102 POOR SURVEY. QUIT AT SHOELEATHER CREEK. ELAPSED TIME 22 MINUTES.

07/26/87 Quality: 0.8 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
132	6	DS	ADFG	1	2	1	2	2	2	1	39

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	289	0	49	0	0	0	0	0	0	0	0
102	28	0	2	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	317			0		0		0		0	

Some turbidity (t=3) in lower 8 miles obscured counts. Surveyed from mouth to shoeleather creek. G-172RG.

Stream: CHEENEETNUK RIVER Drainage: SWIFT RIVER Latitude: 614850N Longitude: 1560030W

08/04/88 Quality: 0.9 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
216	6	DS	ADFG	3	1	2	1	1	2	1	30

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	74	4	152	82	0	0	0	0	0	0	0
102	29	0	44	0	0	0	0	0	0	0	0
103	4	0	6	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	107			82		0		0		0	

Began 5 miles above Shoeleather Creek, ended at mouth. Rating=3 because of late sirvey. Many abandoned king redds. Judging by the number of redds, 200 female chinook may have spawned with a total escapement of around 600 chinook. C-172RG.

07/27/86 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
108	6	DS	ADFG	2	1	1	1	2	3	2	12

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	6	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	6			0		0		0		0	

0

07/26/87 Quality: 0.95 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
133	6	DS	ADFG	1	1	1	1	1	2	1	15

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	20	0	3	0	0	0	0	33	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	20			0		0		33		0	

Surveyed from Tevyaraq Lake to the mouth. C-172RG.

Stream: CHINEEKLUK CREEK Drainage: HOLOKUK RIVER Latitude: 612200N Longitude: 1581900W

07/20/88 Quality: 0.8 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
203	6	DS	ADFG	0	2	2	1	2	2	1	10

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		0	

Began at mouth, ended at Tevyaraq Lake. C-172RG.

Stream: CHUKOWAN RIVER Drainage: HOLITNA RIVER Latitude: 605000N Longitude: 1575000W

07/27/87 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
134	6	DS	ADFG	2	1	1	2	2	2	1	28

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	258	0	40	180	0	0	0	120	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	258			180		0		120		0	

Survey began at confluence of Chikulnuk and Gemuk Crddks. Water is slightly milky colored. Water cleared progressively downstream due to addition of clear water from various creeks. C-172RG.

07/23/88 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
210	6	DS	ADFG	2	2	2	2	2	2	1	30

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	1120	5	0	940	12	0	0	170	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1120			940		0		170		0	

Began at mouth, ended at Gemuk Creek.. C-172RG.

Stream: CRIPPLE CREEK Drainage: KUSKOKWIM BAY Latitude: 592500N Longitude: 1612100W

07/27/87 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
135	3	KS	ADFG	2	1	1	2	2	2	1	4

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	6	0	0	376	7	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	6			376		0		0		0	

0

07/23/85 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
72	6	DS	ADFG	2	1	3	1	2	3	1	100

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	530	0	0	280	0	0	0	50	0	0	0
103	376	0	0	75	0	0	0	10	0	0	0
104	212	0	0	101	0	0	0	20	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1118			456		0		80		0	

START NEAR RAINY CR. STRIP (UNUSEABLE). END 2 MILES ABOVE SO. FK. EEK RIVER CONFLUENCE.

07/23/87 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
136	2F	DS	ADFG	2	1	3	1	3	2	1	46

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	42	0	0	0	0	0	0	0	0	0	0
103	107	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	149			0		0		0		0	

Plane and pilot furnished by USFWS. USFWS observer, Ray Jones, was also aboard. Survey began about four miles above Eek Lake and ended due to dark conditions about three miles into Great Ridge valley.

Stream: EEK RIVER Drainage: KUSKOKWIM RIVER Latitude: 601200N Longitude: 1621500W

07/27/87 Quality: 1. Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
137	2F	DH	ADFG	2	1	1	1	1	1	1	200

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	1183	0	0	0	0	0	0	0	0	0	0
103	106	1	0	0	0	0	0	0	0	0	0
104	450	0	0	335	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1739			335		0		0		0	

Excellent survey in USFWS C-185 on floats. Area 101 not surveyed.

07/23/88 Quality: 0.9 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
207	2F	DS	ADFG	2	1	1	1	2	2	1	80

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	204	0	0	1990	0	120	0	110	0	0	0
102	1459	0	0	1722	0	0	0	55	0	0	0
103	572	1	0	136	0	0	0	139	0	0	0
104	224	0	0	72	20	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2459			3920		120		304		0	

Began at Rainy Creek, ended about 20 miles from mouth. USFWS aircraft - C185 on floats. USFWS pilot, George Walters, and observer, Ray Jones on board.

Stream: FISH RIVER Drainage: HIGHPOWER CREEK/SWIFT FORK Latitude: 632830N Longitude: 1525307W

11/02/83 Quality: 1.25 Rating: 0

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
117	0	KG	0	0	0	0	0	0	0	0	0

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		0	

MEMO FROM LOUIE BARTON, CF DIV., FAIRBANKS TO DAN SCHNEIDERHAN, CF DIV., ANCHORAGE: A K. GRANROTA TOLD DICK BISHOP (GAME DIVISION IN FAIRBANKS) THAT FISH R. HAS COHO SALMON. FISH R. IS TRIBUTARY OF HIGHPOWER CREEK WHICH FLOWS TO SWIFT FK KUSKOKWIM R. NEAR LAKE MINCHUMINA - YOUR AREA -. (NOTE: ABOVE DATE IS DATE OF MEMO; OBSERVATION WAS PROBABLY MADE IN SEPTEMBER.)

Stream: FOG RIVER Drainage: TULUKSAK RIVER Latitude: 610500N Longitude: 1604500W

07/28/87 Quality: 0.7 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
138	3	KF	ADFG	1	1	1	3	3	3	1	20

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	10	0	0	5	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	10			5		0		0		0	

Surveyed from headwaters to major fork below foothills.

Stream: GAGARYAH RIVER Drainage: SWIFT RIVER Latitude: 613715N Longitude: 1553840W

07/26/87 Quality: 0.95 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
140	6	DS	ADFG	1	2	1	1	1	1	10	31

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	205	0	1	0	0	0	0	0	0	0	0
102	0	0	12	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	205			0		0		0		0	

Excellent survey conditions throughout survey. C-172RG.

08/04/88 Quality: 0.95 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
217	6	DS	ADFG	3	1	2	1	1	1	1	20

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	123	11	100	0	0	0	0	0	0	0	0
102	18	0	23	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	141			0		0		0		0	

Began at mouth, ended at upstream boundary of 102. Number of redds suggests that 120 female chinook may have spawned with a total escapement of about 370 chinook. C-172RG.

Stream: GOODNEWS LAKE Drainage: GOODNEWS RIVER Latitude: 593000N Longitude: 1613100W

08/01/85 Quality: 0.7 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
63	6	DS	ADFG	2	3	3	1	3	1	2	15

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	1723	10	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		1723		0	

MODERATE WIND AND OVERCAST OBSCURRED COUNTS.

08/01/85 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
64	6	KS	ADFG	2	2	3	1	2	2	2	15

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	3200	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		3200		0	

SEE GOODNEWS R. SURVEY SAME DATE, SAME OBSERVER (KS).

Stream: GOODNEWS LAKE Drainage: GOODNEWS RIVER Latitude: 593000N Longitude: 1613100W

07/26/86 Quality: 0.9 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
110	6	DS	ADFG	2	2	1	1	1	2	1	10

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	3190	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		3190		0	

SEE GOODNEWS RIVER COMMENTS; SAME DATE.

07/15/88 Quality: 0.9 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
193	6	DS	ADFG	1	2	1	1	1	2	1	5

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	4399	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		4399		0	

C-172RG.

Stream: GOODNEWS LAKE Drainage: GOODNEWS RIVER Latitude: 596000N Longitude: 1613100W

08/03/88 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
218	6	KF	ADFG	1	2	3	1	1	1	1	5

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	4550	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		4550		0	

0

07/11/84 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
23	6	DS	ADFG	1	2	3	1	1	1	1	80

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	478	0	0	2035	0	1200	0	1990	0	0	0
102	102	0	0	167	0	55	0	588	0	0	0
103	8	0	0	0	0	25	0	220	0	0	0
104	0	0	0	0	0	0	0	2975	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	588			2202		1280		5773		0	

SURVEY BEGAN AT GOODNEWS LAKE AND ENDED AT RIVER MOUTH.

07/11/84 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
22	6	KS	ADFG	1	1	4	1	1	1	1	80

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	544	0	0	0	0	0	0	4350	0	0	0
102	266	0	0	0	0	0	0	650	0	0	0
103	0	0	0	0	0	0	0	175	0	0	0
104	0	0	0	0	0	0	0	1600	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	810			0		0		6775		0	

SURVEY BEFORE PEAK. MOST SOCKEYE AND CHUMS IN THE LOWER END OF THE RIVER AND MIXED. DIFFICULT TO SEPARATE SOCKEYE AND CHUMS APART. WATER LEVEL EXTREMELY LOW. DID NOT COUNT CHUMS. SURVEYED ENTIRE RIVER.

Stream: GOODNEWS RIVER Drainage: GOODNEWS BAY Latitude: 500700N Longitude: 1613500W

07/27/84 Quality: 0.95 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
24	6	KF	ADFG	2	1	2	1	1	1	1	80

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	366	0	0	24481	0	0	0	0	0	0	0
102	1033	25	0	3176	0	0	0	70	0	0	0
103	603	35	0	467	0	0	0	52	0	0	0
104	0	0	0	0	0	0	0	12685	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2002			28124		0		12807		0	

104 ONE BROWN BEAR. 104 IS GOODNEWS LAKE AND INLET STREAM. KINGS AT SPAWN STAGE 2, CHUM 1, SOCKEYE 1.**

08/26/84 Quality: 0.75 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
25	6	DS	ADFG	1	2	3	1	2	2	1	70

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	32670	0
102	52	0	0	0	0	0	0	0	0	9520	0
103	0	0	0	0	0	0	0	100	0	1735	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	52			0		0		100		43925	

COHO SURVEY RATED POOR BECAUSE TOO EARLY; OTHERWISE FAIR. SURVEYED FROM GOODNEWS LAKE TO MOUTH.

Stream: GOODNEWS RIVER Drainage: GOODNEWS BAY Latitude: 500700N Longitude: 1613500W

09/04/84 Quality: 1. Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
26	1	KF	ADFG	0	1	1	1	1	1	1	80

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	4001	0	0	0	0	0	11880	0
102	4	0	0	100	0	1000	0	0	0	4488	0
103	0	0	0	0	0	0	0	11	0	5090	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	4			4101		1000		11		21458	

THE TAIL WIND HAD A SLIGHTLY ADVERSE EFFECT ON SURVEY SINCE WE MISSED SOME TIGHT TURNS. THE RIVER IS BEST DESCRIBED AS LITTERED WITH CARCASSES. THEY WERE EVERYWHERE.

07/25/85 Quality: 0.8 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
83	6	KS	ADFG	1	3	3	1	1	1	2	80

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	176	0	0	2875	0	0	0	0	0	0	0
102	88	0	0	550	0	0	0	45	0	0	0
103	88	0	0	5	0	0	0	67	0	0	0
104	0	0	0	0	0	0	0	2468	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	352			3430		0		2580		0	

STRONG SW WINDS OF 20-25 MPH AFFECTED COUNTS. LOWERE PORTION OF RIVER CLEAR, UPPER PORTION (35%) HAD 90 PERCENT CLOUD COVER. COMBINED WITH A POOR PILOT MADE SURVEY POOR.

Stream: GOODNEWS RIVER Drainage: GOODNEWS BAY Latitude: 500700N Longitude: 1613500W

08/01/85 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
62	6	DS	ADFG	2	2	3	1	2	2	2	70

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	810	0	0	1080	0	0	0	150	0	70	0
102	2358	0	0	3080	0	0	0	797	0	0	0
103	367	0	0	255	0	0	0	473	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	3535			4415		0		1420		70	

LOWER RIVER WAS SURVEYED UNDER OPTIMUM CONDITIONS. UPPER RIVER WAS CLOUDY WITH SEVERAL AREAS OF RAIN SHOWERS.

08/01/85 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
61	6	KS	ADFG	2	2	3	1	2	2	2	70

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	296	0	0	640	0	0	0	0	0	0	0
102	1624	0	0	1920	0	0	0	175	0	0	0
103	353	0	0	0	0	0	0	285	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2273			2560		0		460		0	

UPPER PORTION OF RIVER AND LAKES WAS SURVEYED UNDER POOR TO FAIR CONDITIONS. LOWER PORTION OF RIVER UNDER EXCELLENT CONDITIONS. C-172RG.

Stream: GOODNEWS RIVER Drainage: GOODNEWS BAY Latitude: 500700N Longitude: 1613500W

07/26/86 Quality: 0.9 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
111	6	DS	ADFG	2	2	1	1	2	1	1	80

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	155	0	0	8750	0	200	0	2880	0	6300	0
102	613	0	0	1300	0	50	0	1750	0	0	0
103	300	0	0	1800	0	0	0	1140	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1068			11850		250		5770		6300	

BEGAN AT LAKE; ENDED AT BAY.

07/26/87 Quality: 0.75 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
143	3	KF	ADFG	1	1	1	3	3	2	1	36

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	267	2	0	2982	0	0	0	300	0	0	0
102	37	5	0	2380	0	0	0	262	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	10330	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	304			5362		0		10892		0	

Area 102 and 103 were counted together and reported as 102. 104 is Goodnews Lake and its inlet creek. Sockeye count is fair (2) due to their color and distribution in shallow spawning streams. Suspect many may still be in lake. Water color obscured chinook and chum salmon; therefore, survey poor (3) for those species.

Stream: GOODNEWS RIVER Drainage: GOODNEWS BAY Latitude: 500700N Longitude: 1613500W

07/28/87 Quality: 0.9 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
142	6	DS	ADFG	2	2	1	1	1	2	1	78

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	1050	10	0	7425	1320	0	0	741	0	3595	0
102	1008	0	0	2675	20	0	0	1976	0	120	0
103	176	0	0	2003	0	0	0	2623	0	0	0
104	0	0	0	0	0	0	0	14446	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2234			12103		0		19786		3715	

Most chinook still dark and in good shape. Spawn stage: chum=3, chinook=2, sockeye=1. C-172RG.

08/21/87 Quality: 0.95 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
141	6	DS	ADFG	1	2	1	1	1	1	1	52

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	236	57	0	0	0	100	0	310	300	10365	0
102	29	20	0	0	0	0	0	20	0	498	0
103	7	1	0	0	0	0	0	685	30	259	0
104	0	0	0	0	0	0	0	5387	900	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	272			0		100		6402		11122	

Fair survey is a week too early for peak count. Began Goodnews Lake: ended at mouth. C-172RG.

Stream: GOODNEWS RIVER Drainage: GOODNEWS BAY Latitude: 590700N Longitude: 1613500W

07/15/88 Quality: 0.9 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
192	6	DS	ADFG	1	2	1	1	1	2	1	60

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	273	0	0	2220	0	275	0	995	0	0	0
102	173	0	0	310	12	0	0	317	0	0	0
103	38	0	0	360	0	0	0	169	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	484			2890		275		1481		0	

Clear, sunny. Survey rated 2 because spawn stage=1. Began at Goodnews Lake and ended at mouth. C-172RG.

08/03/88 Quality: 0.55 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
219	6	KF	ADFG	2	3	4	1	4	2	1	25

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	184	7	0	50	3	0	0	0	0	0	0
102	135	53	0	1250	53	0	0	300	0	0	0
103	318	36	0	2546	36	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	637			3846		0		300		0	

Overcast made survey poor. Many large chum spawning areas could be seen but lack of light obscured the fish. C-172RG.

Stream: GRANITE CREEK Drainage: TULUKSAK RIVER Latitude: 605830N Longitude: 1600550W

10/14/85 Quality: 0.55 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
73	7	KF	ADFG	3	2	4	2	3	3	3	5

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	3	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		3	

STREAM WAS SURVEYED TWICE UPSTREAM AND DOWN. ONLY ONE COHO WAS SEEN ON SECOND DOWNSTREAM PASS. CREEK WAS BANK FULL.

Stream: HOLITNA RIVER Drainage: KUSKOKWIM RIVER Latitude: 614045N Longitude: 1571000W

07/16/84 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
27	6	DS	ADFG	1	2	2	2	2	2	1	120

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	249	0	0	24964	0	0	0	400	0	0	0
102	46	0	0	3755	0	0	0	50	0	0	0
103	253	0	0	5750	0	0	0	51	0	0	0
104	95	0	0	1000	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	643			35469		0		501		0	

SURVEY BEGAN AT LITTLE TITNUK CREEK; ENDED AT KOGRUKLUK WEIR.

07/27/85 Quality: 0.65 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
87	6	DS	ADFG	3	1	3	3	3	2	2	20

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	90	0	0	4680	1500	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	90			4680		0		0		0	

SURVEY BEGAN AT KULUKBUK HILLS AND WAS ENDED 2- MILES UPRIVER DUE TO POOR WATER VISIBILITY AND INABILITY OF OBSERVER TO DISTINGUISH BETWEEN SPECIES.

Stream: HOLITNA RIVER Drainage: KUSKOKWIM RIVER Latitude: 614045N Longitude: 1571000W

07/30/85 Quality: 0.6 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
96	6	DS	ADFG	3	2	3	3	3	2	1	23

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	120	0	0	0	0	0	0
104	145	115	0	370	450	0	0	300	50	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	145			370		0		300		0	

WATER HIGH, MUDDY. 75 PERCENT CLOUD COVER. ENTIRE 103 AND 104 SURVEYED.

07/27/86 Quality: 0.8 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
106	6	DS	ADFG	2	1	1	3	2	2	1	28

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	240	0	0	750	0	0	0	430	0	0	0
103	410	0	0	1380	0	0	0	145	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	650			2130		0		575		0	

BEGAN AT CONFLUENCE OF KOGRUKLUK AND CHUKOWAN RIVERS. ENDED AT NOGAMIUT. ELAPSED TIME 20 MINUTES. C-172RG.

Stream: HOLITNA RIVER Drainage: KUSKOKWIM RIVER Latitude: 614045N Longitude: 1571000W

07/27/87 Quality: 0.6 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
144	6	DS	ADFG	0	1	1	4	4	3	1	5

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		0	

Water too turbid for survey in area 103. C-172RG.

07/31/87 Quality: 0.7 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
185	6	DS	ADFG	3	1	2	3	2	3	1	56

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	58	3	0	3901	135	0	0	20	0	0	0
102	30	3	0	100	0	0	0	0	0	0	0
103	377	37	0	632	48	0	0	362	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	465			4633		0		382		0	

Surveyed from confluence of Chukowan-Kogrukluk Rivers to Kolukbuk Hills. Survey rated poor due to turbid water and after peak spawning of chinook and chum. C-172RG.

Stream: HOLOKUK RIVER Drainage: KUSKOKWIM RIVER Latitude: 613215N Longitude: 1583535W

07/31/85 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
65	6	DS	ADFG	3	2	1	1	2	2	1	20

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	81	0	0	266	0	0	0	0	0	0	0
102	54	0	0	104	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	135			370		0		0		0	

AREAS 101 AND 102 SURVEYED COMPLETELY.

07/31/85 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
84	6	KS	ADFG	2	2	2	2	2	2	1	20

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	27	0	0	295	0	0	0	0	0	0	0
102	21	0	0	41	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	48			336		0		0		0	

LOWER PORTION OF RIVER WAS CLEAR WATER AND SKY. UPPER PORTION OF RIVER WAS CLOUDY. WATER WAS CLEAR, HOWEVER SOME FISH MAY HAVE BEEN MISSED DUE TO NOT ENOUGH LIGHT. C-172RG.

Stream: HOLOKUK RIVER Drainage: KUSKOKWIM RIVER Latitude: 613215N Longitude: 1583535W

07/27/86 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
109	6	DS	ADFG	2	1	1	2	2	2	3	30

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	100	0	0	441	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	100			441		0		0		0	

BEGAN AT CHINEEKLUK CREEK CONFLUENCE. ENDED AT MOUTH. ELAPSED TIME 24 MINUTES.

07/26/87 Quality: 0.95 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
145	6	DS	ADFG	2	1	1	1	1	2	1	35

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	141	1	32	1400	12	0	0	0	0	0	0
102	67	1	13	190	5	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	208			1590		0		0		0	

Surveyed from Chineskluk Creek to mouth. C-172RG.

Stream: HOLOKUK RIVER Drainage: KUSKOKWIM RIVER Latitude: 613216N Longitude: 1583536W

07/20/88 Quality: 0.7 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
202	6	DS	ADFG	2	2	2	1	4	2	1	28

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	20	0	0	260	5	0	0	0	0	0	0
102	37	0	0	240	8	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	57			500		0		0		0	

Sun was shining straight down the river causing glare from most aircraft positions. Survey=3 due to glare. Considerable smoke haze present. Began at mouth, ended at Chineekluk Creek. C-172RG.

Stream: INDIAN CREEK Drainage: KUSKOKWIM BAY Latitude: 591800N Longitude: 1615830W

07/27/87 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
146	3	KS	ADFG	2	1	1	2	2	2	1	5

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	1235	57	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			1235		0		0		0	

0

Stream: JACKSMITH CREEK Drainage: KUSKOKWIM BAY Latitude: 592900N Longitude: 1614500W

07/27/87 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
147	3	KS	ADFG	2	1	1	2	2	2	1	6

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	12	0	0	156	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	12			156		0		0		0	

0

06/21/84 Quality: 0.7 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
28	6	KF	ADFG	1	1	3	2	3	2	1	20

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	123	0	0	925	0	0	0	150	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	123			925		0		150		0	

SURVEYED LOWER 20 MILES. SEVERAL SCHOOLS OF SMELT.

06/28/84 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
29	6	KF	ADFG	1	1	3	2	2	2	1	25

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	201	1	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	201			0		0		0		0	

QUICKUMAGUILA CR. WAS END POINT. KING SEEN TO THE VICINITY OF FIRST 800 FOOT HILL JUST TO NORTH OF RIVER. NO SPORT FISHING ACTIVITY AT GUIDE CAMP IN FOOTHILLS VISIBLE.

Stream: KANEKTOK RIVER Drainage: KUSKOKWIM BAY Latitude: 594500N Longitude: 1615600W

07/09/84 Quality: 0.85 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
30	6	KF	ADFG	1	1	3	1	2	1	1	37

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	777	2	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	777			0		0		0		0	

UNIDENTIFIED SALMON MOSTLY CHUMS AND SOCKEYE, PROBABLY SOME CHINOOK. DISCONTINUED SURVEY DUE TO THUNDERSTORM AT OLUMAGWILUTE RIVER.

07/12/84 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
31	6	DS	ADFG	1	2	1	1	2	2	1	150

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	917	0	0	24732	0	2460	0	29810	0	0	0
102	182	0	0	191	0	10	0	940	0	0	0
103	1	0	0	0	0	0	0	130	0	0	0
104	0	0	0	0	0	0	0	30	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1100			24923		2470		30910		0	

SURVEYED FROM MOUTH TO HEAD OF LAKE KAGATI.

Stream: KANEKTOK RIVER Drainage: KUSKOKWIM BAY Latitude: 594500N Longitude: 1615600W

07/27/84 Quality: 0.9 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
32	6	DS	ADFG	2	1	1	1	2	2	1	125

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	6262	0	0	40840	2200	19460	0	17260	0	4400	0
102	4480	900	0	7020	2500	3050	0	6820	0	0	0
103	540	0	0	500	0	1520	0	2350	0	0	0
104	0	0	0	0	0	0	0	4410	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	11282			48360		24030		30840		4400	

SURVEY ENDED AFTER COMPLETING KAGATI LAKE.

08/26/84 Quality: 0.75 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
33	6	DS	ADFG	1	2	3	1	2	2	1	110

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	1700	0	0	0	42030	0
102	0	0	0	0	0	0	0	0	0	4800	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		1700		0		46830	

COHO SURVEY RATED POOR BECAUSE TOO EARLY; OTHERWISE FAIR. SURVEY BEGAN AT MOUTH, ENDED 10 MILES BELOW KAGATI LAKE.

Stream: KANEKTOK RIVER Drainage: KUSKOKWIM BAY Latitude: 594500N Longitude: 1615600W

07/25/85 Quality: 0.8 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
79	6	DS	ADFG	2	2	3	1	1	2	1	120

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	9565	0	0	12845	0	250	0	6310	0	100	0
102	3590	0	0	1530	0	0	0	2420	0	0	0
103	310	0	0	10	0	0	0	370	0	0	0
104	0	0	0	0	0	0	0	6470	0	0	0
105	0	0	0	0	0	0	0	700	0	0	0
TOTAL	13465			14385		250		16270		100	

SURVEY BEGAN AT MOUTH AND ENDED AFTER FLYING MARGIN OF KAGATI L.

07/21/86 Quality: 0.65 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
115	6	DS	ADFG	2	2	4	2	2	2	1	100

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	2747	0	0	15180	0	4400	0	9095	0	0	0
102	830	0	0	1590	0	120	0	2330	0	0	0
103	66	0	0	20	0	0	0	565	0	0	0
104	0	0	0	0	0	0	0	100	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	3643			16790		4520		12090		0	

BEGAN AT MOUTH: TIDE HIGH, RIVER TURBID. WATER CLEARED TO 2 AFTER 10 MILES. ENDED WITH PARTIAL SURVEY OF KAGATI LAKE. HEAVY WAVE ACTION ON LAKE. NO SOCKEYE IN SMALL LAKE NEAR WEST END OF LAKE. SPAWN STAGE: CHINOOK, CHUM = 2, SOCKEYE = 1.

Stream: KANEKTOK RIVER Drainage: KUSKOKWIM BAY Latitude: 594500N Longitude: 1615600W

07/27/86 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
102	3	KS	ADFG	2	1	1	2	2	2	1	70

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	1451	0	0	5126	0	0	0	7054	0	835	0
102	884	0	0	2455	0	0	0	2235	0	0	0
103	35	0	0	1185	0	0	0	1250	0	0	0
104	0	0	0	0	0	0	0	300	0	0	0
105	0	0	0	0	0	0	0	4110	0	0	0
TOTAL	2370			8766		0		14949		835	

RAIN FOR THE PREVIOUS WEEK CAUSED RIVER WATER LEVEL TO RISE. THE LOWER PORTION OF THE RIVER WAS TURBID WITH SOME DIFFICULTY IN SEEIN BOTTOM IN THE DEEPER SECTIONS. SOME KING SALMON MAY HAVE BEEN MISSED. ADDITIONALLY, THE TURBIDITY MADE THE ENUMERATION OF CHUM SALMON MORE DIFFICULT SINCE THE CHUM SALMON BLENDED MORE WOTH THE RIVER BOTTOM THEN THE OTHER SPECIES. PINK SALMON WERE NOT ENUMERATED.

07/08/87 Quality: 0.55 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
155	3	KS	ADFG	1	2	3	3	3	3	3	24

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	491	0	0	2025	0	0	0	2200	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	491			2025		0		2200		0	

Observed 1,975 chum, 1,900 sockeye and 491 chinook salmon above the sonar camp. Survey was poor due to high turbidity. Difficult to see in deeper portions of the river.

Stream: KANEKTOK RIVER Drainage: KUSKOKWIM BAY Latitude: 594500N Longitude: 1615600W

07/12/87 Quality: 0.6 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
152	3	KF	ADFG	1	1	4	3	4	1	1	52

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	146	0	0	0	0	0	0	0	0	0	0
102	26	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	172			0		0		0		0	

All unidentified salmon were sockeye or chums in area 101.

07/14/87 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
154	6	DH	ADFG	1	1	3	2	1	1	1	120

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	1662	0	0	0	0	0	0	0	0	0	0
102	390	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2052			0		0		0		0	

0

Stream: KANEKTOK RIVER Drainage: KUSKOKWIM BAY Latitude: 594500N Longitude: 1615600W

07/14/87 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
151	6	LB	ADFG	1	1	3	2	1	1	1	20

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		0	

Inexperienced surveyor made was uncertain of species.

07/16/87 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
150	6	DS	ADFG	1	2	3	2	2	1	1	120

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	1566	0	0	7020	0	0	0	7764	0	0	0
102	278	0	0	1220	0	0	0	1060	0	0	0
103	87	0	0	1180	0	0	0	1047	0	0	0
104	0	0	0	0	0	0	0	1005	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1931			9420		0		10876		0	

Entire river surveyed and Kagati Lake. C-172RG.

Stream: KANEKTOK RIVER Drainage: KUSKOKWIM BAY Latitude: 594500N Longitude: 1615600W

07/26/87 Quality: 0.7 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
149	6	KS	ADFG	2	1	1	3	3	3	1	120

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	932	0	0	4100	0	0	0	3527	0	0	0
102	632	0	0	1910	0	0	0	2425	0	0	0
103	83	0	0	0	0	0	0	2795	0	0	0
104	0	0	0	0	0	0	0	11685	0	0	0
105	0	0	0	0	0	0	0	366	0	0	0
TOTAL	1647			6010		0		20798		0	

Water turbidity made observation of chum and possibly chinook salmon difficult in the main channel. These two species may have been undercounted as a result.

07/28/87 Quality: 1. Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
148	6	DS	ADFG	1	1	1	1	1	1	1	20

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	43740	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		43740		0	

Surveyed lake only. Sockeye spawn stage=1. C-172RG.

Stream: KANEKTOK RIVER Drainage: KUSKOKWIM BAY Latitude: 594500N Longitude: 1615600W

07/31/87 Quality: 0.95 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
183	6	DS	ADFG	3	2	1	1	1	1	2	85

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	2358	0	0	870	0	150	0	3245	0	550	0
102	1299	102	0	920	22	0	0	2063	0	0	0
103	450	4	0	335	0	0	0	2705	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	4107			2125		150		8013		550	

Survey rated fair for chinook, poor for chum (major mortality has occurred), and good for sockeye. spawn stage: chinook=2, chum=3, sockeye=1. Began survey at outlet of Kagati Lake; ended at mouth. Coho counts were all within 5 miles of mouth. C-172RG.

08/20/87 Quality: 1. Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
184	6	DS	ADFG	1	1	1	1	1	1	1	108

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	407	424	0	400	400	780	0	4084	745	18060	0
102	7	40	0	0	150	100	0	552	250	1790	0
103	26	1	0	0	0	0	0	0	0	206	0
104	0	0	0	0	0	0	0	23770	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	440			400		880		28406		20056	

Began at mouth; ended at Kagati Lake. Early survey for coho. Should try again in a week. Sockeye in Kagati Lake are still one-third prespawners and two-thirds are spawning. This indicates that identification between sockeye and coho in late July survey was good as all sockeye type fish in upper river were most likely correctly called sockeye while those nearer the mouth were identified as coho. In some years, it is apparent that differentiating requires awareness of the fact that relatively fresh sockeye may be in the river in late July. C-172RG.

Stream: KANEKTOK RIVER Drainage: KUSKOKWIM BAY Latitude: 594500N Longitude: 1615600W

08/27/87 Quality: 0.95 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
182	6	KS	ADFG	1	2	1	1	1	1	1	120

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	9	0	0	0	0	0	0	0	0	6294	0
102	13	0	0	0	0	0	0	25	0	2415	0
103	30	0	0	0	0	0	0	135	0	2163	0
104	0	0	0	0	0	0	0	30129	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	52			0		0		30289		10872	

Surveyed from Kagati Lake to the mouth of the Kanektok River. Good survey. Low, clear water levels. Noticed many side sloughs dry with numerous carcasses. Did not attempt to count carcasses. Fourteen rafters on river. C-172RG.

06/24/88 Quality: 0.6 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
188	6	DS	ADFG	1	3	2	3	4	1	1	40

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	23	0	0	0	0	0	0	0	0-0-	-0-	
102	0	0	0	0	0	0	0	0	0-0-	-0-	
103	0	0	0	0	0	0	0	0	0-0-	-0-	
104	0	0	0	0	0	0	0	0	0-0-	-0-	
105	0	0	0	0	0	0	0	0	0-0-	-0-	
TOTAL	23			0		0		0	-0-		

WATER TURBID DURING ENTIRE SURVEY. SURVEY ENDED AT FOOTHILLS. C-172RG.

Stream: KANEKTOK RIVER Drainage: KUSKOKWIM BAY Latitude: 594500N Longitude: 1615600W

07/01/88 Quality: 0.5 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
190	6	DS	ADFG	1	3	2	3	4	3	1	45

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	309	0	0	1046	2	75	0	910	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	309			1046		75		910		0	

Mouth to five miles below foothills. Surveyed all meanders. Time 2:39-3:29 pm. Ended survey when no more fish were visible. C-172RG.

07/14/88 Quality: 0.65 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
191	6	DS	ADFG	1	1	3	2	3	3	1	100

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	2258	1	0	8512	0	70	0	3805	0	0	0
102	74	0	0	130	0	30	0	1200	0	0	0
103	17	0	0	0	0	0	0	402	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2349			8642		100		5407		0	

Began survey at Kagati Lake. Ended at mouth. Overcast and haze in the upper 65 miles. Clear and light smoke haze on lower river. C-172RG.

Stream: KANEKTOK RIVER Drainage: KUSKOKWIM BAY Latitude: 594500N Longitude: 1615600W

07/21/88 Quality: 0.95 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
206	6	DS	ADFG	2	1	1	1	1	2	1	100

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	9115	0	0	16050	500	545	0	16570	0	0	0
102	1835	40	0	3893	20	125	0	4560	0	0	0
103	190	0	0	120	0	200	0	450	0	0	0
104	0	0	0	0	0	0	0	8860	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	11140			20063		870		30440		0	

Spawn stage: chinook=2, chum=2, sockeye=1. Began at mouth, ended at Kagati Lake. C-172RG.

Stream: KANEKTOK SONAR PROJECT Drainage: KANEKTOK RIVER Latitude: 594653N Longitude: 1614806W

08/01/84 Quality: 1.25 Rating: 0

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
34	12	DH	ADFG	0	0	0	0	0	0	0	0

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	38202	0	0	194345	0	46739	0	54352	0	31745	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	38202			194345		46739		54352		31745	

COUNTS REPRESENT TOTAL ABUNDANCE FROM 6/15/84 - 8/1/84. COUNTS WERE REGISTERED BY SONAR AND APPORTIONED INT SPECIES COUNTS USING DRIFT GILL NET TEST FISHING DATA FROM 6/15/84 - 7/18/84 AND BEACH SEINE DATA FROM 7/19/84 - 8/1/84. DATE IS LAST DAY OF OPERATION.

08/19/85 Quality: 1.25 Rating: 0

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
100	12	DH	ADFG	0	0	0	0	0	0	0	0

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	38245	0	0	200140	0	40595	0	54754	0	32606	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	38245			200140		40595		54754		32606	

RESULTS ARE REVISED ESTIMATES FOR 1984.

Stream: KANUKTIK CREEK Drainage: KANEKTOK RIVER Latitude: 595300N Longitude: 1602800W

07/31/87 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
155	3	KS	ADFG	3	1	2	1	2	2	2	13

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	230	0	0	30	24	0	0	139	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	230			30		0		139		0	

Counted from mouth to lake. Did not count the other drainage at the forks, approximately 11 miles from the mouth. Kanuktik Creek is the lesser volume of the two creeks at this fork.

Stream: KANUKTIK LAKE Drainage: KANUKTIK CREEK/KANEKTOK R. Latitude: 594400N Longitude: 1601900W

07/31/87 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
156	3	KS	ADFG	3	1	2	1	2	2	2	3

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	25	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		25		0	

Beautiful lake.

Stream: KASIGLUK RIVER Drainage: KUSKOKWIM RIVER Latitude: 605045N Longitude: 1611400W

07/27/85 Quality: 0.65 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
93	6	KF	ADFG	2	1	3	3	3	2	1	24

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	2	0	0	652	7	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2			652		0		0		0	

PLANE C-172. TURBIDITY APPEARED TO BE ALGAE BLOOM, I.E. GREEN IN COLOR. SPAWNING STAGE EARLY IN PEAK.

08/09/87 Quality: 1. Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
181	1	DH	ADFG	3	1	1	1	1	1	1	4

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	1000	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		0	

Chum carcasses observed during a ferry flight to Anchorage. Only four miles of river were surveyed.

07/28/87 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
157	3	KS	ADFG	2	2	2	2	2	2	1	16

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	3	4	0	915	329	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	3			915		0		0		0	

0

Stream: KIPCHUK RIVER Drainage: ANIAK RIVER Latitude: 610300N Longitude: 1591000W

09/11/84 Quality: 1.25 Rating: 0

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
1	1	DH	ADFG	0	0	0	0	0	0	0	0

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	20	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		20	

FLIGHT TRANSECTED KIPCHUK R. ABOUT 2 MILES ABOVE CONFLUENCE WITH BULLDOG CR.

07/27/87 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
158	6	DS	ADFG	2	1	1	2	2	2	1	40

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	31	0	6	5	0	0	0	0	0	0	0
102	79	0	19	10	0	0	0	0	0	0	0
103	83	0	13	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	193			15		0		0		0	

Survey was poor in the lower five miles where chum spawning is most likely. Spawn stage: chinook=2, chum=0 (unobserved). Survey began in valley above Vrem camp and ended at mouth.

Stream: KIPCHUK RIVER Drainage: ANIAK RIVER Latitude: 610300N Longitude: 1591000W

07/18/88 Quality: 0.6 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
201	6	DS	ADFG	1	3	2	4	2	2	1	15

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	41	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	41			0		0		0		0	

Survey began above canyon loop; ended at lower end of canyon due to turbidity.C-172RG.

Stream: KISARALIK RIVER Drainage: KUSKOKWIM RIVER Latitude: 605130N Longitude: 1611400W

07/13/84 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
35	6	DS	ADFG	1	1	2	2	1	2	1	90

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	98	0	0	640	0	0	0	21	0	0	0
102	55	0	0	3	0	0	0	7	0	0	0
103	4	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	157			643		0		28		0	

SURVEY ENDED NEAR UPPER CUTOFF TO KASIGLUK RIVER.

07/13/84 Quality: 0.95 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
36	6	KF	ADFG	1	1	2	1	1	1	1	60

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	11	0	0	673	0	0	0	0	0	0	0
102	13	0	0	28	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	24			701		0		0		0	

UNFAMILIAR WITH STREAM AND I FELT THET MY SURVEY WAS NOT AS GOOD AS CONSITIONS WOULD INDICATE. SURVEY WAS FROM LAKE OUTLET TO AREA WHERE TURBIDITY TOO GREAT TO SURVEY ABOUT 30 MILES ABOVE KUSKOKWIM.

Stream: KISARALIK RIVER Drainage: KUSKOKWIM RIVER Latitude: 605130N Longitude: 1611400W

08/27/84 Quality: 0.7 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
37	6	DS	ADFG	1	3	1	2	3	2	1	60

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	1702	0
103	0	0	0	0	0	0	0	0	0	1258	0
104	0	0	0	0	0	0	0	0	0	563	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		3523	

BEGAN AT KISARALIK L. FIRST COHOS 2 MI. BELOW LAKE. ENDED AT BOTTOM OF AREA 102 (UPPER KASIGLUK R. CUTOFF). SURVEY RATED POOR DUE TO EARLINESS.

07/31/85 Quality: 0.9 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
68	6	KF	ADFG	1	1	2	1	2	1	1	85

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	3	0	0	0	0	0	0
102	45	0	0	48	0	0	0	0	0	0	0
103	18	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	63			48		0		0		0	

RIVER TURBID TO KASIGLUK CUTOFF. WATER TO 102 AND 103 CLEAR. FLOATERS AND GULL ACTIVITY INDICATE CHUMS MAINLY IN 101. SURVEYED TO GOLD CREEK. THUNDERSTORM HALTED SURVEY THERE. ONE BROWN BEAR IN 101. ONE EAGLE IN 103.

Stream: KISARALIK RIVER Drainage: KUSKOKWIM RIVER Latitude: 605130N Longitude: 1611400W

07/23/87 Quality: 0.7 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
159	2F	DS	ADFG	0	2	3	4	2	0	1	80

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		0	

Plane and pilot were provided by USFWS. USFWS observer, Ray Jones, was also aboard. Kisaralik River was high, turbid to within 5 miles of Kisaralik Lake. No salmon were observed in the clear water near the lake.

07/31/87 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
180	2F	DH	ADFG	1	1	2	2	2	1	1	30

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	29	0	0	0	0	0	0	15	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	29			0		0		15		0	

Water clear at kisaralik Lake to unsurveyable at golden gate falls. All sockeye at confluence of Gold Creek and Kisaralik River.

07/16/88 Quality: 0.7 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
197	6	DS	ADFG	1	2	2	3	2	2	1	60

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	41	0	0	690	0	0	0	0	0	0	0
102	17	0	0	93	0	0	0	0	0	0	0
103	2	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	60			783		0		0		0	

Rated 3 due to early survey and turbid water from mid-area 102 downstream. Began at Kisaralik Lake, ended near lower cutoff to Kasigluk River. C-172RG.

08/02/88 Quality: 0.65 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
215	2F	DS	ADFG	3	2	2	2	3	3	1	65

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	8	470	100	0	0	0	0	0	0
102	784	29	172	540	395	0	0	0	0	0	0
103	56	0	28	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	840			1010		0		0		0	

Survey began at Kisaralik Lake, ended about 2 miles into Area 101. Survey rating: chinook=2, chum=3. Past peak of spawning for both spp., but chinook mostley on redds in good numbers and few redds were abandoned. USFWS aircraft piloted by George Walters.

Stream: KOGRUKLUK RIVER Drainage: HOLITNA RIVER Latitude: 604900N Longitude: 1575100W

07/27/87 Quality: 1. Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
160	6	DS	ADFG	2	1	1	1	1	1	1	43

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	715	2	144	2055	16	0	0	415	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	715			2055		0		415		0	

Ideal conditions for this stream. Spawn stage: chinook=2, chum=2, sockeye=1.

07/23/88 Quality: 0.8 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
209	6	DS	ADFG	2	2	2	1	2	2	1	60

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	1970	17	0	4940	260	0	0	2626	40	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1970			4940		0		2626		0	

Began at weir, ended about 10 miles below highest valley. C-172RG.

07/31/76 Quality: 1.25 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
10	11	DS	ADFG	0	0	0	0	0	0	0	0

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	5507	0	0	8046	0	0	0	2302	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	5507			8046		0		2302		0	

TOTAL SEASON ESCAPEMENT ESTIMATE ABOVE WEIR 6/29-7/21.

07/27/77 Quality: 1.25 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
11	11	DS	ADFG	0	0	0	0	0	0	0	0

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	2548	0	0	21746	0	0	0	2238	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2548			21746		0		2238		0	

TOTAL SEASON ESCAPEMENT ESTIMATE ABOVE WEIR. OPERATED 7/14-7/27.

Stream: KOGRUKLUK WEIR PROJECT Drainage: KOGRUKLUK RIVER/HOLITNA R. Latitude: 605036N Longitude: 1575049W

07/31/78 Quality: 1.25 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
12	11	RB	ADFG	0	0	0	0	0	0	0	0

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	13132	0	0	47099	0	0	0	1656	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	13132			47099		0		1656		0	

TOTAL SEASON ESCAPEMENT 6/28-7/31.

07/24/79 Quality: 1.25 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
13	11	RB	ADFG	0	0	0	0	0	0	0	0

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	11063	0	0	15277	0	0	0	2589	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	11063			15277		0		2589		0	

TOTAL SEASON ESCAPEMENT ESTIMATE FOR 6/29-7/31. OPERATION 7/1-7/24 DUE TO HIGH WATER.

Stream: KOGRUKLUK WEIR PROJECT Drainage: KOGRUKLUK RIVER/HOLITNA R. Latitude: 605036N Longitude: 1575049W

07/11/80 Quality: 1.25 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
14	11	RB	ADFG	0	0	0	0	0	0	0	0

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	6572	0	0	41777	0	0	0	3200	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	6572			41777		0		3200		0	

TOTAL SEASON ESTIMATED ESCAPEMENT FOR 6/29-7/31. OPERATION 7/1-7/11 DUE TO HIGH WATER.

10/05/81 Quality: 1.25 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
15	11	RB	ADFG	0	0	0	0	0	0	0	0

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	16075	0	0	56495	0	0	0	17702	0	11532	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	16075			56495		0		17702		11532	

TOTAL SEASON ESCAPEMENT 6/29-7/31 FOR CHINOOK, SOCKEYE, CHUM; 8/10-10/5 FOR COHO. COMPLETE DOCUMENTATION.

Stream: KOGRUKLUK WEIR PROJECT Drainage: KOGRUKLUK RIVER/HOLITNA R. Latitude: 605036N Longitude: 1575049W

09/14/82 Quality: 1.25 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
16	11	DS	ADFG	0	0	0	0	0	0	0	0

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	10990	0	0	51853	0	0	0	20654	0	38961	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	10990			51853		0		20654		38961	

TOTAL SEASON ESCAPEMENT ESTIMATE 6/29-7/31 FOR CHINOOK, SOCKEYE, CHUM; 8/10-9/30 FOR COHO. OPERATION 7/9-9/14 DUE TO HIGH WATER.

09/27/83 Quality: 1.25 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
17	11	DS	ADFG	0	0	0	0	0	0	0	0

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	3009	0	0	8997	0	0	0	1147	0	8327	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	3009			8997		0		1147		8327	

TOTAL SEASON ESCAPEMENT ESTIMATE 6/29-7/31 FOR CHINOOK, SOCKEYE, CHUM; 8/10-9/30 FOR COHO. OPERATION 6/24-7/2, 7/6-11, AND 8/13-9/27 DUE TO HIGH WATER AND AIRCRAFT ACCIDENT.

Stream: KOGRUKLUK WEIR PROJECT Drainage: KOGRUKLUK RIVER/HOLITNA R. Latitude: 605036N Longitude: 1575049W

09/15/84 Quality: 1.25 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
18	11	DS	ADFG	0	0	0	0	0	0	0	0

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	4928	0	0	41484	0	0	0	4130	0	29824	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	4928			41484		0		4130		29824	

TOTAL SEASON ESCAPEMENT 6/19-8/20 FOR CHINOOK, SOCKEYE, CHUM; 7/24-10/05 ESCAPEMENT ESTIMATE FOR COHO. OPERATED FROM 6/19-9/15/ TERMINATED 9/15 DUE TO FISCAL CONSIDERATIONS. COMPLETE DOCUMENTATION FOR CHINOOK, SOCKEYE, CHUM.

Stream: KRISTIN CREEK Drainage: STONY RIVER Latitude: 610300N Longitude: 1541000W

07/27/85 Quality: 1. Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
89	6	DS	ADFG	0	1	1	1	1	1	1	5

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		0	

BEAUTIFUL, CLEAR CREEK. LOWER FIVE MILES APPEAR IDEAL FOR CHINOOK, COHO SPAWNING. ABOVE THAT, THE GRADIENT IS VERY STEEP. NO SALMON OBSERVED.

Stream: KWETHLUK RIVER Drainage: KUSKOKWIM RIVER Latitude: 604900N Longitude: 1612700W

07/13/84 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
39	6	DS	ADFG	1	1	2	3	2	2	1	70

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	100	0	0	876	0	0	0	90	0	0	0
103	150	0	0	703	0	0	0	60	0	0	0
104	23	0	0	57	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	273			1636		0		150		0	

101 TOO TURBID TO SURVEY. ENDED SURVEY AT NEARES APPROACH TO ICEBOX L. AND KISARALIK RIVER.

07/13/84 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
38	6	KF	ADFG	1	1	2	2	2	1	1	70

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	17	0	0	172	0	0	0	0	0	0	0
103	27	0	0	538	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	44			710		0		0		0	

101 TOO TURBID TO SURVEY. 102 LOWER PORTION TOO TURBID TO SURVEY; UPPER PART PARTIALLY OBSCURRED AND 103 GLARE. BLUE TURBIDITY COMING OUT OF STREAM ABOVE CANYON CREEK. SOURCE SHOULD BE CHECKED

Stream: KWETHLUK RIVER Drainage: KUSKOKWIM RIVER Latitude: 604900N Longitude: 1612700W

08/02/85 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
85	6	KF	ADFG	2	1	1	2	2	2	1	45

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	11	0	0	575	20	0	0	0	0	0	0
103	35	0	0	133	23	0	0	0	0	0	0
104	4	0	0	434	1	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	50			1142		0		0		0	

101 TO A MUD BANK 5 MILES ABOVE THREE STEP MT. TOO TURBID TO SURVEY. TURBIDITY FROM MUD BANK. BLUE CLAY IN WATER REST OF WAY TO BREAST MT. FROM CLAY BANKS IN UPPER RIVER. 104 CANYON CREEK TO BREAST MT.

07/16/88 Quality: 0.7 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
198	6	DS	ADFG	1	2	2	3	2	2	1	50

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	87	0	0	582	0	0	0	0	0	0	0
102	25	0	0	114	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	112			696		0		0		0	

Water=3 from 3-step Mountain to Devil's Elbow. Water=2 above Devil's Elbow. Survey began at 3-step Mt., ended at Canyon Creek. C-172RG.

Stream: KWETHLUK RIVER Drainage: KUSKOKWIM RIVER Latitude: 604900N Longitude: 1612700W

08/02/88 Quality: 0.7 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
213	2F	DS	ADFG	3	2	3	2	2	2	1	50

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	129	3	40	260	390	0	0	35	0	0	0
103	468	22	131	560	440	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	597			820		0		35		0	

Began at confluence with Canyon Creek, ended about 5 miles above Three-step Mt., boundary of Area 101. Rating: chinook=2, chum=3. USFWS aircraft piloted by George Walters.

Stream: LITTLE SWIFT CREEK Drainage: CANYON CREEK/KWETHLUK R. Latitude: 601600N Longitude: 1595000W

07/31/85 Quality: 0.9 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
95	6	KF	ADFG	1	1	3	1	1	1	1	3

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	1	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1			0		0		0		0	

CROSSED FROM COLD CREEK.

10/15/84 Quality: 1.25 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
41	10	KS	ADFG	0	0	0	0	0	0	0	0

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	3260	0	0	19003	0	13744	0	32053	0	249	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	3260			19003		13744		32053		249	

TOWER PROJECT WAS OPERATIONAL FROM JUNE 15 - JULY 31. ESTIMATED ESCAPEMENTS ARE EXPANDED SEASON TOTAL TOWER COUNTS. THE PROJECT WAS TERMINATED TOO EARLY TO PROPERLY ASSESS THE COHO OR PINK SALMON ABUNDANCE.

07/24/86 Quality: 1.25 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
123	10	KS	ADFG	0	0	0	0	0	0	0	0

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	2083	0	0	14756	0	0	0	51069	0	163	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2083			14756		0		51069		163	

THE PROJECT OPERATED FROM JUNE 16 THROUGH JULY 24, 1986. BUDGET CONSIDERATIONS RESULTED IN AN EARLIER THAN SCHEDULED TERMINATION DATE. BASED ON THE HISTORICAL (1981-1985) AVERAGE TIMING DATA, THIS RESULTED IN 89% COUNT OF CHINOOK, 99% COUNT OF SOCKEYE, AND 84% COUNT OF CHUM SALMON.

Stream: MIDDLE FORK EEK RIVER Drainage: EEK RIVER Latitude: 600800N Longitude: 1613500W

07/27/87 Quality: 1. Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
161	2F	DH	ADFG	2	1	1	1	1	1	1	60

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	387	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	387			0		0		0		0	

Survey began at confluence of Eek and Middle Fork Eek Rivers. Excellent survey used USFWS plane and pilot. USFWS observer, Ray Jones, accompanied.

07/11/84 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
40	6	DS	ADFG	1	2	5	1	1	1	1	20

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	5	0	0	0	0	0	0	0	0	0	0
102	1535	0	0	0	0	0	0	0	0	0	0
103	115	0	0	0	0	0	0	0	0	0	0
104	100	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1755			0		0		0		0	

ALL LAKES EXCEPT NORTH LAKE (101, 102) SURVEYED.

07/11/84 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
44	6	KS	ADFG	1	1	4	1	1	1	1	30

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	12	0	0	0	0	0	0	975	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	200	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	12			0		0		1175		0	

SEE MIDDLE FORK GOODNEWS RIVER SURVEY, SAME DATE, SAME OBSERVER (KS).

Stream: MIDDLE FORK GOODNEWS LAKES Drainage: MIDDLE FORK GOODNEWS RIVER Latitude: 592400N Longitude: 1603600W

07/27/84 Quality: 0.95 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
46	6	KF	ADFG	2	1	2	1	1	1	1	35

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	287	0	0	0	0	0	0	622	0	0	0
102	36	2	0	0	0	0	0	6450	1	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	323			0		0		7072		0	

102 INCLUDES 103, 104 AND 105. OBSERVER DID NOT KNOW INDEX AREAS.

07/25/85 Quality: 0.9 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
82	6	KS	ADFG	1	2	2	1	1	1	2	90

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	208	0	0	30	0	0	0	175	0	0	0
102	0	0	0	0	0	0	0	6375	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	190	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	208			30		0		6740		0	

SEE MIDDLE FORK GOODNEWS RIVER SURVEY, SAME DATE AND OBSERVER (KS).

Stream: MIDDLE FORK GOODNEWS LAKES Drainage: MIDDLE FORK GOODNEWS RIVER Latitude: 592400N Longitude: 1603600W

08/01/85 Quality: 0.6 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
71	6	DS	ADFG	2	3	3	3	3	1	2	10

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	2455	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		2455		0	

THUNDERSTORM IN PROGRESS DURING SURVEY.

08/01/85 Quality: 0.9 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
70	6	KS	ADFG	2	2	2	1	1	1	1	70

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	7	0	0	0	0	0	0	4900	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	7			0		0		4900		0	

CLOUDY WITH RAIN. POOR SURVEY CONDITIONS. C-172RG.

Stream: MIDDLE FORK GOODNEWS LAKES Drainage: MIDDLE FORK GOODNEWS RIVER Latitude: 592400N Longitude: 1603600W

09/04/85 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
78	8	FD	ADFG	3	2	2	2	2	2	1	6

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	3000	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		3000		0	

FRED DECICCO, SF DIV., FLOAT TRIP. FEW CHINOOK, SOCKEYE SPAWNING ON MARGIN OF KUKAKTLIM L. AND IN FIRST 1/4 MILE OF OUTLET.

07/26/86 Quality: 0.95 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
113	6	DS	ADFG	1	1	1	1	1	2	1	10

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	8540	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		8540		0	

KUKAKTLIM LAKE AND THREE LAKES TWO MILES WEST OF OUTLET.

Stream: MIDDLE FORK GOODNEWS LAKES Drainage: MIDDLE FORK GOODNEWS RIVER Latitude: 592400N Longitude: 1603600W

07/28/87 Quality: 0.9 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
179	6	DS	ADFG	2	1	1	2	1	2	1	86

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	2114	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	877	0	0	0
104	0	0	0	0	0	0	0	6657	0	0	0
105	0	0	0	0	0	0	0	14832	0	0	0
TOTAL	0			0		0		24480		0	

0

07/28/87 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
163	3	KS	ADFG	2	2	2	2	2	2	1	25

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	980	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	421	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	865	0	0	0
TOTAL	0			0		0		2266		0	

0

Stream: MIDDLE FORK GOODNEWS LAKES Drainage: MIDDLE FORK GOODNEWS RIVER Latitude: 592400N Longitude: 1603600W

08/21/87 Quality: 0.95 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
166	6	DS	ADFG	3	2	1	1	1	1	1	25

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	5405	3900	0	0
TOTAL	0			0		0		5405		0	

Spawn stage: sockeye=3. Survey rating=3 due to lateness for sockeye.

07/15/88 Quality: 0.95 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
195	6	DS	ADFG	1	2	1	1	1	1	1	20

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	155	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	400	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	2101	0	0	0
TOTAL	0			0		0		2656		0	

C-172RG.

Stream: MIDDLE FORK GOODNEWS RIVER Drainage: GOODNEWS RIVER Latitude: 590800N Longitude: 1612900W

07/11/84 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
42	6	DS	ADFG	1	2	3	1	2	2	1	80

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	161	0	0	1019	0	1490	0	1068	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	285	0	0	0
104	65	0	0	0	0	60	0	206	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	226			1019		1550		1559		0	

BEGAN AT MOUTH; SURVEYED COMPLETE INDEX AREAS, EXCEPT AREA 102 - DID NOT SURVEY. LAKES REPORTED SEPARATELY.

07/11/84 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
43	6	KS	ADFG	1	1	4	1	1	1	1	30

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	554	0	0	0	0	0	0	175	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	2	0	0	0	0	0	0	125	0	0	0
104	114	0	0	0	0	0	0	100	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	670			0		0		400		0	

SURVEY BEFORE PEAK. MOST REDS AND CHUMS ION LOWER END OF THE DRAINAGE AND MIXED. DIFFICULT TO SEPARATE CHUMS AND SOCKEYE. WATER LEVEL EXTREMELY LOW. ONLY A PARTIAL COUNT FOR SOCKEYE. DID NOT COUNT CHUMS.

Stream: MIDDLE FORK GOODNEWS RIVER Drainage: GOODNEWS RIVER Latitude: 590800N Longitude: 1612900W

07/27/84 Quality: 0.95 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
45	6	KF	ADFG	2	1	2	1	1	1	1	35

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	679	81	0	10041	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	500	0	0	0
103	134	11	0	187	0	0	0	973	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	813			10228		0		1473		0	

BROWN BEAR IN 103. 102 LOWER 4 MILES WAS DRY DUE TO LOW WATER CONDITIONS PREVENTING LATER RUN FISH ACCESS TO LAKE. KING SPAWN STAGE 2, CHUM 1, SOCKEYE 1.

07/25/85 Quality: 0.9 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
81	6	KS	ADFG	1	2	2	1	1	1	2	90

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	621	0	0	1750	0	0	0	311	0	0	0
102	0	0	0	0	0	0	0	15	0	0	0
103	40	0	0	0	0	0	0	335	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	661			1750		0		661		0	

CLEAR FOR 80 PERCENT OF THE LOWER RIVER. 50 PERCENT CLOUD COVERAGE IN UPPER PORTION OF THE RIVER. STRONG SW WINDS AT 20-25 MPH. SURVEY CONDITIONS FAIR. C-172RG. PILOT POOR.

Stream: MIDDLE FORK GOODNEWS RIVER Drainage: GOODNEWS RIVER Latitude: 590800N Longitude: 1612900W

08/01/85 Quality: 0.8 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
80	6	DS	ADFG	3	2	2	1	2	2	2	55

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	1465	0	0	3353	0.	0	0	255	0	112	0
102	0	0	0	0	0	0	0	0	0	0	0
103	585	0	0	240	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2050			3593		0		255		112	

GOOD SURVEY BELOW KUKTLIM CR. FAIR SURVEY TO LAKES.

08/01/85 Quality: 0.9 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
69	6	KS	ADFG	2	2	2	1	1	1	1	70

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	1344	0	0	4180	0	0	0	315	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	433	0	0	220	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1777			4400		0		315		0	

THE MIDDLE AND LOWER PORTIONS OF THE RIVER WAS CLEAR SKYS AND EXCELLENT SURVEY CONDITIONS. THE UPPER PORTION OF RIVER WAS CLOUDY: FAIR SURVEY CONDITIONS. C-172RG

Stream: MIDDLE FORK GOODNEWS RIVER Drainage: GOODNEWS RIVER Latitude: 590800N Longitude: 1612900W

09/04/85 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
77	8	FD	ADFG	3	2	2	2	2	2	1	45

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	11	0	0	2	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		0	

FLOAT TRUP BY FRED DECICCO, SF DIV., AUG27-SEP4. FEW LIVE CHINOOK, SOCKEYE SPAWNING ON MARGIN OF KUKAKTLIM L. AND IN FIRST 1/4 MILE OF OUTLET. COHO NOT SPAWNING YET: NO COUNT BUT PRESENT FROM 1 MILE BELOW LAKE DOWN - COMMON BUT NOT NUMEROUS.

07/26/86 Quality: 0.9 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
112	6	DS	ADFG	2	1	1	1	2	2	1	50

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	655	0	0	7460	0	500	0	8410	0	4400	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	594	0	0	185	0	0	0	40	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1249			7645		500		8450		4400	

70 CHINOOK COUNTED BELOW TOWER SITE. 2775 SOCKEYE BELOW TOWER. 4000 COHO BELOW TOWER. 2100 CHUM BELOW TOWER. BEGAN AT MOUTH; ENDED AT KUKAKTLIM L.

Stream: MIDDLE FORK GOODNEWS RIVER Drainage: GOODNEWS RIVER Latitude: 590800N Longitude: 1612900W

07/27/86 Quality: 1. Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
103	3	KS	ADFG	2	1	1	1	1	1	1	12

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	230	0	0	515	0	0	0	2400	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	230			515		0		2400		0	

SURVEY WAS TO ENUMERATE THE SALMON BETWEEN THE CURRENT TOWER SITE AND THE PROPOSED NEW TOWER SITE, AN ADDITIONAL 12 MILES UPRIVER. PINK SALMON WERE NOT ENUMERATED.

07/26/87 Quality: 0.75 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
165	3	KF	ADFG	1	1	1	3	3	2	1	48

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	188	0	0	1641	0	0	0	1595	0	0	0
102	0	0	0	0	0	0	0	1225	0	0	0
103	0	0	0	0	0	0	0	269	0	0	0
104	59	0	0	411	0	0	0	265	0	0	0
105	0	0	0	0	0	0	0	3416	0	0	0
TOTAL	247			2052		0		6770		0	

Downstream of tower: 21 chinook, 200 sockeye and 600 chum. Sockeye count rating=2 since they were in shallow spawning streams and were highly colored. Water color matched chinook and chum resulting in rating=3 for those species.

Stream: MIDDLE FORK GOODNEWS RIVER Drainage: GOODNEWS RIVER Latitude: 590800N Longitude: 1612900W

07/28/87 Quality: 0.9 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
162	6	DS	ADFG	2	1	1	2	1	2	1	86

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	1580	12	0	7506	73	520	0	1588	0	2420	0
102	0	0	0	0	0	0	0	0	0	0	0
103	135	0	0	265	0	0	0	533	0	0	0
104	492	3	0	1925	20	0	0	870	20	0	0
105	0	0	0	0	0	0	0	21489	5	0	0
TOTAL	2207			9696		520		24480		2420	

Most chinook still dark and in good condition. Spawn stage: chinook=2, chum=3, sockeye=1, coho=1. C-172RG.

07/28/87 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
164	3	KS	ADFG	2	2	2	2	2	2	1	75

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	1170	5	0	2554	201	0	0	690	0	0	0
102	3	0	0	6	0	0	0	0	0	0	0
103	94	0	0	5	0	0	0	95	0	0	0
104	331	0	0	240	0	0	0	75	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1598			2805		0		860		0	

0

Stream: MIDDLE FORK GOODNEWS RIVER Drainage: GOODNEWS RIVER Latitude: 590800N Longitude: 1612900W

08/21/87 Quality: 0.95 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
167	6	DS	ADFG	1	2	1	1	1	1	1	52

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	65	20	0	0	0	0	0	473	0	5343	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	9	7	0	0	0	0	0	0	0	113	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	74			0		0		473		5456	

Fair survey is a week too early for peak counts. Began at mouth: ended at lakes above Kukaktlim Creek. C-172RG.

07/15/88 Quality: 0.9 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
194	6	DS	ADFG	1	2	1	1	1	2	1	40

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	718	0	0	5628	0	0	0	2755	0	0	0
102	42	0	0	20	0	0	0	143	0	0	0
103	71	0	0	78	0	0	0	257	0	0	0
104	193	0	0	88	0	0	0	20	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1024			5814		0		3175		0	

Below tower: chinook=160, sockeye=1600, chum=2600. Began at mouth, ended at lakes. C-172RG.

Stream: NIXON FORK Drainage: TAKOTNA RIVER Latitude: 630200N Longitude: 1554000W

07/26/87 Quality: 0.7 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
169	6	DS	ADFG	0	1	1	3	2	4	2	38

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		0	

Water highly stained by organic solubles. No salmon or carcasses observed. C-172RG

Stream: OSKAWALIK RIVER Drainage: KUSKOKWIM RIVER Latitude: 614430N Longitude: 1581130W

07/31/85 Quality: 0.55 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
66	6	DS	ADFG	3	2	3	3	3	3	1	42

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	16	1	0	801	75	0	0	0	0	0	0
102	22	7	0	170	140	0	0	0	0	0	0
103	15	0	0	45	50	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	53			1016		0		0		0	

STARTED AT CONDLUENCE ON EAST SIDE OF HENDERSON MT. AND CONTINUED TO MOUTH.

07/30/87 Quality: 0.8 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
171	6	DS	ADFG	2	1	1	2	3	2	1	42

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	118	2	31	107	4	0	0	0	0	0	0
102	70	3	17	495	21	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	188			602		0		0		0	

Began just above Henderson Mt. Surveyed to mouth. Spawn stage: chinook=2, chum=2.

Stream: OSKAWALIK RIVER Drainage: KUSKOKWIM RIVER Latitude: 614430N Longitude: 1581130W

07/20/88 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
205	6	DS	ADFG	2	2	2	1	2	3	1	37

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	24	0	0	1495	290	0	0	0	0	0	0
102	31	0	0	1205	75	0	0	0	0	0	0
103	25	0	0	920	125	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	80			3620		0		0		0	

Smoke haze. Began at Henderson Mt., ended at mouth. G-172RG.

Stream: OYAK CREEK Drainage: KUSKOKWIM BAY Latitude: 594743N Longitude: 1615700W

06/28/88 Quality: 0.9 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
189	3	KF	ADFG	1	1	2	1	1	2	1	15

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		0	

Surveyed from Oyak Creek mouth along the entire length of Kilokuyak Creek and the south fork of Oyak Creek to where it joins the Kanektok River. There were 14 beaver dams that completely blocked the stream. Pool size indicated very little flow. The junction of Kilokuyak and Kanektok is a beaver pond marsh with no clear channel joining the two rivers. It is unlikely that there is sufficient flow to attract salmon. Therefore, Oyak Creek is an unlikely bypass of the Kanektok sonar site.

Stream: SALMON RIVER Drainage: KUSKOKWIM BAY Latitude: 585143N Longitude: 1614556W

07/28/87 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
170	3	KS	ADFG	2	2	2	2	2	2	1	1

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	500	0	0	0	0	0	200	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			500		0		0		200	

0

08/04/81 Quality: 1.25 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
50	11	DS	ADFG	0	0	0	0	0	0	0	0

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	2153	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2153			0		0		0		0	

TOTAL SEASON ESCAPEMENT ESTIMATE FOR SALMON RIVER WEIRED AND UNWEIRED PORTIONS USING WEIR COUNTS IN CONJUNCTION WITH AERIAL SURVEY PROPORTIONS.

07/30/82 Quality: 1.25 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
51	11	DS	ADFG	0	0	0	0	0	0	0	0

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	612	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	612			0		0		0		0	

TOTAL SEASON ESCAPEMENT ESTIMATE FOR SAMON RIVER WEIRED AND UNWEIRED PORTIONS USING WEIR COUNT IN CONJUNCTION WITH AERIAL SURVEY PROPORTIONS.

Stream: SALMON RIVER/ANIAK RIVER Drainage: KUSKOKWIM RIVER Latitude: 610400N Longitude: 1591100W

08/05/84 Quality: 0.7 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
48	6	DS	ADFG	3	1	4	1	3	2	1	3

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink.	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	12	2	4	100	50	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	12			100		0		0		0	

THICK CLOUD COVER DID NOT ALLOW ENOUGH LIGHT TO SURVEY, SO TERMINATED AFTER THREE MILES FROM THE MOUTH.

08/05/84 Quality: 0.7 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
47	6	KF	ADFG	3	1	4	1	3	2	1	1

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	13	0	5	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	13			0		0		0		0	

TOO DARK TO SURVEY. DISCONTINUED AFTER SHORT DISTANCE FROM MOUTH.

Stream: SALMON RIVER/ANIAK RIVER Drainage: KUSKOKWIM RIVER Latitude: 610400N Longitude: 1591100W

07/28/86 Quality: 0.95 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
105	6	DS	ADFG	2	1	1	1	1	2	1	30

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	282	0	90	240	0	0	0	0	0	0	0
102	54	0	15	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	336			240		0		0		0	

SURVEY BEGAN AT CRIPPLE CREEK CONFLUENCE. ELAPSED TIME 25 MINUTES.

07/27/87 Quality: 1. Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
172	6	DS	ADFG	2	1	1	1	1	1	1	35

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	459	0	76	2075	0	0	0	0	0	0	0
102	57	0	18	15	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	516			2090		0		0		0	

Ideal survey conditions for this stream. Began at mouth. Ended at Cripple Creek confluence. Spawn stage: chinook=2, chum=3. C-172RG.

Stream: SALMON RIVER/ANIAK RIVER Drainage: KUSKOKWIM RIVER Latitude: 610400N Longitude: 1591100W

07/18/88 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
200	6	DS	ADFG	1	2	2	1	1	2	1	25

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	184	0	0	310	0	0	0	0	0	0	0
102	60	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	244			310		0		0		0	

Began at Cripple Creek; ended at mouth. Survey=2 because too early. C-172RG.

Stream: SALMON RIVER/PITKA FORK Drainage: MIDDLE FORK/BIG RIVER Latitude: 625330N Longitude: 1543420W

07/23/84 Quality: 0.8 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
49	6	DS	ADFG	2	2	2	1	2	2	1	40

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	32	0	0	0	0	0	0	0	0	0	0
102	43	0	0	0	0	0	0	0	0	0	0
103	3	0	0	0	0	0	0	0	0	0	0
104	494	5	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	572			0		0		0		0	

SURVEYED ALL THREE AREAS TO THE EXTENT OF SALMON COUNTS. DUE TO A LACK OF LANDMARKS IT IS NOT POSSIBLE TO DESCRIBE EXACT ENDING POINTS FOR EACH FORK.

07/26/85 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
99	6	DS	ADFG	2	1	2	2	2	1	1	40

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	5	0	0	0	0	0	0	0	0	0	0
102	15	0	0	0	0	0	0	0	0	0	0
103	4	0	0	0	0	0	0	0	0	0	0
104	601	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	625			0		0		0		0	

AREA 102 WAS CLOUDY AND DIFFICULT TO SEE FISH.

Stream: SALMON RIVER/PITKA FORK Drainage: MIDDLE FORK/BIG RIVER Latitude: 625330N Longitude: 1543420W

07/26/87 Quality: 0.65 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
173	6	DS	ADFG	1	1	3	3	3	2	1	52

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	17	0	0	0	0	0	0	0	0
102	268	0	4	0	0	0	0	0	0	0	0
103	24	0	23	0	0	0	0	0	0	0	0
104	182	2	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	474			0		0		0		0	

Highest water level in ten years during chinook spawning. Counts only obtained in upper two-thirds of each index area. 70 percent cloud cover decreased water visibility considerably. C-172RG.

07/25/88 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
211	6	DS	ADFG	2	2	3	1	2	2	1	44

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	28	0	0	0	0	0	0	0	0	0	0
102	32	1	0	0	0	0	0	0	0	0	0
103	39	0	0	0	0	0	0	0	0	0	0
104	402	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	501			0		0		0		0	

Overcast, light wind. Easy visibility of chinook in the shallow river accounts for fair survey rating=2. C-172RG.

Stream: SLATE CREEK Drainage: GOODNEWS RIVER Latitude: 605900N Longitude: 1600100W

07/28/87 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
174	3	KS	ADFG	2	2	2	2	2	2	1	3

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	2	0	0	6	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2			6		0		0		0	

0

Stream: SLATE CREEK/TULUKSAK RIVER Drainage: KUSKOKWIM RIVER Latitude: 605900N Longitude: 1600100W

07/24/84 Quality: 1. Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
52	9	KS	ADFG	2	1	1	1	1	1	1	1

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	4	0	1	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	4			0		0		0		0	

ONLY SURVEYED FROM TULUKSAK TO HYDROPOWER DITCH.

10/14/85 Quality: 0.55 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
74	7	KF	ADFG	3	2	4	2	3	3	2	12

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	3	1
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		3	

LIVE COHO SEEN WERE HEAVILY FUNGUSED. CREEK WAS BANK FULL. SUSPECT HIGH WATER AND BEARS REASON FOR SMALL NUMBERS.

Stream: SOUTH FORK AROLIK RIVER Drainage: AROLIK RIVER Latitude: 593000N Longitude: 1612000W

09/04/84 Quality: 1. Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
53	1	KF	ADFG	2	1	1	1	1	1	1	10

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	200	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		200	

STREAM TOO NARROW AND TWISTY TO ACTUALLY SURVEY. IT WAS ON OUR ROUTE RETURNING FROM GOODNEWS TO BETHEL. FISH FIRST SEEN IN CASINO CREEK. COHO SPAWNING TO THE EAST FORK. ALSO SAW PAIR OF COHO IN CRATER CREEK INCLUDED IN 200 TOTAL.

Stream: SOUTH FORK GOODNEWS RIVER Drainage: GOODNEWS RIVER Latitude: 590730N Longitude: 1612930W

07/27/84 Quality: 0.95 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
54	6	KF	ADFG	2	1	2	1	1	1	2	10

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	12	5	0	2450	0	0	0	0	0	175	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	12			2450		0		0		175	

KING SPAWN STAGE 2, CHUM 1, COHO 1. LAST SURVEY OF DAY OBSERVER FATIQUE HAD SOME ADVERSE EFFECT. DISTANCE IS STRAIGHT LINE NOT RIVER MILES. ENDED SURVEY IN ROLLING HILLS.

07/26/87 Quality: 0.75 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
175	3	KF	ADFG	1	1	1	3	3	2	1	12

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	38	2	0	680	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	38			680		0		0		0	

0

Stream: TAKOTNA RIVER Drainage: KUSKOKWIM RIVER Latitude: 625700N Longitude: 1553600W

07/25/87 Quality: 0.75 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
176	6	DS	ADFG	0	2	2	4	2	0	1	70

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		0	

Water deeply stained from organic solubles, some turbidity. Many gravel bars, but no carcasses or other signs of salmon.

Stream: TATLAWIKSUK RIVER Drainage: KUSKOKWIM RIVER Latitude: 615510N Longitude: 1561430W

07/26/87 Quality: 0.65 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
139	6	DS	ADFG	0	2	1	4	2	3	1	3

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		0	

Too stained and turbid for survey. Surveyed five miles in upper valley. North tributary about five miles from mouth is in similar condition.

Stream: TELAQUANA LAKE Drainage: TELAQUANA RIVER/STONY R. Latitude: 605700N Longitude: 1535200W

07/27/85 Quality: 0.9 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
90	6	DS	ADFG	2	1	1	2	2	1	1	30

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	15426	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		15426		0	

SURVEY BEGAN 5 MILES DOWNSTREAM FROM LAKE AND INCLUDED ENTIRE LAKESHORE.

Stream: TEVYARAQ LAKE Drainage: CHINEEKLUK CREEK/HOLOKUK R. Latitude: 611605N Longitude: 1580143W

07/31/85 Quality: 0.8 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
98	6	DS	ADFG	3	3	1	2.	2	1	1	5

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	50	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		50		0	

0

07/31/85 Quality: 0.7 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
86	6	KS	ADFG	2	2	3	2	2	2	1	2

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	35	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		35		0	

SOUTHERN THREE QUARTERS OF LAKE WAS SURVEYED. C-172RG.

Stream: TEVYARAQ LAKE Drainage: CHINEEKLUK CREEK/BOLOKUK R. Latitude: 611605N Longitude: 1580143W

07/27/86 Quality: 1. Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
107	6	DS	ADFG	2	1	1	1	1	1	2	3

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0.	0	0	165	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		165		0	

0

07/26/87 Quality: 1. Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
168	6	DS	ADFG	0	1	1	1	1	1	1	2

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		0	

No salmon in lake. C-172RG.

Stream: TEVYARAQ LAKE Drainage: CHINEEKLUK CREEK/HOLOKUK R. Latitude: 611605N Longitude: 1580143W

07/21/88 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
204	6	DS	ADFG	1	2	2	1	1	2	1	4

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	100	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		100		0	

Smoke haze. C-172RG.

Stream: TULUKSAK RIVER Drainage: KUSKOKWIM RIVER Latitude: 610600N Longitude: 1605800W

07/13/84 Quality: 0.85 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
56	6	DS	ADFG	1	1	2	1	2	2	1	50

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	93	0	0	1625	0	15	0	0	0	0	0
102	24	0	0	10	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	117			1635		15		0		0	

SURVEY BEGAN AT FOG R. CONFLUENCE AND ENDED AT BEAR CREEK.

07/13/84 Quality: 0.9 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
55	6	KF	ADFG	1	1	2	1	1	2	1	40

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	41	0	0	2838	0	0	0	0	0	0	0
102	22	0	0	10	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	63			2848		0		0		0	

AREA 101 WAS EXCELLENT. AREA 102 WAS HINDERED BY USE OF C-172 WHICH WAS A BIT FAST FOR JOB BUT SECOND PASS WORKED WELL. ENDED SURVEY AT BEAR CREEK.

Stream: TULUKSAK RIVER Drainage: KUSKOKWIM RIVER Latitude: 610600N Longitude: 1605800W

07/24/84 Quality: 1. Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
59	9	KS	ADFG	2	1	1	1	1	1	1	5

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	21	0	7	5	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	21			5		0		0		0	

SURVEYED DOWNSREAM OF SLATE CREEK TO APPROXIMATELY 1 MILE BELOW DRY CREEK. SEE SCOTT AND WEAGLE SURVEYS FOR SAME DAY.

07/24/84 Quality: 1. Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
58	9	KW	NGC	2	1	1	1	1	1	1	5

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	25	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	25			0		0		0		0	

KEN WEAGLE WITH NORTHLAND AS CONSULTING BIOLOGIST DID SURVEY FROM UPPER BRIDGE TO BEAR CREEK HYDRODITCH.

Stream: TULUKSAK RIVER Drainage: KUSKOKWIM RIVER Latitude: 610600N Longitude: 1605800W

07/24/84 Quality: 0.5 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
57	9	MS	BLM	2	1	1	11	1	1	1	6

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	57	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	57			0		0		0		0	

GRANITE CREEK TO NYAC.

07/20/85 Quality: 1. Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
116	9	RH	NGC	2	1	1	1	1	1	1	5

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	9	0	0	0	0	0	0	0	0	0	0
103	20	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	29			0		0		0		0	

FOOT SURVEY DONE BY ROD HOFFMAN, A PRIVATE CONSULTANT FOR NORTHLAND MINING COMPANY. SURVEY BEGAN AT NORTHLAND BRIDGE (SLATE CREEK) AND ENDED AT CONFLUENCE OF CALIFORNIA CREEK.

Stream: TULUKSAK RIVER Drainage: KUSKOKWIM RIVER Latitude: 610600N Longitude: 1605800W

07/25/85 Quality: 0.9 Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
91	6	DH	ADFG	2	1	1	2	1	2	1	45

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	135	0	0	3092	116	0	0	0	0	0	0
102	7	0	0	90	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	142			3182		0		0		0	

SURVEY CONDITIONS NEAR OPTIMUM. SURVEY BEGAN AT NYAC AND ENDED 3 MI. ABOVE FOG RIVER CONFLUENCE.

10/14/85 Quality: 0.5 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
76	7	KF	ADFG	3	4	4	2	3	2	4	10

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	3	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		3	

SURVEY COMBINED AERIAL FOOT. A COHO IN GOOD CONDITION WAS SIGHTED ON REDD. LANDED FOR SUBSTRATE SAMPLE AND FOUND AT LEAST 3 COHO IN AREA. SUBSTRATE SAMPLE IMPOSSIBLE DUE TO WATER DEPTH. COHO APPEARED TO STILL BE SPAWNING. WATER TURBIDITY INCREASED DUE TO BANK FULL CONDITION UNTIL SURVEY NOT POSSIBLE ABOUT 3 MILES ABOVE NYAC. AREAS 102 AND 101 UNSURVEYABLE.

Stream: TULUKSAK RIVER Drainage: KUSKOKWIM RIVER Latitude: 610600N Longitude: 1605800W

07/07/86 Quality: 1. Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
118	2	DW	TDCO	1	1	1	1	1	1	1	24

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		0	

DW = DOUGLAS WEIR: CONSULTANT FOR NORTHLAND GOLD CORPORATION. HE HAS WORKED IN CONJUNCTION WITH THE DEPARTMENT SINCE 1983 AND HIS SURVEY TECHNIQUE IS THE SAME AS THAT USED FOR DEPARTMENT SURVEYS OF THE TULUKSAK.

07/09/86 Quality: 1. Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
119	2	DW	TDCO	1	1	1	1	1	1	1	24

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		0	

SEE NOTES 7/7/86 DW TULUKSAK SURVEY.

Stream: TULUKSAK RIVER Drainage: KUSKOKWIM RIVER Latitude: 610600N Longitude: 1605800W

07/28/86 Quality: 0.75 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
104	6	DS	ADFG	2	1	1	3	3	2	1	30

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	3	0	0	20	0	0	0	0	0	0	0
102	1	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	4			20		0		0		0	

RIVER VERY HIGH, TURBID, CLEARING IN AREA 102. SURVEY ENDED AT NYAC. ELAPSED TIME 23 MINUTES.

08/02/86 Quality: 0.75 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
120	2	DW	TDCO	2	3	2	2	2	1	1	30

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	2	1	0	0	0	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2			0		0		0		0	

SEE 7/7/86 DW TULUKSAK SURVEY. CHUM SALMON CARCASSES WERE COMMON. NO COUNT POSSIBLE FROM FOG RIVER TO FOOTHILLS.

Stream: TULUKSAK RIVER Drainage: KUSKOKWIM RIVER Latitude: 610600N Longitude: 1605800W

08/03/86 Quality: 0.8 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
122	8	DW	TDCO	2	1	3	2	2	1	1	0

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	4	1	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	4			0		0		0		0	

COUNT MADE ON RAFT TRIP FROM DUGOUT CREEK TO FOOTHILLS. BASED ON DW'S FIVE YEARS OF WORK ON TULUKSAK RIVER, THESE WERE WORST COUNTING CONDITIONS ENCOUNTERED. CHINOOK POPULATION LESS THAN 50 BASED ON PAST YEARS DISTRIBUTION. NO CHUMS ABOVE THE FOOTHILLS.

07/28/87 Quality: 0.75 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
177	3	KF	ADFG	1	1	1	3	3	2	1	36

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	60	0	0	258	0	0	0	0	0	0	0
102	15	0	0	5	0	0	0	0	0	0	0
103	7	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	82			263		0		0		0	

Turbidity prevented survey below Otter Creek. Otter Creek to Nyac was difficult due to green water color obscuring deeper portions of stream. Water was high due to recent rains. Turbidity appeared to be natural.

Stream: TULUKSAK RIVER Drainage: KUSKOKWIM RIVER Latitude: 610600N Longitude: 1605800W

08/01/87 Quality: 1. Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
178	9	DW	ADFT	2	1	1	1	1	1	1	10

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	0	0
102	86	0	0	25	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	86			25		0		0		0	

This survey was done by Doug Weir who has been the resident naturalist at Nyac for the preceeding 10 years or so. He surveyed most of the small tailing streams. The counts were made from 21 Jul through 1 August so there is some chance of double counting.

07/28/88 Quality: 0.75 Rating: 2

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
212	2F	DS	ADFG	3	2	2	2	2	2	1	59

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	188	7	97	1445	243	0	0	0	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	188			1445		0		0		0	

Slightly past peak of spawning. Survey began about 5 miles north of Nyac on Tuluksak area 102, ended 5 miles above Fog River. Water=1 in upper end and 3 near Fog River. USFWS C-185 on floats. Pilot: George Walters. USFWS observer: Ray Jones.

Stream: TWO LAKES Drainage: NECONS RIVER/STONY R. Latitude: 610730N Longitude: 1534500W

07/27/85 Quality: 0.8 Rating: 3

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
88	6	DS	ADFG	1	1	1	3	1	3	1	20

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	20	0	0	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		20		0	

TWO LAKES IS MUCH MORE TURBID THAN TELAQUANA. IF SOCKEYE ARE PRESENT IN SIGNIFICANT NUMBERS, THEY ARE HIDDEN BY SILTY WATERS.

Stream: UNNAMED CREEK/MAGAKTLEK CR. Drainage: AROLIK RIVER Latitude: 594400N Longitude: 1613500W

09/04/84 Quality: 1. Rating: 1

Seq	Method	Obs	Agency	Spawn Stg	Wind	Weather	Water	Water Vis.	Bottom	Sun Angle	Distance
60	1	KF	ADFG	1	1	1	1	1	1	1	1

INDEX	Live Chinook	Dead Chinook	Chinook Redd	Live Chum	Dead Chum	Live Pink	Dead Pink	Live Sockeye	Dead Sockeye	Live Coho	Dead Coho
101	0	0	0	0	0	0	0	0	0	2	0
102	0	0	0	0	0	0	0	0	0	0	0
103	0	0	0	0	0	0	0	0	0	0	0
104	0	0	0	0	0	0	0	0	0	0	0
105	0	0	0	0	0	0	0	0	0	0	0
TOTAL	0			0		0		0		2	

WHILE IN ROUTE FROM GOODNEWS TO BETHEL CROSSED UNNAMED TRIB. OF MAGAKTLEK CREEK WHICH IS TRIB. OF NORTH FORK AROLIK RIVER AND SAW PAIR OF SPAWNING COHO.

.ppendix A. Data type definitions for Kuskokwim Area salmon esca, .nt observation database.

SEQUENCE: unique number assigned to a new row of data at time of entry.
LATITUDE: standard latitude of a point near a body of water or tributary mouth.
LONGITUDE: standard longitude of a point near a body of water or tributary mouth.
STREAM: standard stream name as used in the Kuskokwim River Salmon Observation Catalog.
DRAINAGE: standard drainage name as used in the Kuskokwim River Salmon Observation Catalog.
DATE: date of an observation.
METHOD: primary equipment or technique used to obtain an observation (an F appended to an aircraft code denotes that it is equipped with floats).

1. Super Cub
2. Cessna 185
3. Cessna 180
4. Heliocourier
5. Maule
6. Other Fixed Wing Aircraft
7. Helicopter
8. Boat
9. Foot Survey
10. Counting Tower
11. Weir
12. Sonar
13. Tagging Estimates
14. Personal Interview
15. Literature Review

WIND: to what extent did wind affect the visibility of salmon either by roughing the water surface or by affecting aircraft handling and attitude during the survey?

1. No effect
2. Slight riffle or turbulence, slight effect on counts
3. Moderate riffle or turbulence, affecting counts
4. Heavy riffle or turbulence, major effect on counts

WEATHER: what portion of the sky is obscured by clouds?

1. Clear
2. Slightly Overcast (5-30%)
3. Moderately Overcast (31-70%)
4. Overcast (71-100%)

WATER: to what extent does water clarity prevent salmon observation?

1. Clear, no effect
2. Slightly turbid, deep pools obscured.
3. Moderately turbid, bottom visible in shallow areas
4. Extremely turbid, counts not possible

WATER VISIBILITY: how easily is the water surface seen through glare, trees, shadows, ice, etc.?

1. Good visibility, optimum conditions
2. Fair visibility, water surface seldom obscured
3. Moderate visibility, water frequently obscured
4. Poor visibility, water usually obscured

BOTTOM: does the color and/or pattern of the stream or lake bottom camouflage salmon?

1. Light colored bottom, little pattern, optimum
2. Light colored bottom, some fish-sized dark pattern
3. Slightly dark with darker fish-sized pattern
4. Dark with extensive darker fish-sized pattern

TIME (SUN ANGLE): does the time of day and the associated angle of incidence of sunlight affect salmon visibility?

1. Near local noon, sun angle greatest, optimum
2. Before or after local noon, shadows somewhat longer
3. Well before or after local noon, shadows long
4. Early or late in the day shade dominates

DISTANCE: approximate air miles surveyed (survey time in hours times airspeed in miles per hour).
SPAWN STAGE: are salmon present in maximum numbers?

1. Before peak, number of salmon is increasing
2. Peak, number of salmon is maximum
3. After peak, number of salmon is decreasing

RATING: what is the observers impression of the effectiveness of the survey?

1. Good, salmon visibility good to optimum, survey at peak of spawning
2. Fair, salmon mostly visible, survey at peak of spawning
3. Poor, salmon difficult to view and/or survey not at or near peak of spawning

QUALITY: computed as 1.25-((wind + weather + water + water vis. + bottom + time)/24).
OBSERVER: observer's initials (up to 4 characters).
AGENCY: observer's organizational affiliation (up to 4 characters)
COMMENTS: notes which amplify or add to various aspects of the observation (up to 855 characters).
INDEX AREA: standard stream areas defined in the pre-1984 historic data record (Kuskokwim Stream Catalog, 1954-1983).

Appendix B. Observer and agency index for Kuskokwim Area salmon escapement observation database.

NAME		INITIALS	AFFILIATION	AGENCY
Alt	Ken	KA	AK. Dept. Fish/Game	ADFG
Arvey	Bill	BA	Ak. Dept. Fish/Game	ADFG
Baxter	Rae	RB	Ak. Dept. Fish/Game	ADFG
Brannian	Linda	LB	Ak. Dept. Fish/Game	ADFG
DeCicco	Fred	FD	Ak. Dept. Fish/Game	ADFG
Francisco	Kim	KF	Ak. Dept. Fish/Game	ADFG
Granrota	K.	KG	Private Citizen	PRIV
Huttunen	Dan	DH	Ak. Dept. Fish/Game	ADFG
Jonrowe	Mike	MJ	Ak. Dept. Fish/Game	ADFG
Kuhlman	Fritz	FK	Ak. Dept. Fish/Game	ADFG
Pennoyer	Steve	SP	Ak. Dept. Fish/Game	ADFG
Regnart	Ron	RR	Ak. Dept. Fish/Game	ADFG
Schaefer	Gary	GS	Ak. Dept. Fish/Game	ADFG
Schneiderhan	Dan	DS	Ak. Dept. Fish/Game	ADFG
Schultz	Keith	KS	Ak. Dept. Fish/Game	ADFG
Scott	Mike	MS	Bureau of Land Mgt.	BLM
Weagle	Ken	KW	Bureau of Land Mgt.	BLM
Weir	Doug	DW	Northland Gold Corp.	NGCO
Yanagawa	Carl	CY	Ak. Dept. Fish/Game	ADFG

Appendix C. Stream location index for Kuskokwim Area salmon escapement database.

STREAM	DRAINAGE	LATITUDE	LONGITUDE	USGS MAP
3 LAKES BELOW KAGATI LAKE	Kanektok River	595400N	1601500W	GO-D3
101 entire	104 none			
102 none	105 none			
103 none				
ANIAK RIVER	Kuskokwim River	613440N	1592910W	RM-C2
101 Mouth to Buckstock River	104 Gemuk Mountain to Aniak Lake			
102 Buckstock River to Salmon River	105 none			
103 Salmon River to Gemuk Mountain				
ANIAK SONAR	Kuskokwim River	613009N	1592226W	RM-C2
101 none	104 none			
102 none	105 none			
103 none				
AROLIK LAKE	Arolik River	592900N	1610600W	GO-C8
101 entire	104 none			
102 none	105 none			
103 none				
AROLIK RIVER	Kuskokwim Bay	593800N	1613600W	GO-C8
101 North River to South/East Fork	104 East Fork to Arolik Lake			
102 South River to South/East Fork	105 none			
103 South Fork				
AWAYAK LAKE NORTH	Goodnews River	593000N	1603636W	GO-C5
101 entire	104 none			
102 none	105 none			
103 none				
AWAYAK LAKE SOUTH	Goodnews River	592900N	1603600W	GO-C5
101 entire	104 none			
102 none	105 none			
103 none				

STREAM	DRAINAGE	LATITUDE	LONGITUDE	USGS MAP
BARNUM CREEK	Goodnews River	591500N	1612300W	GO-B7

101 entire
102 none
103 none
104 none
105 none

****

BEAR CREEK	Tuluksak River	610000N	1595800W	BE-D3

101 entire
102 none
103 none
104 none
105 none

****

BEAR CREEK/PITKA FORK	Middle Fork/Big River	625100N	1543300W	MG-D4

101 entire
102 none
103 none
104 none
105 none

****

BIG RIVER	Kuskokwim River	625800N	1545300W	MG-D4

101 entire
102 none
103 none
104 none
105 none

****

BIG SALMON FORK	Little Tonzona River	625720N	1535530W	ME-A2

101 entire
102 none
103 none
104 none
105 none

****

BLACKWATER CREEK	Big River	625730N	1545345W	MG-D4

101 entire
102 none
103 none
104 none
105 none

****

BUCKSTOCK RIVER	Aniak River	612100N	1591400W	RM-B1

101 entire
102 none
103 none
104 none
105 none

****

STREAM	DRAINAGE	LATITUDE	LONGITUDE	USGS MAP
CAN CREEK	Stony River	611600N	1550100W	LH-B6

101 Mouth to foothills
102 Foothills to headwaters
103 none
104 none
105 none

****

CANYON CREEK	Kwethluk River	601400N	1601500W	BE-B4

101 entire
102 none
103 none
104 none
105 none

****

CANYON LAKE	Goodnews River	592600N	1610900W	GO-B6

101 entire
102 none
103 none
104 none
105 none

****

CARTER CREEK	Kuskokwim Bay	591700N	1615600W	GO-B8

101 entire
102 none
103 none
104 none
105 none

****

CHEENEETNUK RIVER	Swift River	614850N	1560030W	LH-D8

101 Mouth to foothills
102 Foothills to Shoeleather Creek
103 Shoeleather Creek to headwaters
104 none
105 none

****

CHINEEKLUK CREEK	Holokuk River	612200N	1581900W	ST-B6

101 entire
102 none
103 none
104 none
105 none

****

CHINEEKLUK LAKE	Chineekluk Creek/Holokuk R.	611900N	1575155W	ST-B5

101 entire
102 none
103 none
104 none
105 none

****

STREAM	DRAINAGE	LATITUDE	LONGITUDE	USGS MAP
CHUILNUK LAKE	Holitna River	612030N	1574730W	ST-A4

101 entire
102 none
103 none
104 none
105 none

****

CHUKOWAN RIVER	Holitna River	605000N	1575000W	TM-D5

101 Mouth to Enatalik Creek
102 none
103 none
104 none
105 none

****

CRIPPLE CREEK	Kuskokwim Bay	592500N	1612100W	GO-B8

101 entire
102 none
103 none
104 none
105 none

****

CROOKED CREEK	Kuskokwim River	615210N	1580800W	ST-D6

101 entire
102 none
103 none
104 none
105 none

****

DENNIS CREEK	Tonzona River	630930N	1533210W	ME-A1

101 entire
102 none
103 none
104 none
105 none

****

DILLINGER RIVER	South Fork Kuskokwim River	623440N	1533340W	MG-C1

101 entire
102 none
103 none
104 none
105 none

****

DONLIN CREEK	Crooked Creek	620445N	1581300W	ID-A5

101 entire
102 none
103 none
104 none
105 none

****

STREAM	DRAINAGE	LATITUDE	LONGITUDE	USGS MAP
EAGLE MOUNTAIN CREEK	Stony River	610800N	1542900W	LH-A4

101 entire
102 none
103 none
104 none
105 none

****

EAST FORK GEORGE RIVER	George River	615900N	1573400W	ST-D5

101 Mouth to North Fork (same as George R.)
102 North Fork to headwaters (George River)
103 none
104 none
105 none

****

EAST FORK KUSKOKWIM RIVER	Kuskokwim River	630700N	1543500W	ME-A4

101 entire
102 none
103 none
104 none
105 none

****

EAST FORK OSKAWALIK RIVER	Oskawalik River	613405N	1574030W	ST-C5

101 entire
102 none
103 none
104 none
105 none

****

EEK RIVER	Kuskokwim River	601200N	1621500W	BI-A1

101 Mouth to Middle Fk. Eek River
102 Middle Fk. Eek River to Great Ridge
103 Great Ridge to Eek Lake Creek
104 Eek Lake Creek to Rainy Creek Airstrip
105 Rainy Creek Airstrip to headwaters

****

FOG RIVER	Tuluksak River	610500N	1604500W	RM-A5

101 entire
102 none
103 none
104 none
105 none

****

GAGARYAH RIVER	Swift River	613715N	1553840W	LH-C6

101 Mouth to ridge on north side
102 North side ridge to hill 2550
103 none
104 none
105 none

****

STREAM	DRAINAGE	LATITUDE	LONGITUDE	USGS MAP
GEMUK LAKE	Gemuk River	603400N	1585600W	TM-C8

101 entire
102 none
103 none
104 none
105 none

****

GEMUK RIVER	Chukowan River	604700N	1583200W	TM-D7

101 entire
102 none
103 none
104 none
105 none

****

GEORGE RIVER	Kuskokwim River	615400N	1574200W	ST-D5

101 Mouth to North Fork (see E. Fk. George)
102 North Fork to headwaters (see E.Fk.G.R.)
103 none
104 none
105 none

****

GOLD LAKE	Gold Creek/Kisaralik R.	601251N	1592730W	BE-A2

101 entire
102 none
103 none
104 none
105 none

****

GOODNEWS LAKE	Goodnews River	593000N	1613100W	GO-B5

101 entire
102 none
103 none
104 none
105 none

****

GOODNEWS RIVER	Kuskokwim Bay	590700N	1613500W	GO-A7

101 Mouth to Slate Creek
102 Slate Creek to Nimgum Creek
103 Nimgum Creek to Goodnews Lake
104 none
105 none

****

GRANITE CREEK	Tuluksak River	605830N	1600550W	BE-D3

101 entire
102 none
103 none
104 none
105 none

****

STREAM	DRAINAGE	LATITUDE	LONGITUDE	USGS MAP
HIGHPOWER CREEK	Swift Fork Kuskokwim River	632500N	1530700W	ME-B1

101 entire
102 none
103 none
104 none
105 none

****

HOHOLITNA RIVER	Holitna River	613035N	1565900W	ST-C3

101 Whitefish Lake to South Fork Hoholitna
102 South Fork Hoholitna R. to mouth
103 none
104 none
105 none

****

HOLITNA RIVER	Kuskokwim River	614045N	1571000W	ST-C4

101 Mouth to Nogamut
102 Nogamut to Kiknik Creek
103 Kiknik Creek to Kashegelok
104 Kashegelok to Kogrukluk River Weir
105 none

****

HOLOKUK LAKE	Holokuk River	613216N	1583536W	ST-C7

101 entire
102 none
103 none
104 none
105 none

****

HOLOKUK RIVER	Kuskokwim River	613215N	1583535W	ST-C7

101 Mouth to Ski Creek
102 Ski Creek to Chineekluk Creek
103 Chineekluk Creek to headwaters
104 none
105 none

****

INDIAN CREEK	Carter Bay/Kuskokwim Bay	591800N	1615830W	GO-B8

101 entire
102 none
103 none
104 none
105 none

****

JACKSMITH CREEK	Jacksmith Bay/Kuskokwim Bay	592900N	1614500W	GO-B8

101 entire
102 none
103 none
104 none
105 none

****

STREAM	DRAINAGE	LATITUDE	LONGITUDE	USGS MAP
JONES RIVER	South Fork Kuskokwim River	623415N	1533330W	MG-C2

101 entire
102 none
103 none
104 none
105 none

****

KS-2 (location unknown)	Stony River	614611N	1563521W	ST-D1

101 entire
102 none
103 none
104 none
105 none

****

KAGATI LAKE	Kanektok River	595200N	1600500W	GO-D3

101 entire
102 none
103 none
104 none
105 none

****

KALMAKOF RIVER	Kuskokwim River	613430N	1585330W	ST-C8

101 entire
102 none
103 none
104 none
105 none

****

KANEKTOK RIVER	Kuskokwim Bay	594500N	1615600W	GO-C8

101 Mouth to Nukluk Creek
102 Nukluk Creek to Kanuktik Creek
103 Kanuktik Creek to Lake Kagati
104 Kagati Lake
105 Kagati Lake to headwaters

****

KANEKTOK TOWER (LOWER)	Kanektok River	594621N	1615018W	GO-C8

101 none
102 none
103 none
104 none
105 none

****

KANEKTOK TOWER (UPPER)	Kanektok River	595258N	1600746W	GO-C8

101 none
102 none
103 none
104 none
105 none

****

STREAM	DRAINAGE	LATITUDE	LONGITUDE	USGS MAP
KANUKTIK CREEK	Kanektok River	595300N	1602800W	GO-D4

101 entire
102 none
103 none
104 none
105 none

****

KANUKTIK LAKE	Kanuktik Creek/Kanektok R.	594400N	1601900W	GO-C4

101 entire
102 none
103 none
104 none
105 none

****

KASIGLUK RIVER	Kuskokwim River	605045N	1611400W	BE-D6

101 Mouth to first cutoff
102 First cutoff to second cutoff
103 Second cutoff to Little Kasigluk River
104 Little Kasigluk River to Canyon
105 none

****

KASIGLUK SONAR	Kasigluk River/Kuskokwim R.	604808N	1605756W	BE-D6

101 none
102 none
103 none
104 none
105 none

****

KINEGNAK RIVER	Chagvan Bay	584915N	1614045W	HI-D6

101 entire
102 none
103 none
104 none
105 none

****

KIPCHUK RIVER	Aniak River	610300N	1591000W	RM-A1

101 Mouth to valley above canyon
102 Canyon loop
103 Canyon loop to headwaters
104 none
105 none

****

KISARALIK LAKE	Kisaralik River	601100N	1592500W	BE-B2

101 entire
102 none
103 none
104 none
105 none

****

STREAM	DRAINAGE	LATITUDE	LONGITUDE	USGS MAP
KISARALIK RIVER	Kuskokwim River	605130N	1611400W	BE-D6

101 Mouth to south 90 degree turn
102 South 90 degree turn to Goldengate Falls
103 Goldengate Falls to Kisaralik Lake
104 none
105 none

****

KOGRUKLUK RIVER	Holitna River	604900N	1575100W	TM-D5

101 entire
102 none
103 none
104 none
105 none

****

KOGRUKLUK TOWER	Kogrukluk River/Holitna R.	604947N	1575051W	TM-D5

101 none
102 none
103 none
104 none
105 none

****

KOGRUKLUK WEIR	Kogrukluk River/Holitna R.	604947N	1575052W	TM-D5

101 none
102 none
103 none
104 none
105 none

****

KUKAKTLIM LAKES	Kukaktlim Cr./M Fk Goodnews	592000N	1603000W	GO-B4

101 entire
102 none
103 none
104 none
105 none

****

KUSKOKWIM RIVER	Kuskokwim Bay	600500N	1622500W	KB-D1

101 Mouth to Tuluksak River
102 Tuluksak River to Aniak River
103 Aniak River to Holitna River
104 Holitna River to McGrath
105 McGrath to headwaters

****

KWETHLUK RIVER	Kuskokwim River	604900N	1612700W	BE-D7

101 Mouth to Three-step Mountain
102 Three-step Mountain to Elbow Mountain
103 Elbow Mountain to Canyon Creek
104 Canyon Creek to headwaters
105 none

****

STREAM	DRAINAGE	LATITUDE	LONGITUDE	USGS MAP
KWETHLUK SONAR	Kwethluk River	602805N	1610610W	BE-D7

101 none
102 none
103 none
104 none
105 none

****

LAKE ABOVE KANUKTIK LAKE	Kanuktik Creek/Goodnews R.	594500N	1601000W	GO-C4

101 entire
102 none
103 none
104 none
105 none

****

LITTLE KASIGLUK RIVER	Kasigluk River/Kuskokwim R.	604100N	1603600W	BE-C5

101 entire
102 none
103 none
104 none
105 none

****

LITTLE TONZONA RIVER	South Fork Kuskokwim River	625756N	1632139W	MG-D3

101 entire
102 none
103 none
104 none
105 none

****

LITTLE UNDERHILL CREEK	Stony River	614545N	1544740W	LH-C4

101 entire
102 none
103 none
104 none
105 none

****

MIDDLE FORK EEK RIVER	Eek River	600800N	1613500W	BE-A7

101 entire
102 none
103 none
104 none
105 none

****

MIDDLE FORK GOODNEWS LAKES	Middle Fork Goodnews River	592400N	1603600W	GO-B5

101 North Lake and inlet creek to headwaters
102 South Lake and inlet creek to headwaters
103 Kukaktlim Lakes & inlet cr. to U.Kuk. L.
104 Upper Kukaktlim Lake Cr. to headwaters
105 none

****

STREAM	DRAINAGE	LATITUDE	LONGITUDE	USGS MAP
MIDDLE FORK GOODNEWS RIVER	Goodnews River	590800N	1612900W	GO-A7

101 Mouth to fork of North and South L. Crs.
102 North Lake Creek
103 South Lake Creek
104 Kukaktlim Creek
105 none

****

MIXON FORK	Takotna River	630200N	1554000W	MG-D6

101 entire
102 none
103 none
104 none
105 none

****

NORTH FORK GEORGE RIVER	George River	620300N	1573400W	ID-A4

101 entire
102 none
103 none
104 none
105 none

****

NORTH FORK KUSKOKWIM RIVER	Kuskokwim River	630700N	1543400W	ME-A4

101 entire
102 none
103 none
104 none
105 none

****

NUKLUK CREEK	Kanektok River	594300N	1605800W	GO-C6

101 entire
102 none
103 none
104 none
105 none

****

OPHIR CREEK	Whitefish Lake	612000N	1600000W	RM-B4

101 entire
102 none
103 none
104 none
105 none

****

OSKAWALIK RIVER	Kuskokwim River	614430N	1581130W	ST-C6

101 Mouth to South Creek
102 South Creek to East Creek
103 East Creek to Henderson Mountain
104 Henderson Mountain to headwaters
105 none

****

STREAM	DRAINAGE	LATITUDE	LONGITUDE	USGS MAP
OWHAT RIVER	Kuskokwim River	613600N	1592500W	RM-C2

101 entire
102 none
103 none
104 none
105 none

****

OYAK CREEK	KUSKOKWIM BAY	594743N	1615700W	GO-D8

101 entire
102 none
103 none
104 none
105 none

****

PITKA FORK	Middle Fork River	625600N	1544500W	MG-D4

101 entire
102 none
103 none
104 none
105 none

****

POST RIVER	South Fork Kuskokwim River	622400N	1532800W	MG-B1

101 entire
102 none
103 none
104 none
105 none

****

POTHOLES LAKES	Goodnews River	592002N	1603002W	GO-B5

101 entire
102 none
103 none
104 none
105 none

****

QUICKSILVER CREEK	Kisaralik River	602305N	1595905W	BE-B3

101 entire
102 none
103 none
104 none
105 none

****

QUICKSILVER LAKES	Quicksilver Cr./Kisaralik R.	602300N	1595900W	BE-B3

101 entire
102 none
103 none
104 none
105 none

****

STREAM	DRAINAGE	LATITUDE	LONGITUDE	USGS MAP
SALMON RIVER	Kuskokwim Bay	585143N	1614556W	HI-D6

101 entire
102 none
103 none
104 none
105 none

****

SALMON RIVER/ANIAK RIVER	Kuskokwim River	610400N	1591100W	RM-A1

101 Mouth to Marvel Creek
102 Marvel Creek to Cripple Creek
103 Cripple Creek to headwaters
104 none
105 none

****

SALMON RIVER/PITKA FORK	Middle Fork/Big River	625330N	1543420W	MG-D4

101 Mouth to fork
102 North Fork
103 Middle Fork
104 South Fork
105 none

****

SELATNA RIVER	Kuskokwim River	623100N	1554800W	MG-C6

101 entire
102 none
103 none
104 none
105 none

****

SHOTGUN CREEK	Holitna River	604901N	1575101W	TM-D5

101 entire
102 none
103 none
104 none
105 none

****

SLATE CREEK	Tuluksak River	605900N	1600100W	BE-D3

101 entire
102 none
103 none
104 none
105 none

****

SODA CREEK	North Fork Kuskokwim River	631500N	1540100W	ME-B3

101 entire
102 none
103 none
104 none
105 none

****

STREAM	DRAINAGE	LATITUDE	LONGITUDE	USGS MAP
SOUTH FORK GOODNEWS RIVER	Goodnews River	590730N	1612930W	GO-A7

101 entire
102 none
103 none
104 none
105 none

****

SOUTH FORK HOHOLITNA RIVER	Hoholitna River/Holitna R.	605400N	1561500W	TM-D1

101 entire
102 none
103 none
104 none
105 none

****

SOUTH FORK KUSKOKWIM RIVER	Kuskokwim River	630500N	1543900W	ME-A4

101 entire
102 none
103 none
104 none
105 none

****

SOUTH LAKE	Goodnews River	592401N	1603601W	GO-C5

101 entire
102 none
103 none
104 none
105 none

****

STINK RIVER	Stony River	613030N	1560750W	ST-C1

101 entire
102 none
103 none
104 none
105 none

****

STONY RIVER	Kuskokwim River	614610N	1563520W	ST-D1

101 entire
102 none
103 none
104 none
105 none

****

SULLIVAN CREEK	Pitka Fork	624800N	1542900W	MG-D4

101 entire
102 none
103 none
104 none
105 none

****

STREAM	DRAINAGE	LATITUDE	LONGITUDE	USGS MAP
SWIFT RIVER	Kuskokwim River	615320N	1561830W	ST-D1

101 entire
102 none
103 none
104 none
105 none

TAKSHILIK CREEK	Kanektok River	594400N	1610000W	GO-C6

101 entire
102 none
103 none
104 none
105 none

TATINA RIVER	South Fork Kuskokwim River	621800N	1532300W	MG-B1

101 entire
102 none
103 none
104 none
105 none

TATLAWIKSUK RIVER	Kuskokwim River	615510N	1561430W	ST-D1

101 Mouth to foothills (1172 Witsuk marker)
102 Foothills to hill 1465
103 Hill 1465 to headwaters
104 none
105 none

TELAQUANA LAKE	Stony River	605700N	1535200W	LG-D3

101 entire
102 none
103 none
104 none
105 none

TELAQUANA RIVER	Stony River	610410N	1542430W	LG-D3

101 entire
102 none
103 none
104 none
105 none

TEVYARAQ L. (FORMER UNNAMED)	Holokuk River	611700N	1580200W	ST-A6

101 entire
102 none
103 none
104 none
105 none

STREAM	DRAINAGE	LATITUDE	LONGITUDE	USGS MAP
TEVYARAQ LAKE	Chineekluk Creek/Holokuk R.	611605N	1580143W	ST-B6

101 entire
102 none
103 none
104 none
105 none

****

TITNUK CREEK	Holitna River	612100N	1570300W	ST-B3

101 entire
102 none
103 none
104 none
105 none

****

TROUT LAKE	Stony River	611700N	1553200W	LH-A7

101 entire
102 none
103 none
104 none
105 none

****

TULUKSAK RIVER	Kuskokwim River	610600N	1605800W	RM-A6

101 Mouth to Foothills
102 Foothills to Nyac
103 Nyac to headwaters
104 none
105 none

****

TUNKALESHNA CREEK	Stony River	610700N	1542600W	LH-A4

101 entire
102 none
103 none
104 none
105 none

****

TUNULIK RIVER	Goodnews Bay	590800N	1613730W	GO-A7

101 entire
102 none
103 none
104 none
105 none

****

TWO LAKES	Stony River	610730N	1534500W	LH-A2

101 entire
102 none
103 none
104 none
105 none

****

STREAM	DRAINAGE	LATITUDE	LONGITUDE	USGS MAP
UNALUK RIVER	Kinegnak River	585000N	1613800W	HI-D5

101 entire
102 none
103 none
104 none
105 none

****

UNNAMED TRIBUTARY	Big River	624500N	1544000W	MG-D4

101 entire
102 none
103 none
104 none
105 none

****

UNNAMED TRIBUTARY	Chineekluk Creek	611930N	1580200W	ST-B6

101 entire
102 none
103 none
104 none
105 none

****

UNNAMED TRIBUTARY	George River	620301N	1573401W	ID-A4

101 entire
102 none
103 none
104 none
105 none

****

UNNAMED TRIBUTARY	North Fork Swift River	613500N	1544500W	LH-C5

101 entire
102 none
103 none
104 none
105 none

****

UNNAMED TRIBUTARY	Stony River	610200N	1541500W	LH-A4

101 entire
102 none
103 none
104 none
105 none

****

UNNAMED TRIBUTARY	Swift River	613000N	1550000W	LH-C6

101 entire
102 none
103 none
104 none
105 none

****

STREAM	DRAINAGE	LATITUDE	LONGITUDE	USGS MAP
WATERBOOT CREEK	Aniak River	605400N	1590000W	BE-D1

101 entire
102 none
103 none
104 none
105 none

****

WEST FORK OSKAWALIK RIVER	Oskawalik River	613200N	1574300W	ST-C5

101 entire
102 none
103 none
104 none
105 none

****

WHITEFISH LAKE	Ophir Creek	612200N	1600100W	RM-B3

101 entire
102 none
103 none
104 none
105 none

****