State of Alaska
Department of Fish and G
Nomination for Waters
Important to Anadromous Species

1986
Year of Revision

Name of Waterway TRIBUTARY TO EUAINGIKNUK CREEK

AWC# of Waterway 331-00-10290-2201-3090

AWC Volume & Number 5

USGS Quad NOATAK D-3

Addition X
Deletion X
Correction
Change

Change to X
Atlas
Catalog
Both

Approved

Regional Supervisor — 12-31-85 Date

GK SRS — 1-2-86

Drafted Tom Ruccio 1-2-86

86 490

ALASKA DEPT. OF FISH & GAME
DEC 31 1985
REGION II
HABITAT DIVISION

Species	Date(s) Observed	Spawning	Rearing	Migration
Arctic char	late August 84		X	

Comments: Provide any clarifying information, including number of fish observed, location of fish survey data, etc.

SEE HIGHLIGHTED PORTIONS OF THE DAMES + MOORE REPORT ATTACHED (D+M, 1984)
ANADROMOUS CHAR DOCUMENTED IN EUAINGIKNUK CREEK BELOW RED DOG HAUL ROAD X-ING (FRED DeCICCO)
change channel of 3090 as shown. delete lake 0010

Attach a copy of a map showing location of mouth and upper points of each species, specific stream reaches identified for spawning or rearing, locations of barriers, such as falls. Attach a copy of the fish survey data, if available.

Name of Observer (please print)

Date: Signature:

Address:

JOB REPORT

1984 FISH SURVEY ALONG THE PROPOSED COMINCO ALASKA INC. ACCESS ROUTE

October 12, 1984

Dames & Moore

5438-078-20

made on the main Omikviorok River and on Dud Creek (Dames & Moore, unpublished data).

This report compiles and includes information from those earlier surveys along with results from the 1984 surveys.

2.0 MATERIALS AND METHODS

The primary method used for sampling fish in 1984 was a Smith-Root Type VII electroshocker fished in the pulsed DC mode. In 1982 and 1983 work, a Type XI electroshocker was used. In all 3 years, aerial stream surveys for spawning fish were conducted from helicopters. All streams with reasonable potential for spawning by anadromous fish were flown for several miles both up and downstream during late August or early September of at least one of the study years.

At all crossings surveyed, the nature of the stream habitat was qualitatively described and the stream then electroshocked for up to 100 meters up and downstream. Lesser distances were sampled in streams with moderate to high densities of fish. Fork length was measured on all salmonids captured and total length was recorded for cottids.

3.0 RESULTS AND DISCUSSION

3.1 GENERAL

A total of 17 potential stream crossings was surveyed between August 21 and 24, 1984. Of these, 14 were found to contain fish in the immediate vicinity of the crossing. In addition, the Lake Fork of the Omikviorok and the upper North Fork of Evaingiknuk Creek had fish downstream of the crossing, although none was taken at the crossing. Arctic char (Salvelinus alpinus) was the predominant species taken, followed by the sculpin (Cottus cognatus). Surprisingly, no juvenile Arctic grayling (Thymallus arcticus)

Crossing No. 13 Right Tak Creek (Little Creek)

At the crossing (center of northern boundary, Sec. 22, T9N, R20W), this stream is generally incised between willow and grassy banks with some narrow gravel bars. Gradient is moderate and flow was estimated at 10 cfs in late August 1984.

Bed is coarse gravel to cobble and boulders, providing excellent habitat for char fry (49-69 mm) as well as sculpin (110, 130 mm). Fish density was high, second only to the Valley Ford of Dud Creek (Crossing No. 16).

3.5 EVAINGIKNUK CREEK SYSTEM

Evaingiknuk Creek is a moderate-sized tributary of the Noatak River. A major upper tributary of this creek (the North Fork) will be crossed twice by the planned road. Anadromous char spawn in low numbers in the mainstream of the creek, beginning a mile or two downstream of the long low ridge once considered as a borrow source for the road (F. DeCicco, ADF&G Sportfish Division, Fairbanks, personal communication).

Crossing No. 14 Lower North Fork - Evaingiknuk Creek #1

At this crossing (south of center, Sec. 33, T30N, R19W), the North Fork is shallowly incised in a coarse cobble and boulder bed. A moderately steep bank rises some 4-6 m on the west side of the creek while a flat grassy area, perhpas an active highwater area, lies on the east. The stream is realitvely straight at the crossing and the gradient is moderate. Flow was estimated at 8 cfs in late August 1984. The coarses bed offers excellent habitat, with approximately equal numbers of the char and sculpin. Char included both fry (55-64 mm) and older juveniles (119 mm).

Crossing No. 15 Upper North Fork - Evaingiknuk Creek #2

At the upper crossing (SW 1/4, Sec. 27, T30N, R19W), the North Fork is deeply incised (0.6-1.0 m) with a low sinuosity and a moderate to high gradient. A significant drop (about 0.6 m in one cascade) occurs near the surveyed centerline but could be avoided by moving the alignment upstream 5-10 m. The channel appears stable with grass and willow banks and minor undercutting.

The very coarse boulder and cobble bed would provide good habitat at lower flows. However, in late August 1984, velocity was uniformly high and no fish were taken in electrofishing.

3.6 DUD CREEK

Dud Creek is a relatively small tributary of Ikalukrok Creek, itself a major tributary of the Wulik River. Dud Creek drains much of the southern Red Dog Valley, including the area around the air strip (via Buddy and Bons creeks). Spawning by anadromous char has been documented in the lower mainstem of Dud Creek (Dames & Moore 1983a,b) and a single spawning pair of chinook salmon was seen on August 23, 1984.

Crossing No. 16 Valley Fork - Dud Creek (Anxiety Ridge #1)

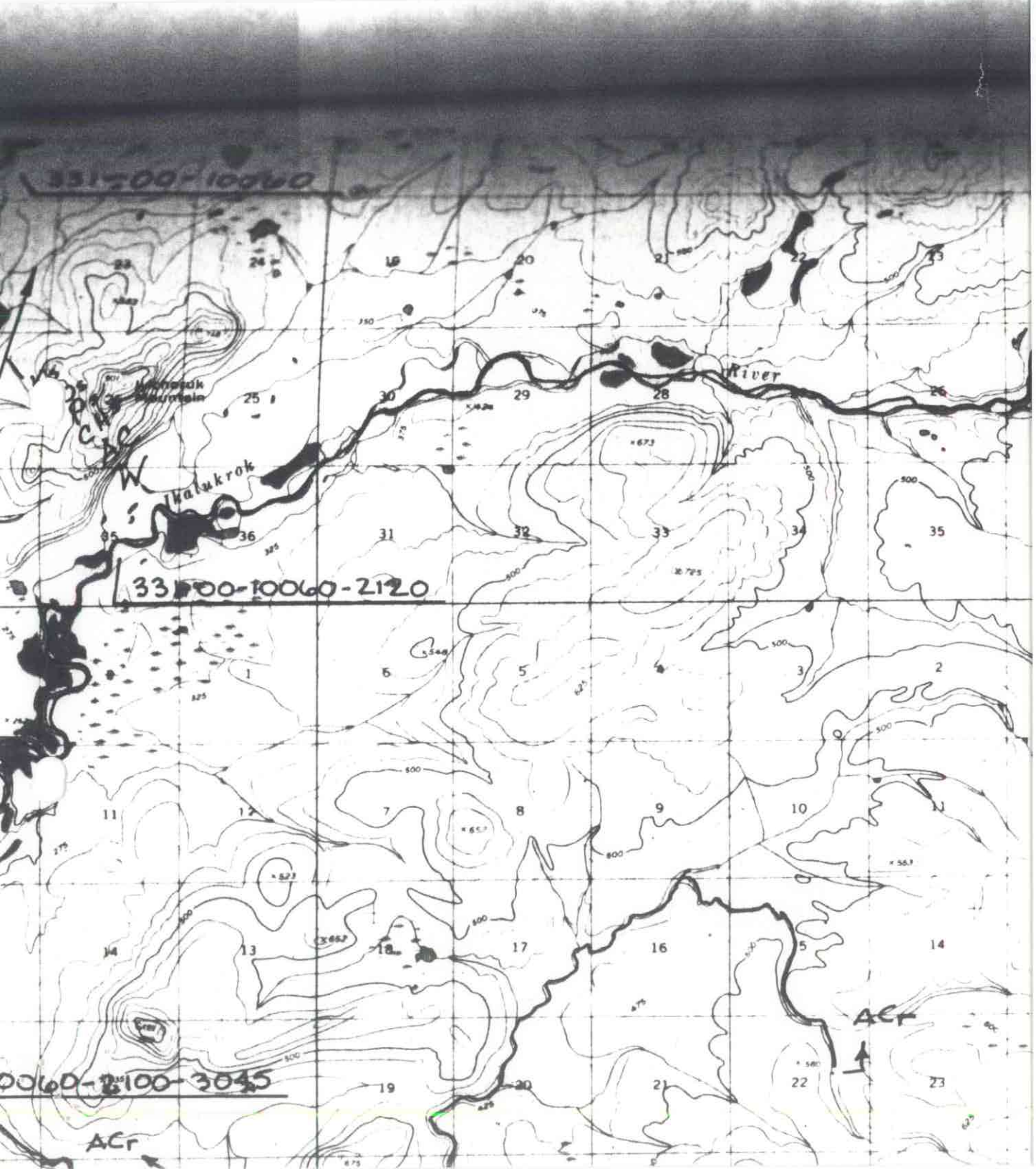
At the crossing (SW 1/4, Sec. 24, T30N, R19W), the Valley Fork flows in a stable, moderate gradient, channel with a coarse gravel/cobble/boulder bed. Flow was measured at 22.5 cfs (1 mile downstream) on August 18, 1982. The channel at the original crossing undergoes two 90 degrees bends which were to be avoided by realignment (B. Drage, PN&D, personal communication). Banks are moss and boulders with overhanging willows and some narrow cobble and gravel bars. The southwest bank slopes gradually upward, while the northeast side has an unusual flat terrain with lumpy "frostheaves" of cobbles.

APPENDIX A (Continued)

Number	System	Tributary	Sec.	Tn.	Rn.	Date	Wetted Width (feet)	Maximum Depth (feet)	Flow (cfs)	Bed Material	Bank Material	Channel Description	Fish Presence/Habitat[a]
39	Omikviorok River	Dry Fork Tributary	36	27N	24W	08-16-82	2-10	1	<1[b]	grass	grass	wetted area	none
40	Omikviorok River	Dry Fork	25-36	27N	24W	08-16-82	10-25	-	0	gravel/cobble	gravel/cobble	dry creek bed evidence of significant breakup flow	none; migration of char or grayling may occur during periods of flow
41	Omikviorok River	Main Fork	24-25	27N	24W	08-16-82	15-40	5	37	gravel/cobble	gravel/cobble	sinuous channel, broad gravel bars suggest higher flows; rounded gravel/cobble	good riffles and pools AC-fry, yearling, resident adults abundant GR-likely
42	Imikruk Creek	Tributary	13	27N	24W	08-16-82	(e)	-	-				
43	Imikruk Creek	Tirbutary	12	27N	24W	08-16-82	(e)	-	-				
44	Imikruk Creek	Main Stem	12	27N	24W	08-16-82	3-10	3	1[b]	grass/silt	grass	beaded	unlikely
45	Sivu Creek	South Fork	1	27N	24W	08-16-82	(e)						
46	Sivu Creek	Main Stem	29	28N	23W	08-17-82	5-40	>6	4.8	gravel/cobble silt in instream pond	cobble/grass	U-shaped channel in and out of instream pond	no fish taken in electrofishing creek or angling pond; however, some fish are likely
47	Dirty Creek	Lake Outlet Tributary	25 SE 1/4	28N	23W	08-17-82	2-5	1	1[b]	grass	grass	lake outlet flows among tussocks (not on USGS map)	none
48	Dirty Creek	South Fork	30	28N	22W	08-17-82	5-10	4	6.9	cobble/silt	cobble/grass	U-shaped channel, silt bed in deeper pools only	no fish taken, some fish use likely
49	Evaingiknuk	South Fork	9	29N	19W	08-18-82	3-15	2	6.8	sand/cobble	gravel/cobble	wide sand/gravel bars suggest higher flows	good habitat GR-fry AC-possible
50	Evaingiknuk	North Fork	9	29N	19W	08-18-82	8-25	3	32.1	gravel/cobble	gravel/cobble	wide bars in lower reach suggests higher flows; more stable channel above Lake Fork	good habitat GR-fry CC AC-likely; present at borrow site
51	Evaingiknuk	Lake Fork	5	29N	19W	08-18-82	3-5	2	3[b]	gravel/cobble	cobble/vegetation	steep V-shaped valley near North Fork; flow among tussocks near lake	unlikely, excessive gradient

deletion

(e) Stream not found.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