FORM 02-001B

MEMORANDUM State of Alaska 102-60-90u

TO: Robert H. Armstrong
Sport Fish Division
Juneau
Dept. of Fish and Game

DATE : September 10, 1974

FROM: Donald L. Siedelman
Sport Fish Division
Ketchikan
Dept. of Fish and Game

SUBJECT: Anderson Creek
Karta River

Anderson Creek was foot surveyed on August 27, 1974 by Dennis Blankenbeckler and myself in relationship to the Forest Service proposed activity in the area - logging. We were dropped in via helicopter just below the lake area as indicated on Page 1 of 6. We had also tried hook and lining the upper lake with no results except one follow of a fish representing (?) a cutthroat trout. More about fishing in the lake later.

First off, we began taking temperatures, charting creek and catching fish. All fish caught are on survey sheets as to area caught and age. All the fish observed were coho fry. They were fairly numerous throughout the entire creek area. Minnow trapping further substantiated this observation. There were a couple young cutthroat trapped. (Minority).

From all that can be interpreted, it appears that only coho are able to traverse the falls and probably only in low water conditions. After looking at the falls and the fish, it appears the fish have genetically adapted themselves for this situation. All coho observed and caught were small slender 4-6 lbs. with 6 lbs. a big fish.

There is only one area in the falls that these fish can get over and that is on the left side looking upstream out of the main current. There is a slight step in this area that provides hope. Just below this area there is a small pool which then goes into a shoot with a climb. Appears that this could be a velocity block.

The coho are not fat and have seemed to evolve into an early run returning for this low water situation. They are fairly well "beat up" by this partial block (?) even though some do make the falls.

The cutthroat and rainbow trout from agings appeared to be resident stocks only. The major share of these two species were below the falls with no rainbow trout found above the falls. No Dolly Varden were collected throughout the entire creek area.

The last 500 yards of the Creek had 43 spawning red salmon. This area seemed to be marginal for spawning.

Checked under the Creek rocks and did not observe insect life. I did see a stone fly and a Caddis fly. The Creek seems devoid of abundant insect life.

A salamander (orange and brown) was collected from the Creek.

Spawning areas are excellent throughout most of the upper Creek area and good to fair below the last rapids in the lower Creek area. There seems to be a good pool-riffle combination in this area.

These falls should be looked at for possibly installing a fish passage device. There is,as stated earlier, excellent rearing and spawning areas. One could perhaps start a run of sockeye in this area without too much competition between the species. They could easily be introduced in the upper Lakes in the fry or smolt stage.

This upper area has a good sport-fish potential if a ladder of some sort or even modifications to the falls was installed or accomplished. This would also provide more steelhead spawning areas. Perhaps, we should be looking at this for future sportfish potential instead of salmon.

I feel this stream has more potential than is being utilized by either species or numbers. Hopefully, this spring I can get in this area for foot surveys on steelhead. If all works out, Commercial Fish and I will get over to survey for coho salmon activities later this fall.

There appears to be two age classes of coho fry in the Creek. "0" check and "1" check! There could be a few two checks, but probably not a real large amount. Interesting note was that no coho fry were collected in the upper Lake.

There is a small area with fair to poor spawning potential in the upper Creek area shown on Page 2 and 3. This is fairly swift with big boulders but has some marginal areas on the fringes.

CC: A. Schmidt

ANDERSON LAKE

A variable mesh gill net (1" - 4" stretch mesh) was set in this lake on August 29, 1974 at 1350. It was pulled on August 30, 1974 at 0800. The lake surface temperature at setting was 15.5° C. and at pulling, 13.0° C.

1st Panel: 31 Dolly Varden

231	240	196	218	218	170
180	184	194	190	196	190
174	167	213	209	166	194
172	184	193	190	191	165
178	204	198	173	191	178
191					

2nd Panel: 3 Dolly Varden, 2 Cutthroat

DV=228, 260, 229.

CT=359mm, Male

Stomach: 1 adult dragon fly
1 fry (species unknown).

278mm, Female

Stomach: 1 D.V. 100 in lgth.

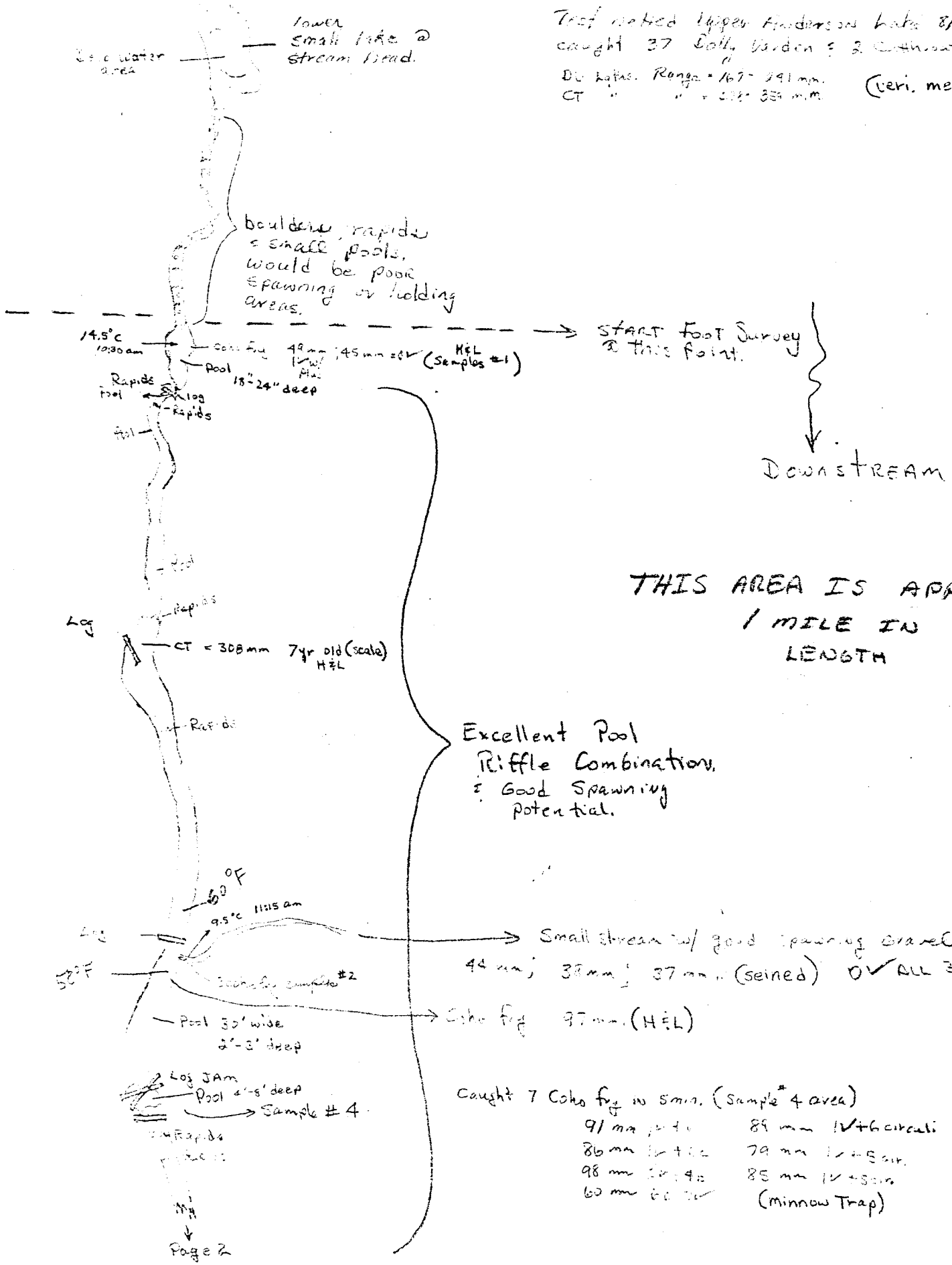
3rd Panel: 1 Dolly Varden (240mm).

4th Panel: 2 Dolly Varden (235, 241mm).

Caught a total of 37 Dolly Varden and 2 cutthroat in 18 hours of fishing time.

All these Dolly Varden may be the reason for no coho fry in the net in this lake. All Dolly Varden appeared to be stunted in this lake. I would not consider this lake as productive.

ANDERSON CREEK
KARTA RIVER



Trap netted Upper Anderson Lake 8/29-31/74 caught 37 Dolly Varden & 2 Cutthroat Trout.
DV Lengths. Range = 167-291 mm.
CT " " = 278-359 mm. (Veri. mesh)

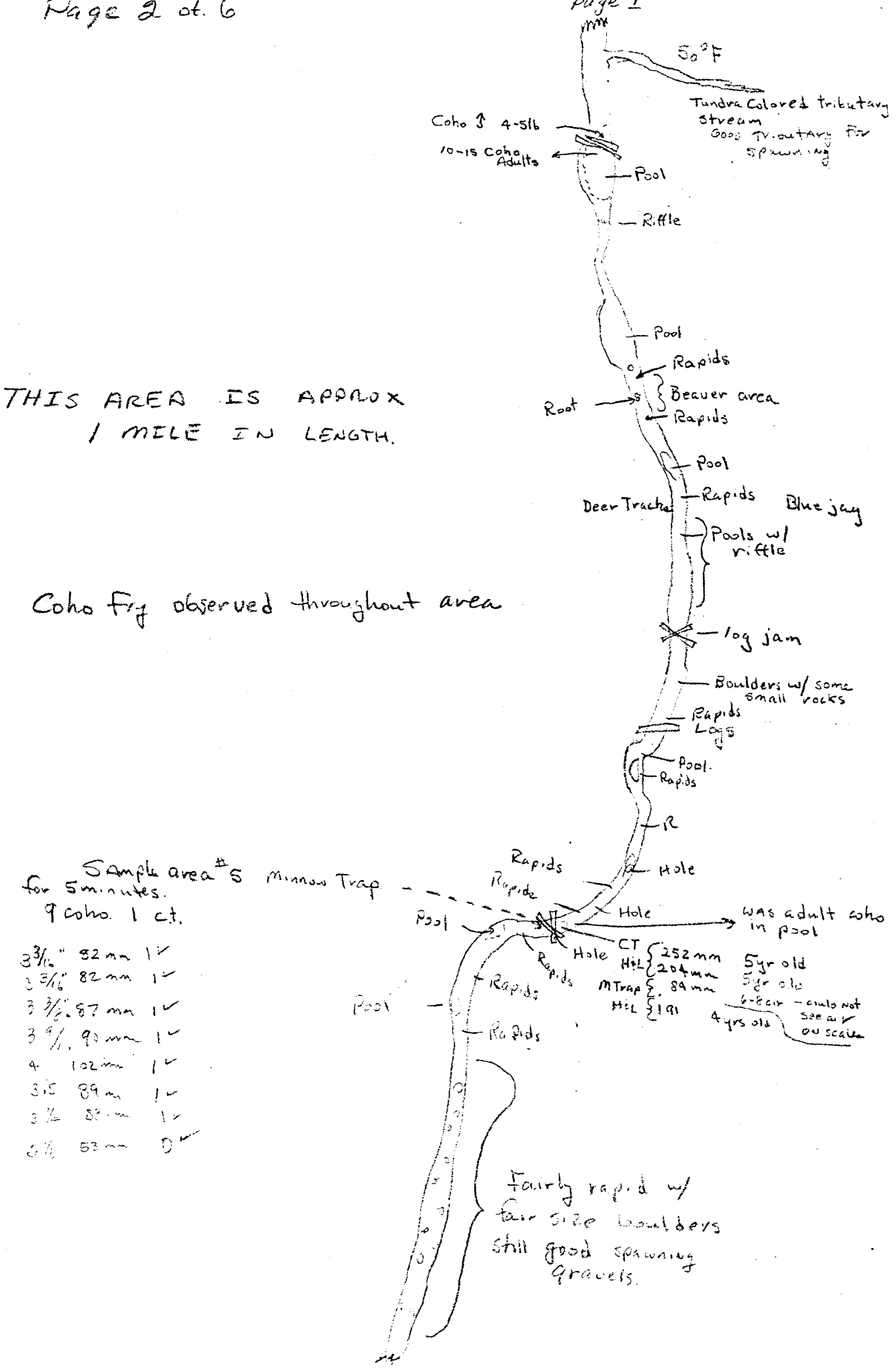
THIS AREA IS APPROX 1 MILE IN LENGTH

Small stream w/ good spawning gravel
44 mm, 38 mm, 37 mm. (seined) OV ALL 3

Coho fry 97 mm. (H&L)

Caught 7 Coho fry in 5 min. (Sample #4 area)

91 mm	89 mm IV+G circuli
86 mm	79 mm
98 mm	85 mm IV+Scale
60 mm	(Minnow Trap)

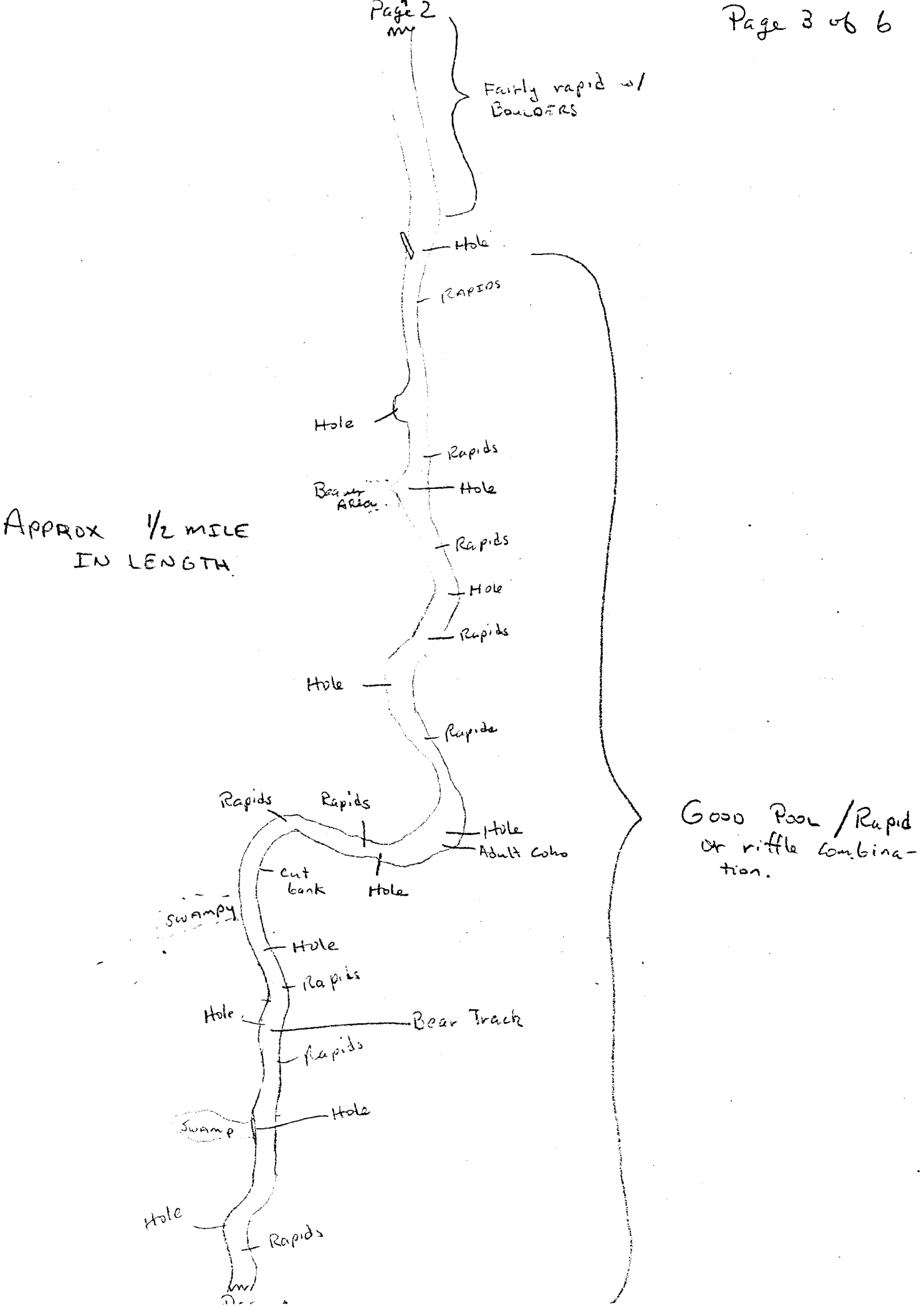


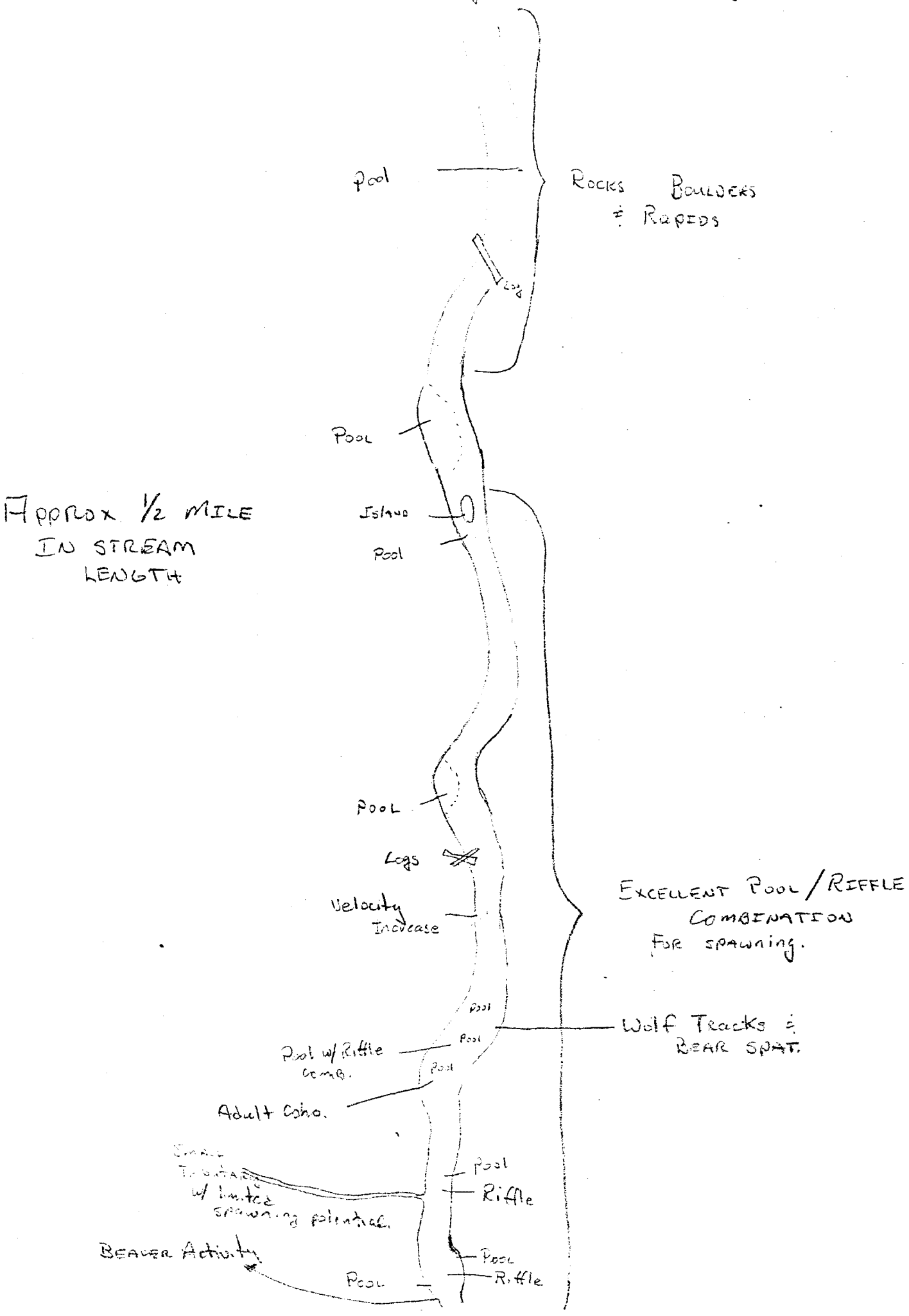
THIS AREA IS APPROX 1 MILE IN LENGTH.

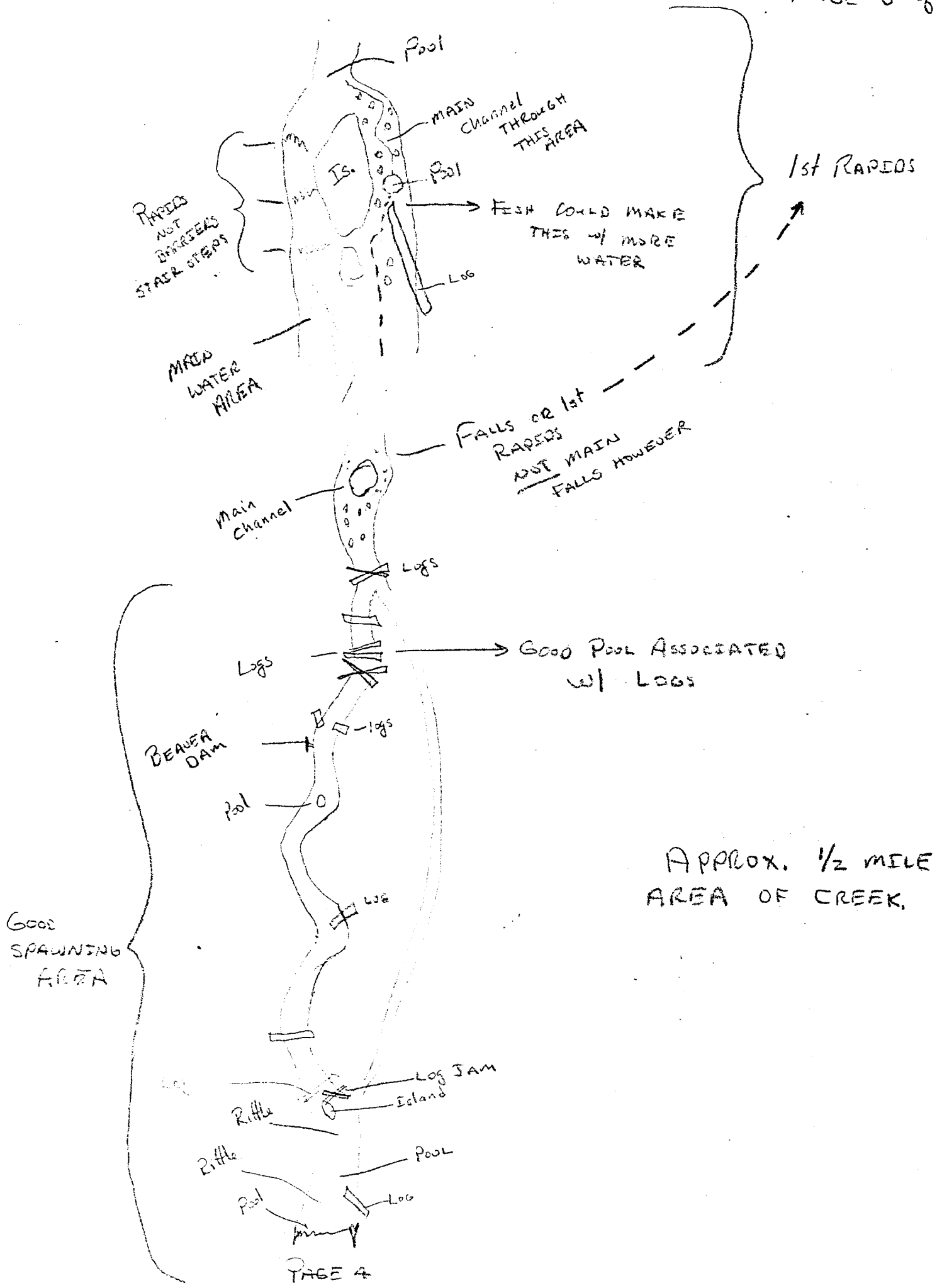
Coho fry observed throughout area

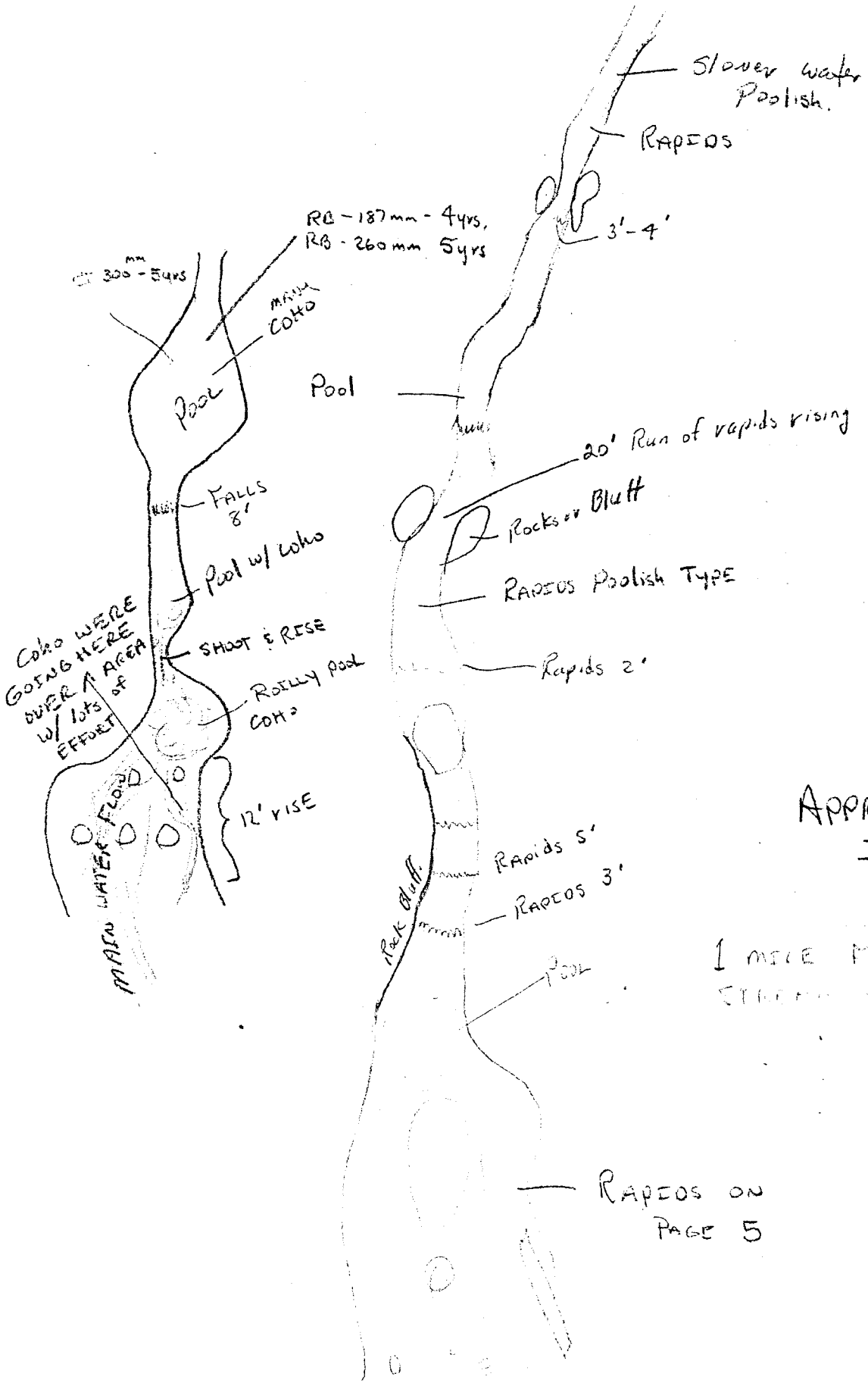
Sample area #5 Minnow Trap - - - - -
for 5 minutes.
9 coho. 1 ct.

3 3/16"	82 mm	1 ✓
3 3/16"	82 mm	1 ✓
3 3/4"	87 mm	1 ✓
3 9/16"	90 mm	1 ✓
4	102 mm	1 ✓
3.5	89 mm	1 ✓
3 1/2	87 mm	1 ✓
2 1/2	63 mm	0 ✓


Page 2
Fairly rapid w/ Boulders
Hole
Rapids
Hole
Rapids
Bear Area
Hole
Rapids
Hole
Rapids
Hole
Rapids
Rapids
Rapids
Hole
Adult Coho
Cut bank
Hole
Swampy
Hole
Rapids
Hole
Bear Track
Rapids
Hole
Swamp
Hole
Rapids
Approx 1/2 mile in length
Good Pool / Rapid or riffle combination.


Pool
Rocks Boulders ± Rapids
Log
Pool
Approx 1/2 mile in stream length
Island
Pool
Pool
Logs
Velocity Increase
Excellent Pool/Riffle combination for spawning.
Pool
Pool
Wolf Tracks & Bear Spat.
Pool w/ Riffle comb.
Pool
Adult Coho.
Small Tributary w/ limited spawning potential
Pool
Riffle
Beaver Activity
Pool
Pool
Riffle

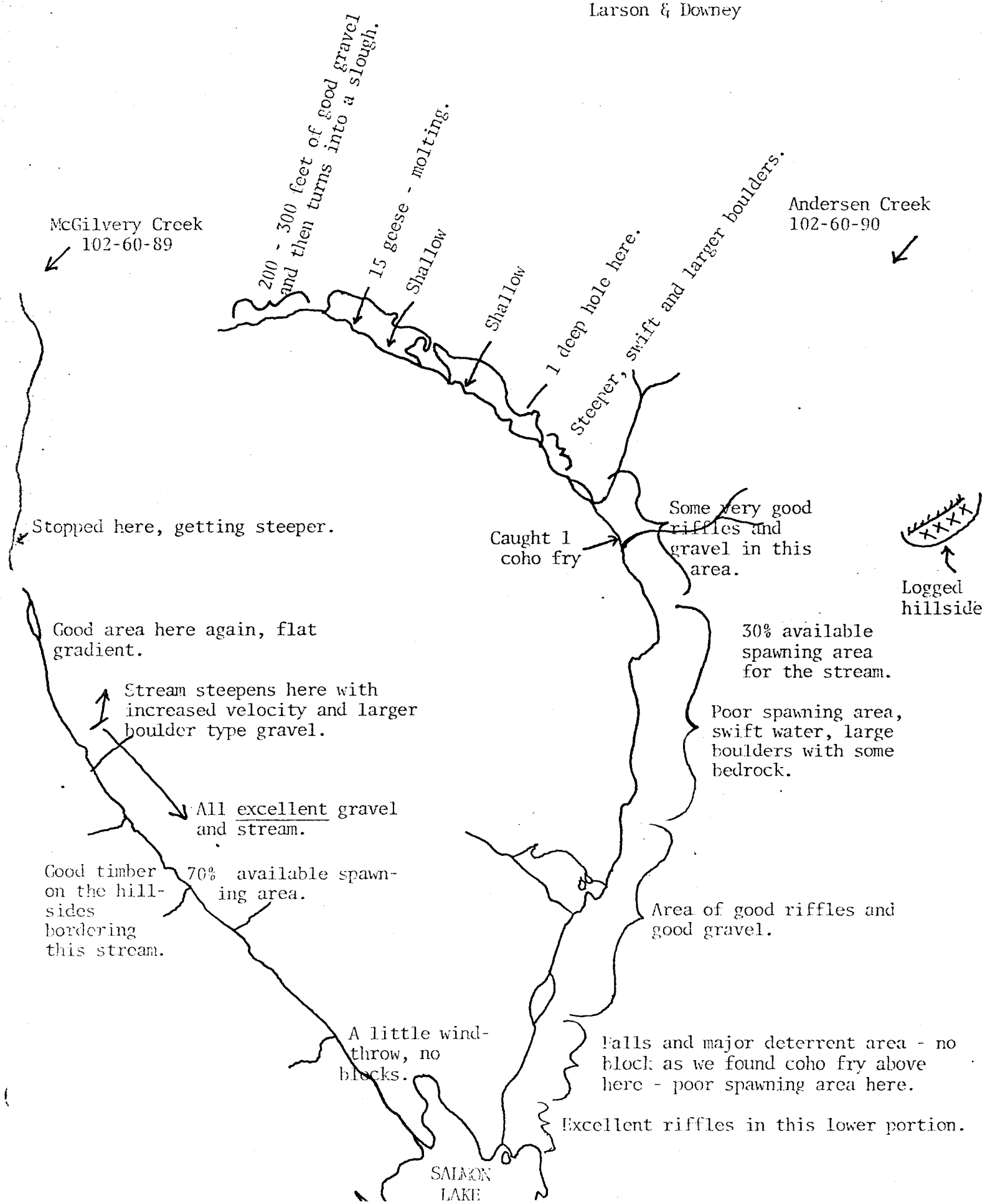

Pool
MAIN Channel THROUGH THIS AREA
Is.
Pool
FISH COULD MAKE THIS W/ MORE WATER
Log
RAPIDS NOT BARRIERS STAIR STEPS
1st RAPIDS
MAIN WATER AREA
FALLS OR 1st RAPIDS NOT MAIN FALLS HOWEVER
Main Channel
Logs
Logs
GOOD POOL ASSOCIATED W/ LOGS
Logs
BEAVER DAM
Pool
Log
GOOD SPAWNING AREA
Log JAM
Island
Riffle
Riffle
POOL
Pool
Log
APPROX. 1/2 MILE AREA OF CREEK.



APPROX 1/4 MILE IN LENGTH

1 MILE FROM [illegible] to

UPPER KARTA RIVER SYSTEM
7-9-74
Larson & Downey



Name Andersen Creek
Latitude N 55° 34' 38"
Longitude W 132° 42' 27"
Geodetic Map No. Craig C-3
Location Upper Karta River system
Drainage Area of Watershed
Water Supply Type Shallow lakes and precipitation

Catalog No. 102-60-90 a
WR No.
K No.
Work Area Ketchikan
Watershed Length 7 miles

Trails & Survey Routes Not walked.

Aerial Survey Notes The stream is open and wide enough to get good surveys from the air. Too long to walk.
Anchorage Off the mouth of the Karta River, planes can land in both Salmon and Little Salmon Lakes.
Tide Stage When Surveyed Not applicable - above a lake system.

FISHERY RESOURCES

Commercial Fisheries Sockeye, coho and possibly chum and pink

Escapement 8-20-73 = 4,500 (unidentified) off the mouth ; 8-15-71 = 300 (unidentified) at the mouth
Species Composition Unknown but should be primarily sockeye and coho.

Timing Early for sockeye and late for other species.
Schooling areas Off the mouth and pools in the stream.

Shellfish Potential N/A

Sport Fisheries Unknown, but probably limited due to deterrent falls in the lower area.
Land Use at Present Sport fishing off the mouth and in Salmon Lake.

History of Land Use Sport fishing.

Rehabilitation Potential None - unless the possibility exists for increasing the sockeye and coho run here.
Soils Appeared to be stable.

GAME RESOURCES

Bear ———	Fish carcasses or bones (old or fresh) on banks, estimate	0
	Number of droppings	0
Geese ———	Number seen on tide flats	15
	Number seen up creek	0
	Number of broods seen	0
Mallards —	Number seen on tide flats	0
	Number seen up creek	0
	Number of broods seen	0
Mergansers -	Number of broods seen	0
Bald Eagles-	Number seen along creek	0
	Number of nests seen and location	0
Seals ———	Number seen at mouth of stream	N/A
Tide flats -	Estimate length along beach	N/A
	Estimate depth out from beach	N/A
	Eel grass present on what percent of flats	N/A

STREAM INVENTORY FORM

Name: Andersen Creek

Number: 102-60-90

Observers: Larson - Down

Date: 7-9-74

Temperature:

Weather: Overcast

Station No.	1															
Pool Size/Type	2/1															
Riffle Type Width-Depth	114'W .75'D															
Pool Riffle Frequency	3															
Bottom Type (Riffle)	4															
Color/Turbidity	1/1															
Velocity																
Flow (C.F.S.)																
Temp. (°F.)																
pH	6															
Fry Abundance	2-1 1-1															
Benthos Sample No.	0															
Higher Plant Class	1															
Aquatic Veg. Density Ident. (1) Mosses (2) Algae	3 / 2															

General Remarks (rehab., land use, barriers, log jams, etc.):

Andersen Creek
102-60-90

114' Wide
10' intervals

FLOW BOARD MEASURES

Depth	.80	.45	.48	.55	.83	.96	.93	.78	.72	.74
Head	.83	.45	.48	.55	.86	1.00	.94	.78	.72	.74

ALASKA DEPARTMENT OF FISH AND GAME
DIVISION OF SPORT FISH
LAKE SURVEY SUMMARY

LAKE Andersen Lakes (2)

MAP REF. USGS Craig (C-3) T R S LAT. N 53° 33' 50" LONG. W 132° 48' 51"

LOC. Head of Karta River drainage on N. of Wolf Is. SURF. ELEV. 393 + 390 resp

1. SURF. ACRES upper-64, lower 52 MAX. DEPTH est 20 AVG. DEPTH 6 est ACRE FT. 696
SHOAL AREA 95% WATER COLOR Muskeg Stain SECCHI READING
AQUATIC VEGETATION Some nuphar, Potamogeton, Valisneria

2. FISH SPECIES: NATIVE Cutthroat INTRODUCED none known

3. FISHING HISTORY None recorded or rumored.

4. INVERTEBRATES insect larvae, scuds

5. INLETS one permanent at head of upper lake DISCHARGE 2 cfs normal Summer cfs
DISCHARGE cfs
DISCHARGE cfs
BARRIERS low flow and steep grades

6. OUTLETS Andersen Creek DISCHARGE 5 cfs normal Summer cfs
DISCHARGE cfs
BARRIERS Impassable falls near Salmon Lake

7. SPAWNING AREAS good in lake inlet and outlet

8. WATERSHED TYPE Forested up to 2200 ft, some alpine DRAINAGE AREA 2686 acres ACRES

9. ACCESSIBILITY By plane 45 miles from Ketchikan bearing 290° True and 4 mile hike

10. ACCESS STATUS Tongass National Forest

11. USE SITE none as such FACILITIES None

12. OTHER USE Scenic Pin Peak, 2nd highest mtn on Prince of Wales Is.

13. POLLUTION None

14. REMARKS A pair of very shallow lakes that have a trout population but rather inaccessible. There is no trail to them from Big Salmon Lake. A falls near the Big lake limits access to the stream above to ~~migratory fish~~. only coho.

BY Robert T Bosch DATE Sept 5, 1969

FG-206 2/69