



HABITAT CZM PROJECT  
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ANCHORAGE, ALASKA 99502

REVISED ANADROMOUS STREAM CATALOG OF  
SOUTHEASTERN ALASKA

Appendix B - District 2

Volume II

Moira Sound Area Survey Data

By:  
Paul Novak

1975

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DEPARTMENT OF FISH AND GAME  
Building, Juneau, Alaska 99801

James W. Brooks  
Commissioner

## ADF&G TECHNICAL DATA REPORTS

This series of reports is designed to facilitate prompt reporting of data from studies conducted by the Alaska Department of Fish and Game, especially studies which may be of direct and immediate interest to scientists of other agencies.

The primary purpose of these reports is presentation of data. Description of programs and data collection methods is included only to the extent required for interpretation of the data. Analysis is generally limited to that necessary for clarification of data collection methods and interpretation of the basic data. No attempt is made in these reports to present analysis of the data relative to its ultimate or intended use.

Data presented in these reports is intended to be final, however, some revisions may occasionally be necessary. Minor revisions will be made via errata sheets. Major revisions will be made in the form of revised reports.

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REVISED ANADROMOUS STREAM CATALOG OF  
SOUTHEASTERN ALASKA

By

Paul Novak  
Alaska Department of Fish and Game,  
Division of Commercial Fisheries, 1975  
Ketchikan, Alaska

1975

Appendix B - District 2

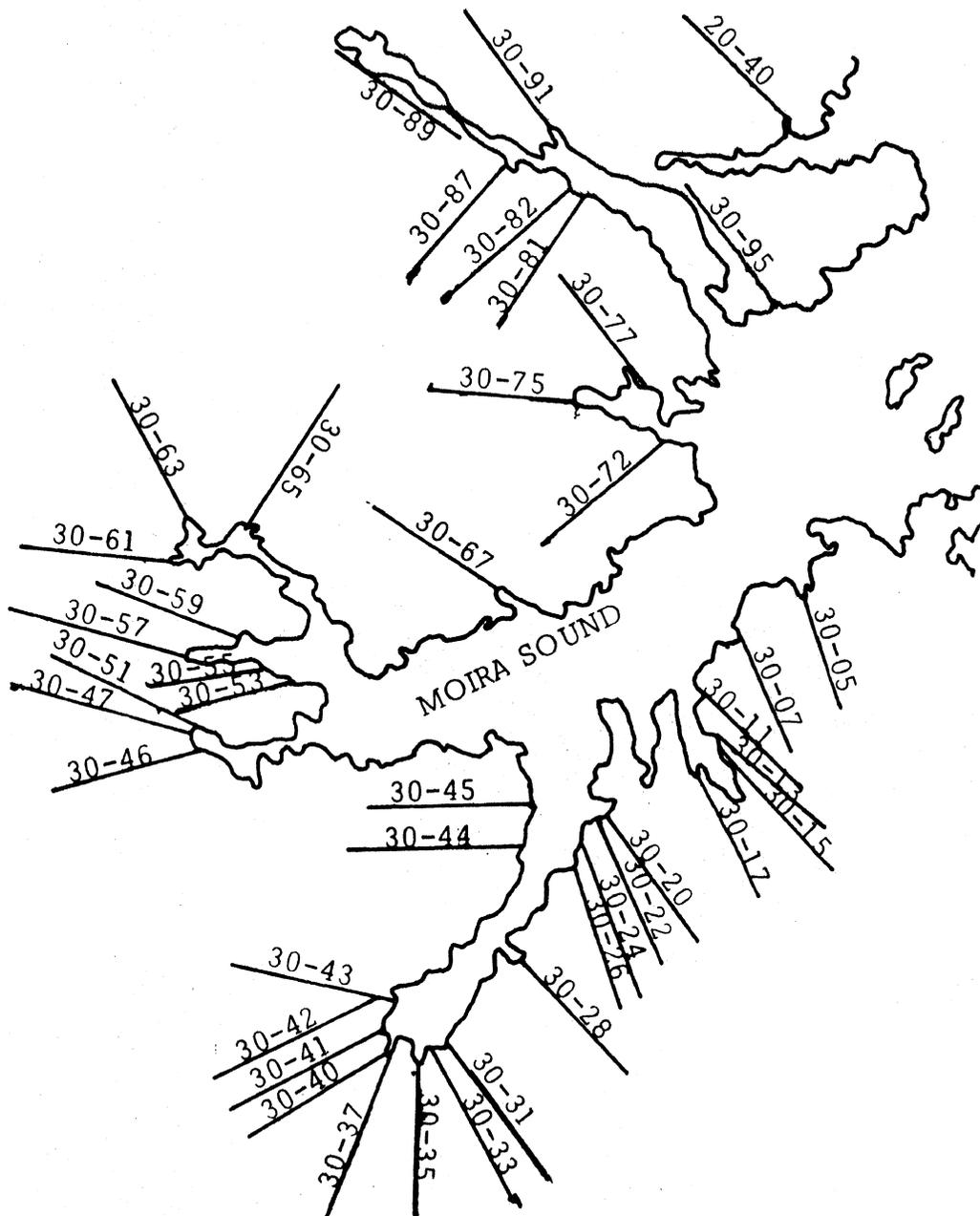
(Volume II)

Moira Sound Area Survey Data

1. S.E. Alaska  
2. Hydrology  
3. Agency



Statistical Area 102  
Moira Sound - District 2



SUMMARY  
STREAM EVALUATIONS

District 2

Moira Sound

Name & Number	Average Width	Length	Area (Ft <sup>2</sup> )	M <sup>2</sup>	Spawning Area (m <sup>2</sup> )	Available Area (m <sup>2</sup> )
Dolomi Creek 102-20-40	40'	2340'	93,600	8695	70%	6087
102-30-07	8'	1200'	9,600	892	60%	535
Quad Creek 102-30-11	15'	1200'	18,000	1672	30%	502
E. Johnson Cove 102-30-13	8'	1200'	9,600	892	75%	670
Johnson Creek 102-30-17	30'	5280'	158,400	14,715	75%	11,036
102-30-20	NO SPAWNING POTENTIAL					
102-30-22	NO SPAWNING POTENTIAL					
Moira S. Arm 102-30-24	NO SPAWNING POTENTIAL					
Moira S. Arm 102-30-26	NO SPAWNING POTENTIAL					
Perkins Creek 102-30-28	38'	4500'	171,000	15,886	60%	9532
S. Arm Moira 102-30-31	4'	150'	600	56	20%	11
S. Arm Moira 102-30-33	2'	150'	300	28	5%	1
102-30-35	18'	5385	96,930	9005	60%	5403
102-30-37	14'	2250'	31,500	2926	30%	878
S. Arm Hd. 102-30-40	13'	1200'	15,600	1449	15%	217
102-30-41	NO SPAWNING POTENTIAL					
Sick Creek 102-30-43	70'	1800'	26,000	11,705	70%	8194
102-30-44	NO SPAWNING POTENTIAL					

Name & Number	Average Width	Length	Area (Ft <sup>2</sup> )	M <sup>2</sup>	Spawning Area (m <sup>2</sup> )	Available Area (m <sup>2</sup> )
102-30-45	4'	375'	1500	139	30%	42
102-30-46	NO SPAWNING POTENTIAL					
W. Arm Moira 102-30-47	40'	600'	24,000	2230	20%	446
Fredrick Creek 102-18-51	50'	2000'	100,000	9290	60%	5574
Dickman Bay 102-30-53	23'	1320'	30,360	2820	40%	1128
Dickman Bay 102-30-55	NO SPAWNING POTENTIAL					
102-30-56	NO SPAWNING POTENTIAL					
Dickman Bay 102-30-57	30'	2250'	67,500	6271	35%	2195
102-30-59	19'	300'	5700	530	30%	159
Dickman 102-30-61	21'	1200'	25,200	2341	30%	709
102-30-63	15'	1200'	18,000	1672	60%	1003
Kugel Creek 102-30-65	45'	2750'	123,750	11,496	65%	7472
Kegan Creek 102-30-67	54'	1900'	102,600	9532	80%	7625
102-30-72	12'	50'	600	56	20%	11
102-30-75	10'	750'	7500	697	65%	453
102-30-87	30'	3960'	118,800	11,037	80%	8830
Miller Lake 102-30-89	100'	1200'	120,000	11,148	50%	5574
	15'	1200'	18,000	1,672	60%	1003
	15'	1200'	18,000	1,672	60%	1003
Nowiskay Creek 102-30-91?	10'	1750'	17,500	1626	60%	976

MOIRA SOUND TOTAL 87,269

Name Dolomi or John Creek Catalog No. 102-20-40  
 Latitude W 132°03'03" WR No. 128  
 Longitude N 55°07'59" K No. 139  
 Geodetic Map No. Craig A-1 Work Area Ketchikan  
 Location Port Johnson Watershed Length 6 miles (including both  
 Drainage Area of Watershed 7 square miles forks)  
 Water Supply Type Springs primarily with 5 lakes on system. Paul Lake and  
James are the largest. Runoff is other source.  
 Trails & Survey Routes The first 200 yds. above the mouth are a tangle of  
underbrush but upper area may be walked on west side.  
 Aerial Survey Notes The area surveyed may be rough to distinguish fish from  
air due to bottoms dark coloration.  
 Anchorage Large vessel anchorage off mouth in 6 fathoms. Limited.  
 Use skiff to enter mouth of stream when surveying.  
 Tide Stage When Surveyed First half of ebb.

FISHERY RESOURCES

Commercial Fisheries Pink, Chum, Red, Coho - Major red salmon escapement  
during 1950's.  
 Escapement Available spawning area - 6,087 M<sup>2</sup>

Species Composition Pink 70, Chum 5, Red 15, Coho 10

Timing Early for Red, Middle-pinks Late-chum

Schooling areas Below falls in barrier upstream.

At mouth of stream in vicinity of island

Shellfish Potential Possible clam fishery near mouth of stream on both  
sides of head. Potential for dungeness crab

Sport Fisheries Coho should be excellent during adult spawner migrations  
with cutthroat, Dolly Varden, and possible steelhead.

Land Use at Present None other than mineral prospecting.

History of Land Use Mining complex with past logging operations.

Raft storage in bay with camp near mouth.

Rehabilitation Potential Possible falls barrier alteration to improve  
accessibility of upstream area to all species.

Soils Stable except for the two areas where V-Notch situations exist  
along the creek.

GAME RESOURCES

Bear -----	Fish carcasses or bones (old or fresh) on banks, estimate	100
	Number of droppings	2
Geese -----	Number seen on tide flats	0
	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	1
	Number of nests seen and location	0
Seals -----	Number seen at mouth of stream	0
Tide flats -	Estimate length along beach	100 yds.
	Estimate depth out from beach	10'
	Eel grass present on what percent of flats	0



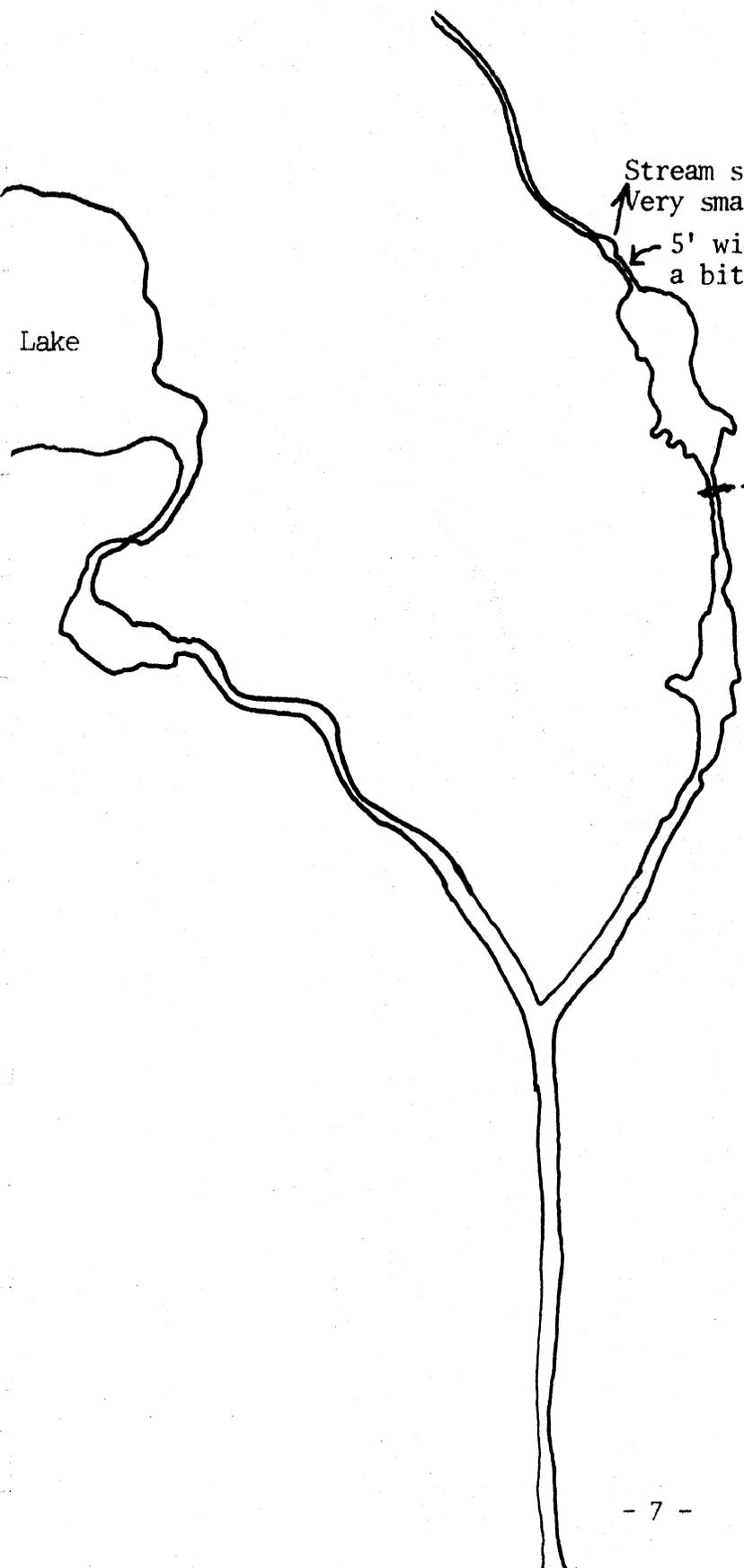
PEAK ESCAPEMENT RECORD

NAME: Dolomi Creek

STREAM CATALOG NUMBER: 102-20-40

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Sept. 28, 1930				Well seeded. Water high and discolored. Had good local reports (G)
Oct. 4, 1941	20,000			Good. 1,000 fish off mouth (G)
Sept. 24, 1942	11,000	500		Excellent. 2,000 fish off mouth (G)
Sept. 14, 1949	200			(G)
July 26, 1953			1,100 red	(G)
Sept. 19, 1953	100	300	50 coho	Poor. Falls 1/4 mile appears impassable on present water level (G)
Sept. 28, 1954		2,000		Few at mouth (A)
Aug. 25, 1955			1,500 coho, 8,000 red	(G)
July 9, 1956			5,000-8,000 red	
July 26, 1957			800 red	200 red at mouth (G)
Aug. 28, 1957	800			
Aug. 10, 1959			1,000 (red?)	None at mouth (A)
July 13, 1961			700 red	(G) 300 salmon at the mouth. July 30, 1961 there was 1,000 salmon at the mouth
Sept. 13, 1962	Few			Fish present, small school (A)
Aug. 18, 1965			100 reds	Present at mouth. Fish ripe but stream nearly dry. (F)
Aug. 17, 1971	Few			Done by skiff. A few jumps in bay
Aug. 9, 1973	200			Dolomi to Pt. Halliday - saw 1 ball and 2 jumps. Vis. fair (A)
Aug. 8, 1974				Much jumping activity in bay and mouth of bay (A)

102-20-40  
Dolomi Creek  
9-10-74  
Downey, Novak, Larson

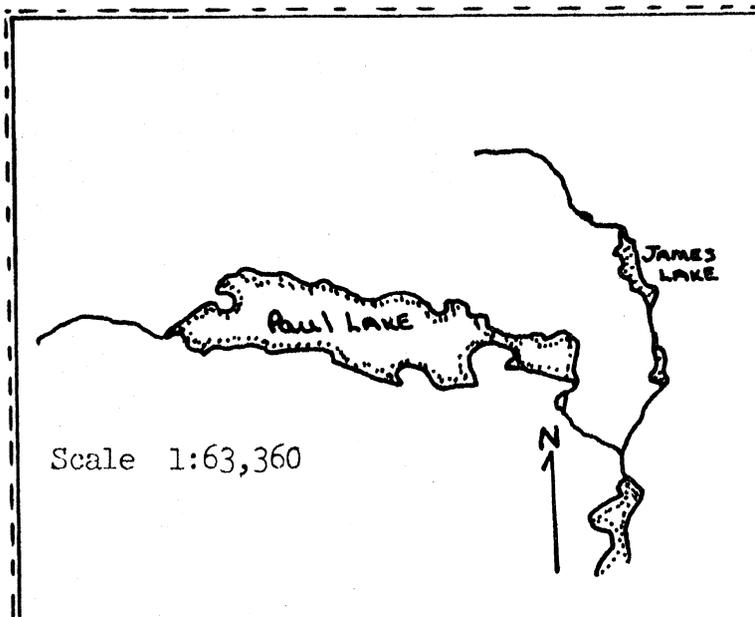


Stream seems to dissappear, goes nowhere.  
Very small with no potential.

5' wide, sluggish and silty with quite  
a bit of debris in the lower end.

Falls, looked like a barrier from  
the helicopter, but not positive.

There is a little spawning potential  
here but not much, short stretch of  
stream.



Dolomi Creek  
102-20-40  
Novak, Downey, Elton

5-29-74

1-2' Deep  
20' Wide  
Moderate Vel.

10% ASA  
Above falls to end  
of survey

Stream above Paul's Lake: 10 salmon  
sighted spawning in lower end of the  
stream. Ten feet wide, 8-10" deep  
with slow moving waters over gravel  
containing some silt. Alder at mouth  
with spruce along stream.

emlock  
spruce

#2

Remains of mining  
railroad

8-10' Falls barrier  
for pink salmon

V-notched area

Bedrock/rubble

100 yd. from falls to tributary  
Good spawning area  
25' Wide  
10" Deep  
50% ASA  
Gravel-Rubble

Stepped  
Falls

Road System

20' Wide  
8" Deep  
90% ASA

Excellent Spawning Area

90%ASA

Gravel & Rubble  
150 yds Long  
60' Wide  
10" Deep  
Some silt along banks

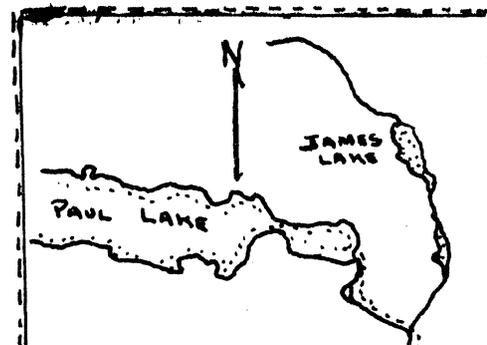
Pink and chum remains  
were found from the falls  
to the I.T.Z.

Abandoned Mining  
Railroad

ITZ

# 1

Mining Village Ruins → \*



Moira Sound  
102-30-07  
Elton  
5-30-74

60% spawning in this 400 yards  
(good gravel with riffles and pools)

8' W, 5" D

Small tributary

0% spawning (bed-  
rock and boulder)  
in this 100 yards.

50% spawning in  
this 100 yards  
(gravel and bedrock)

50% spawning in  
this 100 yards  
of I.T. (gravel  
and cobble)

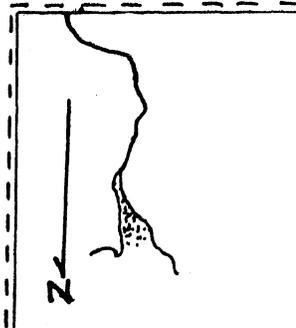
0% spawning

This is a sharp gully with a  
steep gradient

Stream is 8' wide x 7" deep

High tide line

12' W, 3" D





Johnson Cove - Moira Sound

Name \_\_\_\_\_ Catalog No. 102-30-07  
 Latitude N 55° 00' 56" WR No. \_\_\_\_\_  
 Longitude W 132° 02' 58" K No. \_\_\_\_\_  
 Geodetic Map No. Craig A-1 Work Area Ketchikan  
 Location Moira Sound Watershed Length \_\_\_\_\_  
 Drainage Area of Watershed \_\_\_\_\_  
 Water Supply Type Spring and drainage

Trails & Survey Routes Walk in stream

Aerial Survey Notes Not feasible-too much overstory

Anchorage Good anchorage in Menefee

Tide Stage When Surveyed Low

FISHERY RESOURCES

Commercial Fisheries No data

Escapement Available spawning area - 535 M<sup>2</sup>

Species Composition No data

Timing No data

Schooling areas No data

Shellfish Potential None - rocky

Sport Fisheries No data

Land Use at Present None

History of Land Use None

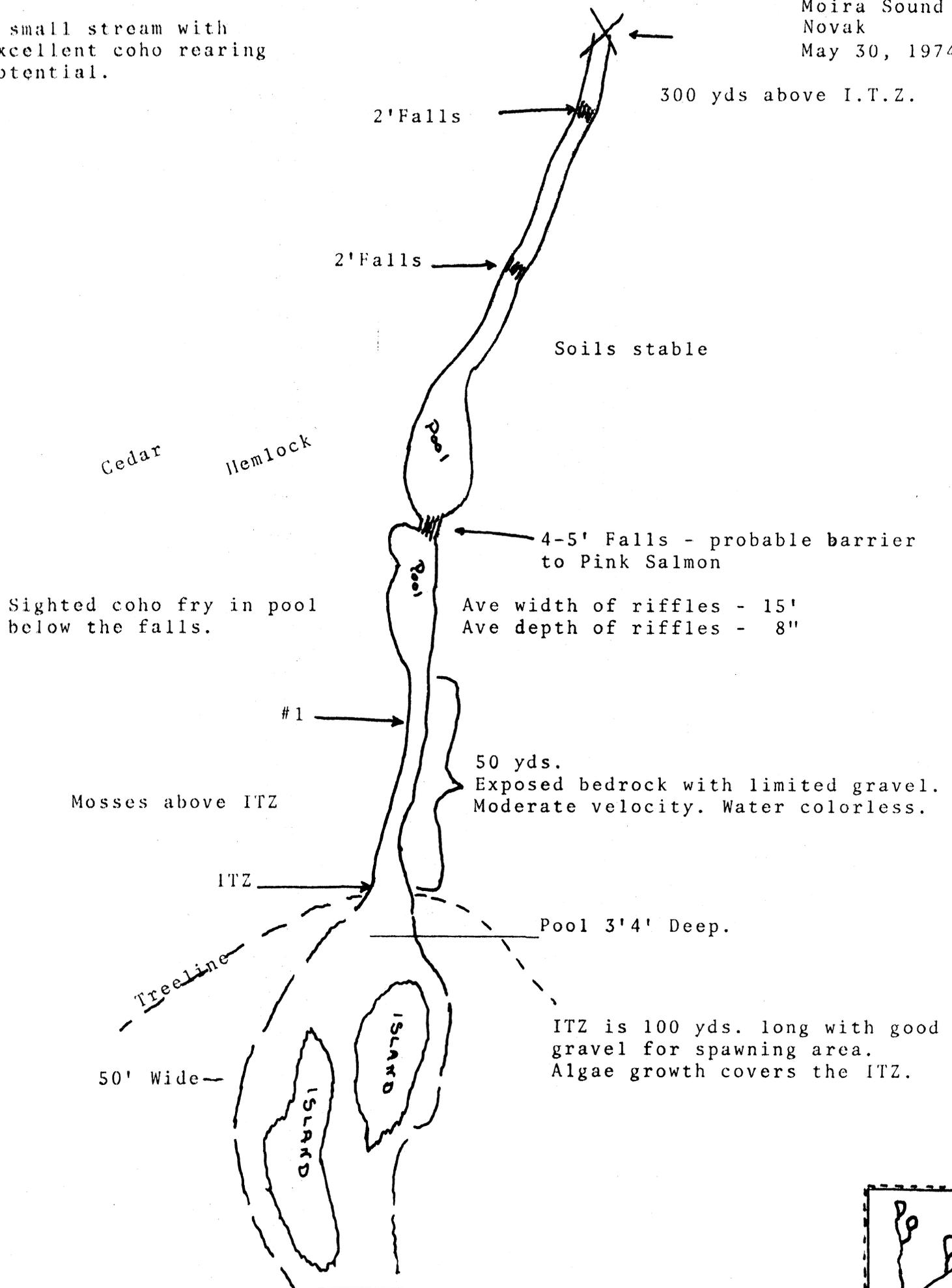
Rehabilitation Potential None

Soils Some undercut banks but nothing bad.

GAME RESOURCES

Bear -----	Fish carcasses or bones (old or fresh) on banks, estimate	0
	Number of droppings	0
Geese -----	Number seen on tide flats	0
	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	0
Tide flats: -	Estimate length along beach	-
	Estimate depth out from beach	-
	Eel grass present on what percent of flats	0

A small stream with excellent coho rearing potential.



300 yds above I.T.Z.

2' Falls

2' Falls

Soils stable

Cedar

Hemlock

Pool

4-5' Falls - probable barrier to Pink Salmon

Sighted coho fry in pool below the falls.

Ave width of riffles - 15'  
Ave depth of riffles - 8"

#1

50 yds.  
Exposed bedrock with limited gravel.  
Moderate velocity. Water colorless.

Mosses above ITZ

ITZ

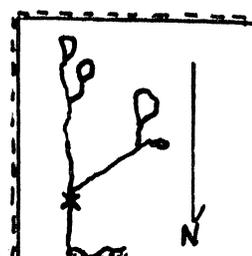
Pool 3'4' Deep.

Tree Line

50' Wide



ITZ is 100 yds. long with good gravel for spawning area.  
Algae growth covers the ITZ.



Name Quad Creek Catalog No. 102-30-11  
Latitude 55°28" N WR No. \_\_\_\_\_  
Longitude 132°04'17" W K No. \_\_\_\_\_  
Geodetic Map No. Craig A-1, Dix. Ent. Work Area Ketchikan  
Location Moira Sound Watershed Length 1 3/4 miles  
Drainage Area of Watershed 1 3/4 square miles  
Water Supply Type 4 lakes are located at the head end of each fork; springs and runoff are the other water supply sources.  
Trails & Survey Routes Walk up the stream as it is fairly small and has good footing. Also may walk along east bank.  
Aerial Survey Notes Impossible to survey as canopy effect from the timber is high.  
Anchorage Use small skiff to survey. Large vessel anchorage in Menefee near mouth of Moira on south side.  
Tide Stage When Surveyed First half of flood

FISHERY RESOURCES

Commercial Fisheries Chum, Pinks, Coho

Escapement Unknown as records do not indicate survey.

Available spawning area - 502 M<sup>2</sup>

Species Composition Unknown

Timing Late - Chums

Schooling areas Possibly in the area off stream mouth.

Shellfish Potential Clams were found on the bay flats in the area of the creek mouth and head of bay.

Sport Fisheries Dolly Varden - Cutthroat-Coho

Land Use at Present None

History of Land Use Unknown but probably none

Rehabilitation Potential None necessary

Soils Relatively stable

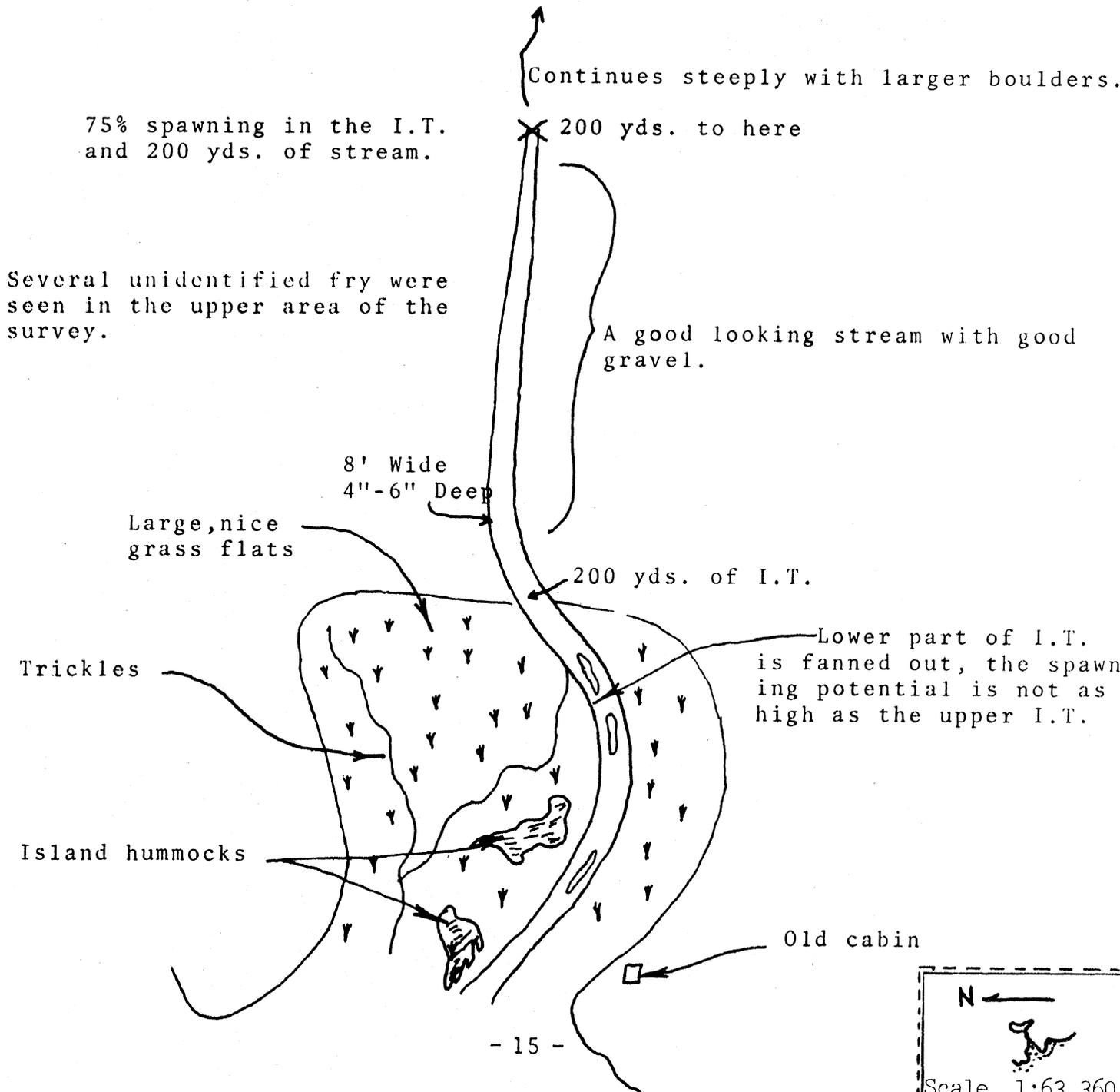
GAME RESOURCES

Bear -----	Fish carcasses or bones (old or fresh) on banks, estimate	0
	Number of droppings	0
Geese -----	Number seen on tide flats	0
	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	0
Tide flats -	Estimate length along beach	150 yds.
	Estimate depth out from beach	12'
	Red grass present on what percent of flats	2%



102-30-13  
Moira Sound  
E. side of Johnson Cove  
Downey  
May 30, 1974

Water temperature 50°



75% spawning in the I.T. and 200 yds. of stream.

Several unidentified fry were seen in the upper area of the survey.

Continues steeply with larger boulders.

200 yds. to here

A good looking stream with good gravel.

8' Wide  
4"-6" Deep

Large, nice  
grass flats

200 yds. of I.T.

Trickles

Lower part of I.T. is fanned out, the spawning potential is not as high as the upper I.T.

Island hummocks

Old cabin



Name \_\_\_\_\_ Catalog No. 102-30-13  
 Latitude 54°59'37" WR No. \_\_\_\_\_  
 Longitude 132°05'43" K No. \_\_\_\_\_  
 Geodetic Map No. Dixon Entrance D-1 Work Area Ketchikan  
 Location \_\_\_\_\_ Watershed Length \_\_\_\_\_  
 Drainage Area of Watershed \_\_\_\_\_  
 Water Supply Type Lake

Trails & Survey Routes Walk on stream

Aerial Survey Notes ?

Anchorage Good anchorage in Menefee

Tide Stage When Surveyed Low

FISHERY RESOURCES

Commercial Fisheries No data

Escapement Available spawning area - 670 M<sup>2</sup>

Species Composition No data

Timing No data

Schooling areas No data

Shellfish Potential None-rocky

Sport Fisheries No data

Land Use at Present None

History of Land Use None

Rehabilitation Potential None

Soils Stable to point walked

GAME RESOURCES

Bear -----	Fish carcasses or bones (old or fresh) on banks, estimate	0
	Number of droppings	0
Geese -----	Number seen on tide flats	0
	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	0
Tide flats -	Estimate length along beach	-
	Estimate depth out from beach	-
	Eel grass present on what percent of flats	?

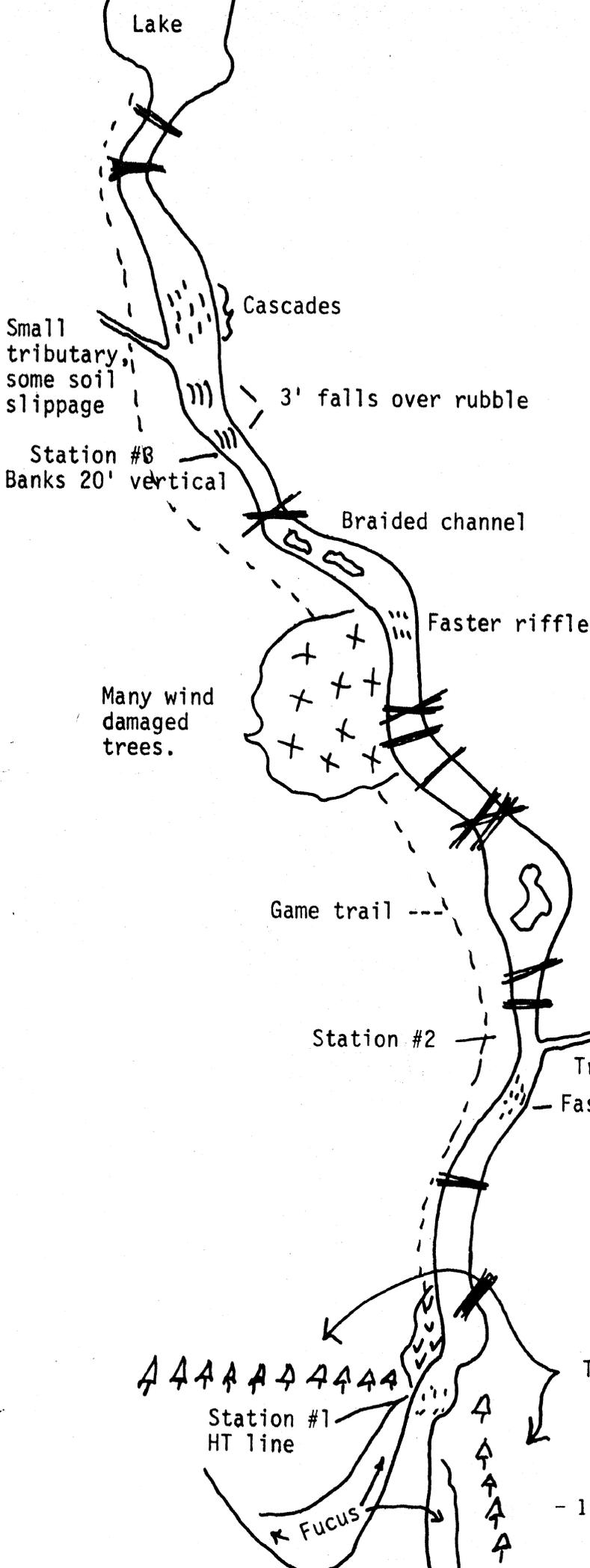
102-30-17

OBSERVER - Dinneford, Joyner

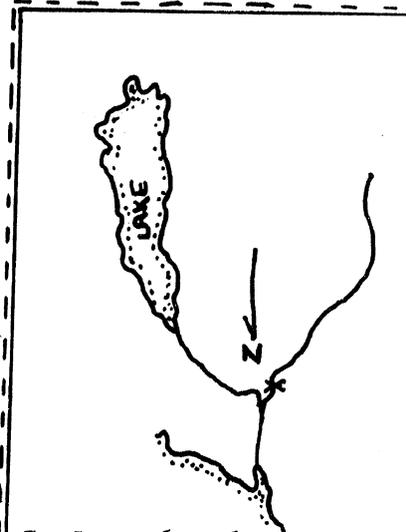
DATE - August 31, 1973

COMMENTS -

Visibility excellent.  
Water level medium.



50 sockeye observed off the two head streams that feed the lake. Approximately 10 feet wide, 8 inches deep with clear water and gravel rubble substrate.



Name Johnson Cove Creek Catalog No. 102-30-17  
 Latitude N 54° 58' 27" WR No. 123  
 Longitude W 132° 06' 29" K No. K - 127  
 Geodetic Map No. Dixon Ent. D-1 Work Area Ketchikan  
 Location West Head Johnson Cove Watershed Length 4 miles  
 Drainage Area of Watershed 6.88 sq. miles  
 Water Supply Type Lake

Trails & Survey Routes Good walking along stream; game trail on east banks.

Aerial Survey Notes Aerial survey visibility good.

Anchorage Fair for skiff off point to east of mouth.

Tide Stage When Surveyed Flooding.

FISHERY RESOURCES

Commercial Fisheries Pink, chum, coho

Escapement 1973 14,000 pink and chum,  
 Available spawning area - 11,036 M<sup>2</sup>

Species Composition 95% pink, less than 5% chum

Timing Lake September - October

Schooling areas Good pools in I.T. area and throughout stream.

Shellfish Potential Low to poor, perhaps 10% of rocky I.T. affords clam habitat.

Sport Fisheries Steelhead, Dolly Varden, Cutthroat, Rainbow.

Land Use at Present None

History of Land Use F.R.E.D. work summer of 1972.

Rehabilitation Potential None presently required; system offers sockeye potential.

Soils Two acres of windblown trees upstream, possible unstable conditions.

GAME RESOURCES

Bear -----	Fish carcasses or bones (old or fresh) on banks, estimate	150
	Number of droppings	10
Geese -----	Number seen on tide flats	0
	Number seen up creek	0
	Number of broods seen	0
Mallards ---	Number seen on tide flats	12
	Number seen up creek	0
	Number of broods seen	0
Mergansers -	Number of broods seen	5 birds at mouth
Bald Eagles-	Number seen along creek	4
	Number of nests seen and location	0
Seals -----	Number seen at mouth of stream	0
Tide flats -	Estimate length along beach	200'
	Estimate depth out from beach	40'
	Kel grass present on what percent of flats	0



PEAK ESCAPEMENT RECORD

NAME: Johnson Creek

STREAM CATALOG NUMBER: 102-30-17

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Sept. 21, 1930	7,500	17,000		Well seeded, Coye full of fish
Sept. 26, 1940	45,000	5,000		Excellent. 20,000 fish off mouth (G)
Oct. 4, 1941	10,000			Good. (G)
Sept. 27, 1945	50,000	15,000		Excellent. 6,000 fish off mouth (G)
Oct. 11, 1947	15,000			(G)
Sept. 9, 1952	650		50 coho	Run just starting (G)
Oct. 6, 1952		2,820		(G)
Sept. 1, 1953	35	2		Poor. (G)
Sept. 11, 1957	20,000			2,000 pink off mouth (G)
Sept. 18, 1957				600 chum, 200 pink off mouth
Sept. 1, 1961				None observed (A)
Sept. 6, 1962				7,500 fish present at the mouth, probably chum. Five jumps in cove (A)
Sept. 17, 1963	2,500	1,200		(F)
Sept. 24, 1964	-----1,500-----			3,000 fish present intertidally. Many dead, vis. poor. Stream full to lake. On Sept. 8, 1964 there were 7,000 fish intertidally (A)
Sept. 1, 1965	few			100 fish intertidally. Vis poor (A)
Sept. 12, 1966	5,200	few		200 fish intertidally. Vis poor. Some spawning. Aug. 27, 1966 there were 7-8,000 fish intertidally..
Sept. 16, 1967	50	1,500		Fair show of jumps. Vis good (F)
Sept. 18, 1968				50 chum at mouth (A)
Aug. 27, 1969	1,000			300 fish intertidally (F)
Sept. 10, 1970	1,400	200		(F)
Sept. 18, 1971	17,500			Few coho, Jumps in bay. Vis. good (F)
Oct. 6, 1971		600		Fair vis. Many carcasses (F)

PEAK ESCAPEMENT RECORD

NAME: Johnson Creek

STREAM CATALOG NUMBER: 102-30-17

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Sept. 28, 1972	1,377	650		Vis. good. Grows, 1,500-1,800 carcasses (F)
Aug. 31, 1973			6 coho	Vis. good (F)
Sept. 13, 1973	----14,000----			Vis. fair (A)
Sept. 5, 1974	7,000.			Vis. poor (A)
Sept. 18, 1974		500		Vis. poor (A)

102-30-20  
(#7 in notes)  
Moiru Sound - South Arm  
10-17-73  
Novak & Downey

This very small stream appeared to be intermittent. At the time of survey it was 5-6' wide and about 4" in depth. The stream has a canopy of trees and shrubs covering the lower end of the watershed.

No fisheries potential

Hemlock - low commercial timber potential.

Optimum escapement - no spawning potential.

102-30-22  
(#7 in notes)  
Moira Sound - South Arm  
10-17-73  
Novak & Downey

Barrier found immediately above the I.T.Z. which serves as a fish block.  
This is a very small system with an average of 6' width at the lower end.  
High water conditions probably existed at the time we observed this  
stream.

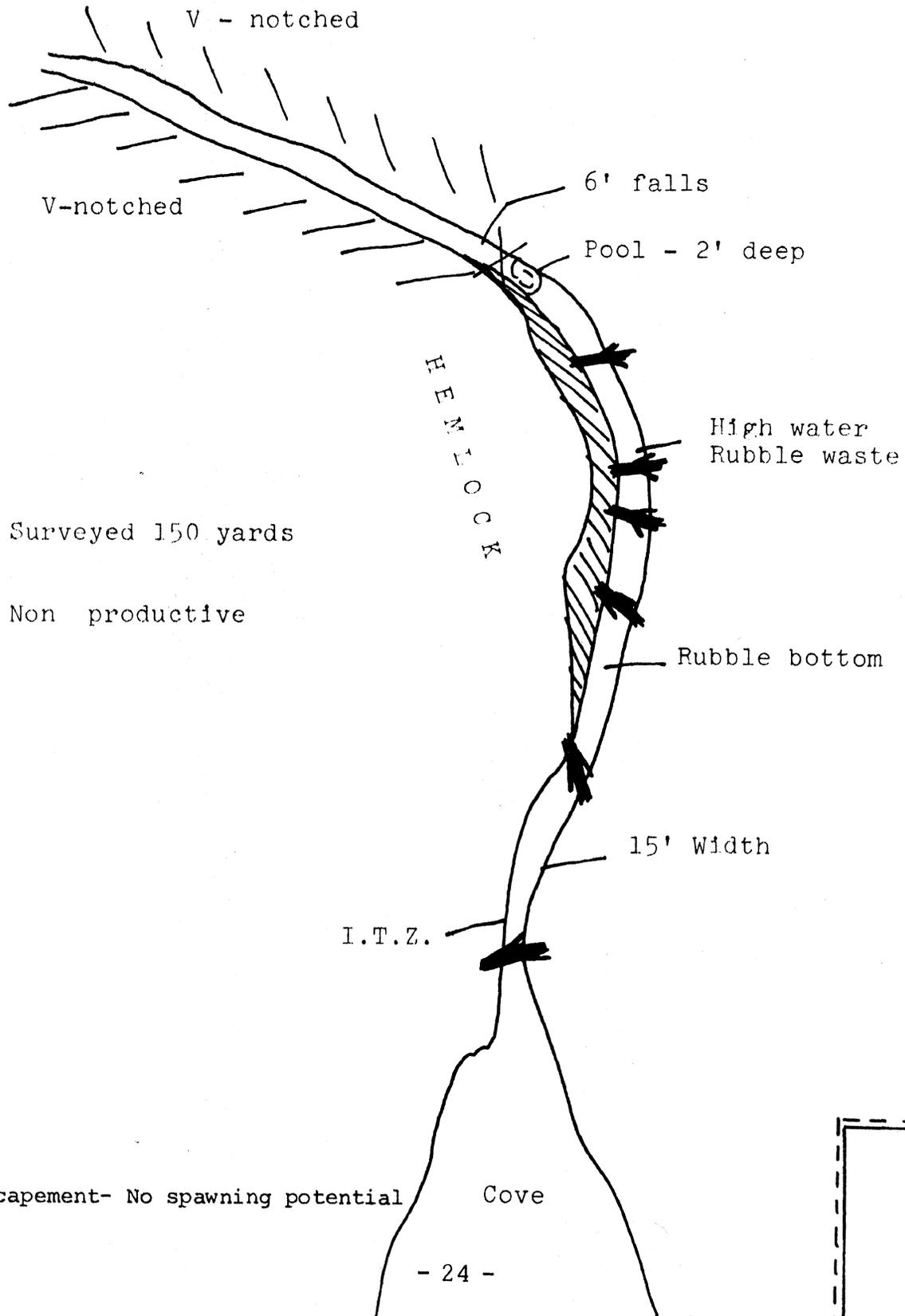
No potential for fisheries

Hemlock - no commercial timber potential.

Optimum escapement - No spawning potential.

Moira Sound - South Arm  
102-30-24  
(#6 in notes)  
10-17-73  
Novak & Downey

Walked during high water stage.



Surveyed 150 yards

Non productive

Opt. Escapement- No spawning potential

Cove

102-30-26  
(#5 in notes)  
Moira Sound - South Arm  
10-17-73  
Novak & Downey

Intermittent stream under normal flow conditions.

Approximately 6 - 8 feet wide and 6 inches in depth.

A small falls area above the I.T.Z. Blowdown and brush, very prevelant. No spawning riffle observed and termed this as a non-productive salmon stream.

Optimum Escapement - No spawning potential

Perkins Creek  
102-30-28  
9-3-73

Banks steeper,  
scrubby timber,  
fast water.

Water level high.  
Visibility poor.

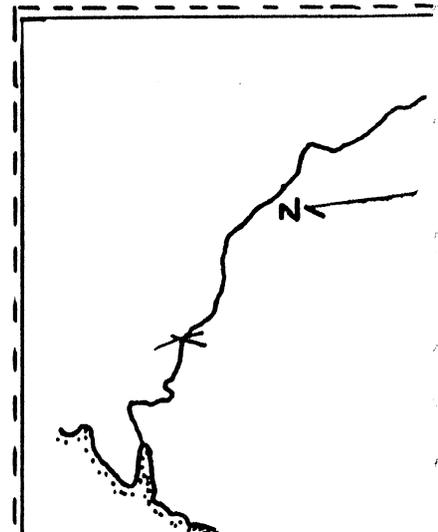
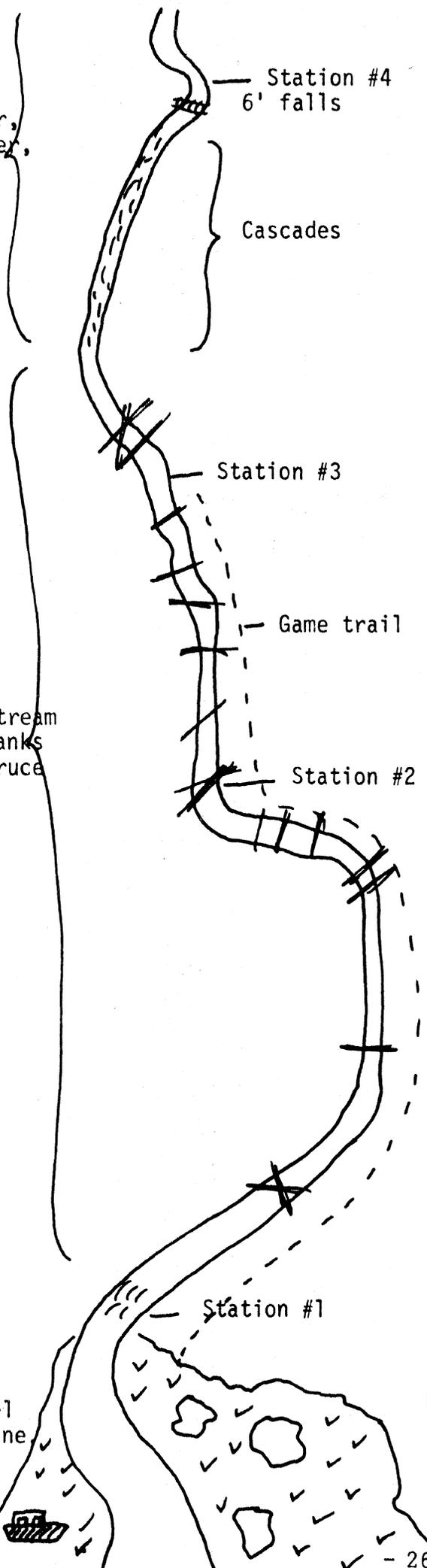
Meandering stream  
bed, level banks  
with good spruce  
and hemlock.

Excellent riffles  
with a few deep pools.

Fine gravel  
in I.T. zone

Ponds on grass flats

Barge  
remains



Name Perkins Creek Catalog No. 102-30-28  
 Latitude N 54° 56' 46" WR No. 124  
 Longitude W 132° 10' 55" K No. 128  
 Geodetic Map No. Dixon Ent. D-1 Work Area Ketchikan  
 Location E. side So. Arm Moira Sound Watershed Length 3 miles  
 Drainage Area of Watershed 3.03 sq. miles  
 Water Supply Type Precipitation and runoff

Trails & Survey Routes Game trail on south bank - walking hard at high water flows.

Aerial Survey Notes Should be good at normal flows, especially lower towards mouth.

Anchorage Fair skiff anchorage at mouth.

Tide Stage When Surveyed Ebb.

FISHERY RESOURCES

Commercial Fisheries Pink, chu, coho, sockeye.

Escapement 1973 15,000 pink and chum.

Available spawning area - 9,532 M<sup>2</sup>

Species Composition 90% pink, 10% chum.

Timing Late - September and October.

Schooling areas Good pools I.T., a few upstream.

Shellfish Potential None

Sport Fisheries Dolly Varden fry trapped above station #4.

Land Use at Present None

History of Land Use Selective cutting in the past.

Rehabilitation Potential 6' falls at station #4 looks like a partial barrier.

Soils Quite a few logs across stream; should be stable unless logged to stream banks.

GAME RESOURCES

Bear -----	Fish carcasses or bones (old or fresh) on banks, estimate	50
	Number of droppings	0
Geese -----	Number seen on tide flats	0
	Number seen up creek	0
	Number of broods seen	0
Mallards ---	Number seen on tide flats	5
	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	0
Tide flats -	Estimate length along beach	0
	Estimate depth out from beach	0
	Eel grass present on what percent of flats	0



PEAK ESCAPEMENT RECORD

NAME: Perkins Creek

STREAM CATALOG NUMBER: 102-30-28

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Sept. 23, 1930	20,000	20,000	300 coho	(G)
Sept. 26, 1940	35,000			Excellent (G)
Oct. 4, 1941	40,000			Excellent (G)
Sept. 25, 1942	3,500	500		Poor. 6,000 fish off mouth (G)
Oct. 9, 1947	4,000	1,000		Good (G)
Sept. 13, 1948			100 coho, 200 red	Good (G)
Sept. 27, 1948	20,000	6,000		Good (G)
Oct. 7, 1949	5,700	2,000	180 coho	(G)
Sept. 14, 1950			119 red	(G)
Sept. 26, 1950	4,950	1,710		(G)
Oct. 5, 1950			57 coho	(G)
Sept. 22, 1951			Few coho, 62 red	2,000 fish off mouth. Water low (G)
Sept. 27, 1951				2,000 chum, 5,000 pink at mouth (G)
Sept. 9, 1952			18 coho, 39 red	250 at mouth (G)
Sept. 22, 1952	319	92		100 at mouth (G)
Aug. 20, 1953	200			(G)
Sept. 20, 1953		50	10 coho	(G)
Sept. 25, 1954	2,500			None observed off mouth (A)
Sept. 25, 1955	6,000	11,000		(G)
Sept. 29, 1956	20,000			Some at mouth spawning (A)
Sept. 15, 1957				Few pink, 500 pink at mouth (A)
Sept. 20, 1958				Pink present. Poor visibility (A)
Sept. 6, 1960				None at mouth (A)
Aug. 16, 1961				Several hundred in bay (A)

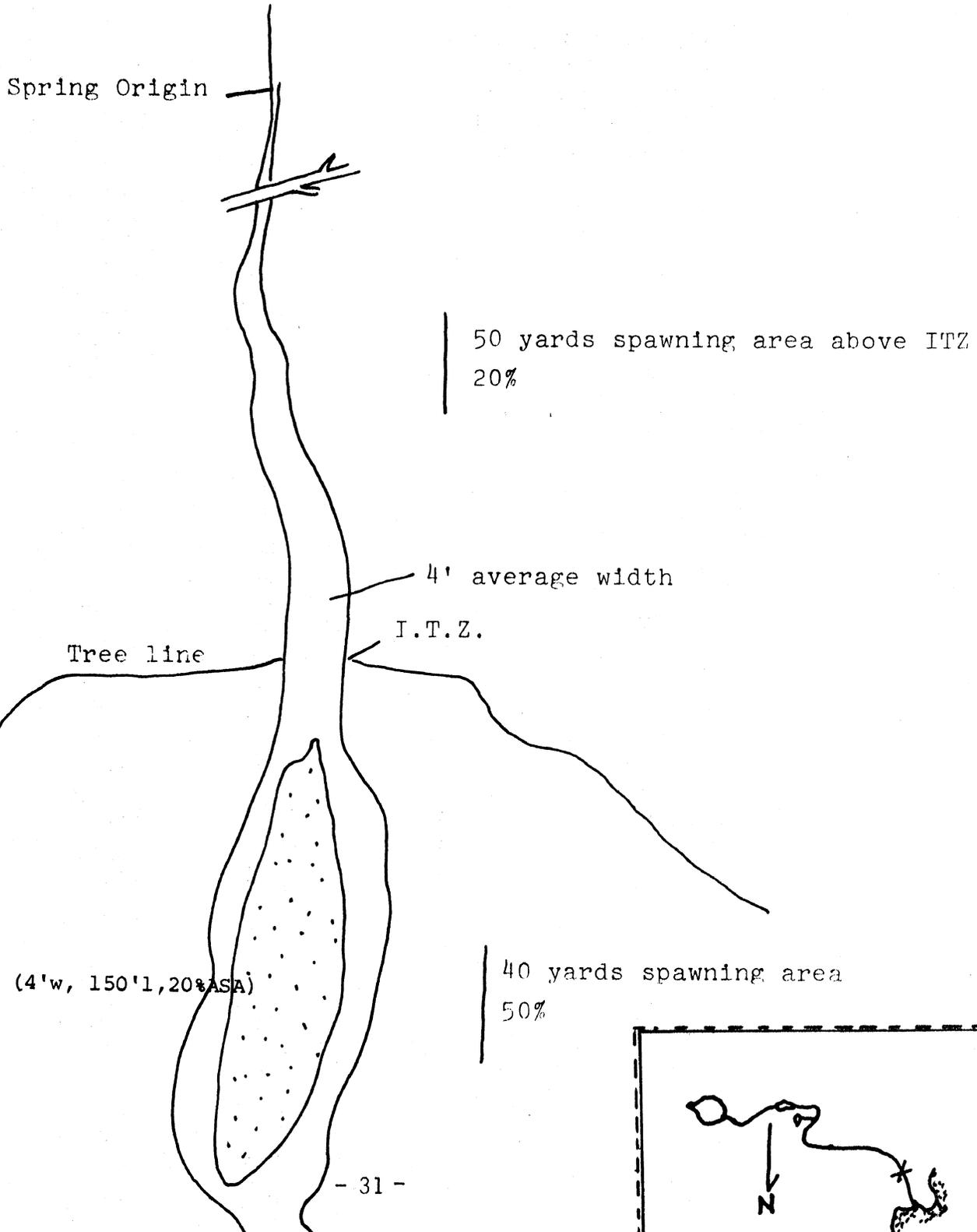
PEAK ESCAPEMENT RECORD

NAME: Perkins Creek

STREAM CATALOG NUMBER: 102-30-28

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Sept. 13, 1961				200 fish present at the mouth, none in the stream yet (A)
Sept. 6, 1962				400 fish present at the mouth (A)
Sept. 26, 1963	240	45	1 coho	Most dark and spawning (F)
Sept. 26, 1964	-----2,000 <sup>+</sup> -----			Vis. poor due to dark water, looks good (A)
Sept. 1, 1965	N.O.			Vis. poor (A)
Sept. 7, 1966	3,700			15,000 fish intertidally. Vis. good (A)
Sept. 17, 1967	800	1,120		1 small school of chums at mouth Vis. good (F)
Sept. 18, 1968	Few			(A)
Sept. 2, 1969	800		2 coho	(F)
Sept. 16, 1969		150		No jumps seen in South Arm (F)
Sept. 9, 1970				5,000 fish at mouth, but visibility too poor for counting the stream (A)
Sept. 10, 1970	1,500			(F)
Sept. 25, 1970		300		(F)
Sept. 18, 1971	7,500	500		Vis. good (F)
Oct. 6, 1971			35 coho	Vis. good. Many carcasses (F)
Sept. 27, 1972	3,200	80		Vis. good. Many carcasses. some new fish (F)
Sept. 3, 1973	11,700	1,250		Clear but high water, Vis. fair (F)
Sept. 5, 1974	-----11,000-----			3,000 in front of cabin, vis. poor (A)

Moirra Sound - South Arm  
102-30-31  
(#3 in notes)  
10-17-73  
Novak & Downey



PEAK ESCAPEMENT RECORD

NAME: Moira Sound, South Arm, S. shore 1.5 miles from head

STREAM CATALOG NUMBER: 102-30-31

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Sept. 25, 1942	3,500			Poor (G)
Oct. 1, 1946				Fair (G)
Oct. 8, 1947	100	60		Poor (G)
Sept. 20, 1953				Insignificant salmon stream (G)
Sept. 6, 1960				None at mouth (A)



PEAK ESCAPEMENT RECORD

NAME: Moira

STREAM CATALOG NUMBER: 102-30-33

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Aug. 28, 1969				No fish found in stream (F)

102-30-35

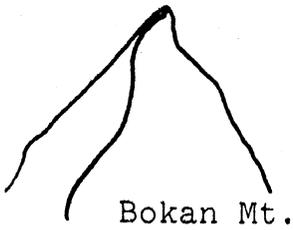
10-17-73

Blankenbeckler & Dinneford

Water level high

Visibility good

Survey distance 1-1/2 mile



Two 3' falls over roots and rubble.

Alder & cedar

Gradient increases

Trib ①

#4

#6

Log jam

#5

#3

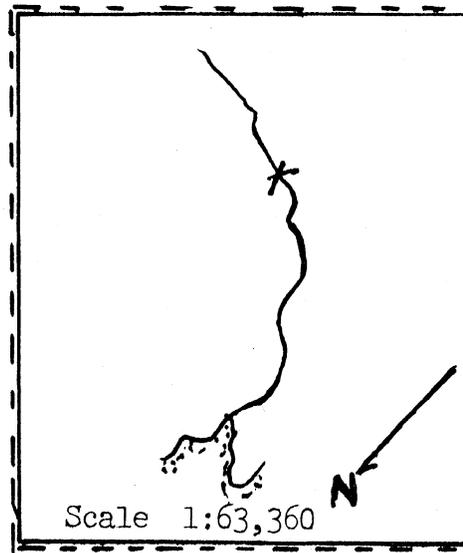
Muskeg

Bear trail -scats & carcasses

#2

Banks level, Good spruce & hemlock.

#1



I.T.Z  
Long & Rocky - 35 -

Excellent puddle duck habitat, grasses & ponds.

Name \_\_\_\_\_ Catalog No. 102-30-35  
 Latitude N 54° 55' 28" WR No. 124 B  
 Longitude W 132° 12' 9" K No. 130  
 Geodetic Map No. Dixon Ent. D-1 Work Area Ketchikan  
 Location So. arm Moira Sd. S. Shore ~~at the~~ from head. 2 miles  
 Drainage Area of Watershed 1.73 miles  
 Water Supply Type Muskeg, precipitation

Trails & Survey Routes Wading along stream difficult due to logs and slick rocks; bear trail usable.

Aerial Survey Notes Poor visibility.

Anchorage All weather anchorage in 7 fathoms in south end of south arm.

Tide Stage When Surveyed Flooding.

FISHERY RESOURCES

Commercial Fisheries Pink, chum and coho, also sockeye.

Escapement No 1973 figures. 1972 - 500 I.T., 400 upstream (pink and chum) Available spawning area - 5,403 M<sup>2</sup>

Species Composition 70% pink, 30% chum.

Timing Late

Schooling areas Numerous pools upstream.

Shellfish Potential Fair mud flats, no eel grass.

Sport Fisheries Unknown

Land Use at Present NONE

History of Land Use NONE

Rehabilitation Potential Log removal.

Soils Fairly level for most part; many logs across stream.

GAME RESOURCES

Bear -----	Fish carcasses or bones (old or fresh) on banks; estimate	50
	Number of droppings	5
Geese -----	Number seen on tide flats	8
	Number seen up creek	0
	Number of broods seen	0
Mallards ---	Number seen on tide flats	10
	Number seen up creek	4
	Number of broods seen	0
Mergansers -	Number of broods seen	0
Bald Eagles-	Number seen along creek	2
	Number of nests seen and location	0
Seals -----	Number seen at mouth of stream	0
Tide flats -	Estimate length along beach	200 yards
	Estimate depth out from beach	40 yards
	Eel grass present on what percent of flats	0



PEAK ESCAPEMENT RECORD

NAME: Moira Sound, South Arm, S. shore 1 mile from head

STREAM CATALOG NUMBER: 102-30-35

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Oct. 9, 1947	2,000	1,000	1 coho, 3 red	Good (G)
Sept. 20, 1953				Insignificant salmon stream (G)
Sept. 1, 1965	N.O.			Vis. fair (A)
Sept. 7, 1966				12-15,000 fish at mouth
Sept. 18, 1968	N.O.			(A)
Aug. 28, 1969				No fish found in stream (F)
Sept. 10, 1970	300			(F)
Aug. 20, 1972	400			500 fish intertidally. Vis. good (F)

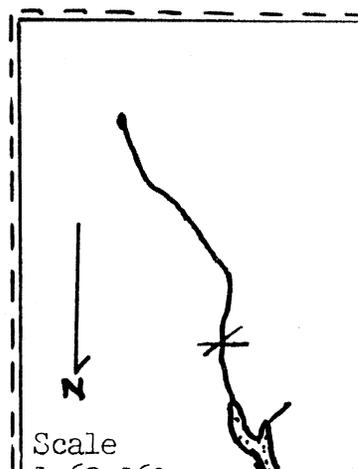
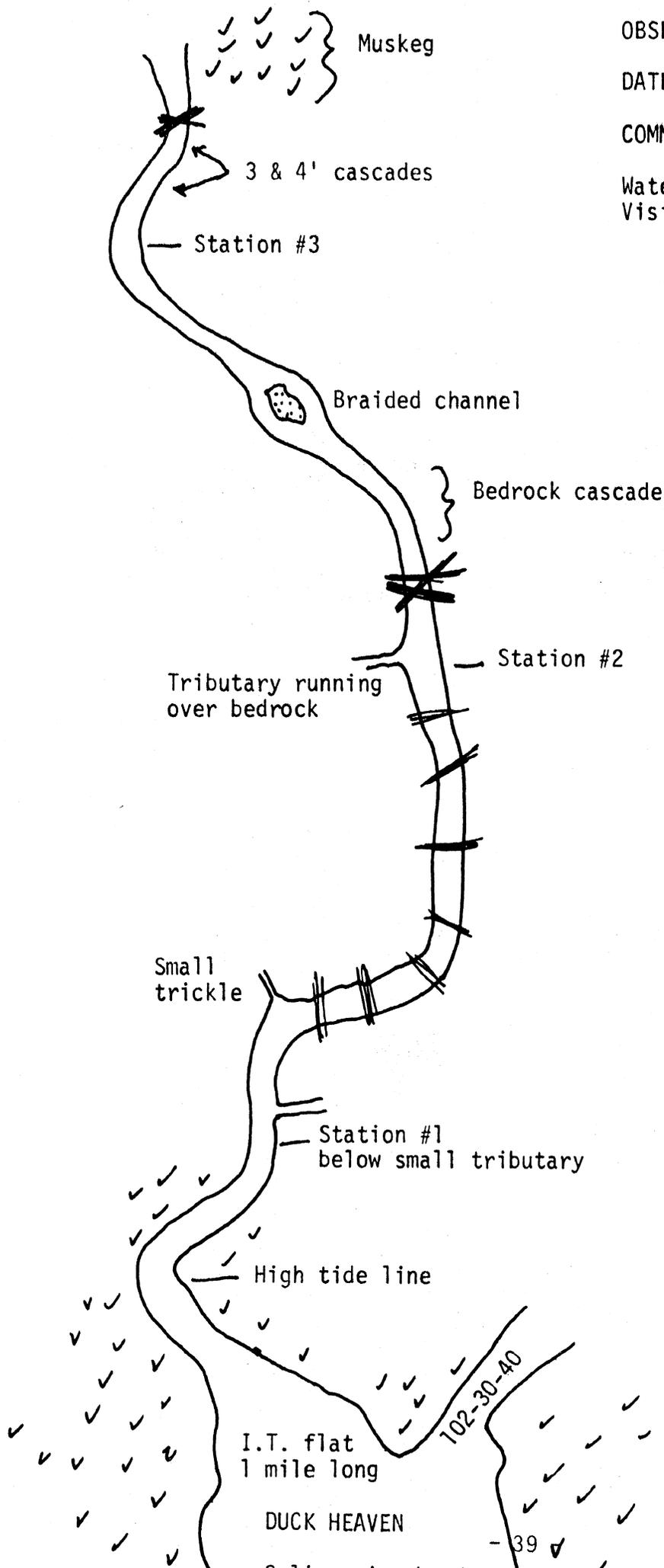
102-30-37

OBSERVER - Dinneford, Joyner

DATE - September 3, 1973

COMMENTS--

Water level low.  
Visibility good.



Name \_\_\_\_\_ Catalog No. 102-30-37  
 Latitude N 54° 55' 48" WR No. 124C  
 Longitude W 132° 12' 40" K No. 131  
 Geodetic Map No. Dixon Ent. D-1 Work Area Ketchikan  
 Location Head So. Arm Moira Sound Watershed Length 2.5 miles  
 Drainage Area of Watershed 1.38 sq. miles  
 Water Supply Type Muskeg

Trails & Survey Routes First 3/4 mile along I.T. grassflats, upper portion easy walking along stream, broken game trail.  
 Aerial Survey Notes I.T. good visibility, some darkness to water.

Anchorage Fair off flats for small craft.

Tide Stage When Surveyed Ebb.

FISHERY RESOURCES

Commercial Fisheries Pink, chum.

Escapement 500 pink (1973)

Available spawning area - 878 M<sup>2</sup>

Species Composition 100% pink.

Timing Late - September

Schooling areas Around the small island...off the tide flats.

Shellfish Potential Excellent clam habitat in estuary.

Sport Fisheries None observed or on record.

Land Use at Present None

History of Land Use None

Rehabilitation Potential No barriers, possibility of log removal helping productivity of system.

Soils Very low gradient and apparent stable conditions.

GAME RESOURCES

Bear -----	Fish carcasses or bones (old or fresh) on banks, estimate	50
	Number of droppings 1 250 bear at treeline	5
Goose -----	Number seen on tide flats	0
	Number seen up creek	0
	Number of broods seen	0
Mallards ---	Number seen on tide flats	100 puddle ducks
	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	2
Tide flats -	Estimate length along beach	1 mile
	Estimate depth out from beach	60'
	Eel grass present on what percent of flats	15%

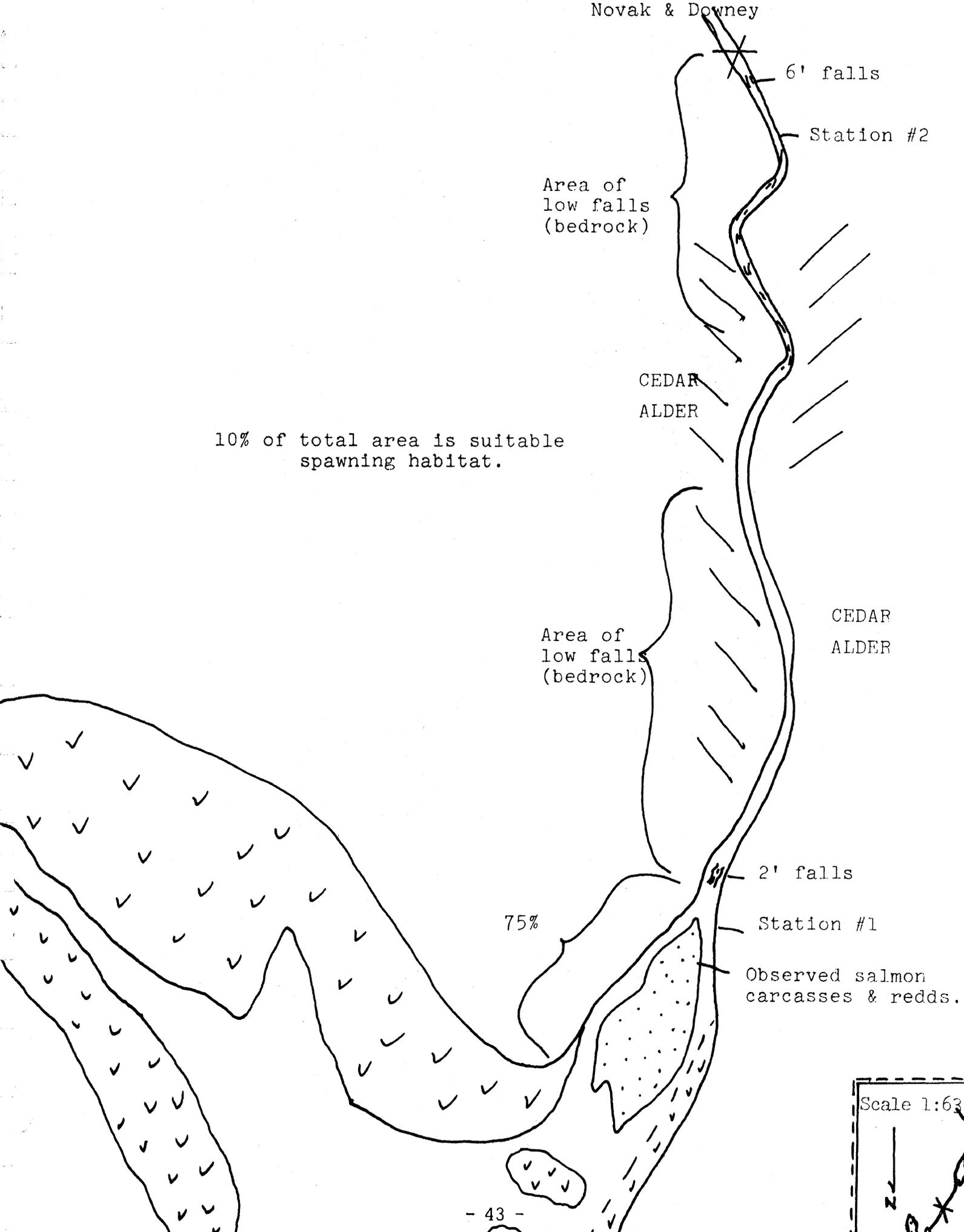


PEAK ESCAPEMENT RECORD

NAME: Moira Sound, South Arm, Head

STREAM CATALOG NUMBER: 102-30-37

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Oct. 1, 1946				Fair. Right-hand stream (G)
Oct. 8, 1947	1,000	400		Good. Right-hand stream (G)
Oct. 8, 1947	2,000	1,000		Good. Left-hand stream (G) } different fork
Sept. 20, 1953				Few chum, pink. Small stream (G)
Sept. 8, 1954				Pink present. Several thousand at mouth (A)
Sept. 2, 1956				15,000 pink at mouth (G)
Sept. 17, 1957				4,000-5,000 chum in bay outside (G)
Sept. 13, 1961				200 off mouth-- none in stream (A)
Sept. 6, 1962	N.O.			(A)
Oct. 6, 1963				No showing (A)
Sept. 24, 1964	----300+	-----		Vis poor, more present, a few dead (A)
Sept. 1, 1965	N.O.			Vis. fair (A)
Aug. 23, 1966				20-25,000 fish observed in balls throughout arm. Vis excellent (A)
Aug. 14, 1967				Few jumps at mouth. Very little showing in arm. (F)
Aug. 28, 1969				No fish in stream (F)
Aug. 20, 1970				1,500 fish intertidally, Vis. poor, cloudy. (A)
Sept. 18, 1971	15,000	300		Many jumps at mouth. Vis. good (F)
Aug. 23, 1974	----1,500---- in stringer			Vis. poor (A)



Area of low falls (bedrock)

10% of total area is suitable spawning habitat.

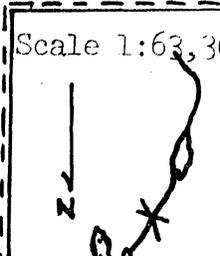
Area of low falls (bedrock)

CEDAR  
ALDER

CEDAR  
ALDER

75%

Observed salmon carcasses & redds.



Name Moira So. Arm - West Head Catalog No. 102-30-40  
 Latitude 54° 55' 02" N. WR No. \_\_\_\_\_  
 Longitude 132° 12' 24" W. R No. \_\_\_\_\_  
 Geodetic Map No. Dixon Entr. - D-1 Work Area Ketchikan - Moira Sound  
 Location \_\_\_\_\_ Watershed Length 2.5 miles  
 Drainage Area of Watershed 1.97 sq. miles  
 Water Supply Type Muskeg lakes which are fed by runoff and springs.

Trails & Survey Routes Very difficult to walk due to algae and mosses on bedrock - best to walk in stream bed when surveying.  
 Aerial Survey Notes Not possible to survey from air as canopy is heavy over the stream.  
 Anchorage At flooding tide it is possible to anchor skiff for short time near mouth of stream.  
 Tide Stage When Surveyed 1st half of flood.

#### FISHERY RESOURCES

Commercial Fisheries Pink salmon with incidental chum and coho.

Escapement No past records of escapement available.

Available spawning area - 217 M<sup>2</sup>

Species Composition From carcasses - 99% pink - 1% coho

Timing Late - September

Schooling areas Around the small island off tide flats in Section 18 on topo map.

Shellfish Potential Excellent clam in estuary with possibility of dungeness crab in head of south arm.

Sport Fisheries None on record but Dolly Varden should use the watershed.

Land Use at Present None - no commercial timber available along the watershed.

History of Land Use None

Rehabilitation Potential None necessary - may be a good lake system for transplanting rearing fry.

Soils Stable conditions near watershed. - muskeg type and bedrock.

#### GAME RESOURCES

Bear -----	Fish carcasses or bones (old or fresh) on banks, estimate	10
	Number of droppings	0
Geese -----	Number seen on tide flats	0
	Number seen up creek	0
	Number of broods seen	0
Mallards ---	Number seen on tide flats	15
	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	0
Tide Flats -	Estimate length along beach	300 yds.
	Estimate depth out from beach	7'
	Est. grass present on what percent of flats	0



PEAK ESCAPEMENT RECORD

NAME: Moira

STREAM CATALOG NUMBER: 102-30-40

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Sept. 2, 1969				500 fish intertidally, but none in stream (F)
Aug. 23, 1974	-----2,000 <sup>+</sup> -----			Vis. poor. Good show of jumps off mouth (A)

Description

West Side - South Arm  
Width - 6'  
Depth - 4-6"

This stream drops off the hillside and has overhanging brush on both sides. Because of the small size and the gradient associated with this watershed it is not considered a productive salmon stream for rearing fry or spawning habitat.

Hemlock stands are found along both sides of the watershed, but are of low commercial timber potential.

No rehabilitation potential.

Optimum escapement - No spawning potential

Rapid 3'

Sick Creek  
102-30-43  
Novak, Larson  
9-9-74

1500 pinks to end of  
survey where rapids  
start from tree below.

150 chum

-- 70' wide  
12" deep

--- boulders/large rock

3' falls

70% available spawning  
area.

HEMLOCK

HEMLOCK

Island --- gravel 2-3" diameter.

70' W.

50% pool, riffle  
relationship.

SPRUCE

SPRUCE

3' D pool --- Pool

Rapids 2' --- 300 pink salmon spawning.

100 schooled  
pink salmon.

Pool

--rapid/boulders above  
this point.  
--braided, gravel  
bottom, slower  
moving 30'w.

600 pink salmon  
spawning in  
the area to  
the pool.

Shallow lake.  
-beaver dam.  
-boulders,  
rapid  
-gravel, 50'W.

Station  
#1-

Gravel 1-3" diameter  
free of silt.

-deep lake

Probable  
fish barriers  
Excellent gravel 50'W.  
Pools w/riffles.

Name Sick Creek Catalog No. 102-30-43  
Latitude 54° 56' 04" WR No. 124D  
Longitude 132° 12' 55" K No. 132  
Geodetic Map No. Dixon Entrance D-1 Work Area Ketchikan ( Moira Sound)  
Location Watershed Length 6.3 miles  
Drainage Area of Watershed 9.8 square miles (polar planimeter)  
Water Supply Type Five major lakes and numerous smaller lakes, runoff from precipitation and ground water.  
Trails & Survey Routes Survey the I.T.Z. area by walking up the stream. Walk the north side of stream banks upstream.  
Aerial Survey Notes Relatively open to aerial work. All spawning areas located below the lower lake. Start approximately 1 mile above I.T.Z.  
Anchorage The south end of the arm affords good all-weather anchorage in about 7 fathoms.  
Tide Stage When Surveyed second half of ebb.

FISHERY RESOURCES

Commercial Fisheries Pink, chum, coho

Escapement No historic data available - 2500 pink, 150 chum, 1974.  
Available spawning area - 8,194 M<sup>2</sup>

Species Composition Pink salmon most prevalent with a probable 80% composition chum 10%, coho 10%. Estimate

Timing Late - September - October.

Schooling areas School around the island off the mouth of this stream.

Shellfish Potential Excellent clam fishery exists at the head of the South Arm. Dungeness crab subsistence fishery may exist.

Sport Fisheries Cutthroat excellent with possibility of land locked and sea run. Dolly Varden and steelhead. Three species of salmon.

Land Use at Present None

History of Land Use None known except for past mineral exploration.

Rehabilitation Potential The falls approximately 1.5 miles upstream should be investigated for possible ladderling.

Soils Stable with outcroppings of bedrock common in the stream.

GAME RESOURCES

Bear -----	Fish carcasses or bones (old or fresh) on banks, estimate	2
	Number of droppings	-
Geese -----	Number seen on tide flats	8
	Number seen up creek	-
	Number of broods seen	-
Mallards ---	Number seen on tide flats	-
	Number seen up creek	-
	Number of broods seen	-
Mergansers -	Number of broods seen	1
Bald Eagles-	Number seen along creek	-
	Number of nests seen and location	-
Seals -----	Number seen at mouth of stream	-
Tide flats -	Estimate length along beach	500'
	Estimate depth out from beach	8'
	Eel grass present on what percent of flats	5%



PEAK ESCAPEMENT RECORD

NAME: Moira Sound, South Arm, N.W. shore 1 mile from head

STREAM CATALOG NUMBER: 102-30-43 and 102-30-42

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Sept. 22, 1930	90,000	10,000	Few coho	Well seeded
Oct. 9, 1947	20,800	8,000		Excellent (G)
Sept. 27, 1948	32,000	3,500		Good (G)
Oct. 5, 1948			250 coho	Good (G)
Sept. 2, 1956				20,000 pink at mouth
Sept. 17, 1957				2,700 at mouth
Sept. 13, 1961				200 at mouth, none in stream, water low (A)
Sept. 6, 1962				50 fish present at the mouth (A)
Sept. 15, 1963				Few chum at mouth. Vis fair (A)
Sept. 24, 1964	-----3,000 <sup>+</sup> -----			Looks good, vis poor. (A)
Sept. 1, 1965	present			Few fish intertidally. Vis Poor (A)
Sept. 12, 1966	800	100	Few coho	400 fish intertidally. Vis good Coho in ponds (H)
Sept. 17, 1967	1,430	400		500 fish intertidally. Vis good (F)
Aug. 25, 1969	N.O.			Vis. fair. 1 jump in bay. Water calm (A)
Sept. 14, 1970	2,600	100		1,000-1,100 fish intertidally (F)
Sept. 7, 1973	-----5,150-----			(F)
-----102-30-42-----				
Aug. 24, 1969	N.O.			Vis. fair, calm, no jumps
Sept. 10, 1970	350	200		(F)
Sept. 18, 1972	15,000	30		Many jumps in bay. Vis. good (F)
Sept. 27, 1972	3,000	1,000		500 fish intertidally. Vis. good, rain, many carcasses (F)
Sept. 5, 1974	-----15,000-----			Vis. poor. In mouth and I.T.Z. (A)

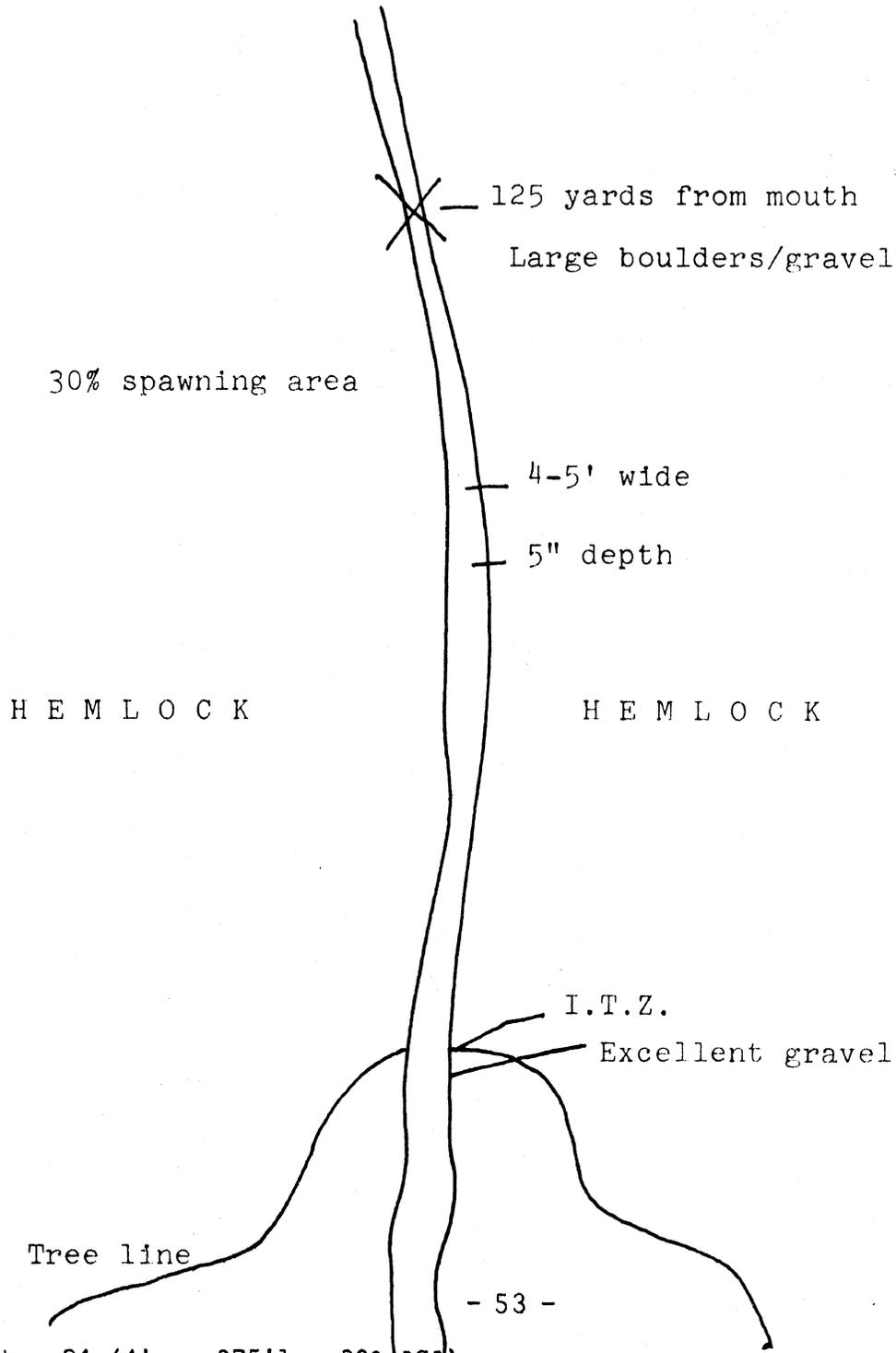
Uncataloged stream  
102-30-44  
(#10 in notes)  
Moira Sound - South Arm  
10-17-73  
Novak & Downey

Very little or no fishery potential. A small stream located 100 yards south of stream 102-30-45. Falls are located at the tree line that stop all fish migrations. The average width is only 2'.

Optimum escapement- No spawning potential.

Moira Sound - South Arm  
102-30-45  
(#9 in notes)  
10-17-73  
Novak & Downey

Not much fishery potential.



Novak and Downey  
10-18-73

102-30-46  
(#13 in notes)  
Moira Sound - West Arm

A very small stream that has a barrier falls immediately above the intertidal zone. At the time of survey, we had excessive rainfall. Stream width 4' and 4" deep. No fishery potential.

Optimum escapement - No spawning potential

PEAK ESCAPEMENT RECORD

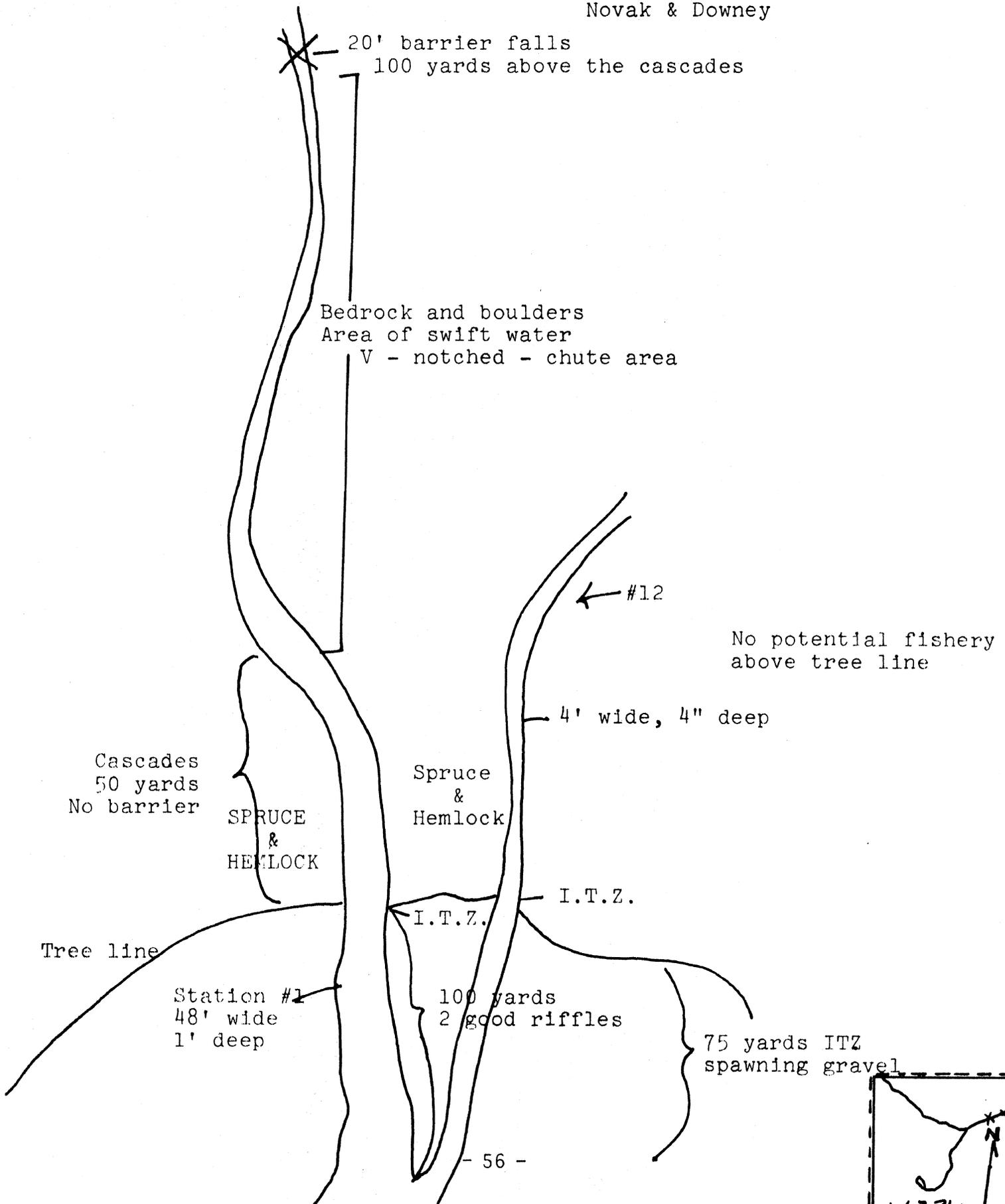
NAME: Frederick Cove, S. W. head

STREAM CATALOG NUMBER: 102-30-46

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Oct. 10, 1947	300			Excellent(G)
Sept. 8, 1949	200			(G)
Aug. 26, 1955				300 fish (G)
Sept. 29, 1956	500	13,000		(G)
Sept. 11, 1957		250		(G)
Aug. 12, 1973				3 schools off mouth (A)

Moira Sound - West Arm  
102-30-47  
(#11 in notes)  
and

10-18-73  
Novak & Downey



Name Head Creek Catalog No. 102-30-47  
 Latitude 54° 58' 54" N WR No. \_\_\_\_\_  
 Longitude 132° 18' 11" W K No. \_\_\_\_\_  
 Geodetic Map No. Dixon Ent. D-1 Work Area Moira Sd. - Ketchikan  
 Location Moira Sound - West Arm Watershed Length 4.5 miles  
 Drainage Area of Watershed 4.16 sq. miles  
 Water Supply Type Runoff and muskeg lakes - springs

Trails & Survey Routes Walked stream due to brushy conditions and V-notched lay of the watershed.

Aerial Survey Notes Not possible to survey upstream area from the air - ITZ is open to aerial surveying.

Anchorage Large boat anchorage east of mouth 800 yds. in 6 fathoms of water.

Tide Stage When Surveyed last half of ebb.

**FISHERY RESOURCES**

Commercial Fisheries Chum, coho, and pink. Chum carcasses were found in the intertidal zone.

Escapement 470 coho recorded in 1971. No other species recorded.  
Available spawning area - 446 M<sup>2</sup>

Species Composition 30% chum, 10% pink, and 60% coho.

Timing Late - september and October.

Schooling areas Off mouth about 1/4 mile east.

Shellfish Potential Clams off mouth to low water line approximately 300 yards. Crab in head of west arm.

Sport Fisheries Coho, Dolly Varden and Cutthroat

Land Use at Present None at present and no plans in the near future.

History of Land Use None

Rehabilitation Potential Due to the upstream cascades and falls nature of the watershed, no improvement necessary.

Soils Stable in lower area with unstable soils starting in the cascades and continuing upstream to ridge where muskeg situation exists.

**GAME RESOURCES**

Bear -----	Fish carcasses or bones (old or fresh) on banks, estimate	0
	Number of droppings	0
Geese -----	Number seen on tide flats	0
	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	0
Tide flats -	Estimate length along beach	600 yds.
	Estimate depth out from beach	8' ave
	Red grass present on what percent of flats	10%



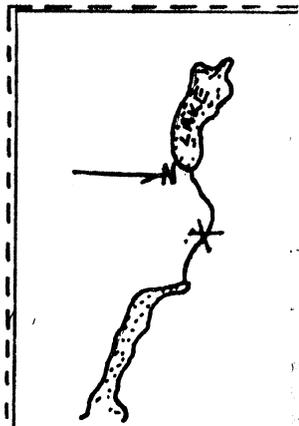
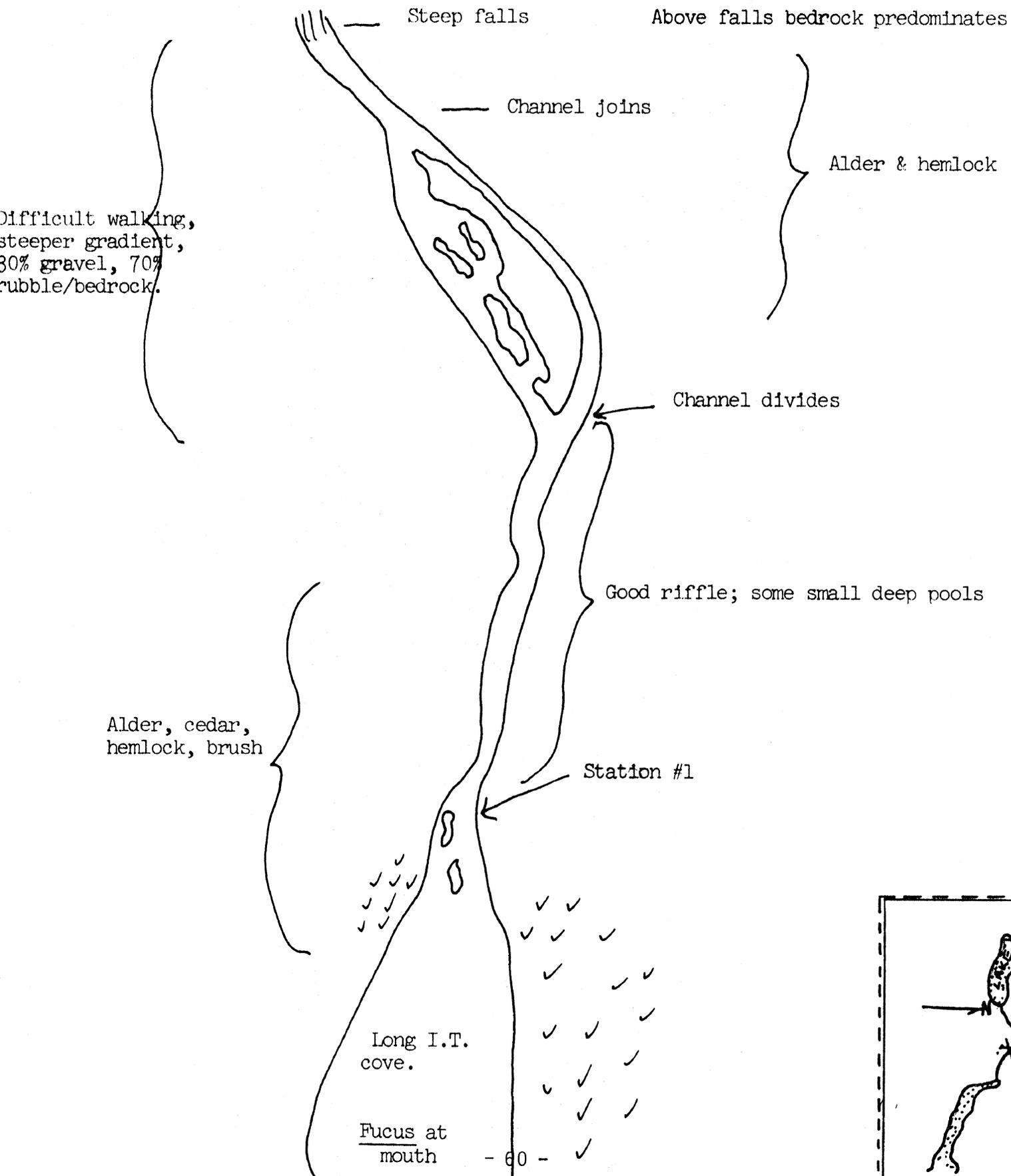
PEAK ESCAPEMENT RECORD

NAME: Moira - West Arm

STREAM CATALOG NUMBER: 102-30-47

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Aug. 28, 1969	N.O.			(F)
Sept. 18, 1971	470			Vis. good (F)
Sept. 13, 1972				2,000 fish intertidally. Vis. good, windy (A)
Sept. 23, 1973	-----1,000-----			1,000 dead. Good showing. Vis. good (A)

Water levels very high on September dates, medium on 10-18-73. Visibility poor in September, good in October.



Name Frederick Creek Catalog No. 102-30-51  
 Latitude N 54° 59' 26" WR No. 125  
 Longitude W 132° 16' 15" K No. 133  
 Geodetic Map No. Dixon Ent. D-1 Work Area Ketchikan  
 Location Moira Sound, W. Arm, No. Shore Watershed Length 4 miles  
 Drainage Area of Watershed 5.05 sq. miles  
 Water Supply Type Lake

Trails & Survey Routes Difficult walking to barrier.

Aerial Survey Notes Fair visibility at low flows especially at lower end of stream.

Anchorage Good for skiff within small cove.

Tide Stage When Surveyed Low, flooding.

FISHERY RESOURCES

Commercial Fisheries Pink and chum

Escapement 1973, 14,000

Available spawning area - 5,574 M<sup>2</sup>

Species Composition 10% chum, 90% pink

Timing Late

Schooling areas Good in cove, small pools upstream.

Shellfish Potential Fair clam habitat.

Sport Fisheries None known.

Land Use at Present None

History of Land Use None

Rehabilitation Potential None required.

Soils Quite rocky, channel meanders; soils appear stable.

GAME RESOURCES

Bear -----	Fish carcasses or bones (old or fresh) on banks, estimate	100
	Number of droppings	0
Geese -----	Number seen on tide flats	12
	Number seen up creek	0
	Number of broods seen	0
Mallards ---	Number seen on tide flats	15
	Number seen up creek	8
	Number of broods seen	0
Mergansers -	Number of broods seen	10 birds at mouth
Bald Eagles-	Number seen along creek	0
	Number of nests seen and location	0
Seals -----	Number seen at mouth of stream	0
Tide flats -	Estimate length along beach	1/2 mile
	Estimate depth out from beach	50'
	Eel grass present on what percent of flats	10%



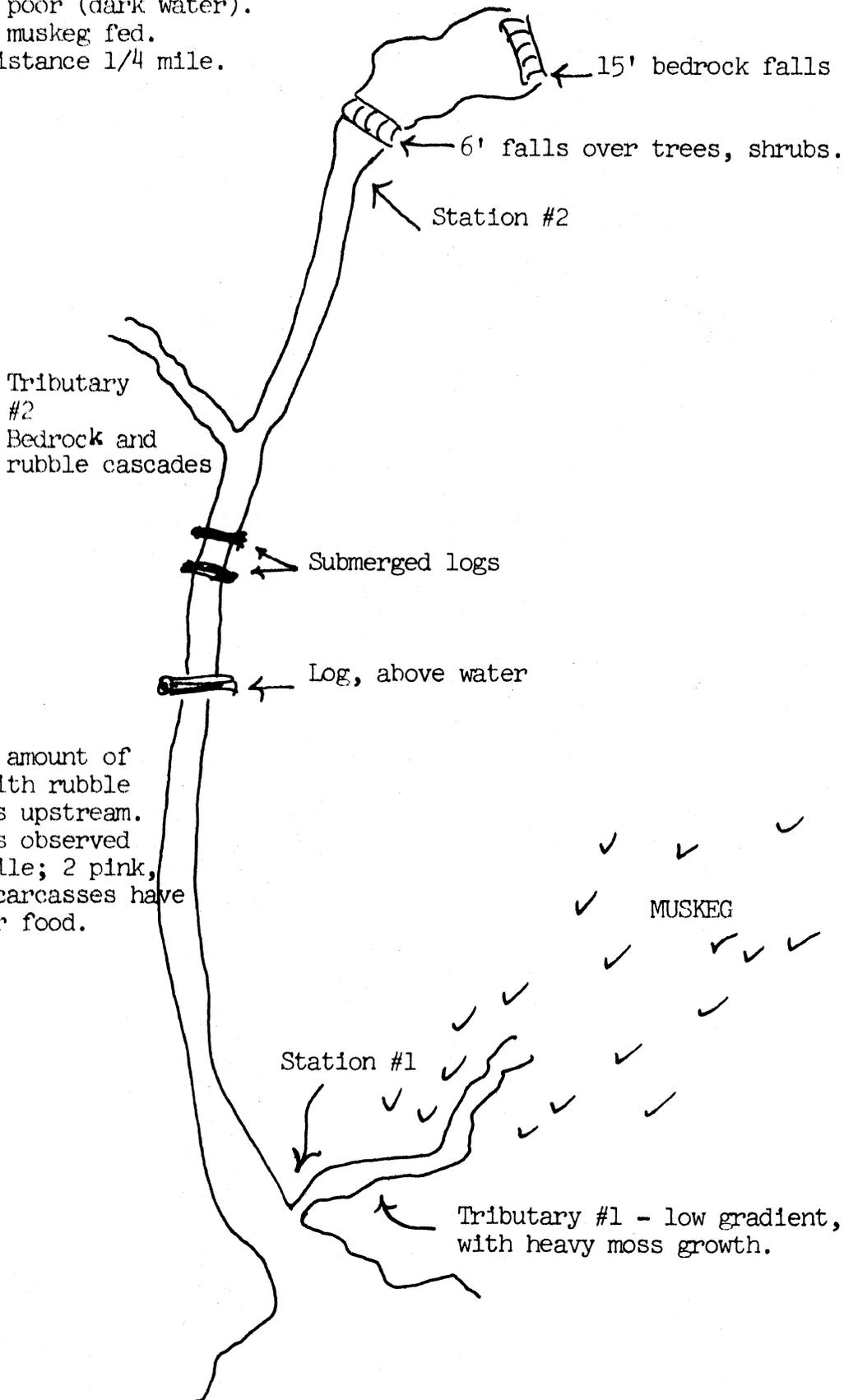
PEAK ESCAPEMENT RECORD

NAME: Frederick Creek

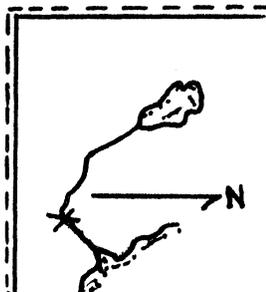
STREAM CATALOG NUMBER: 102-30-51

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Sept. 20, 1961		300		30 at mouth, most spawning, some schooled (A)
Aug. 16, 1962	N.O.			(A)
Oct. 6, 1963				Many dead (A)
Sept. 8, 1964	----100----			Vis. good. Stream very low (A)
Sept. 7, 1966	500			250 fish intertidally. Vis. fair looks good. (A)
Sept. 12, 1966		100		1,100 fish intertidally (H)
Sept. 18, 1967	50	2,250		Vis. good. Looks good: (F)
Sept. 16, 1969	500	300		400 fish intertidally, mostly chum. (F)
Aug. 26, 1970				2,000 fish intertidally. Jumps in bay. Vis poor. (A)
Oct. 6, 1971		550	8 coho	(F)
Sept. 18, 1971	5,800			1,000 carcasses. Vis. good (F)
Aug. 30, 1973	8,600	21,200		Vis. Fair (H)
Aug. 28, 1974				30 schools in cove (18,000 fish) Vis. Excellent (A)
Sept. 10, 1974	6,000			Vis. fair in stream, poor at mouth (A)
Sept. 18, 1974		1,000		1,000 dead, vis. poor (A)

Water level up.  
velocity poor (dark water).  
Lake and muskeg fed.  
survey distance 1/4 mile.



Relative amount of  
gravel with rubble  
decreases upstream.  
300 chums observed  
in 1/4 mile; 2 pink,  
20 chum carcasses have  
made bear food.



Name \_\_\_\_\_ Catalog No. 102-30-53  
 Latitude N 55° 00' 44" WR No. \_\_\_\_\_  
 Longitude W 132° 15' 24" K No. 134  
 Geodetic Map No. Craig A-1 Work Area Ketchikan  
 Location Moira Sd., 1.5 mi. from Dickman Bay Watershed Length 1 mile  
 Drainage Area of Watershed 1.26 sq. mile West head \_\_\_\_\_  
 Water Supply Type Lake

Trails & Survey Routes Easy walking along banks to barrier falls at station #2.

Aerial Survey Notes Poor aerial visibility.

Anchorage Poor for skiff off mouth.

Tide Stage When Surveyed High, beginning to ebb.

FISHERY RESOURCES

Commercial Fisheries Pink and chum.

Escapement 300 chum, 10 pink

Available spawning area - 1,128 M<sup>2</sup>

Species Composition 95% chum, 5% pink

Timing Late

Schooling areas None

Shellfish Potential None

Sport Fisheries None observed.

Land Use at Present None

History of Land Use None

Rehabilitation Potential Lake source might be valuable for sockeye, would entail blasting bedrock falls.

Soils Steep bedrock along most of surveyed stream.

GAME RESOURCES

Bear -----	Fish carcasses or bones (old or fresh) on banks, estimate	<u>20</u>
	Number of droppings	<u>0</u>
Geese -----	Number seen on tide flats	<u>0</u>
	Number seen up creek	<u>0</u>
	Number of broods seen	<u>0</u>
Mallards ---	Number seen on tide flats	<u>0</u>
	Number seen up creek	<u>0</u>
	Number of broods seen	<u>0</u>
Mergansers --	Number of broods seen	<u>0</u>
Bald Eagles--	Number seen along creek	<u>0</u>
	Number of nests seen and location	<u>0</u>
Seals -----	Number seen at mouth of stream	<u>0</u>
Tide flats -	Estimate length along beach	<u>0</u>
	Estimate depth out from beach	<u>0</u>
	Eel grass present on what percent of flats	<u>0</u>



PEAK ESCAPEMENT RECORD

NAME: Dickman Bay, S. shore 1.5 miles from W. head

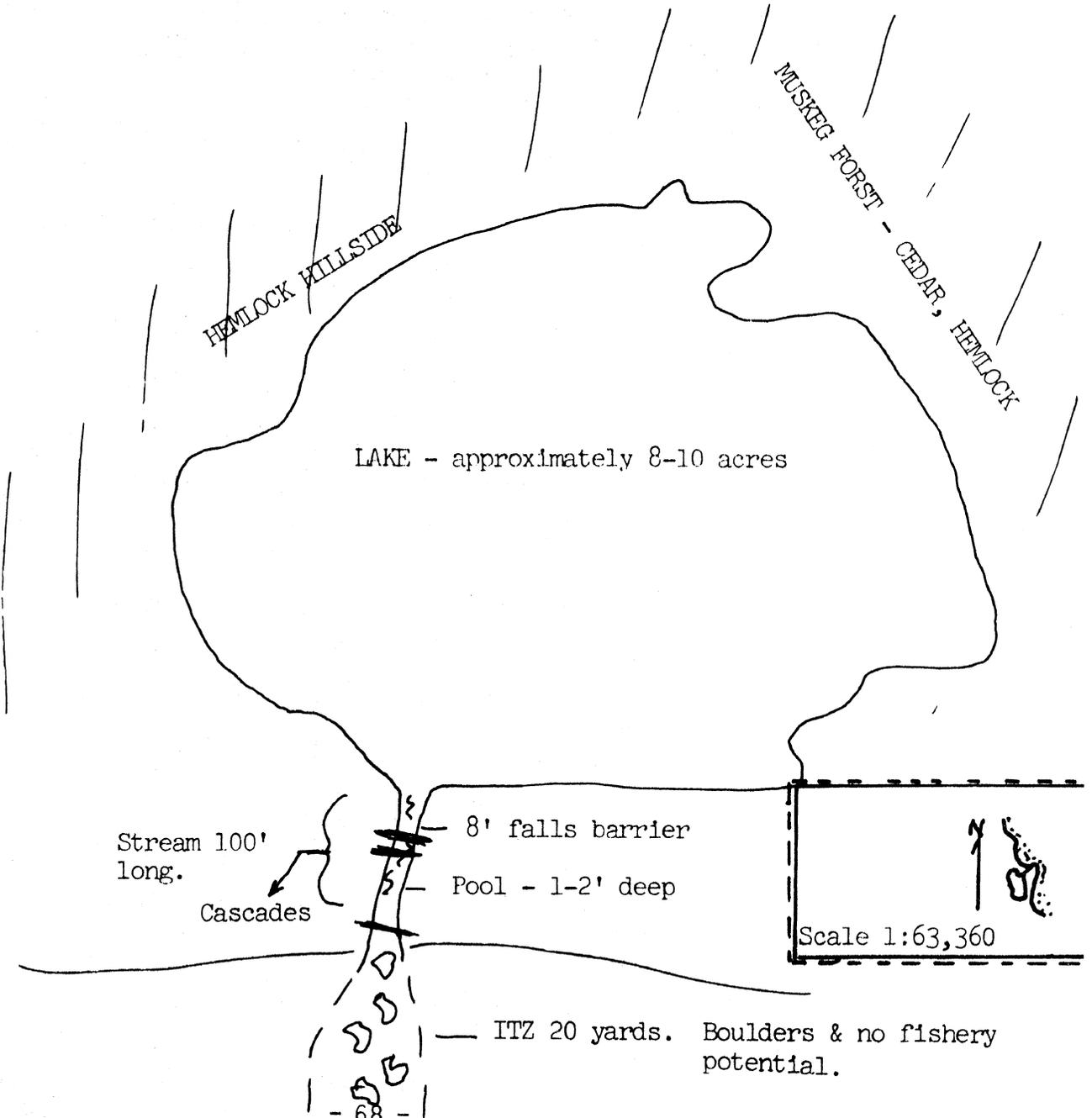
STREAM CATALOG NUMBER: 102-30-53

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Sept. 23, 1930	75,000	65,000		Stream overcrowded
Sept. 27, 1940	5,000			Good (G)
Oct. 4, 1941	5,000			Good (G)
Sept. 25, 1942	2,000	8,000		Excellent. 8,000 pink in bay (G)
Sept. 27, 1945	6,000	10,000		Excellent. 6,000 fish off mouth (G)
Oct. 10, 1947	5,000	250		Good (G)
Sept. 6, 1953	8			Poor. Few at mouth, bay. Water low (G)
Sept. 20, 1953		1,650		Fair. Few at mouth
Oct 4, 1955	150	5,650		(G)
Sept. 2, 1956				15,000 pink at mouth
Sept. 11, 1957	50	250		Few jumps in bay (G)

This short stream is an estimated 100' in length, between the ITZ and the lake. The system, under natural conditions has no fishery potential due to the rapids, falls situation of this stream.

Transplanting of sport and commercial species may be merited in this system. Rearing coho fry may be one consideration-

Optimum escapement - No spawning potential.



Novak & Downey  
10-18-73  
Dickman Bay

102-30-56  
(Uncataloged Stream)  
(#14 in notes)

This is a very small stream averaging 3' in width. A fish barrier falls exists just above the tree line. Large boulders and rocks are found in the short I.T. area. Fishery potential, both rearing and spawning, is rated at zero.

Optimum escapement - No spawning potential

102-30-57  
(#14 in notes)  
Moira Sound - Dickman  
10-18-73  
Novak & Downey

Poor fishery potential in upper  
end of stream. From tributary up-  
stream

10% available spawning area.

Station #2

300 yds above falls & tributary.  
No fish seen. More pools & bedrock  
with larger boulders.

Rapids and canyon area.

More pools,  
Higher velocity.

No fish or carcasses above falls.

20' W  
8" D

Tributary #1

6' falls barrier.

30% available spawning area.

250 chum carcasses, 16 live chum to trib.

100 yards above I.T.Z.

300 chum carcasses  
3 live chum  
1 live coho

40% available spawning area-

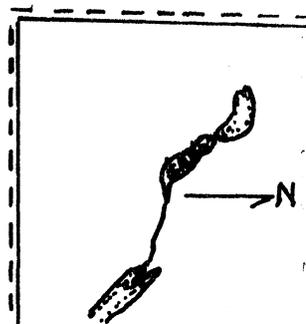
100 yds. I.T.Z.  
spawning gravel

Low falls (1-2')  
Tree line.

70% available spawning area  
200 chum carcasses  
1 live chum

- 70 -

Station #1



Name Dickman Bay - Head Catalog No. 102-30-57  
 Latitude N 55° 01' 55" WR No. \_\_\_\_\_  
 Longitude W 132° 17' 05" K No. \_\_\_\_\_  
 Geodetic Map No. Craig - A1 & A2 Work Area Ketchikan, Moira Sound  
 Location Moira Sound Watershed Length \_\_\_\_\_  
 Drainage Area of Watershed 2.44  
 Water Supply Type Springs, muskeg lake, and runoff. Watershed originates at the 600' elevation area; springs probably most prevelant.  
 Trails & Survey Routes Walk up stream - very hard to survey due to brushy condition of banks and boulders covered with vegetation.  
 Aerial Survey Notes The substrate is dark in color and makes aerial surveying unreliable.  
 Anchorage Large boat must anchor in 53 fathom area about 400 yds. from mouth of stream in middle of arm.  
 Tide Stage When Surveyed First half of flood

FISHERY RESOURCES

Commercial Fisheries Chum, coho, and pink.

Escapement Recorded 771 chum at time of survey.

Available spawning area - 2,195 M<sup>2</sup>

Species Composition Chum 90%, pink 5-8%, coho 2%.

Timing Late - September

Schooling areas Off mouth in 5 fathom area.

Shellfish Potential Good clam production on ITZ. Crab fishery may be present in this arm of Dickman Bay.

Sport Fisheries Unknown, but probable cutthroat and D. Varden with coho also present

Land Use at Present None

History of Land Use None

Rehabilitation Potential None necessary

Soils Stable - bedrock exposed in most of upstream area. V-notched on canyon in upper 3/4 portion may be slide prone.

GAME RESOURCES

	Number seen	
Bear -----	Fish carcasses or bones (old or fresh) on banks, estimate	1
	Number of droppings	0
Geese -----	Number seen on tide flats	0
	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	0
Tide flats -	Estimate length along beach	200
	Estimate depth out from beach	10-15'
	Red grass present on what percent of flats	0



PEAK ESCAPEMENT RECORD

NAME: Dickman Bay, N.W. head of South Arm

STREAM CATALOG NUMBER: 102-30-57

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Sept. 24, 1930	750			Many dead chum. 1,000 fresh pink at mouth (G)
Sept. 11, 1957	2	8	6 coho	Few bear kills (G)
Sept. 1, 1961	15			Schooled (A)
Aug. 29, 1963	N.O.			(A)
Sept. 7, 1966	Few	Few		(F)
Sept. 2, 1969	N.O.			No fish seen in stream (A)
Aug. 26, 1970	N.O.			Vis. poor - cloudy (A)

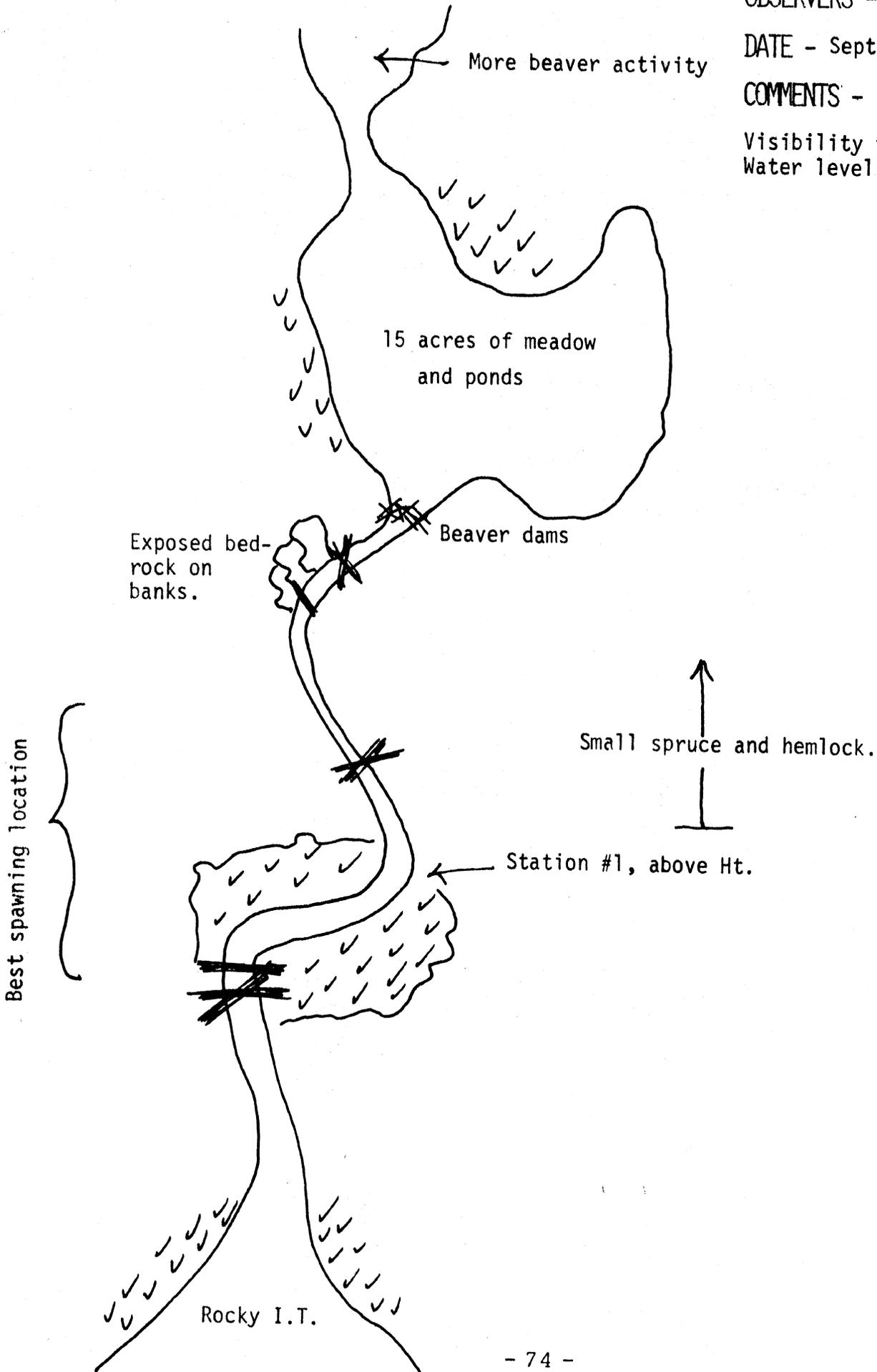
102-30-59

OBSERVERS - Dinneford, Joyner

DATE - September 2, 1973

COMMENTS -

Visibility fair.  
Water level up.



Scale 1:63,360



Name \_\_\_\_\_ Catalog No. 102-30-59  
 Latitude N 55° 01' 43" WR No. \_\_\_\_\_  
 Longitude W 132° 15' 37" K No. 134-B  
 Geodetic Map No. Craig C-1 Work Area Ketchikan  
 Location Moira Sd., Dickman B., N.W. Head So. Arm Watershed Length \_\_\_\_\_  
 Drainage Area of Watershed \_\_\_\_\_ .84 sq. mile  
 Water Supply Type Lake

Trails & Survey Routes Difficult walking over down logs up to beaver dams.

Aerial Survey Notes Poor visibility.

Anchorage Poor for skiff off mouth.

Tide Stage When Surveyed Flooding, near high.

FISHERY RESOURCES

Commercial Fisheries Pink, chum, coho.

Escapement 1973 - 1,350 fish.

Available spawning area - 159 M<sup>2</sup>

Species Composition 10% chum, 90% pink

Timing Lake

Schooling areas In cove off mouth.

Shellfish Potential None, bedrock I.T.

Sport Fisheries None observed or on record.

Land Use at Present None

History of Land Use Much beaver activity upstream.

Rehabilitation Potential Log removal would enhance potential productivity of the system.

Soils Unstable, many logs across stream, some exposed bedrock.

GAME RESOURCES

Bear -----	Fish carcasses or bones (old or fresh) on banks, estimate	15
	Number of droppings	2
Geese -----	Number seen on tide flats	0
	Number seen up creek	5
	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	1
	Number of nests seen and location	0
Seals -----	Number seen at mouth of stream	0
Tide flats -	Estimate length along beach	0
	Estimate depth out from beach	0
	Beel grass present on what percent of flats	0



PEAK ESCAPEMENT RECORD

NAME: Dickman Bay - West Arm

STREAM CATALOG NUMBER: 102-30-59

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Aug. 28, 1969	N.O.			No fish seen

Name Dickman Bay - Head Catalog No. 102-30-61  
 Latitude N 55° 03' 17" WR No. 125D  
 Longitude W 132° 18' 05" K No. 135A  
 Geodetic Map No. Craig A-1 Work Area Ketchikan  
 Location Moira Snd. Dickman Bay W.Hd Watershed Length 4 miles  
 Drainage Area of Watershed of No. Arm. 6.28 sq. miles  
 Water Supply Type Lake

Trails & Survey Routes Difficult walking along slick bedrock to barrier falls.

Aerial Survey Notes No visibility.

Anchorage Poor off mouth for skiff.

Tide Stage When Surveyed High

FISHERY RESOURCES

Commercial Fisheries Pink, chum, coho

Escapement 1973 250 fish Available spawning area - 709 M<sup>2</sup>

Species Composition 250 pinks

Timing Late

Schooling areas None

Shellfish Potential Rocky I.T., no potential.

Sport Fisheries None

Land Use at Present Nothing currently planned to my knowledge.

History of Land Use Dickman Bay was selectively logged at least 20 years ago. Many mature alders found.

Rehabilitation Potential 200 yds. of possible sockeye rearing habitat upstream. Fish block above prevents upstream movements.

Soils Moderately steep, apparently stable at mouth.

GAME RESOURCES

Bear -----	Fish carcasses or bones (old or fresh) on banks, estimate	0
	Number of droppings	0
Geese -----	Number seen on tide flats	0
	Number seen up creek	0
	Number of broods seen	0
Mallards ---	Number seen on tide flats	10
	Number seen up creek	0
	Number of broods seen	0
Mergansers -	Number of broods seen	10 birds at mouth.
Rald Eagles-	Number seen along creek	0
	Number of nests seen and location	0
Seals -----	Number seen at mouth of stream	0
Tide flats -	Estimate length along beach	0
	Estimate depth out from beach	0
	Eel grass present on what percent of flats	0



PEAK ESCAPEMENT RECORD

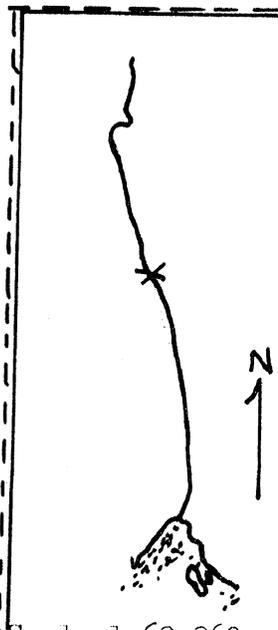
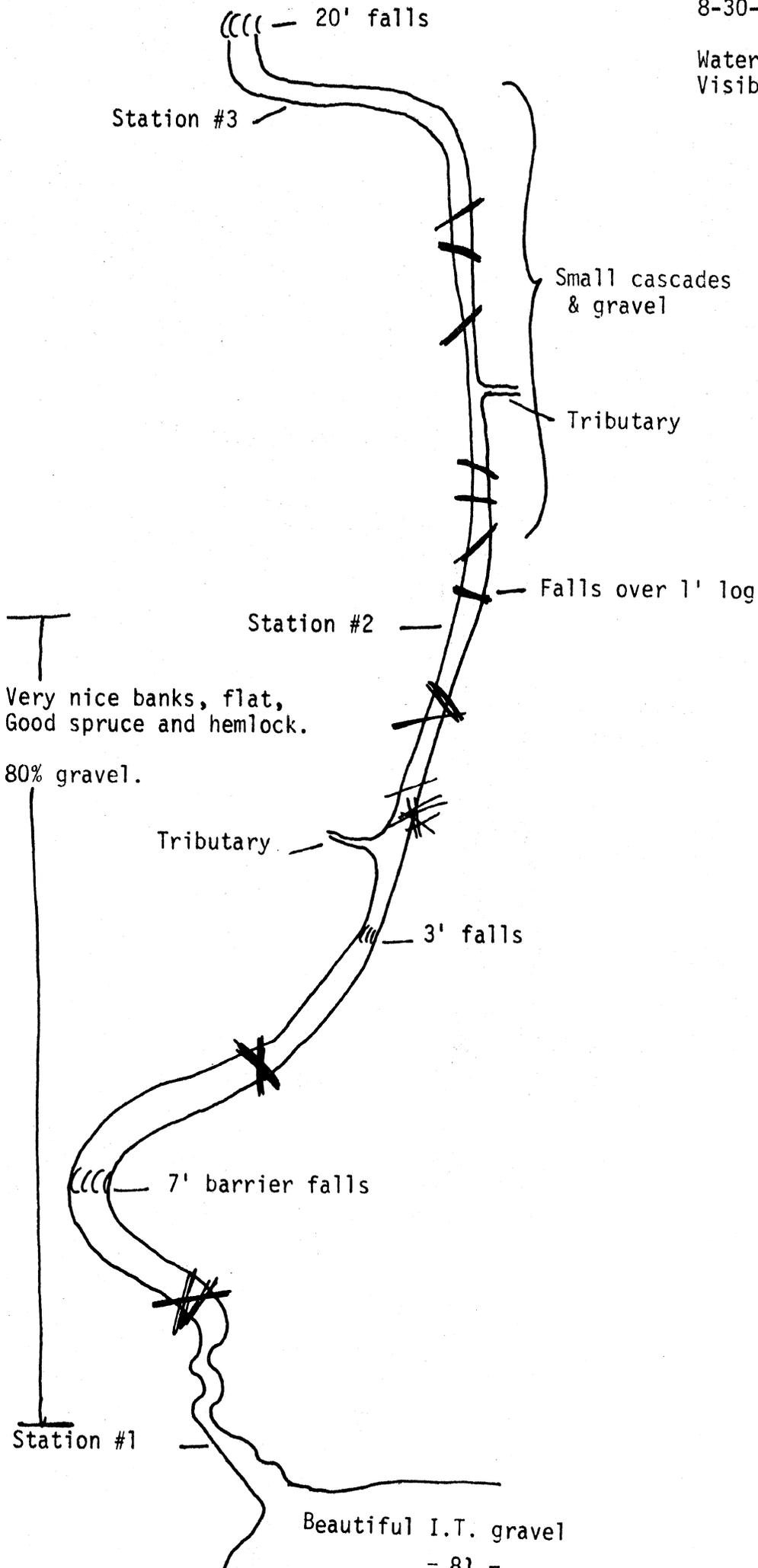
NAME: Dickman Bay, W. head of N. arm

STREAM CATALOG NUMBER: 102-30-61

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Sept. 24, 1930	336	114		1,500 fish off mouth (G)
Oct. 5, 1937				Good chum run. Few pink (G)
Oct. 4, 1955	150	5,650		(G)
Sept. 2, 1956				15,000 pink at mouth (G)
Sept. 10, 1957	2		6 coho	Jumps way ou in bay (G)
Sept. 11, 1957		250		Jumps in bay (G)
Aug. 24, 1969	N.O.			Vis. fair. Calm, no jumps (A)
Sept. 13, 1973	----4,000----			Good showing in bay. Vis. excellent (A)
Sept. 5, 1974	----6,000----			3 schools, Vis. poor (A)

102-30-63  
8-30-73

Water very clear, slightly high.  
Visibility excellent.



Name \_\_\_\_\_ Catalog No. 102-30-63  
 Latitude N 55° 03' 22" WR No. \_\_\_\_\_  
 Longitude W 132° 16' 03" K No. 135 B  
 Geodetic Map No. Craig C-1 Work Area Ketchikan  
 Location Dickman Bay - NE Head of No. Arm Watershed Length 2.5 miles  
 Drainage Area of Watershed 2.59 sq. miles  
 Water Supply Type Runoff

Trails & Survey Routes Walking difficult along narrow canyon

Aerial Survey Notes Poor visibility.

Anchorage Kegan Cove only approved anchorage in U.S. Coast Pilot 9, 12th edition

Tide Stage When Surveyed Flooding

FISHERY RESOURCES

Commercial Fisheries Pink and chum.

Escapement 1973 - 375 pinks, 1930 - 5,000 chum, 1000 pink

Available spawning area - 1,003 M<sup>2</sup>

Species Composition No back figures.

Timing Late

Schooling areas None

Shellfish Potential I.T. mostly gravel.

Sport Fisheries None observed or on record.

Land Use at Present None

History of Land Use Selective logging.

Rehabilitation Potential Log removal would help.

Soils Level banks, past conditions and/or practices have put a number of trees in the stream.

GAME RESOURCES

Bear -----	Fish carcasses or bones (old or fresh) on banks, estimate	0
	Number of droppings	0
Geese -----	Number seen on tide flats	0
	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	0
Tide flats -	Estimate length along beach	rocky
	Estimate depth out from beach	0
	Eel grass present on what percent of flats	0



PEAK ESCAPEMENT RECORD

NAME: Dickman Bay, N. head of N. arm

STREAM CATALOG NUMBER: 102-30-63

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Sept. 23, 1930		5,000		Few pink. 1,000 at mouth (G)
Aug. 28, 1969	N.O.			No fish seen (F)
Sept. 30, 1973		6,000		7 schools of chum (50-100) in bay. Vis. good (A)
Sept. 13, 1973	-----5,000-----			Vis. excellent (A)

Coarser load  
upstream

35' barrier falls / gradient increases  
Station #2

KUGEL CREEK  
102-30-65  
8-29-73

Visibility good.  
Water level up 3-4 inches.

Channel splits

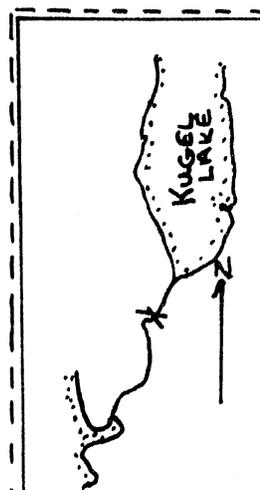
65% good gravel

Very level banks support  
fair spruce and hemlock.

Station #1, H.T. line

Gravel:rubble - 50:50  
some redds observed

Large mussel bed



Name Kugel Creek Catalog No. 102-30-65  
 Latitude N 55° 02' 35" WR No. \_\_\_\_\_  
 Longitude W 132° 15' 24" K No. \_\_\_\_\_  
 Geodetic Map No. Craig C-1 Work Area Ketchikan  
 Location Dickman Bay, N. Arm, N.E. corner Watershed Length 5.0 miles  
 Drainage Area of Watershed 7.65 sq. miles  
 Water Supply Type Lakes

Trails & Survey Routes Moderately easy walking to falls.

Aerial Survey Notes Marginal visibility, good brush and timber to banks.

Anchorage Fair for skiff at mouth

Tide Stage When Surveyed Ebbing

FISHERY RESOURCES

Commercial Fisheries Pink, chum, coho

Escapement 1973 - 8700 pink, 6 chum, 2 coho  
 Available spawning area - 7,472 M<sup>2</sup>

Species Composition 90% pink, 5% chum, 5% coho.

Timing Late

Schooling areas I.T. long, some small pools up to and at falls.

Shellfish Potential Large mussel colony on low tidal rocks.

Sport Fisheries None observed or previously recorded in sport fish files.

Land Use at Present None

History of Land Use Logging

Rehabilitation Potential Steep pass could probably bridge falls, survey of upper creek required. Good lake system.

Soils Level and stable.

GAME RESOURCES

Bear -----	Fish carcasses or bones (old or fresh) on banks, estimate	50
	Number of droppings	0
Geese -----	Number seen on tide flats	0
	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	12
Tide flats -	Estimate length along beach	0
	Estimate depth out from beach	0
	Eel grass present on what percent of flats	0



PEAK ESCAPEMENT RECORD

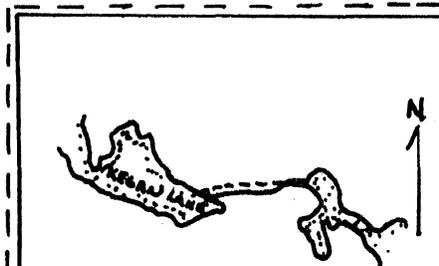
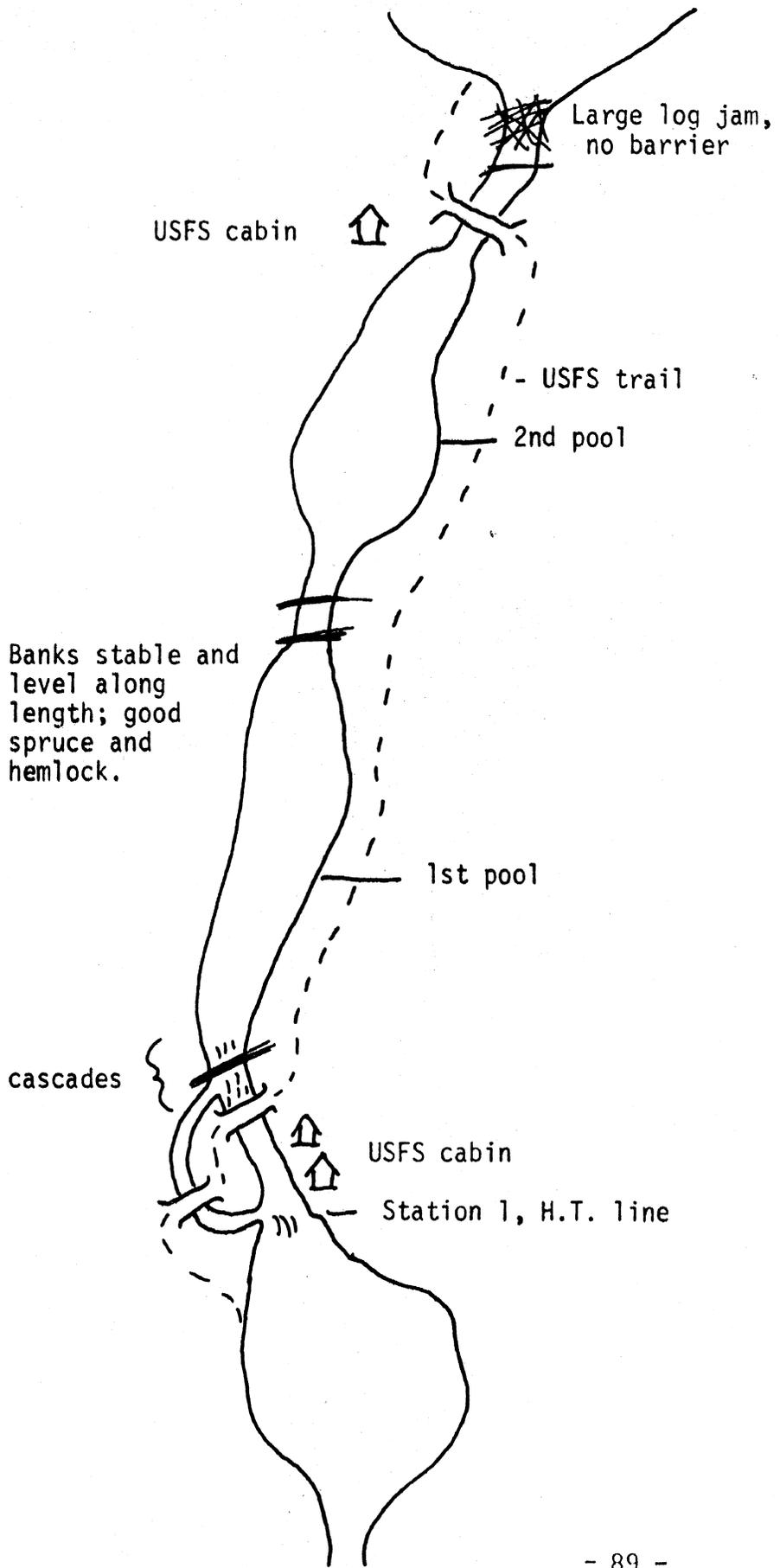
NAME: Dickman Bay, N.E. head of N. arm

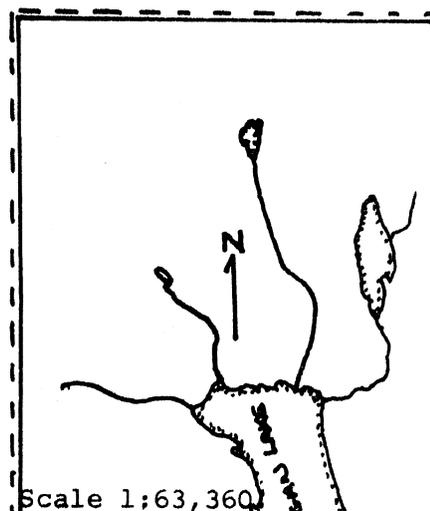
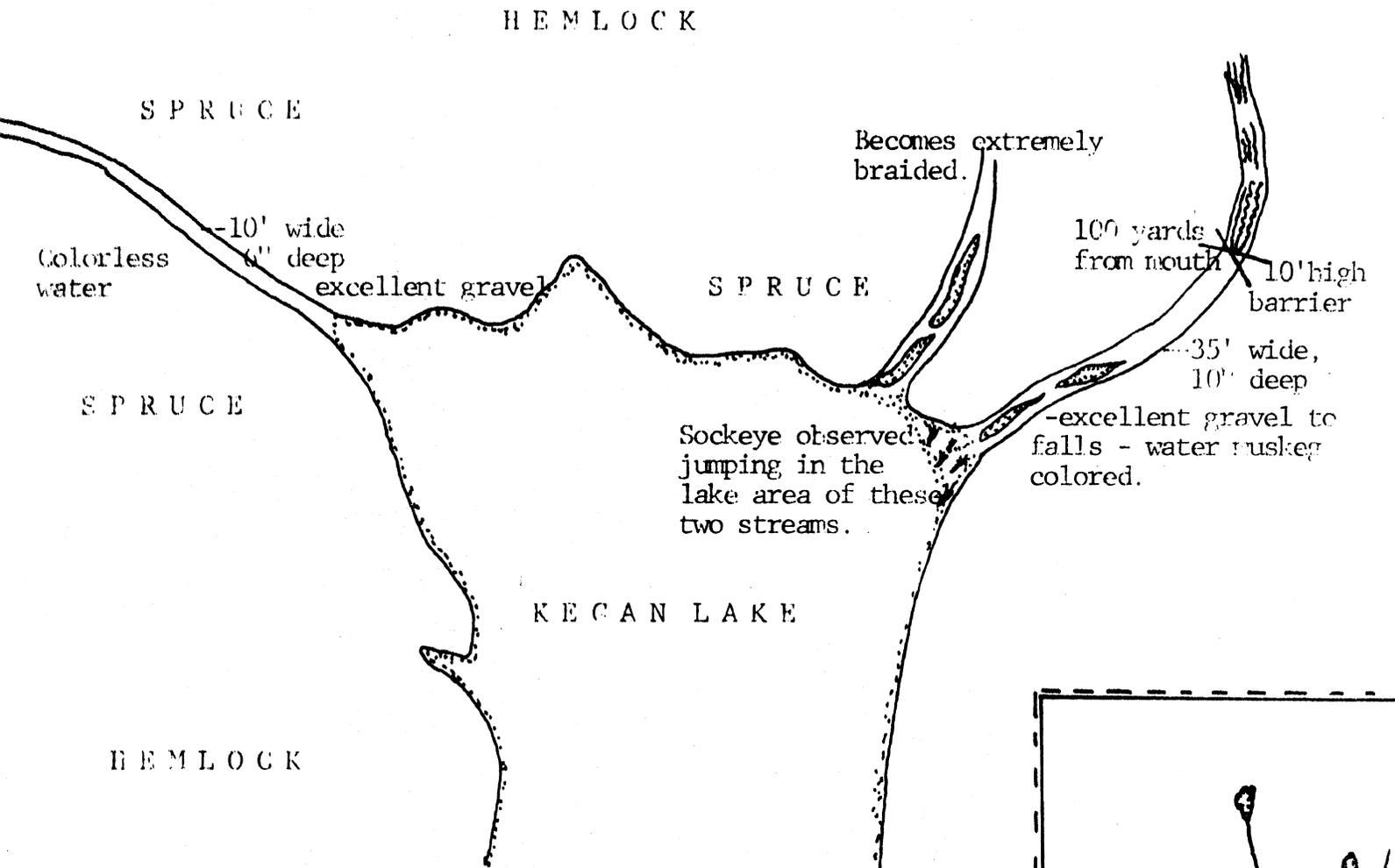
STREAM CATALOG NUMBER: 102-30-65

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Sept. 24, 1930	2,500	22,500		Many dead, mostly chum (G)
Sept. 20, 1953	1	5,500		Good. 200 chum at mouth (G)
Sept. 17, 1967	Few	2,500		500 chums intertidally. Vis. good Looks good. (F)
Sept. 18, 1968				Couple jumps, not much activity, stream looked good, mouth dried up. (A)
Aug. 28, 1969	400	20		(F)
Sept. 14, 1970	25	280		(F)
Sept. 19, 1971	2,100	1,650	1 coho	Vis. good. (F)
Sept. 3, 1973	8,700	1,290		(F)
Aug. 28, 1974	----12-14,000----			28 schools. Vis. excellent (A)

KEGAN CREEK  
102-30-67  
9-4-73

Water level high.  
Visibility poor.





HEMLOCK

SPRUCE

SPRUCE

HEMLOCK

KEGAN LAKE

Colorless water

-10' wide  
6" deep

excellent gravel

Becomes extremely braided.

100 yards from mouth  
10' high barrier

-35' wide,  
10" deep

-excellent gravel to falls - water russet colored.

Sockeye observed jumping in the lake area of these two streams.

Name Kegan Creek Catalog No. 102-30-67  
 Latitude N 55° 01' 22" WR No. 126  
 Longitude W 132° 10' 00" K No. 136  
 Geodetic Map No. Craig C-1 Work Area Ketchikan  
 Location Moira Sd. Kegan Cove Watershed Length 4.5 Miles  
 Drainage Area of Watershed 9.20 sq. miles  
 Water Supply Type Lake

Trails & Survey Routes U.S.F.S. trail along stream to lake outlet.

Aerial Survey Notes Visibility fair under best conditions.

Anchorage Inside chuck is a good 6.5 fathom anchorage.

Tide Stage When Surveyed All

FISHERY RESOURCES

Commercial Fisheries Pink, chum, coho, redd

Escapement 1973 - 9000 fish

Available spawning area - 7,625 M<sup>2</sup>

Species Composition 90% pink, 10% chum, few coho

Timing Late

Schooling areas In cove off mouth, two large pools upstream.

Shellfish Potential Poor clam habitat, some eelgrass in cove.

Sport Fisheries Rainbow, cutthroat, steelhead, and Dolly Varden.

Land Use at Present Recreation

History of Land Use Recreation

Rehabilitation Potential Excellent system, should be given all considerations before any conflicts develop.

Soils Flat and stable.

GAME RESOURCES

Bear -----	Fish carcasses or bones (old or fresh) on banks, estimate	75
	Number of droppings	8
Geese -----	Number seen on tide flats	4
	Number seen up creek	15
	Number of broods seen	0
Mallards ---	Number seen on tide flats	6
	Number seen up creek	0
	Number of broods seen	0
Mergansers -	Number of broods seen	45 birds
Bald Eagles-	Number seen along creek	2
	Number of nests seen and location	0
Seals -----	Number seen at mouth of stream	3
Tide flats -	Estimate length along beach	1/4 mile
	Estimate depth out from beach	40'
	Eel grass present on what percent of flats	30%



PEAK ESCAPEMENT RECORD

NAME: Kegan Creek

STREAM CATALOG NUMBER: 102-30-67

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Sept. 24, 1930				50,000 chum and pink in stream(G)
Oct. 4, 1941	10,000			Good (G)
Sept. 26, 1942	10,000	300		Good(G)
Oct. 10, 1947	15,000	300		Excellent(G)
Sept 22, 1951	11,000			Few chum. 5,000-8,000 fish, mostly pink off mouth (G)
Sept. 27, 1951		125	Some coho	1,000 chum, 5,000 pink off mouth (G)
Sept. 22, 1952	3,200			Very few at mouth (G)
Oct. 6, 1952		1,800	200 coho	(G)
Sept. 6, 1953			200 coho	400 coho at mouth (G)
Sept. 8, 1953	1,080			(G)
Oct. 4, 1953		1,500		(G)
Sept. 25, 1954	15,000			10,000-15,000 at mouth (G)
Sept. 28, 1955	12,500			2,000 at mouth. (A)
July 3, 1956			7,000 red	
Sept. 29, 1956	>30,000			25,000 at mouth (A)
Oct: 1, 1956		3,000		
July 1, 1957			1,200 red .	
Sept. 10, 1957	10,000	500		135 dead. About 1,000 chum, 4,000 pink off mouth (G)
Sept. 16, 1957	19,000	4,000		
Sept. 7, 1958				2,000 schooled in lagoon and off mouth (A)
July 3, 1961			1,000 red	200 at mouth(A)
Aug. 29, 1963	----14,000----			1,500 fish intertidally. Excellent (A)
Sept. 24, 1964	----7,600 <sup>+</sup> ----			Vis. poor, most fish present in the first big hole (A)

PEAK ESCAPEMENT RECORD

NAME: Kagan Creek

STREAM CATALOG NUMBER: 102-30-67

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Aug. 11, 1965			10 coho	Stream low - vis. good (F)
Sept. 1, 1965	1,900			2,000 fish intertidally. Was 4-5,000 fish intertidally on Aug. 17, 1965. Vis. fair in stream poor off mouth. (A)
Aug. 27, 1966	400			Good show outside. (F)
Sept. 1, 1967	300			150 salmon at mouth, Vis. poor. Stream very high. (F)
Aug. 28, 1969	250			20 fish intertidally (F)
Sept. 10, 1970	2,300	Few		(F)
Sept. 17, 1971	7,800	50		1,600 fish intertidally. Vis. fair. Many carcasses (F)
Aug. 31, 1973	9,000	400	2 coho	Vis. Fair (F)
Sept. 5, 1974	6,200			(F)

102-30-72

10-16-73

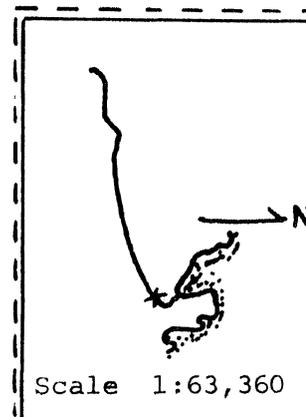
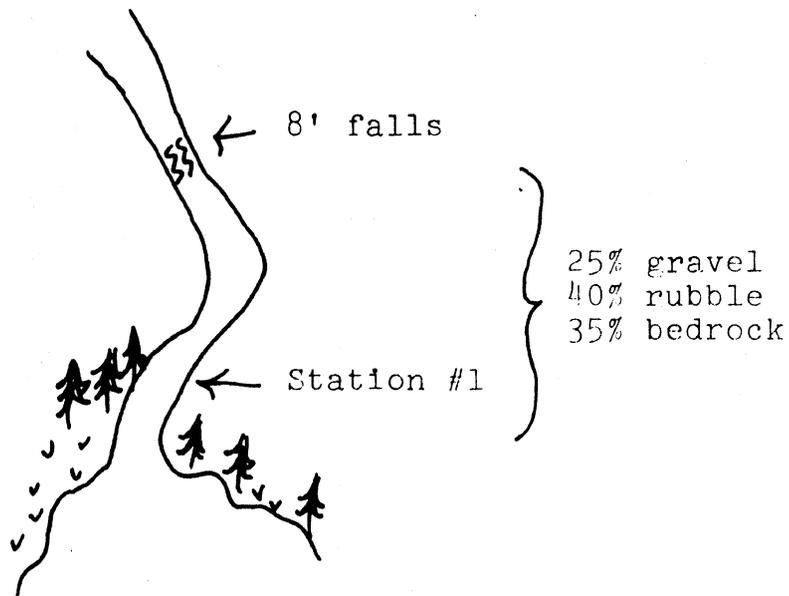
Blankenbeckler & Dinneford

Water level medium

visibility good

OEA = 150'x25%x12'

Survey distance 100 yards



Catalog No. 102-30-72  
 Latitude N 55° 3' 37" WR No. \_\_\_\_\_  
 Longitude W 132° 6' 47" K No. \_\_\_\_\_  
 Geodetic Map No. Craig A-1 Work Area Ketchikan  
 Location Niblack Anc. - So. Shore Watershed Length 1-1/2 mile  
 Drainage Area of Watershed .86 sq. mile  
 Water Supply Type Precipitation

Trails & Survey Routes Easy walking up stream.

Aerial Survey Notes No visibility

Anchorage See 102-30-75

Tide Stage When Surveyed Low ebb.

FISHERY RESOURCES

Commercial Fisheries Pink chum.

Escapement 1973 - 770 pink.

Available spawning area - 11 M<sup>2</sup>

Species Composition Unknown

Timing Late (est.)

Schooling areas Off mouth in cove.

Shellfish Potential Low, I.T. rocky.

Sport Fisheries Unknown

Land Use at Present None

History of Land Use None

Rehabilitation Potential Low value, stream in good shape

Soils Stable.

GAME RESOURCES

Bear -----	Fish carcasses or bones (old or fresh) on banks, estimate	5
	Number of droppings	0
Geese -----	Number seen on tide flats	0
	Number seen up creek	0
	Number of broods seen	0
Mallards ---	Number seen on tide flats	5
	Number seen up creek	0
	Number of broods seen	0
Mergansers -	Number of broods seen	3 birds
Raid Eagles-	Number seen along creek	1
	Number of nests seen and location	0
Seals -----	Number seen at mouth of stream	0
Tide flats -	Estimate length along beach	0
	Estimate depth out from beach	0
	Red gumps present on what percent of flats	0



PEAK ESCAPEMENT RECORD

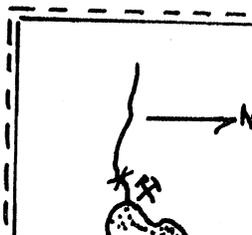
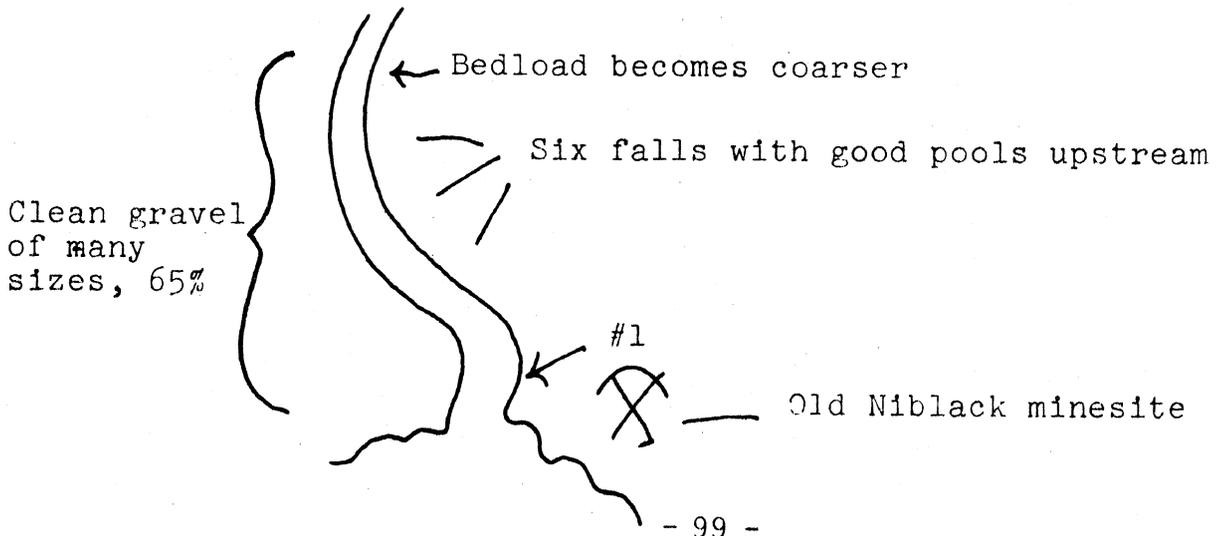
NAME: Niblack Anchorage

STREAM CATALOG NUMBER: 102-30-72

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Sept. 8, 1973	721			50 pink carcasses (F)

Niblack Creek  
102-30-75  
Blankenbeckler & Dinneford

Water level medium  
Visibility okay  
OEA 10' x 1/8 mi x 65%  
Survey distance 1/8 mile



Name Niblack Catalog No. 102-30-75  
 Latitude N 55° 3' 56" WR No. \_\_\_\_\_  
 Longitude W 132° 8' 17" K No. \_\_\_\_\_  
 Geodetic Map No. Craig - C-1 Work Area Ketchikan  
 Location Head of Niblack Anch. Watershed Length 1-1/4 miles  
 Drainage Area of Watershed 1.42 sq. miles  
 Water Supply Type Precipitation

Trails & Survey Routes Runoff

Aerial Survey Notes Visibility poor.

Anchorage Very good anchorage in Niblack Cove, 6 to 20 fathoms, mud bottom.

Tide Stage When Surveyed flooding.

FISHERY RESOURCES

Commercial Fisheries Pink, chum, coho

Escapement 1973 - 405 pink

Available spawning area - 453 M<sup>2</sup>

Species Composition unknown

Timing Late (est.)

Schooling areas Off mouth, pools in lower 1/8 mile

Shellfish Potential Low, I.T. mostly rocky

Sport Fisheries No record.

Land Use at Present None

History of Land Use Mining.

Rehabilitation Potential Low; above 1/8 mile stream becomes mostly rubble.

Soils Stable, relatively level.

CAME RESOURCES

Bear -----	Fish carcasses or bones (old or fresh) on banks, estimate	0
	Number of droppings	0
Geese -----	Number seen on tide flats	0
	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	0
Tide flats -	Estimate length along beach	0
	Estimate depth out from beach	0
	Est. grass present on what percent of flats	0

PEAK ESCAPEMENT RECORD

NAME: Niblack Anchorage

STREAM CATALOG NUMBER: 102-30-75

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Aug. 28, 1969	N.O.			(F)
Sept. 8, 1973	405			50 pink carcasses (F)

AIKEN COVE CREEK

102-30-87

OBSERVER - Dinneford, Joyner

DATE - August 31, 1973

COMMENTS -

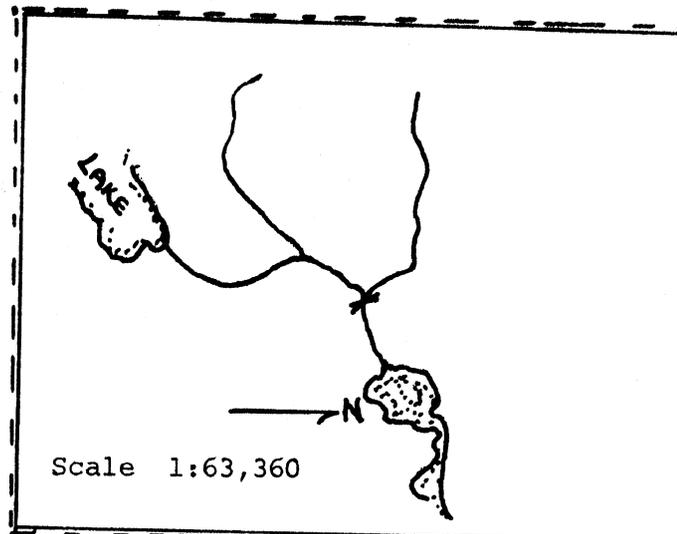
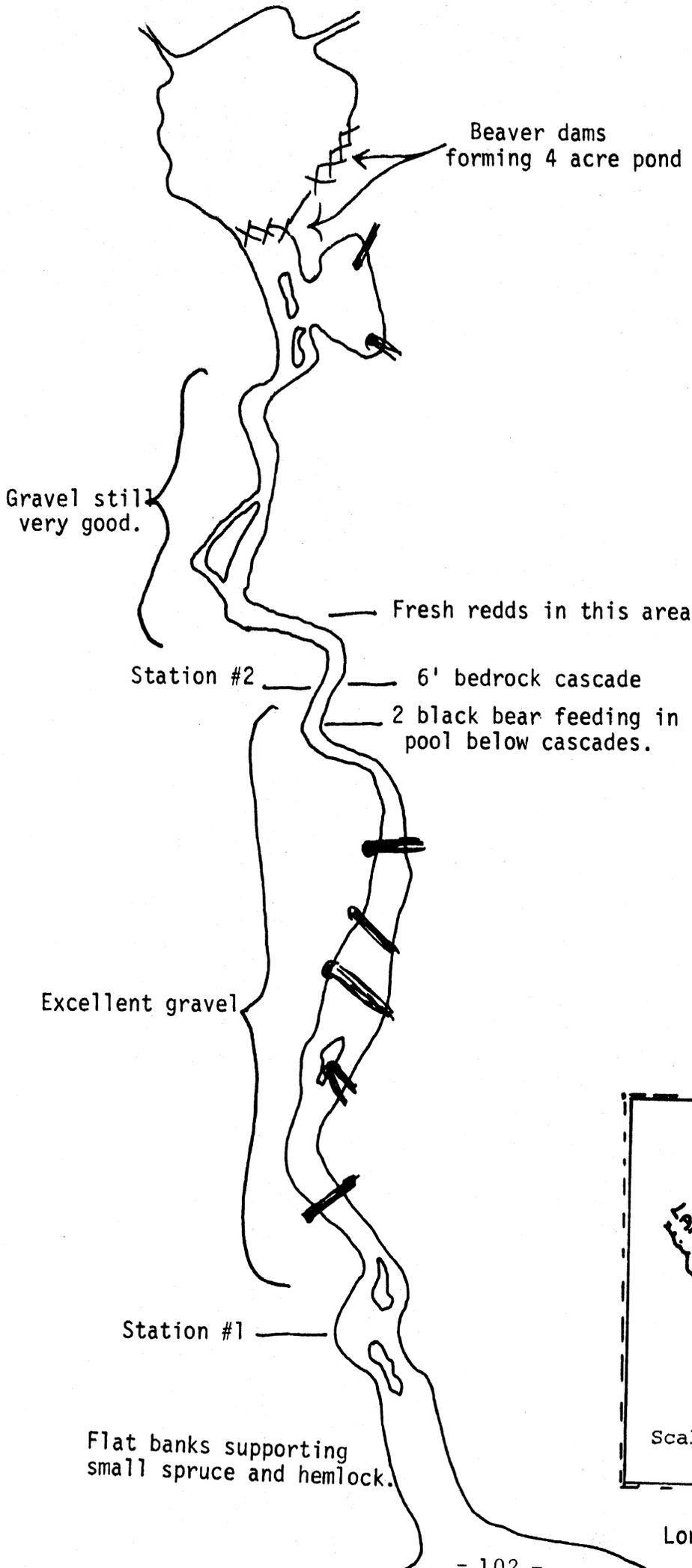
Visibility good upstream, poor off mouth.

Water level medium

Upper end logged sometime b.

Opt. escapement area -

3/4 mi x 30' x 80%



Long gravel tideflats, poor anchorage

Name Aiken Cove Creek Catalog No. 102-30-87  
 Latitude N 55° 07' 18" WR No. 127B  
 Longitude W 132° 11' 52" K No. 137  
 Geodetic Map No. Craig C-1 Work Area Ketchikan  
 Location Aiken Cove, N. Arm Moira Snd. Watershed Length 2.25 miles  
 Drainage Area of Watershed 4.10 sq. miles  
 Water Supply Type Lake, runoff

Trails & Survey Routes Easy walking along stream.

Aerial Survey Notes Fair aerial visibility.

Anchorage Two fathoms, off mouth.

Tide Stage When Surveyed High.

FISHERY RESOURCES

Commercial Fisheries Pink, chum, coho and sockeye.

Escapement 1973 = 22,000

Available spawning area - 8,830 M<sup>2</sup>

Species Composition +90% pink, -10% chum

Timing Late

Schooling areas In cove off mouth

Shellfish Potential Good eel grass flats

Sport Fisheries Dolly Varden and rainbow.

Land Use at Present None

History of Land Use Recreation (trapping).

Rehabilitation Potential Removal of beaver dams, by passing 6' falls at Station #2.

Soils Excellent.

GAME RESOURCES

Bear -----	Fish carcasses or bones (old or fresh) on banks, estimate	500
	Number of droppings	25
Geese -----	Number seen on tide flats	0
	Number seen up creek	0
	Number of broods seen	0
Mallards ---	Number seen on tide flats	5
	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	0
Tide flats -	Estimate length along beach	1/2 mi.
	Estimate depth out from beach	50'
	Eel grass present on what percent of flats	45%



PEAK ESCAPEMENT RECORD

NAME: Aiken Creek

STREAM CATALOG NUMBER: 102-30-87

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Sept. 26, 1940	30,000	3,000		Excellent (G)
Oct. 5, 1941	75,000	5,000		Excellent(G)
Sept. 29, 1946				Poor (G)
Oct. 8, 1947	10,000	5,000		Excellent(G)
Oct. 4, 1948	10,000	3,000		Good. Many dead chum and pink (G)
Sept. 22, 1951				Low water. Fish unable to enter 5,000 pink, 8,000 chum off mouth
Sept. 7, 1953	100			(G)
Sept. 19, 1953		4,500		Dead mostly predator kills(G)
Sept. 4, 1954				Stream low(A)
Oct. 2, 1955	40	3,370		(G)
Sept. 29, 1956	500	13,000		
July 15, 1957			100 red	
Sept. 21, 1957		2,025		2,000 chum, 5,000 pink at mouth
Sept. 4, 1959	2,000	50	50 coho	(A)
Sept. 24, 1964	-----600-----			Vis. Good (A)
Sept. 12, 1966	Few	Few	25 coho	Vis. Excellent
Sept. 17, 1968	1,500	9,000	250 coho	Vis. fair-good (A)
Sept. 15, 1969	3,800			400 pinks intertidally, Not many jumps in West Arm (F)
Aug. 26, 1970	500			200 fish intertidally. Vis poor(A)
Sept. 24, 1970		205		Stream high - heavy rain (F)
Aug. 27, 1971	14,000			6,000 fish intertidally. Vis. good (A)
Sept. 27, 1972	230	580	15 coho	300 fish intertidally. Vis. excellent. Few carcasses. Coho above falls (F)

PEAK ESCAPEMENT RECORD

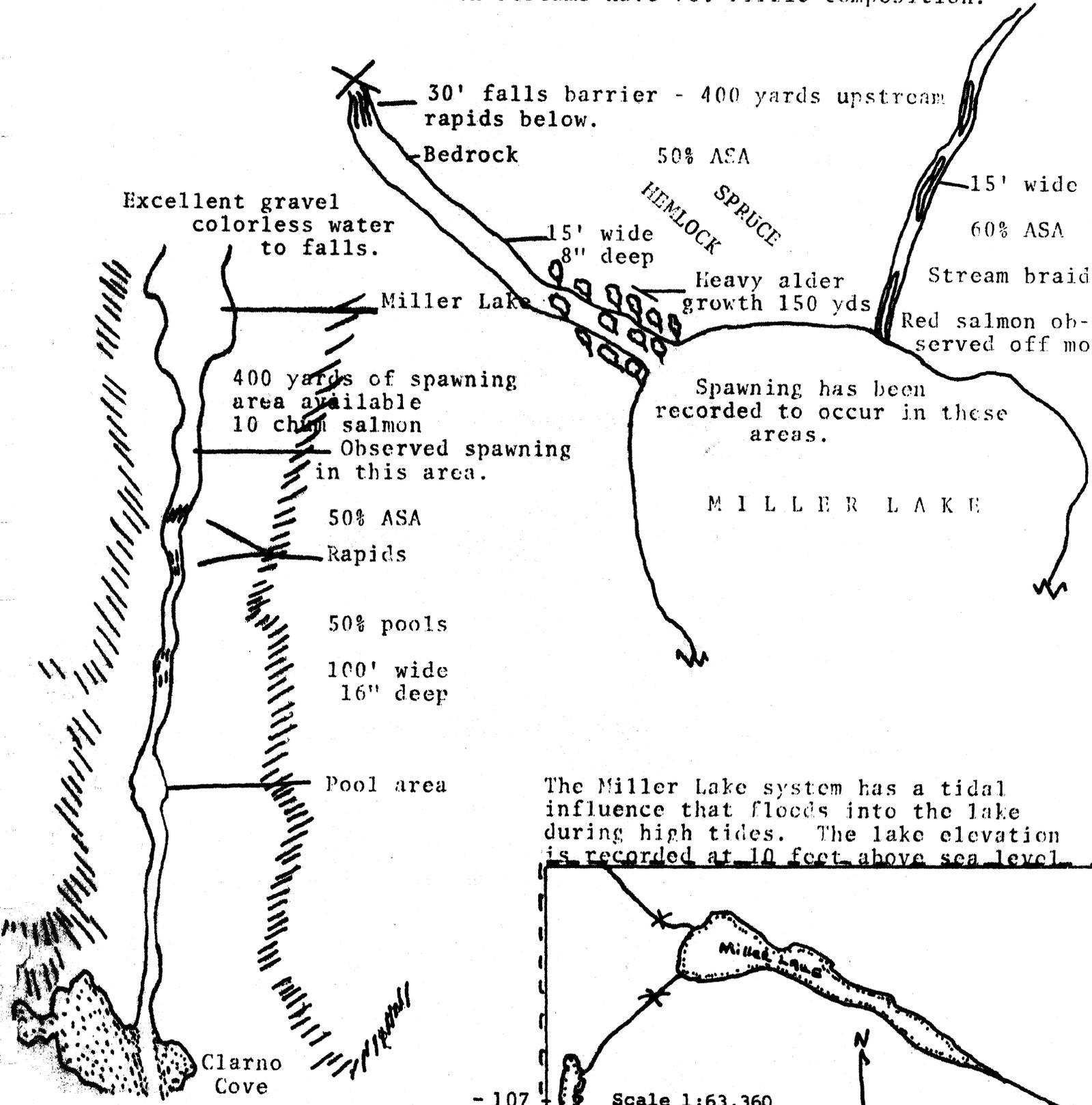
NAME: Aiken Creek

STREAM CATALOG NUMBER: 102-30-87

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Aug. 19, 1973	-----51,000-----			Vis. good (H)
Sept. 19, 1974	1,000	500		Vis. Good (Boat at mouth)

Miller Lake  
 102-30-89  
 Novak  
 9-9-74

Both streams have 75% riffle composition.



The Miller Lake system has a tidal influence that floods into the lake during high tides. The lake elevation is recorded at 10 feet above sea level.

Name Miller (Lake) Creek Catalog No. 102-30-89  
 Latitude N 55° 07' 48" WR No. 127  
 Longitude W 132° 10' 43" K No. 138  
 Geodetic Map No. \_\_\_\_\_ Work Area Ketchikan  
 Location North Arm Moira Sound Watershed Length 2.5 miles long  
 Drainage Area of Watershed 10 sq. miles (polar planimeter)  
 Water Supply Type Lakes and ground water.

Trails & Survey Routes The lower area is hard to survey due to angular slippery rocks - no trails available.

Aerial Survey Notes Hard to survey from the air due to dark coloration of substrate.

Anchorage Small boat anchorage found in Clarno Cove, but care should be taken when entering cove due to rocks.

Tide Stage When Surveyed 2nd half of ebb.

FISHERY RESOURCES

Commercial Fisheries Chum, pink, coho and red salmon.

Escapement high historic 50,000 1942. 13,000 pink salmon 1973. <sup>2</sup>  
 Available spawning area (1st area) - 5,574 M<sup>2</sup>, (2nd area) - 1,003 M<sup>2</sup>, (3rd area) - 1,003 M<sup>2</sup>

Species Composition Pink 95%, chum 2%, coho 3%

Timing Late - September, October

Schooling areas Schooling takes place off the mouth and about half-way to the lake where a deep pool exists. Numerous small pools

Shellfish Potential Unsurveyed crab and clam potential.

Sport Fisheries Dolly Varden, cutthroat and steelhead. All four species of salmon.

Land Use at Present None in the immediate vicinity of the watershed but logging is planned on the Kitkun Bay side.

History of Land Use The remains of an old marble quarry are situated near the mouth.

Rehabilitation Potential None necessary.

Soils Stable at the present but prone to high erosion along the lake if disturbed.

GAME RESOURCES

Bear -----	Fish carcasses or bones (old or fresh) on banks, estimate	-
	Number of droppings	-
Geese -----	Number seen on tide flats	-
	Number seen up creek	-
	Number of broods seen	-
Mallards ---	Number seen on tide flats	-
	Number seen up creek	-
	Number of broods seen	-
Mergansers -	Number of broods seen	-
Bald Eagles-	Number seen along creek	-
	Number of nests seen and location	-
Seals -----	Number seen at mouth of stream	-
Tide flats -	Estimate length along beach	400 yds
	Estimate depth out from beach	100'
	Eel grass present on what percent of flats	0

PEAK ESCAPEMENT RECORD

NAME: Miller (Lake) Creek

STREAM CATALOG NUMBER: 102-30-89

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Sept. 25, 1940	15,000			Excellent (G)
Sept. 27, 1940		3,000		Good. 7,000 fish off mouth (G)
Oct. 5, 1941	50,000			Excellent (G)
Sept. 24, 1942	500	4,000		Fair. 10,000 fish off mouth (G)
Oct. 7, 1947	10,000	700		(G)
Aug. 10, 1948			25 red	(G)
Oct. 4, 1948	15,000	4,000		Good. Many dead both species (G)
July 11, 1953			75 red	(G)
Sept. 19, 1953	1,000	2,000	1,000 coho	Poor to fair (G)
Sept. 21, 1956	500	4,500		(G)
Sept. 21, 1957	500	9,000		6,000 chum at mouth
Aug. 23, 1966	300			500 pinks in lake outlet. Vis. excellent (A)
Aug. 27, 1969	30			(F)
Aug. 15, 1973	-----8,000-----			Vis. good (H)
Aug. 22, 1974	N.O.	N.O.		Vis. very poor (A)

Name Nowiskay Creek Catalog No. 102-30-91 (B.D.'s number)  
 Latitude N 55° 7' 46" WR No. 127C  
 Longitude W 132° 9' 0" K No. 138A  
 Geodetic Map No. Craig C-1 Work Area Ketchikan  
 Location Head Nowiskay Cove Watershed Length 1-1/2 miles  
 Drainage Area of Watershed 1.19 sq. miles  
 Water Supply Type Precipitation

Trails & Survey Routes Difficult walking to barrier 1/8 mile upstream.

Aerial Survey Notes No visibility upstream.

Anchorage Large vessels anchor 1 mile from entrance to north arm on east shore.

Tide Stage When Surveyed Ebbing.

FISHERY RESOURCES

Commercial Fisheries Pink, chum, probably coho.

Escapement 1947 - 112 pink, 2 chum.

Available spawning area - 976 M<sup>2</sup>

Species Composition 99% pink, 1% chum

Timing Late

Schooling areas Off mouth in Nowiskay Cove.

Shellfish Potential Rocky I.T.

Sport Fisheries None reported.

Land Use at Present None

History of Land Use None

Rehabilitation Potential None

Soils Steep banks supporting hemlock and alder. Some logs across stream.

GAME RESOURCES

Bear -----	Fish carcasses or bones (old or fresh) on banks, estimate	0
	Number of droppings	0
Geese -----	Number seen on tide flats	0
	Number seen up creek	0
	Number of broods seen	0
Mallards ---	Number seen on tide flats	3
	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	0
Tide flats -	Estimate length along beach	0
	Estimate depth out from beach	0
	Eel grass present on what percent of flats	0

PEAK ESCAPEMENT RECORD

NAME: Nowiskay Cove, Head

STREAM CATALOG NUMBER: 102-30-91

DATE	PINK	CHUM	OTHER SPECIES	REMARKS
Oct. 7, 1947	112	2		Excellent (G)
Sept. 10, 1953				A trickle - not a salmon stream(G)
Sept. 4, 1954				Stream slow(A)

## ACKNOWLEDGMENTS

Gerry Downey, Pink Salmon Research, provided much of the foot work during field surveys. The catalog library was kept current with the assistance of Sharon Peterson and Karen Crandall. Thanks is also extended to G.L. Finger, June Grant and J.C. McMullen for their assistance in publication and planning.

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