

Fisheries and Oceans
Canadian Data Report of
Fisheries and Aquatic Sciences

No. 394

April 1983

CATALOGUE OF SALMON STREAMS AND SPAWNING ESCAPEMENTS OF

STATISTICAL AREA 4
(UPPER SKEENA RIVER)

by

M.J. Hancock, A.J. Leaney-East, and D.E. Marshall

Fisheries and Oceans
Enhancement Services Branch
1090 West Pender Street
Vancouver, B.C. V6E 2P1

Catalogue of Salmon Streams and Spawning Escapements of Statistical Area
4- Upper Skeena River

The following **BLANK** pages have not been included as part of this scanned document:

Page 46
Page 62
Page 92
Page 123
Page 135
Page 176
Page 196
Page 222
Page 226
Page 270

Minister of Supply and Services Canada 1983

Cat. NO. Fs 97-13/394

ISSN 0706-6465

Correct citation for this publication:

Hancock, M.J., A.J. Leaney-East, and D.E. Marshall. 1983 Catalogue of Salmon Streams and Spawning Escapements of Statistical Area 4 (Upper Skeena River) Can. Data Rep. Fish and Aquat. Sci. 394: xxiii+324p.

ABSTRACT

Hancock, M.J., A.J. Leaney-East, and D.E. Marshall, 1983. Catalogue of Salmon Streams and Spawning Escapements of Statistical Area 4, (Upper Skeena River) Can. Data Rep. Fish Aquat. Sci. 394: xxiii + 324p.

Catalogue containing each stream's location, spawning distribution, barriers and points of difficult ascent, escapement records and other general data pertaining to the stream. The catalogue also includes a topographical map of the stream's location and in some cases a sketch which further describes the surrounding area.

Keywords: British Columbia, Statistical Area 4, Upper Skeena River, Salmon Streams, Spawning Escapements.

RÉSUMÉ

Hancock, M.J., A.J. Leaney-East, and D.E. Marshall, 1983. Catalogue of Salmon Streams and Spawning Escapements of Statistical Area 4, (Upper Skeena River) Can. Data Rep. Fish Aquat. Sci. 394: xxiii + 324p.

Le présent répertoire porte sur l'emplacement de chaque cours d'eau, la répartition de fraie, les obstacles et les points de remonte difficile, les données sur les saumons de remonte et d'autres données relatives au cours d'eau. On y trouve aussi une carte topographique de l'emplacement du cours d'eau et, dans quelques cas, un croquis décrivant la zone environnante.

Mots-clés: Colombie-Britannique, zone statistique 4, cours supérieur de la Skeena, cours d'eau à saumons, saumons de remonte

CONTENTS

Abstract/Résumé	iii
Table of Contents	v-vii
Statistical Areas	viii
Management Divisions	ix
Map References	x
Conservation Districts	xi
Federal Fisheries Districts	xii
Standards Used on Stream Data Page	xiii-xiv
Federal Fisheries Districts Addresses	xvi
Escapement Record for Statistical Area 4	xvii
Index to Map of Salmon Spawning Streams of Statistical Area 4	xviii-xxiii

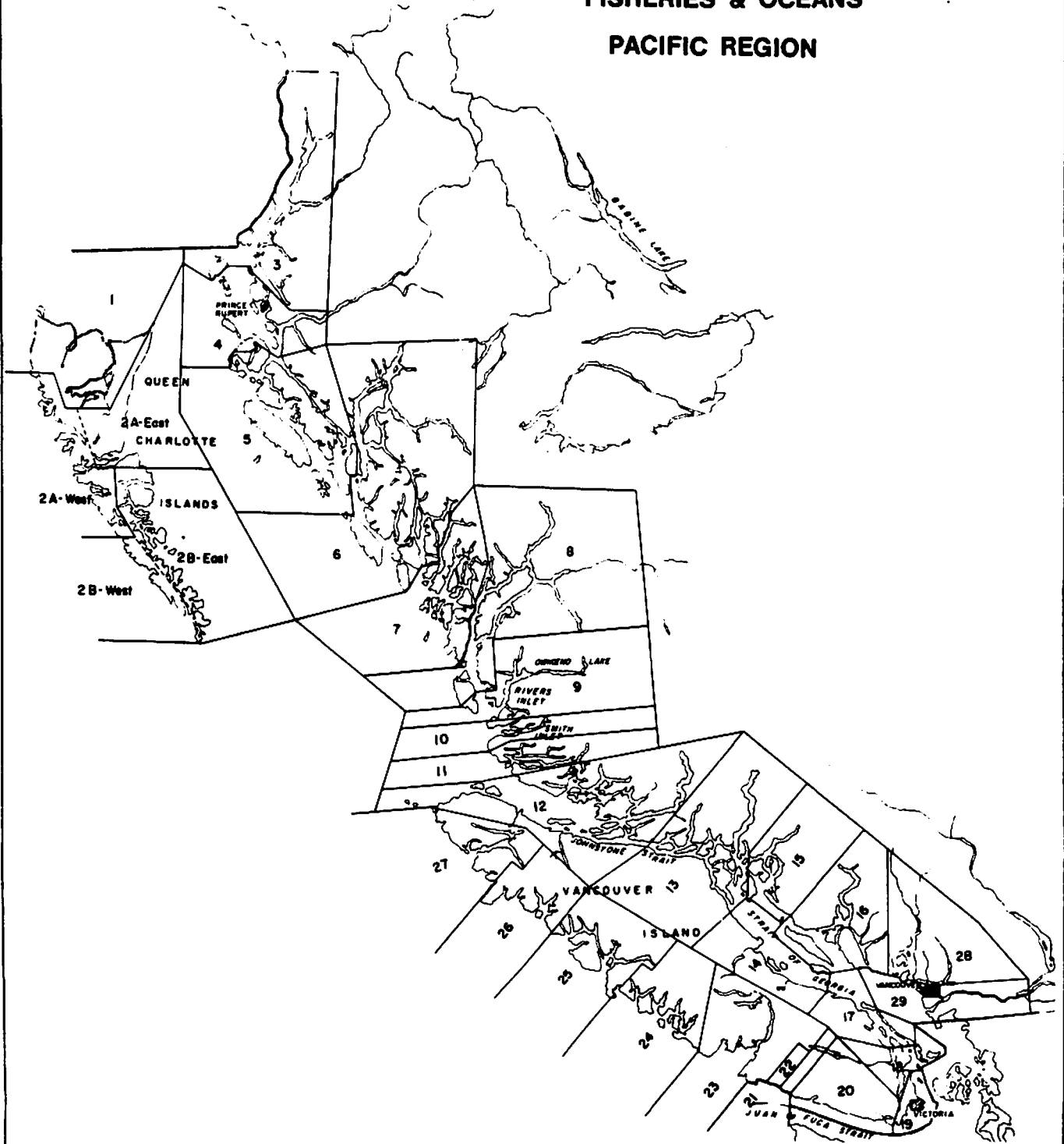
STREAM DATA

ASITKA LAKE AND RIVER	1
ATNA RIVER AND LAKE (Morice Lake)	5
AZUKLOTZ CREEK	9
BABINE LAKE (Sketch of Areas)	13
BABINE LAKE	15
BABINE RIVER - UPPER (Area #1 into #2)	19
BABINE RIVER - UPPER (Area #2 into #3)	23
BABINE RIVER - UPPER (Area #3 into Nilkitkwa Lake).....	27
BABINE RIVER - LOWER (Area #4 above Weir)	31
BABINE RIVER - LOWER (Below Weir)	35
BEAR RIVER AND LAKE	39/43
BIG LOON CREEK (Wright Creek)	49
BOUCHER CREEK (McDonald Creek)	53
BUCK CREEK	57
BULKLEY RIVER	61
BULKLEY RIVER (Below Houston)	63
BULKLEY RIVER (Above Houston)	67
CANYON CREEK (Cass Creek, Carr Creek)	71
CAUSQUA CREEK (Fish Creek)	75
CLIFFORD CREEK	79
CROSS CREEK (Pendleton Creek)	83
(Donalds Creek)	87
DRIFTWOOD CREEK	91/93
(Five Mile Creek)	97
(Forks Creek)	101

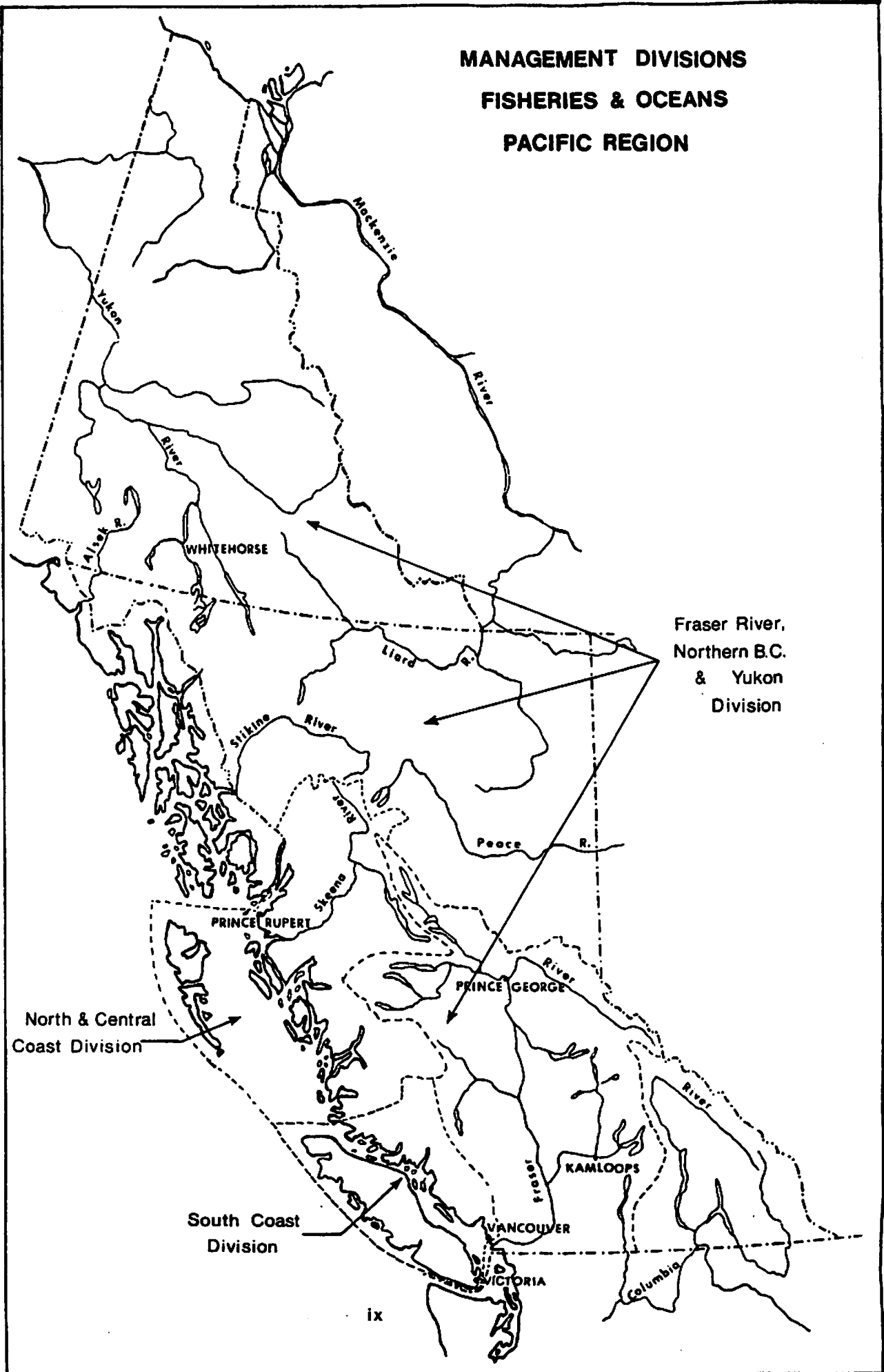
(Four Mile Creek)	105
FULTON RIVER	109
GOSNELL CREEK	113
GULLWING CREEK (Six Mile, Wiggins Creek)	117
HAROLD PRICE CREEK	121
(Hazelwood Creek)	125
IRONSIDE CREEK	129
JOHANSON LAKE AND CREEK	133
KATHLYN CREEK (Chicken Creek)	137
(Kew Creek)	141
KISPIOX RIVER	145
KLUATANTAN RIVER	149
KLUAYAZ CREEK AND LAKE	153
MCDONELL LAKE SYSTEM (at head of Zymoetz River)	157
MAXAN CREEK	161/163
MOOSEVALE CREEK (North Fork)	167
MORICE LAKE	171
MORICE RIVER	175/177
MORRISON CREEK (Hatchery Creek)	181
MOTASE LAKE	185
NANGEESE RIVER	189
NANIKA RIVER	193
NICHYESKWA RIVER	199
NILKITKWA RIVER	203
(Nine Mile Creek)	207
OWEN CREEK	211
PIERRE CREEK	215
PINKUT CREEK (15 Mile, Anderson Creek)	219/221
REISETER CREEK (Two Bridge Creek)	229
RICHFIELD CREEK (Findley Creek)	233
SALIX CREEK	237
SHASS CREEK (Grizzly Creek)	241
SKUNSNAT CREEK	245
SLAMGEESH RIVER	249
(Sockeye Creek)	253
SPAWNING LAKE (Solo Creek)	257
STATION CREEK	261
SUSKWA RIVER	265
SUSTUT RIVER	269/271

SUTHERLAND RIVER (Beaver River)	275
SWEETIN RIVER	279
TACHEK CREEK	283
TAHLO CREEK (Lower Salmon Creek)	287
TAHLO CREEK - UPPER (Salmon Creek)	291
TELKWA RIVER	295
(Telzato Creek, Monica Creek)	299
THAUTIL RIVER	303
TOBOGGAN CREEK	307
TROUT CREEK (Sheddy Creek)	311
TSEZAKAWA CREEK (Trail Creek)	315
TWAIN CREEK	319

**STATISTICAL AREAS
FISHERIES & OCEANS
PACIFIC REGION**



**MANAGEMENT DIVISIONS
FISHERIES & OCEANS
PACIFIC REGION**



MAP REFERENCES

Roads:

hard surface, all weather	more than 2 lanes	
hard surface, all weather	2 lanes	
hard surface, all weather	less than 2 lanes	
loose surface, all weather	2 lanes	
"	less than 2 lanes	
Private Road, Trail	Private Road	
	Trail	

Railways:

normal gauge, multiple track	
normal gauge, single track	
abandoned, or under construction	
narrow gauge, single track	
Bridge, underpass or overpass	
Tunnel	

Boundary, International	
" Province	
" County or District	
" Township or Parish	
" City or Town	
" Reservation, Indian, Military, etc	
Power Transmission Line	
Telephone or Telegraph, main route	
Horizontal Control Point	
Boundary Marker	
Bench Mark	
Spot Elevation, (in feet)	
Mine or Pit	

Road, Hard Surface, All Weather	
Loose Surface, All Weather	
Loose Surface, Less than 2 lanes	
Private (Logging, Mining etc)	
Four Wheel Drive	
Trail	
Railway	
Main Telephone Line	
Main Electric Power Line	
Horizontal Control Station	
Contours (Interval 500 feet)	
Elevation in feet above mean sea-level	
Intermittent Stream	
Swamp or Marsh	
Dam	
Spring	
Navigation Light	
Mine	
Glacier	
Customs Office	

House, Building	
School	
Church	
" with conspicuous Tower or Spire	
Post Office	
Tower, Radio Mast, Lookout, etc.	
Cemetery	
Quarry	
Sand or Gravel Pit	
Cliff	
Cutting	
Embankment	
Saw Mill	

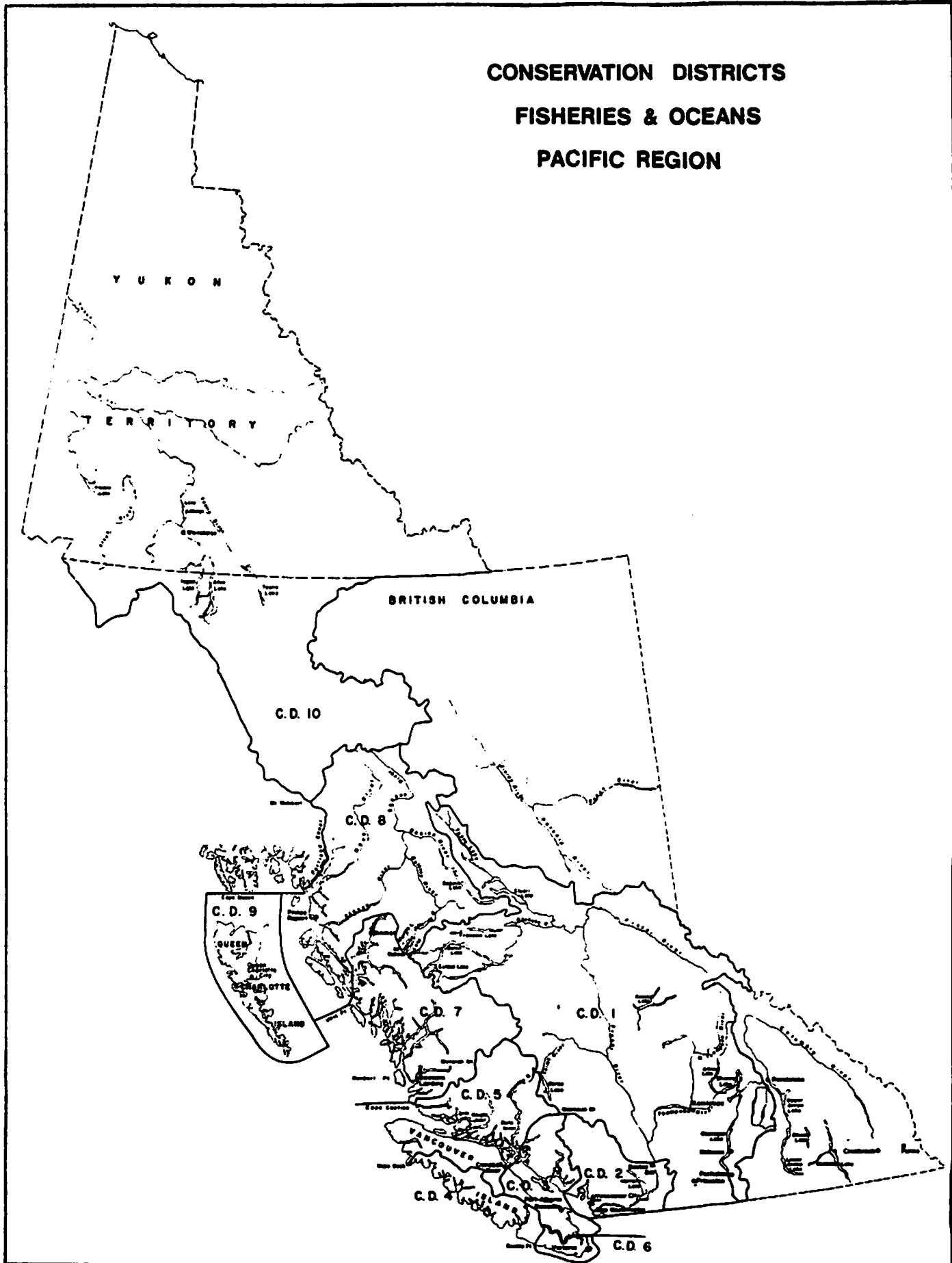
Lighthouse	
Wharf or Pier	
Foreshore Flats	
Swamp or Marsh	
Lake or Pond, intermittent	
Glacier or Snowfield	
Stream, intermittent	
Irrigation Canals, Ditches	
Inundated Land, seasonal	
Contours, elevation	
" depression	
" approximate	
Forest, unclassified	

Surveyed timber license number	TL 2841
Lot number	L 124 or 566
Building	
School	
Non-perennial stream	
Marsh or Swamp	
Glacier	
Foreshore flats	
Contours, elevation	
Contours, depression	
Forest	

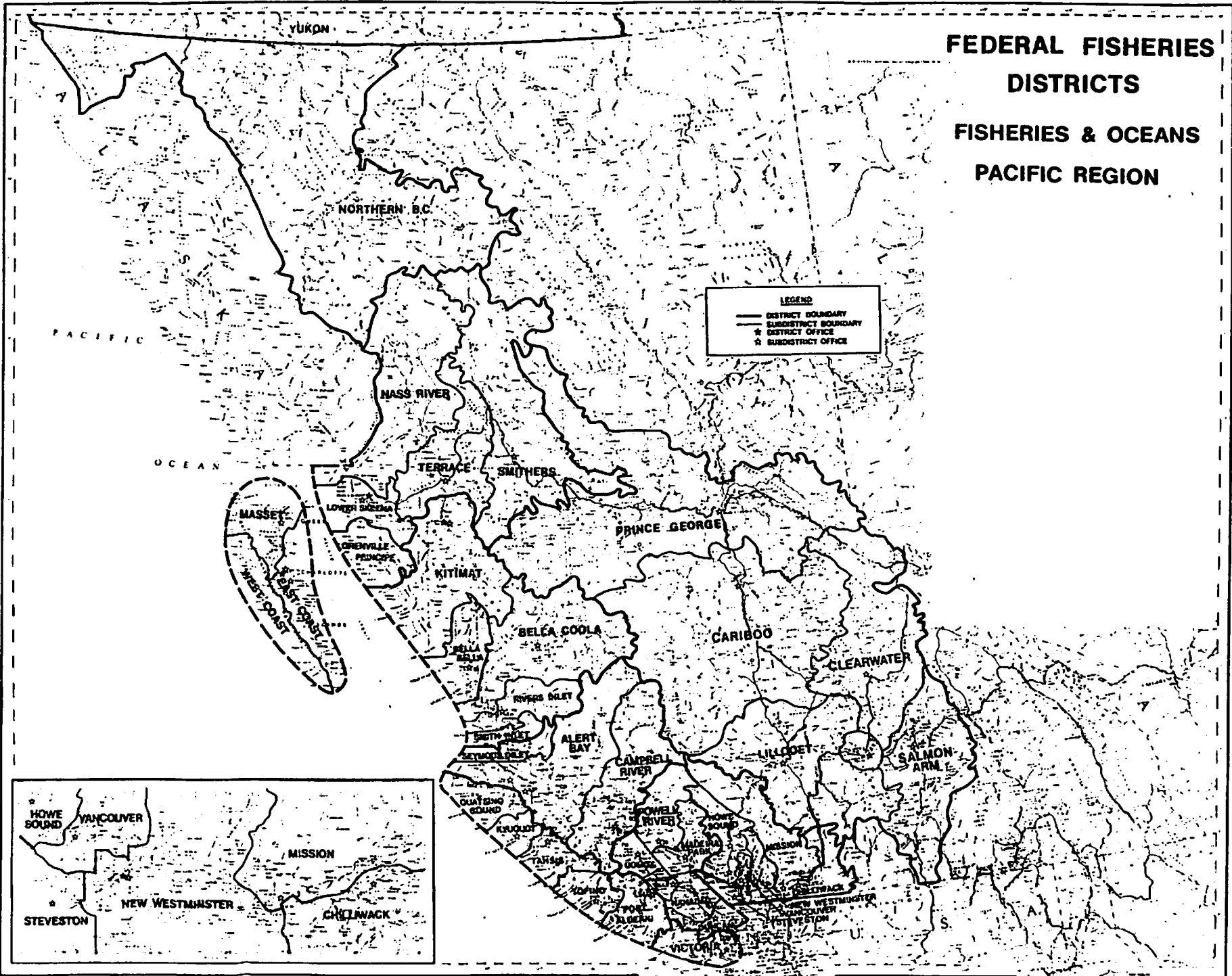
City or large town		Post office		Boundary monument	
Town		School		Astronomical position	
Village or settlement		Church		Horizontal control point	
Streams:		Intermittent lake		Marsh or swamp	
intermittent or dry		Sand, gravel or mud		Wooded areas	
indefinite		Seaplane base		Seaplane anchorage	
Irrigation canal or ditch					
Rapids, falls					
Aerodrome					
Landing ground					

Streams		Dam	
Highways		Log Jams	
Roads		Log	
Trails		Power Line	
Houses		Coho	
Railroad		Chum	
Falls		Pink	
Rapids		Chinook	
Rip-Rap		Sockeye	
Bridges			

**CONSERVATION DISTRICTS
FISHERIES & OCEANS
PACIFIC REGION**



**FEDERAL FISHERIES
DISTRICTS
FISHERIES & OCEANS
PACIFIC REGION**



STANDARDS USED ON STREAM DATA PAGE

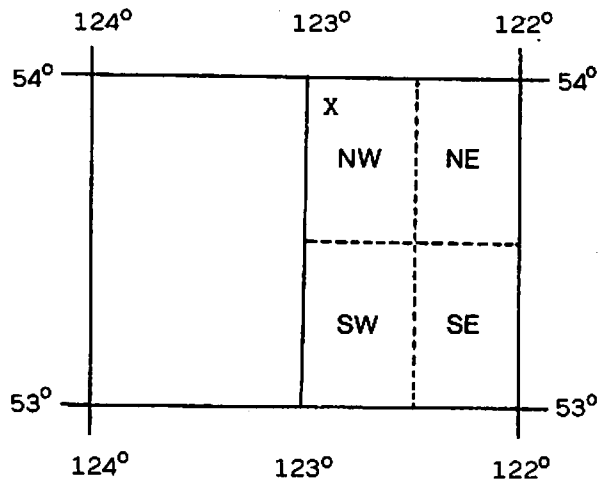
Name of Stream: Name as given in Gazetteer of Canada, British Columbia 1966 edition; local or non-gazetted names are added in lower case type.

Conservation District: As defined by the Conservation and Protection Service (April 1965).

Statistical Area: As defined by Department of the Environment, Fisheries Operations Statistical Map (January 1974).

Location and Position: Defined by quadrant indexing. Each geographical quadrilateral of the earth's surface of 1 degree in extent in latitude and longitude is divided into the SE, SW, NE and NW quarters. The south-east corner of each quadrilateral gives the initial point for the figure of reference (Gazetteer of Canada).

EXAMPLE "X"
53° 122° NW



Length: The portion of the stream accessible to spawning salmon.

Width: Average width, estimated to the nearest metre for the described length.

Drainage: Area in square kilometres of the entire drainage basin feeding the stream.

Composition:

Bedrock	bedrock
Boulder	>256 mm
Coarse	50.9 - 256 mm
Fine	3.37 - 50.8 mm
Sand & Silt	<3.37 mm
Unclassified	where bottom cannot be observed, e.g. log jams, pools, water colour, etc.

Gradient: Expressed as a percentage

Wetted Area: Number of square metres of stream bed under water at average flows within the described length.

Spawning Area: Estimated square metres of stream bed suitable for salmon spawning within the described length.

Discharge: Mean annual discharge. Maximum and minimum values are either daily means or instantaneous discharges. The latter are identified by (Inst.). Discharge data is taken from "Historical Stream Flow Summary", British Columbia, Water Survey of Canada.

Temperature: As described. (°C)

Barriers and Points of Difficult Ascent: Complete and partial barriers to salmon and their distance from the stream mouth. Species likely to be affected may be listed. Both natural and man-made obstructions are defined.

Spawning Distribution: Portion of the stream utilized by each species. Distribution is indicated by brief comments opposite the species.

Potential of Inaccessible Portion of Stream: Indicates whether or not the inaccessible portion of the stream could be utilized by spawning salmon.

General Remarks: Emphasizes features of stream and spawning populations. Also includes industrial activity, routes of accessibility, etc. The comments with dates are taken from "Annual Reports of Salmon Streams & Spawning Grounds" (B.C. 16's). In some cases, references to additional information not included in the General Remarks may be given.

Escapement Records: The escapement represents the mid point of the coded range of escapement for each species. For example: the letter "H" representing 5000-10000 fish would be entered as 7500. Where absolute numbers are provided by Fisheries Personnel, these numbers are entered. N/O means the stream was inspected but no fish were observed; UNK means there was evidence of fish present but no estimates were made; NO RECORDS means no escapement records for the applicable years could be found in the escapement files.

Timing: Dates which salmon arrive in the stream, begin to spawn, reach peak spawning period and finish spawning.

E = early (1st to 10th of the month)
M = mid (11th to 20th of the month)
L = late (21st to end of the month)

NB: Distance references are from the mouth of the stream unless otherwise stated.

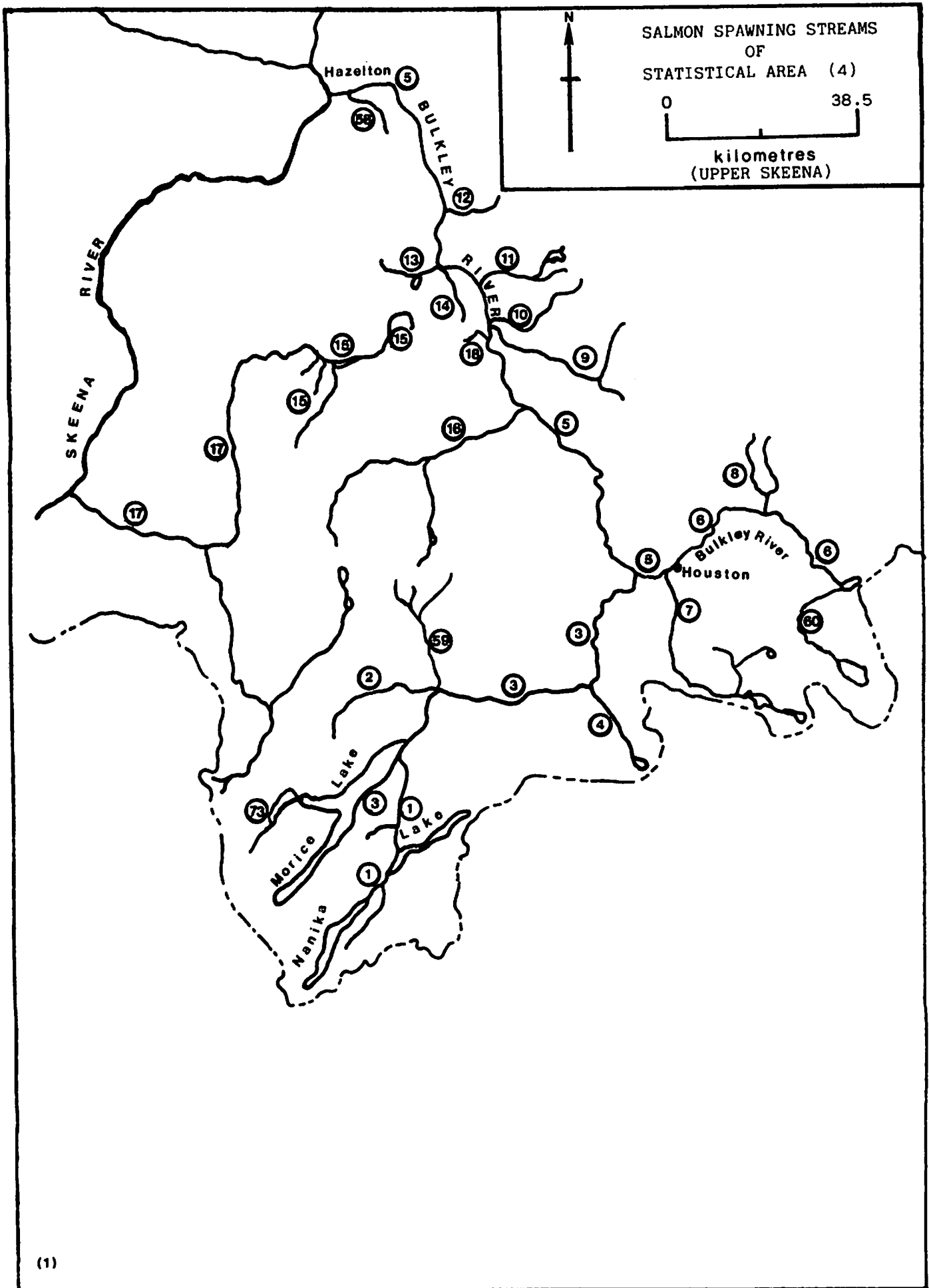
FEDERAL FISHERIES DISTRICTS FISHERIES & OCEANS PACIFIC REGION

DISTRICT AND SUBDISTRICT OFFICES	ADDRESSES	TELEPHONE NUMBERS
DISTRICT #1 KAMLOOPS	202 Federal Bldg., 317 Seymour St., Kamloops, B.C., V2C 2E9	374-4322
Salmon Arm	Box 1160, Salmon Arm, B.C., VOE 2T0	832-8037
Prince George	Box 267, Postal Stn. A, Prince George, B.C., V2L 4S1	564-7030
Clearwater	P.O. Box 610, P.O. Building, Clearwater, B.C., VOE 1N0	674-9633
Lillooet	Box 315, Lillooet, B.C., VOK 1V0	256-4525
Cariboo	Box 4340, Quesnel, B.C., V2J 3J3	992-2434
DISTRICT #2 NEW WESTMINSTER	309 - 549 Columbia St., New Westminster, B.C., V3L 1B3	545-7181
Surrey	309 - 549 Columbia St., New Westminster, B.C., V3L 1B3	545-7181
Vancouver Waterfront	309 - 549 Columbia St., New Westminster, B.C., V3L 1B3	545-7181
Mission	Box 3308, Mission, B.C., V2V 4J5	826-3664
Chilliwack	Sta. 5, 9 Mary Street, Chilliwack, B.C., V2P 4G9	792-6011
Steveston	1255 No. 1 Road, Richmond, B.C., V7E 1T7	274-7217
Coquitlam	309 - 549 Columbia St., New Westminster, B.C., V3L 1B3	545-7181
Squamish	Box 85, Squamish, B.C., V0N 3G0	892-3230
DISTRICT #3 NANAIMO	204 - 60 Front St., Nanaimo, B.C., V9R 5H7	876-274
Parksville	Box 1120, Parksville, B.C., V0R 2S0	248-6710
Comox	Box 1328, Comox, B.C., V9N 3Z9	339-2031
Duncan	Box 241, Duncan, B.C., V9L 3X3	746-6221
Powell River	4770 Joyce Ave., Powell River, B.C., V8A 3B6	485-9621
Pender Harbour	Box 10, Madeira Park, B.C., V0N 2H0	883-2313
DISTRICT #4 PORT ALBERNI	P.O. Box 280, Federal Bldg., Port Alberni, B.C., V9Y 7M7	724-0195
Tofino	Box 48, Tofino, B.C., V0R 2Z0	725-3468
Tahsis	Box 549, Tahsis, B.C., V0P 1X0	934-6606
Port Hardy	Box 10, Port Hardy, B.C., V0N 1P0	949-6422
DISTRICT #5 CAMPBELL RIVER	215 - 950 Alder St., Campbell River, B.C., V9W 2P8	287-2102
Port Hardy	Box 10, Port Hardy, B.C., V0N 2P0	949-6422
Alert Bay	Box 263, Alert Bay, B.C., V0N 1A0	974-5216
DISTRICT #6 VICTORIA	116 - 816 Government St., Victoria, B.C., V8W 1W9	566-3252
Saanich	116 - 816 Government St., Victoria, B.C., V8W 1W9	566-3252
Sooke	Box 831, Sooke, B.C., V0Z 1N0	642-5322
DISTRICT #7 KITIMAT	312 - 450 Federal Bldg., City Centre, Kitimat, B.C., V8C 1T6	632-6158
Butedale	312 - 450 Federal Bldg., City Centre, Kitimat, B.C., V8C 1T6	632-6158
Bella Bella	Box 38, Bella Bella, B.C., V0T 1B0	957-2312
Bella Coola	Box 130, Bella Coola, B.C., V0T 1C0	799-5345
Rivers Inlet	Dawsons Landing P.O., Rivers Inlet, B.C., V0N 1M0	Radio Ph.
DISTRICT #8 PRINCE RUPERT	109 - 417 Second Ave. West, Prince Rupert, B.C., V8J 1G8	624-9137
Lower Nass	109 - 417 Second Ave. West, Prince Rupert, B.C., V8J 1G8	624-9137
Upper Nass	P.O. Box 29, Nass Camp P.O., B.C., V0N 3J0	633-2408
Skeena	109 - 417 Second Ave. West, Prince Rupert, B.C., V8J 1G8	624-9137
Grenville-Principe	109 - 417 Second Ave. West, Prince Rupert, B.C., V8J 1G8	624-9137
Hazelton	Box 327, Hazelton, B.C., V0J 1Y0	842-6327
Terrace	4721-B Lazelle Ave., Terrace, B.C., V8G 1R6	635-2206
Smithers	Box 578, Smithers, B.C., V0J 2N0	847-2312
DISTRICT #9 QUEEN CHARLOTTE	Box 99, Q.C. City, Queen Charlotte Islands, B.C., V0T 1S0	559-4413
Sandspit	Box 222, Sandspit, B.C., V0T 1T0	637-5340
Masset	Box 99, Masset, B.C., V0T 1M0	626-3316
DISTRICT #10 WHITEHORSE	122 Industrial Road, Whitehorse, Yukon Territories, Y1A 2T9	403- 667-2235
Haines Junction	P.O. Box 5341, Haines Junction, Y.T., Y0B 1L0	403- 667-2235

ESCAPEMENT RECORD FOR STATISTICAL AREA 4 UPPER SKEENA RIVER

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947	93,494	2	1,450		200	-
1948	522,720	2,400	5,150	7	130,700	-
1949	536,414	52,575	30,437	-	35,749	-
1950	70,545	75	103	-	200	-
1951	177,170	10,272	15,315	-	3,706	-
1952	310,875	19,250	23,475	-	12,525	25
1953	598,288	31,000	23,405	17	10,125	7,820
1954	455,250	25,300	32,565	15,050	85,250	2,540
1955	208,789	38,125	33,975	1,500	21,500	2,581
1956	313,925	40,000	45,240	1,503	79,350	5,150
1957	446,620	45,300	30,170	3,515	543,650	5,650
1958	578,525	44,200	61,875	1,510	97,300	4,400
1959	623,825	106,275	27,400	1,620	816,500	4,181
1960	226,250	24,200	24,800	306	67,400	3,650
1961	816,095	10,650	19,175	450	124,900	-
1962	432,375	19,625	22,222	48	114,000	80
1963	591,950	21,005	17,180	25	157,700	675
1964	529,464	18,125	10,125	200	48,200	-
1965	502,600	12,500	14,425	400	106,800	25
1966	355,025	12,850	14,200	750	50,070	700
1967	444,800	20,200	12,410	-	118,930	2,000
1968	528,750	15,475	20,350	400	88,800	2,300
1969	724,648	10,450	17,270	409	224,200	-
1970	763,750	9,650	18,125	415	187,500	400
1971	591,700	8,925	14,375	407	504,400	50
1972	694,944	13,150	15,591	3,500	52,537	40
1973	798,880	27,525	16,925	1,506	546,475	1,340
1974	725,597	20,276	11,827	1,502	23,100	40
1975	809,304	9,509	6,901	750	652,365	64
1976	502,472	4,726	7,922	750	119,400	-
1977	941,863	8,754	27,645	750	298,371	-
1978	543,337	11,989	26,467	208	204,533	25
1979	9,920	475	925	25	90,033	-
1980	530,140	15,451	10,347	75	331,776	18
1981	1,192,900	9,820	5,614	25	373,840	265
1982	1,225,047	6,922	5,387	-	310	32
1983						
1984						
1985						
TIME						
ARR.						
START						
PEAK						
END						

REMARKS



(1)

INDEX TO MAP OF SPANNING STREAMS OF STATISTICAL AREA 4

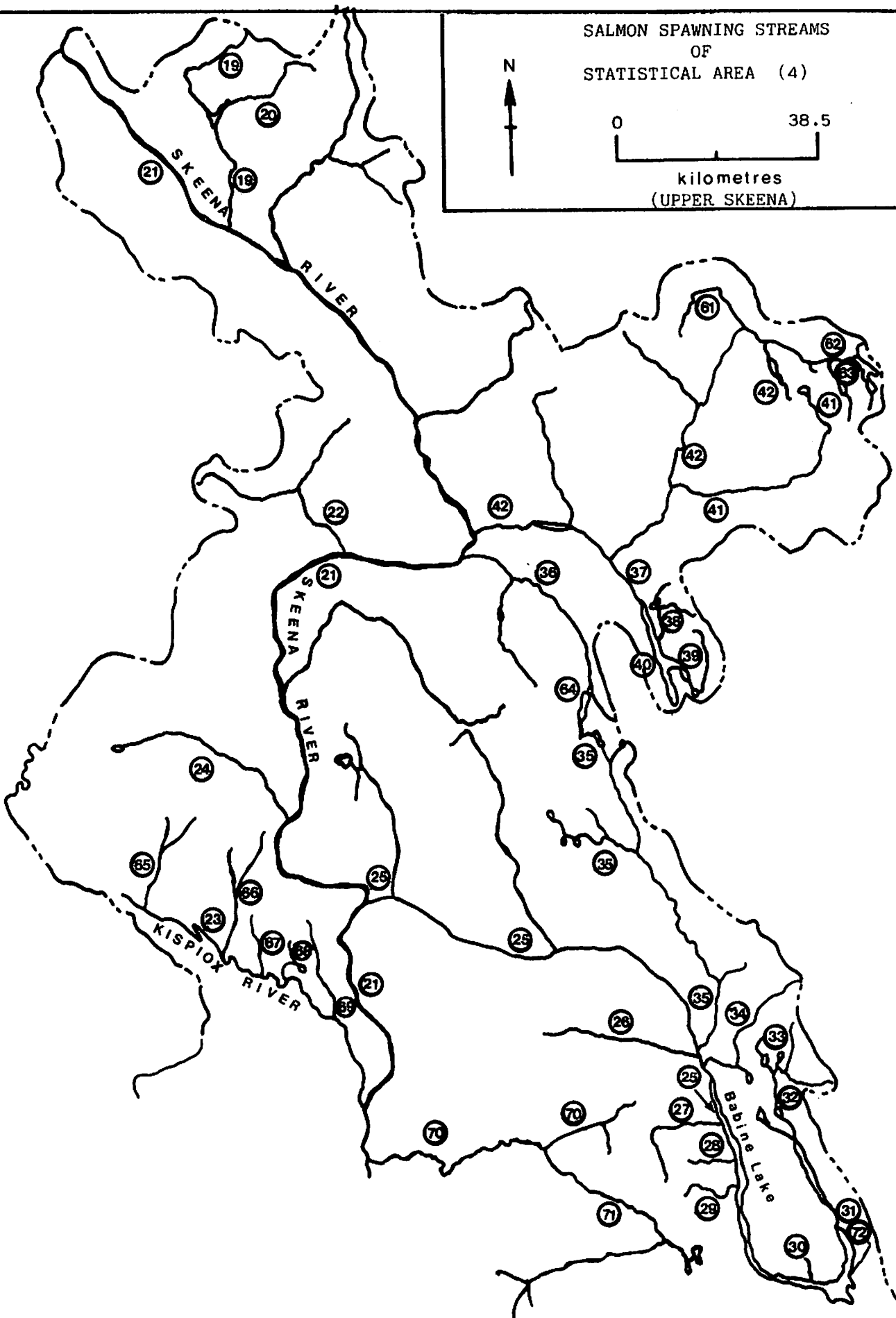
UPPER SKEENA RIVER

ATNA RIVER AND LAKE (MURICE LAKE)	(73)
BUCK CREEK	(7)
BULKLEY RIVER below HOUSTON	(5)
BULKLEY RIVER above HOUSTON	(6)
CANYON CREEK (Cass Carr)	(9)
CAUSQUA CREEK (Fish)	(12)
DRIFTWOOD CREEK	(10)
GOSNELL CREEK	(2)
KATHLYN CREEK (Chicken)	(18)
MCDONNELL LAKE AREA (at head of Zymoetz River)	(15)
MAXAN CREEK	(60)
MURICE RIVER AND LAKE	(3)
NANIKA RIVER	(1)
OWEN CREEK	(4)
REISETER CREEK (Two Bridge)	(11)
RICHFIELD CREEK (Findley)	(8)
STATION CREEK	(58)
TELKWA RIVER	(16)
THAUTIL RIVER	(59)
TOBOGGAN CREEK	(14)
TROUT (Sheddy)	(13)
ZYMOETZ RIVER (Copper)	(17)

SALMON SPAWNING STREAMS
OF
STATISTICAL AREA (4)



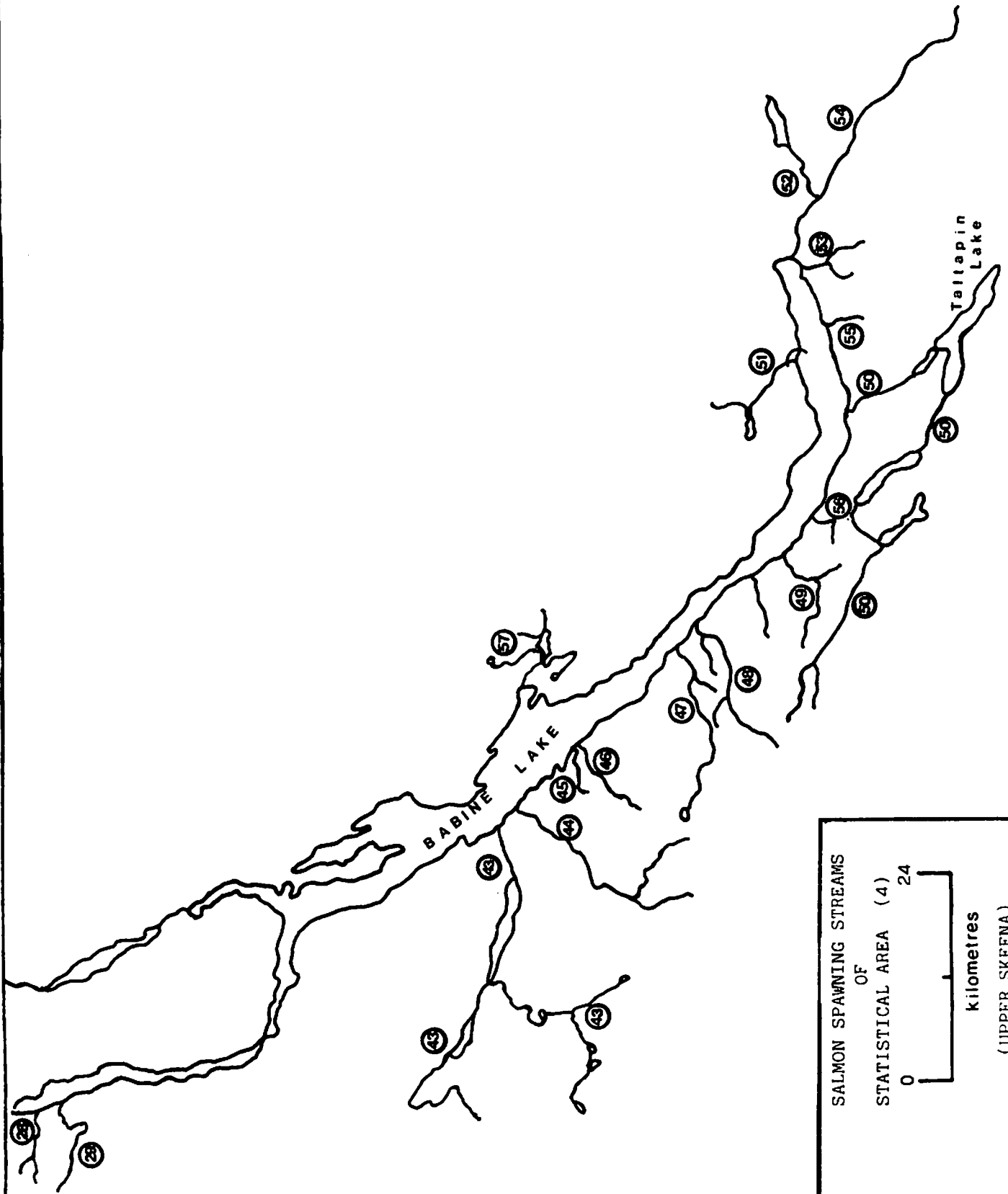
kilometres
(UPPER SKEENA)



INDEX TO MAP OF SPAWNING STREAMS OF STATISTICAL AREA 4

UPPER SKEENA RIVER

ASITKA RIVER & LAKE	(41)
AZUKLOTZ CREEK	(39)
BABINE RIVER--LOWER	(25)
BEAR LAKE	(40)
BEAR RIVER	(37)
BOUCHER CREEK (McDonald)	(34)
CLIFFORD CREEK	(67)
(Five Mile Creek)	(28)
(Forks Creek)	(30)
HAROLD PRICE CREEK	(71)
(Hazelwood Creek)	(72)
IRUNSIDES CREEK	(69)
JOHANSON CREEK & LAKE	(62)
KISPIOX RIVER	(23)
KLUAYAZ CREEK & LAKE	(20)
KLUATANTAN RIVER	(19)
KULDU CREEK	(24)
MOUSEVALE CREEK	(61)
MORRISON CREEK (Hatchery)	(31)
MOTASE LAKE	(64)
NANGEESE CREEK	(65)
NICHYESKWA RIVER	(26)
NILKITKWA RIVER & LAKE	(35)
(Nine Mile Creek)	(29)
SALIX CREEK	(38)
SKEENA RIVER	(21)
SKUNSNAT CREEK	(68)
SLAMGEESH RIVER & LAKE	(22)
SPAWNING LAKE (SOLO CREEK)	(63)
SQUINGULA RIVER	(36)
SUSKWA RIVER	(70)
SUSTUT RIVER & LAKE	(42)
SWEETIN CREEK	(66)
TAHLO RIVER--LOWER	(33)
TAHLO RIVER--UPPER (Salmon)	(32)
TSEZAKWA CREEK (Trail)	(27)



SALMON SPAWNING STREAMS
OF
STATISTICAL AREA (4)

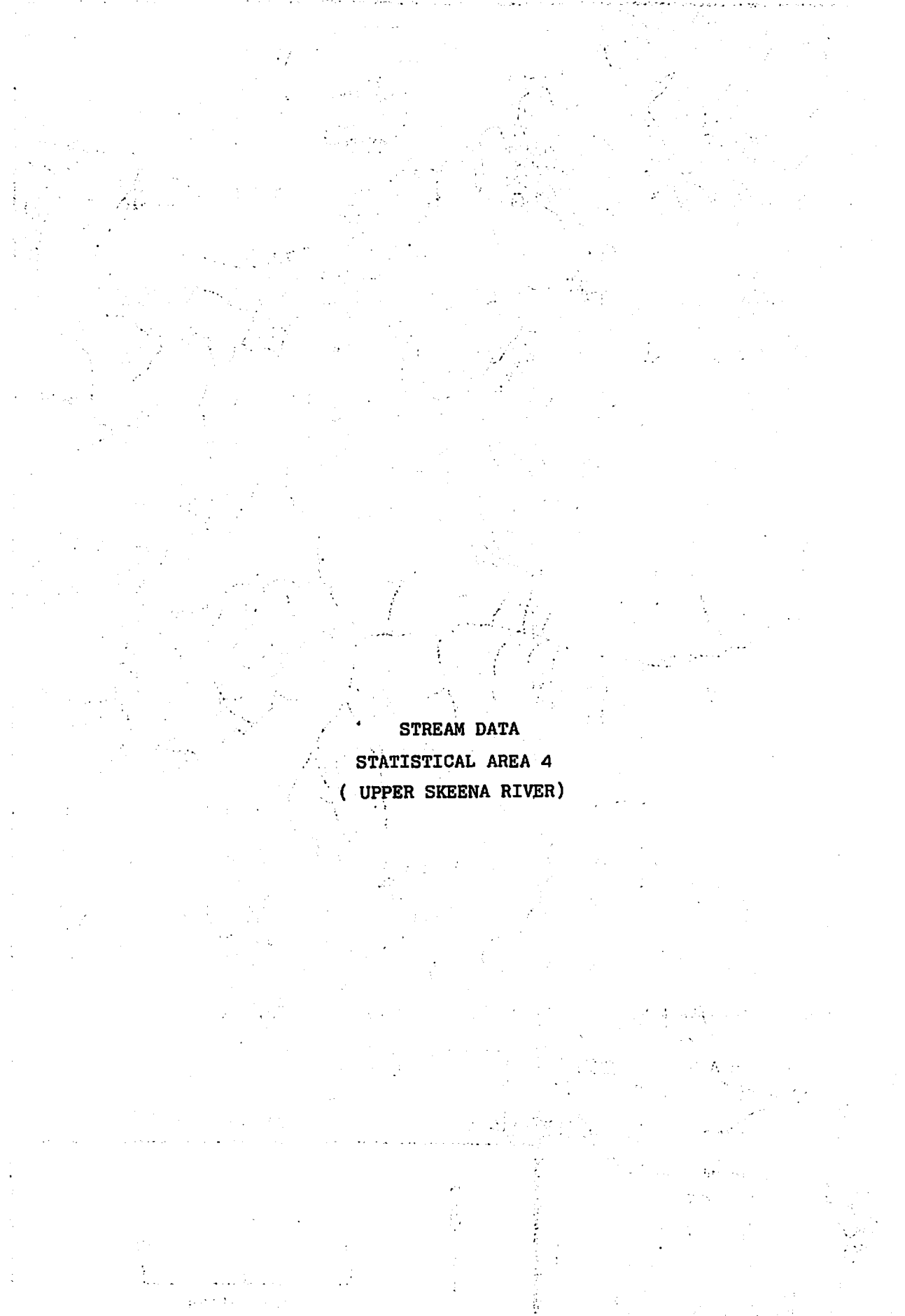
0 24
kilometres

(UPPER SKEENA)

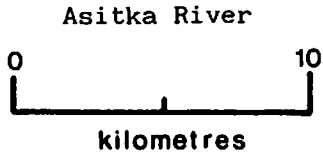
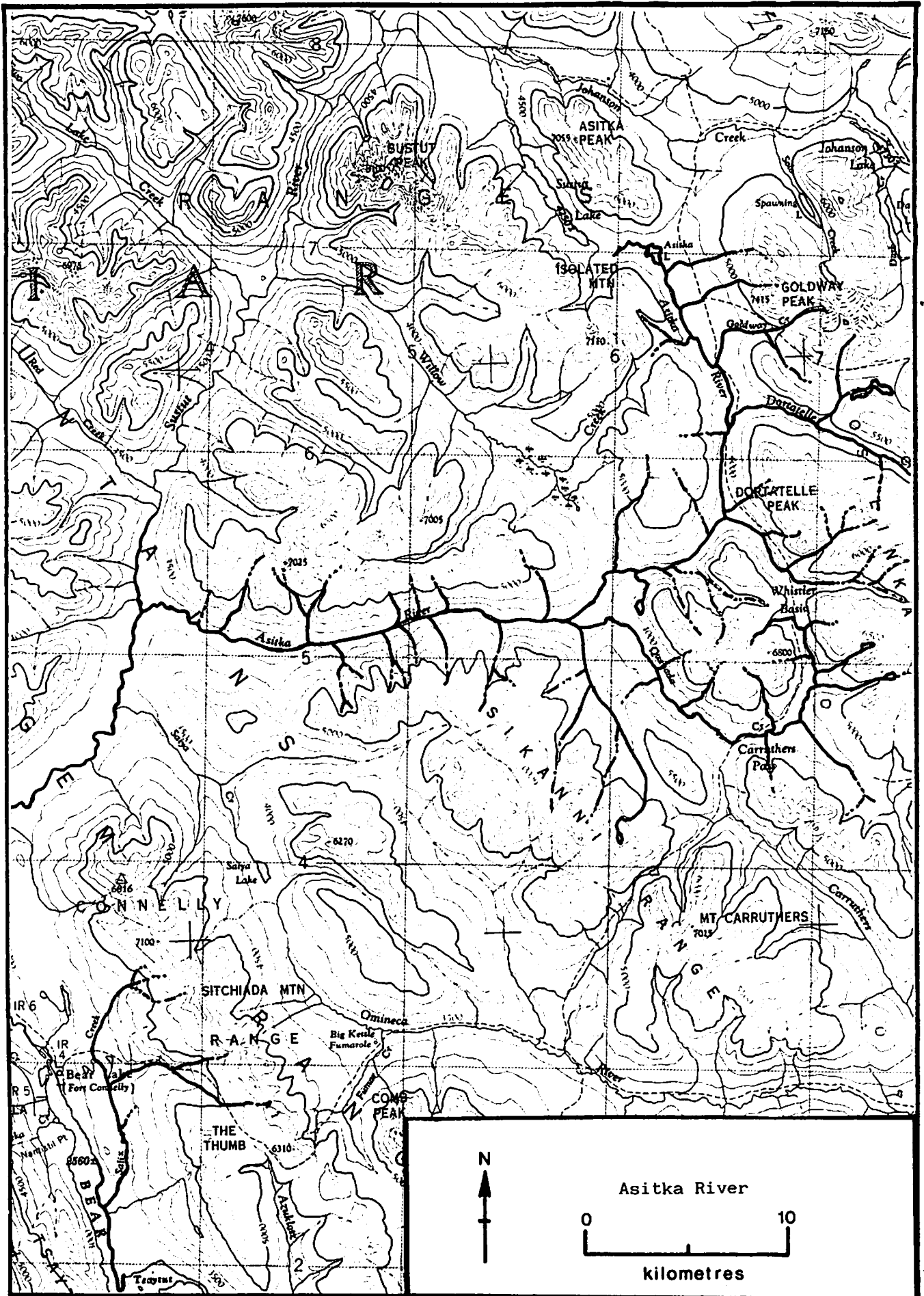
INDEX TO MAP OF SPAWNING STREAMS OF STATISTICAL AREA 4

UPPER SKEENA RIVER

BIG LOON CREEK (Wright)	(57)
CROSS CREEK (Pendleton)	(49)
(Donalds Creek)	(56)
(Five Mile Creek)	(28)
(Four Mile Creek)	(55)
FULTON RIVER	(43)
GULLWING CREEK (Six Mile, Wiggins)	(51)
(Kew Creek)	(46)
(Nine Mile Creek)	(29)
PIERRE CREEK	(47)
PINKUT CREEK (15 Mile, Anderson)	(50)
SHASS CREEK (Grizzly)	(52)
(Sockeye Creek)	(45)
SUTHERLAND RIVER (Beaver)	(54)
TACHEK CREEK	(44)
(Telzato Creek) (Monica)	(53)
TWAIN CREEK	(48)



**STREAM DATA
STATISTICAL AREA 4
(UPPER SKEENA RIVER)**



NAME OF STREAM ASITKA LAKE AND RIVER

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH Headwaters of Asitka River, S.E. of Sustut L., Cassiar Dist.
Flows West into Sustut River. POSITION 56 126 NE.

LENGTH 2.4 km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

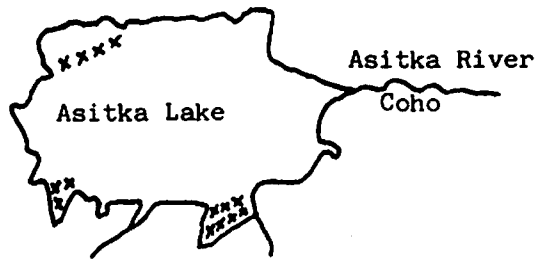
BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- in lake shallows
CHINOOK	
COHO	- in Asitka Creek to lake.
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1962-63 Weather conditions did not permit observation.
1964 Population may be largely 5 year olds.
1965 Beaver dams impaired fish passage.
1972-74 Light to moderate beaver activity in Asitka Creek.
Light predation by bears and birds.



x Sockeye Spawning
Grounds



Sketch of
Asitka Lake, 1980



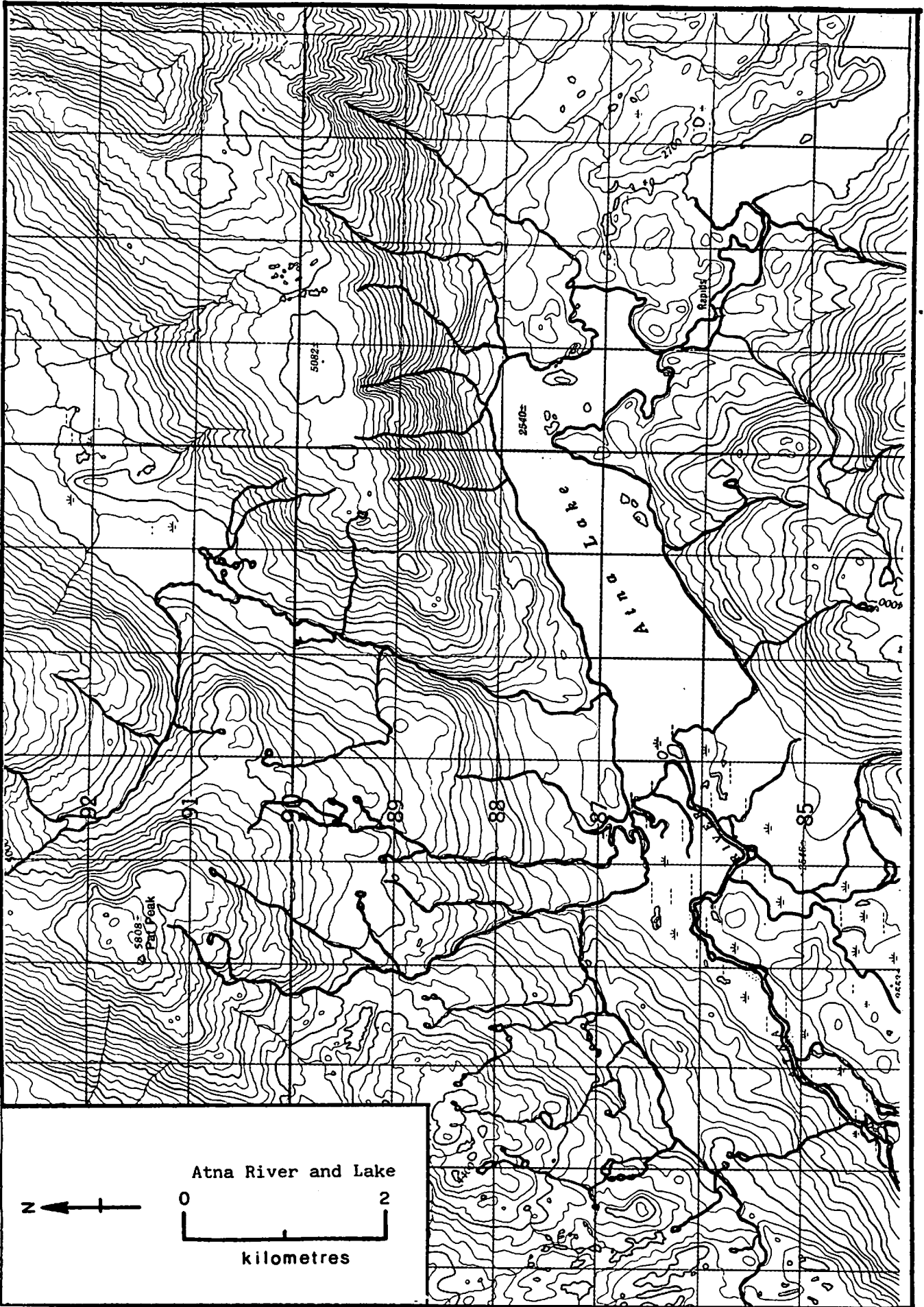
ESCAPEMENT RECORD FOR ASITKA LAKE AND RIVER

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57	200					
58	200					
59	N/O					
60	N/O					
61	300					
62	N/O					
63	N/I					
64	250					
65	N/O					
66	300					
67	N/O					
68	300					
69	N/I					
70	50					
71	N/O					
72	50					
73	300					
74	1			2		
75	N/I	N/I				
76	N/I					
77	N/O			N/O		
78	300			N/O		
79						
80	500					
81	UNK					
82	No Records					
83						
84						
85						

TIMING:

ARRIVE	L Aug-E Sept				
START	E Sept				
PEAK	M-L Sept				
END	Oct				

REMARKS N/I = Not Inspected



NAME OF STREAM ATNA LAKE, (Morice Lake)

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH W. of Atna Bay, Morice Lake, Rge. 5, Coast Dist.

POSITION 54 127 SW

LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____

SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

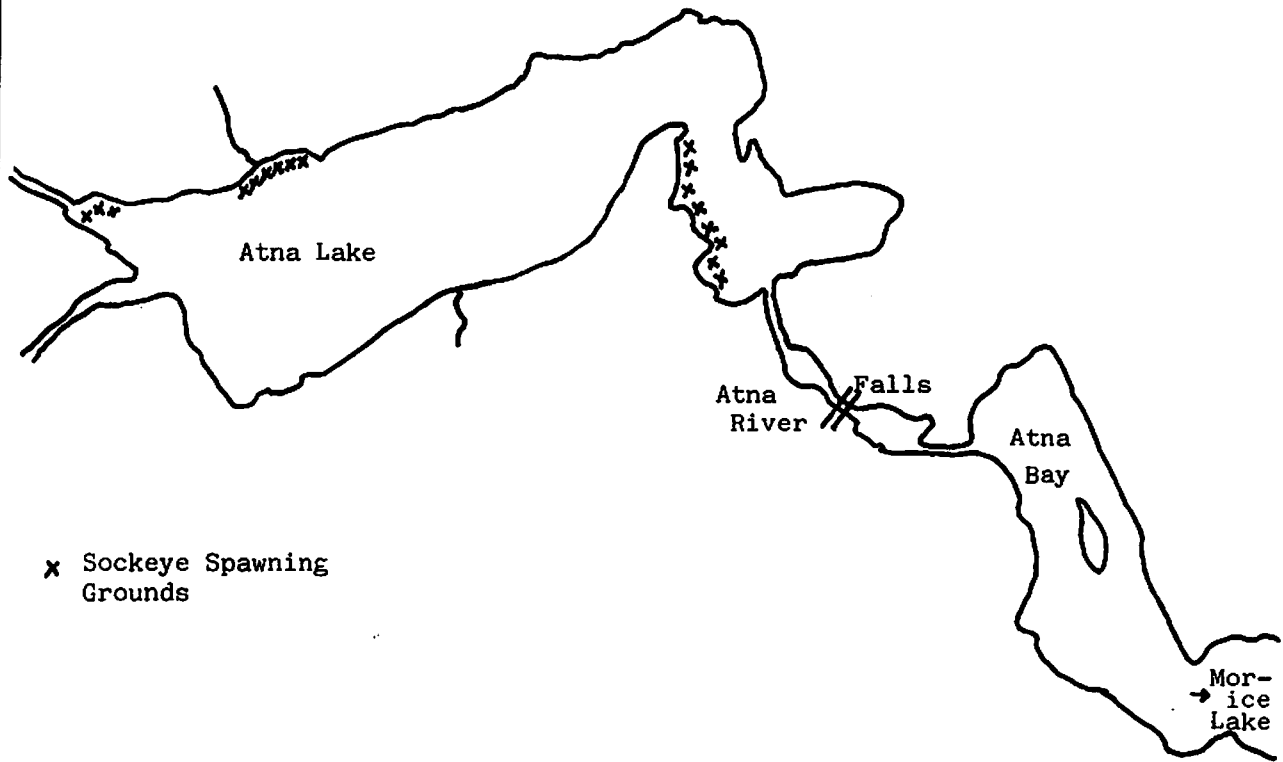
BARRIERS OR POINTS OF DIFFICULT ASCENT Small cascades near mouth passable at most water levels.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- in lake on gravel bars and at mouths of streams and
CHINOOK	/alluvial fans at lake head.
COHO	- likely throughout upper lake tributaries.
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS Light predation by bears
Heavy glacial silt load.



x Sockeye Spawning
Grounds



Sketch of
Atna Lake, 1980



ESCAPEMENT RECORD FOR ATNA LAKE (Morice Lake)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65	500					
66	500					
67	500					
68	500					
69	N/I					
70	N/I					
71	N/I					
72	N/I					
73	200					
74	N/I					
75	N/I					
76	N/I					
77	N/I					
78	200			N/O		
79						
80	250					
81	300					
82	No Records					
83						
84						
85						

TIMING:

ARRIVE						
START	Aug-E	Sept				
PEAK	Sept-E	Oct				
END	Oct					

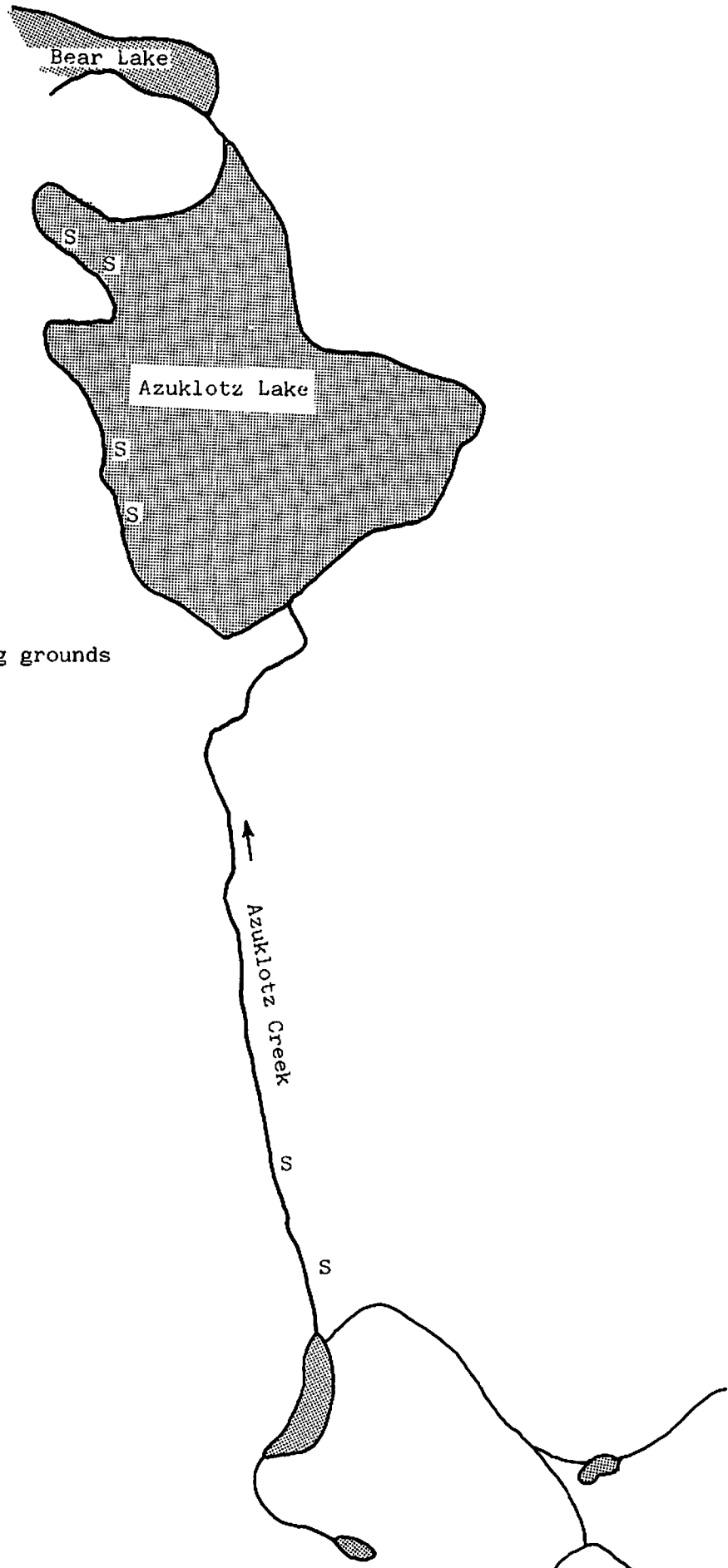
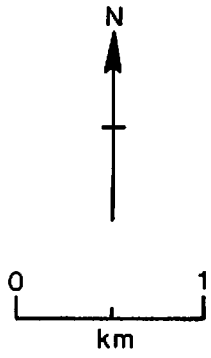
REMARKS N/I = not inspected

AZUKLOTZ CREEK

see

BEAR RIVER AND LAKE p. 39

Sketch of
Azuklotz Creek, 1970



S - Sockeye spawning grounds

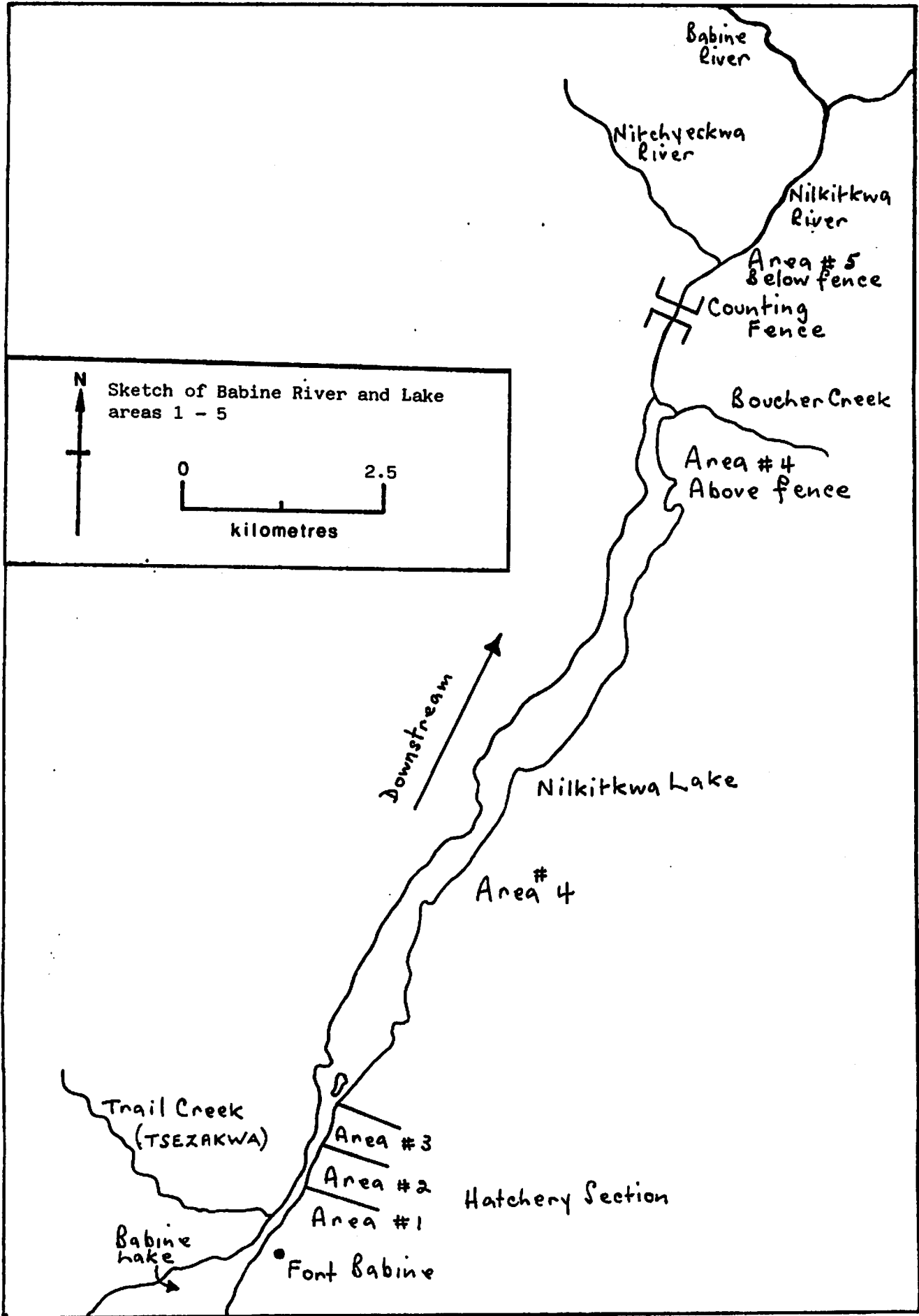
ESCAPEMENT RECORD FOR AZUKLOTZ CREEK

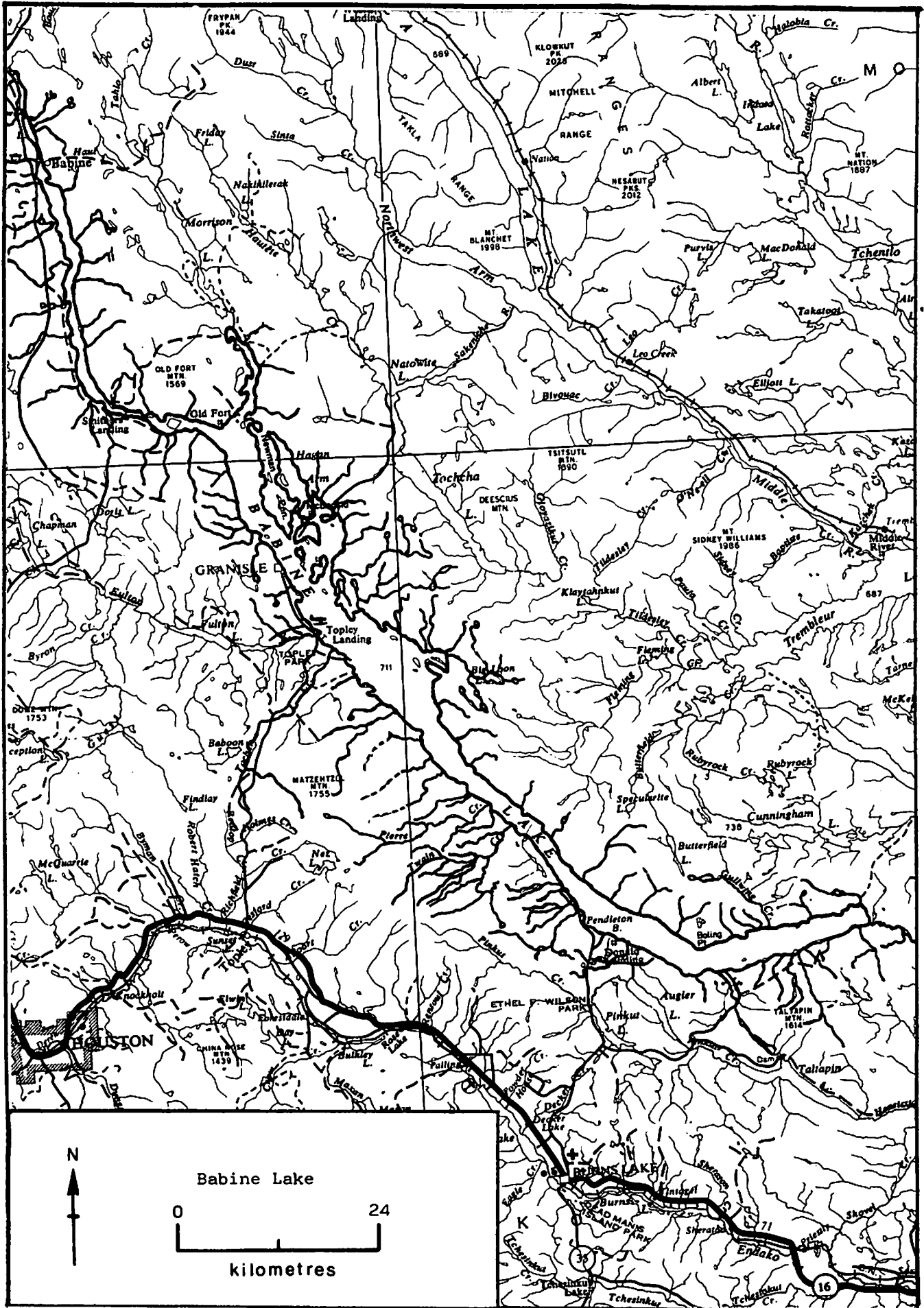
YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51	700		200			
52	N/O		N/O			
53	75		200			
54	1,000		200			
55	500		200			
56	1,000		400			
57	25		N/O			
58	200					
59	3,500		200			
60	1,500		200			
61	589		200			
62	1,500		75			
63	4,000					
64	3,000					
65	200					
66	200					
67	150					
68	200					
69	No Record					
70	50					
71	N/O					
72	N/O					
73	2,000					
74	N/O					
75	1,050					
76	100					
77	N/O					
78	1,000					
79	750					
80	750					
81	200					
82	No Record					
83						
84						
85						

TIMING:

ARRIVE	L Aug			E Sept	
START	E Sept				
PEAK	M Sept			Oct	
END	L Sept-E Oct				

REMARKS





NAME OF STREAM BABINE LAKE
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flowing into Babine River, W. of Stuart Lake, Rge. 5 Coast Dist.
 POSITION 54 126 NE.
 LENGTH 106 km km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

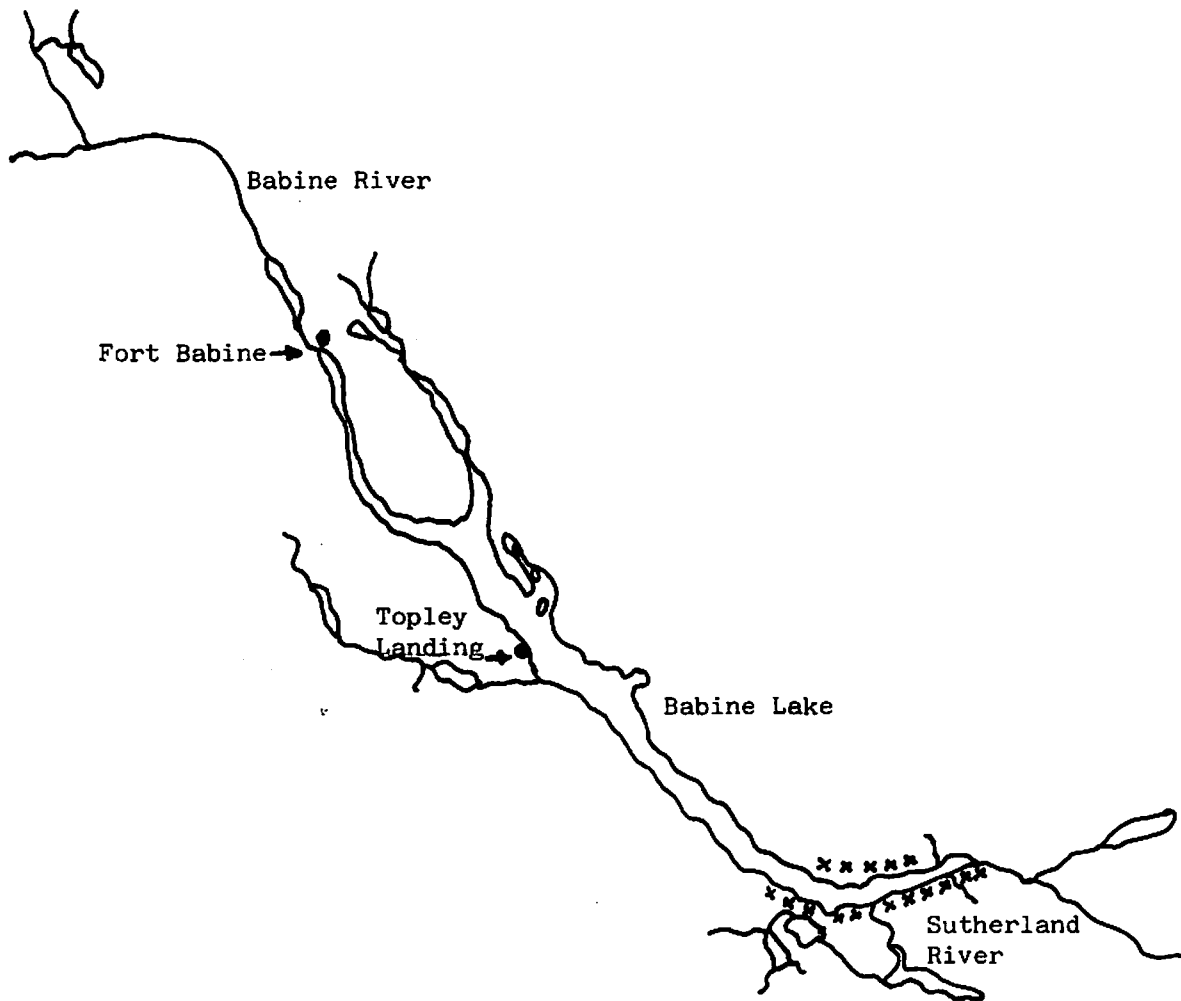
BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	Well distributed. Heaviest between Babine R. and Nine Mile Pt.
CHINOOK	All over stream bed. Sockeye -- Lake spawning at all creek mouths.
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1951 Lake spawning figures are estimates partly based on research done on lake spawning at Bear Lake.
1958 Babine Lake contained a large spawning sockeye population. Figures are estimates only due to the problems of judging effective spawning efforts.
1962/3 Skuba divers found some lake spawning sockeye but no estimate of total number was possible.
Lake spawning is related to water levels in streams and varies from moderate to heavy. 1981 had highest spawners on record. 578,134.
Water levels range from very low to very high.
Predators: Large Dolly Varden and Rainbow Trout eat considerable eggs and young fingerlings. Light to heavy bird predation.



Sketch of Babine Lake, 1980



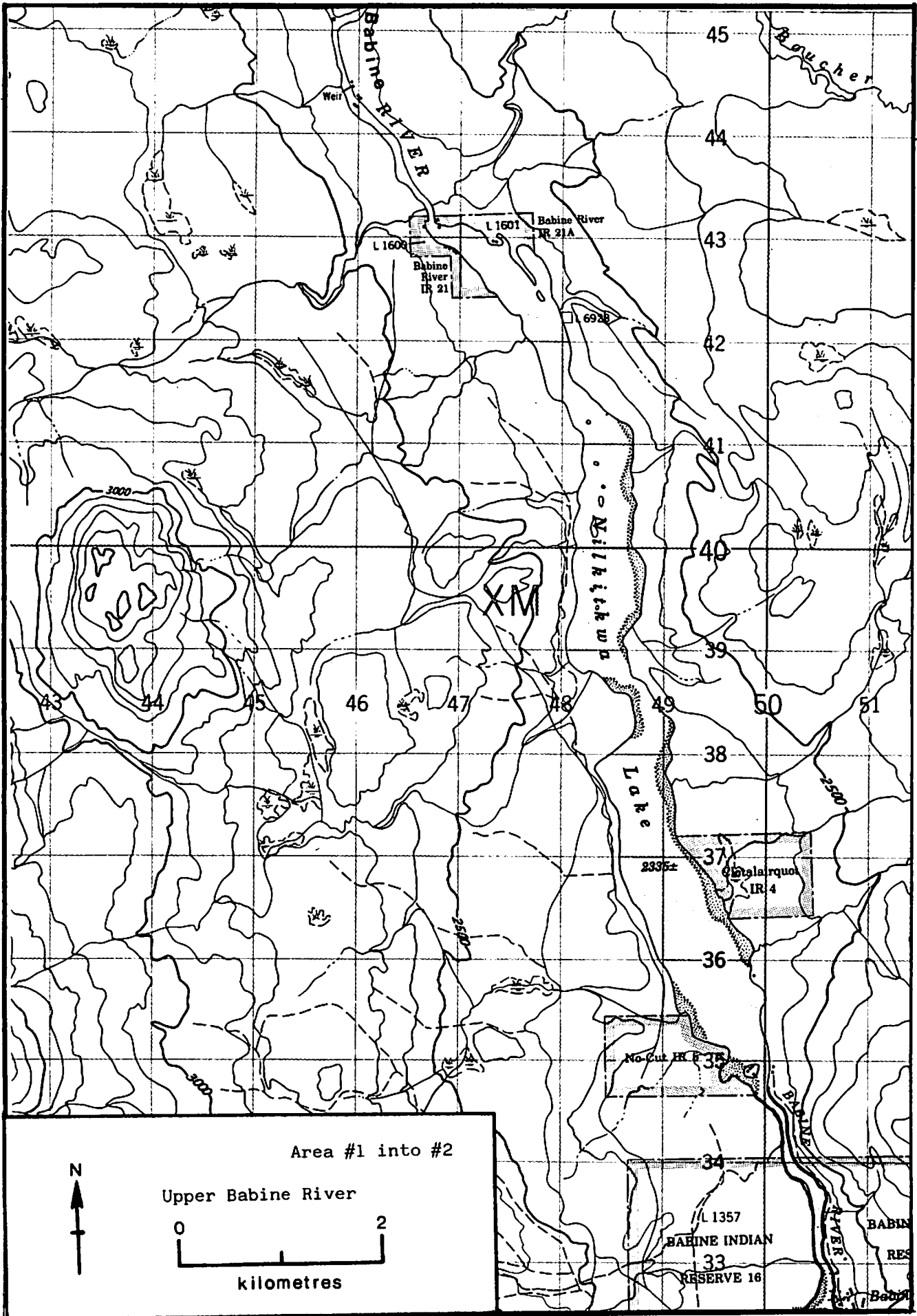
ESCAPEMENT RECORD FOR BABINE LAKE (Lake Spawners)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50	-					
51	15,000					
*52	40,000					
53	25,000					
54						
55	No Records 1954 - 1957					
56						
57						
58	100,000+					
59						
60						
61	75,000					
62	UNK					
63	100,000+					
64	N/O					
65	UNK					
66	UNK					
67	20,000+					
68	50,000					
69	80,000					
70	75,000					
71	70,000					
72	66,000					
73	110,000					
74	127,223					
75	105,000					
76						
77	126,000					
78	152,643					
79						
80	164,852					
81	578,134					
82	417,000					
83						
84						
85						

TIMING:

ARRIVE						
START	Sept-Oct					
PEAK	E Oct- L Oct					
END	Oct-Nov					

REMARKS 1949 Sex ratios Sockeye M 45%, F 55%; Pinks M 40%, F 60%
 *1952 Estimated 40,000 Sockeye died upspawned, no explanation given.



Area #1 into #2

Upper Babine River



kilometres

NAME OF STREAM UPPER BABINE RIVER (Bridge Section)
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flowing into Upper Babine River area #1 into area # 2
 POSITION 55° 20' N 126° 40' W
 LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25
0.25 - 0.50
0.50 - 0.75
0.75 - 1.00
>1.00

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

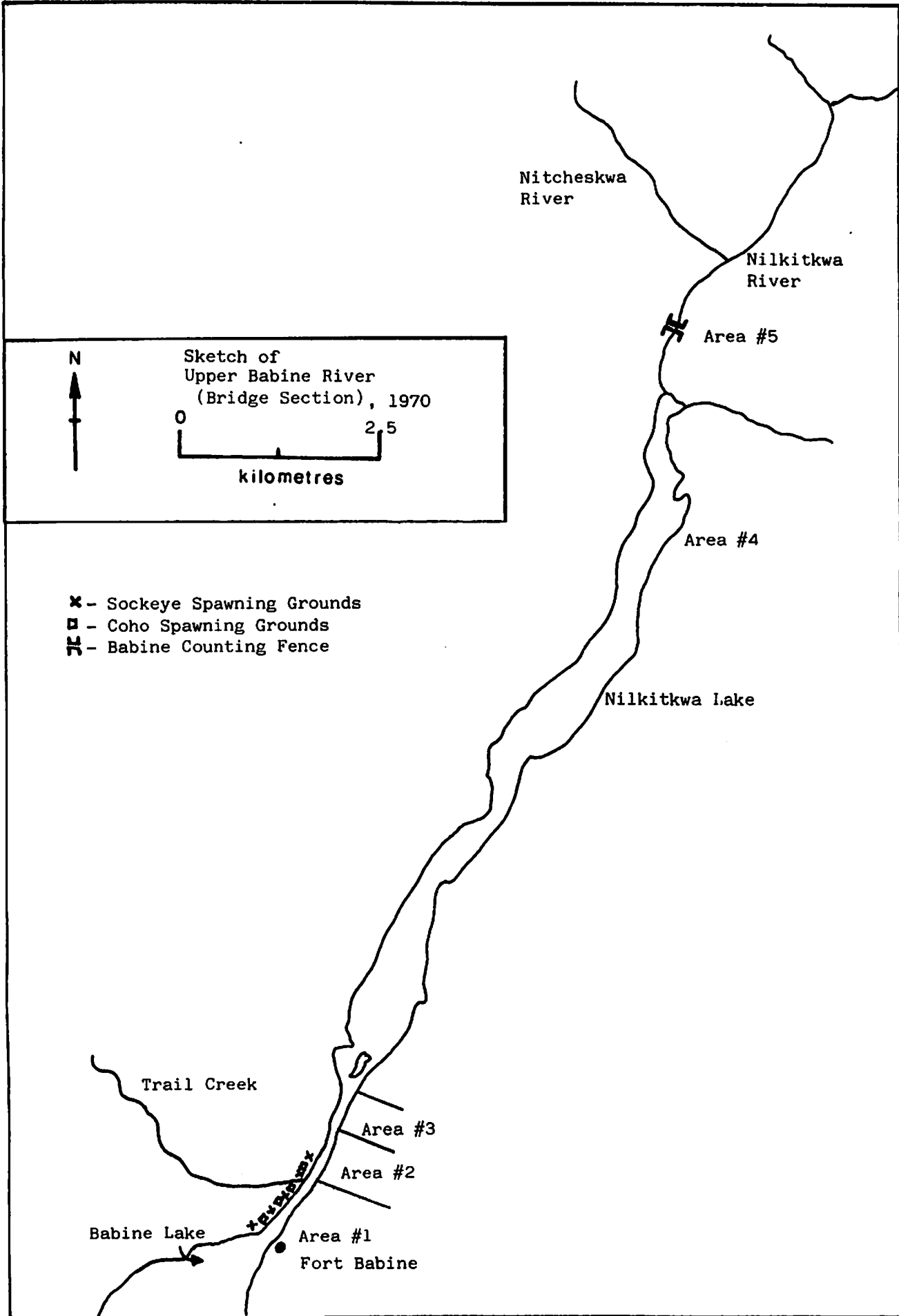
BARRIERS OR POINTS OF DIFFICULT ASCENT Passable throughout

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	-spawning well distributed, heaviest Smokehouse Isl. to Ft. Babine
CHINOOK	and at Lake end.
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1948 Fish spawn late in season. Much evidence of lake spawning.
1949 Very good spawning year but some eggs lost by overspawn.
1952 Many unspawned dead sockeye due to fatigue and injuries.
1962 Heavy sport fishery 67,68.
1966 Sport fishery and boat traffic. 1969 Indian food fishery in Sept. and Aug.
1969/71 Heavy spawning late Oct. over earlier spawning Sept. possibly caused by
low lake levels. 1973/4 Some egg digging.
Fluctuating water levels ranging from low but adequate to very high.
Predators: merganzers and gulls.



ESCAPEMENT RECORD FOR UPPER BABINE RIVER (Bridge Section)
 #1 Flowing into Babine River #2

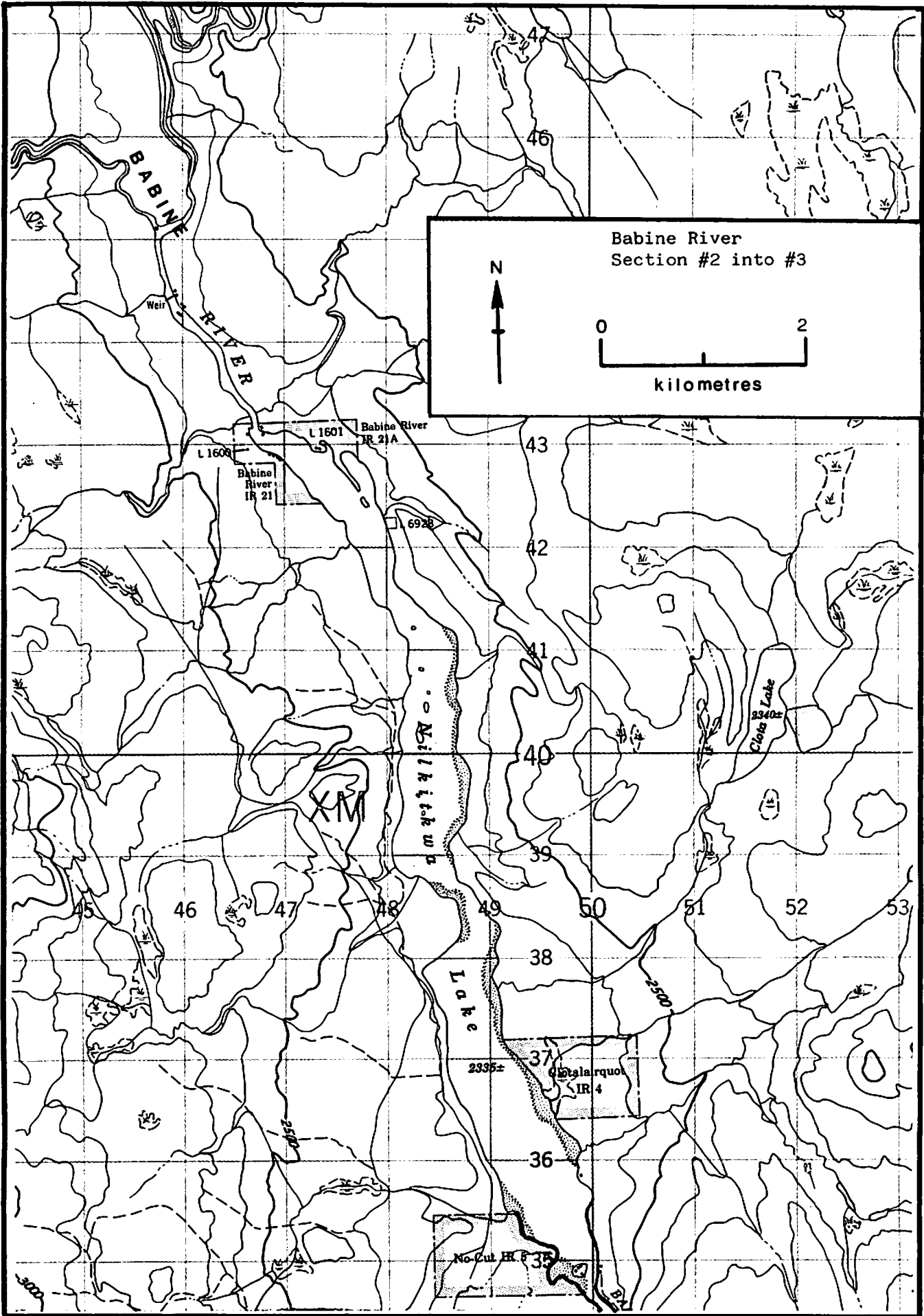
YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947	Obs	Obs	Obs	-	N/O	Obs
48	50,000	Obs	Obs			Obs
49	50,000	Obs	Obs			Obs
50						
51	5,000					
52	15,000		750			
53	40,000		150			
54	40,000		20			
55	8,000		400			
56	20,000		200			
57	40,000		500			
58	50,000		500			
59	45,000		300			
60	9,000		150			
61	70,000		750			
62	70,000		200			
63	36,900		200			
64	80,000		200			
65	40,000		Obs			
66	20,000		150			
67	35,000		300			
68	50,000		250			
69	200,000		500			
70	130,000		600			
71	183,000		800			
72	84,000		600			
73	68,000		1,000			
74	80,219		-			
*75	92,000		4,000			
*76	127,232		4,500			
77						
78						
79						
80						
81						
82						
83						
84						
85						

TIMING:

ARRIVE					
START	E Aug-M Sept		Sept-L Oct		
PEAK	E Sept-Oct		Oct-Nov		
END	M Oct-Nov		L Oct-Nov		

REMARKS *1975 - includes areas 1,2,3

*1976 - includes areas 1,2,3



NAME OF STREAM BABINE RIVER SECTION 2
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flowing into section #3
 POSITION 55° 22' N 126° 40' W
 LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	_____
0.25 - 0.50	_____
0.50 - 0.75	_____
0.75 - 1.00	_____
> 1.00	_____

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

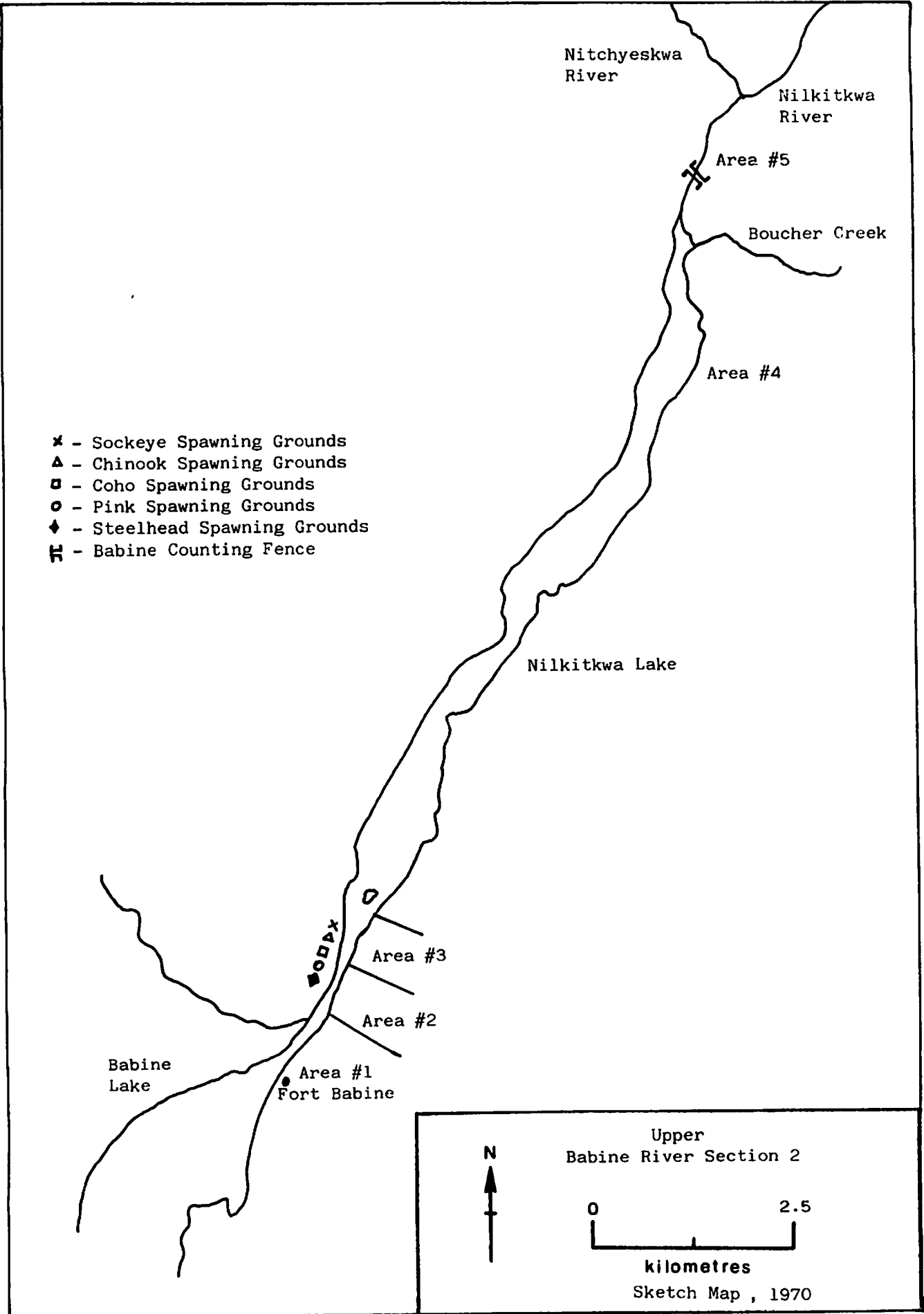
BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	spawning well distributed throughout. Heaviest on shallow gravel bars.
CHINOOK	_____
COHO	over entire area
CHUM	_____
PINK (ODD YEAR)	not specified
PINK (EVEN YEAR)	not specified
STEELHEAD	_____

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1948 All fish passing to the lake use this area.
 1949 Fine size and clean fish. Sockeye arrived much later this year but spawned at the same time as usual. A good run of coho later dropped downstream into #3 area.
 1952 Many unspawned dead sockeye and coho. Fish injured and fatigued .
 1962 Heavy sport fishery 67,68. 1966 Sport fishery and boat traffic
 1969 Indian food fishery--low lake levels.
 Fluctuating water levels ranging from low-adequate through normal-high. Until 1968 there was little evidence of digging up eggs by later spawners, but since then there has been heavy digging.
 Predators: numerous gulls, fish ducks, Dolly Varden and Rainbow Trout.
 Generally bird predation ranges from light to heavy. Ducks, gulls and eagles.



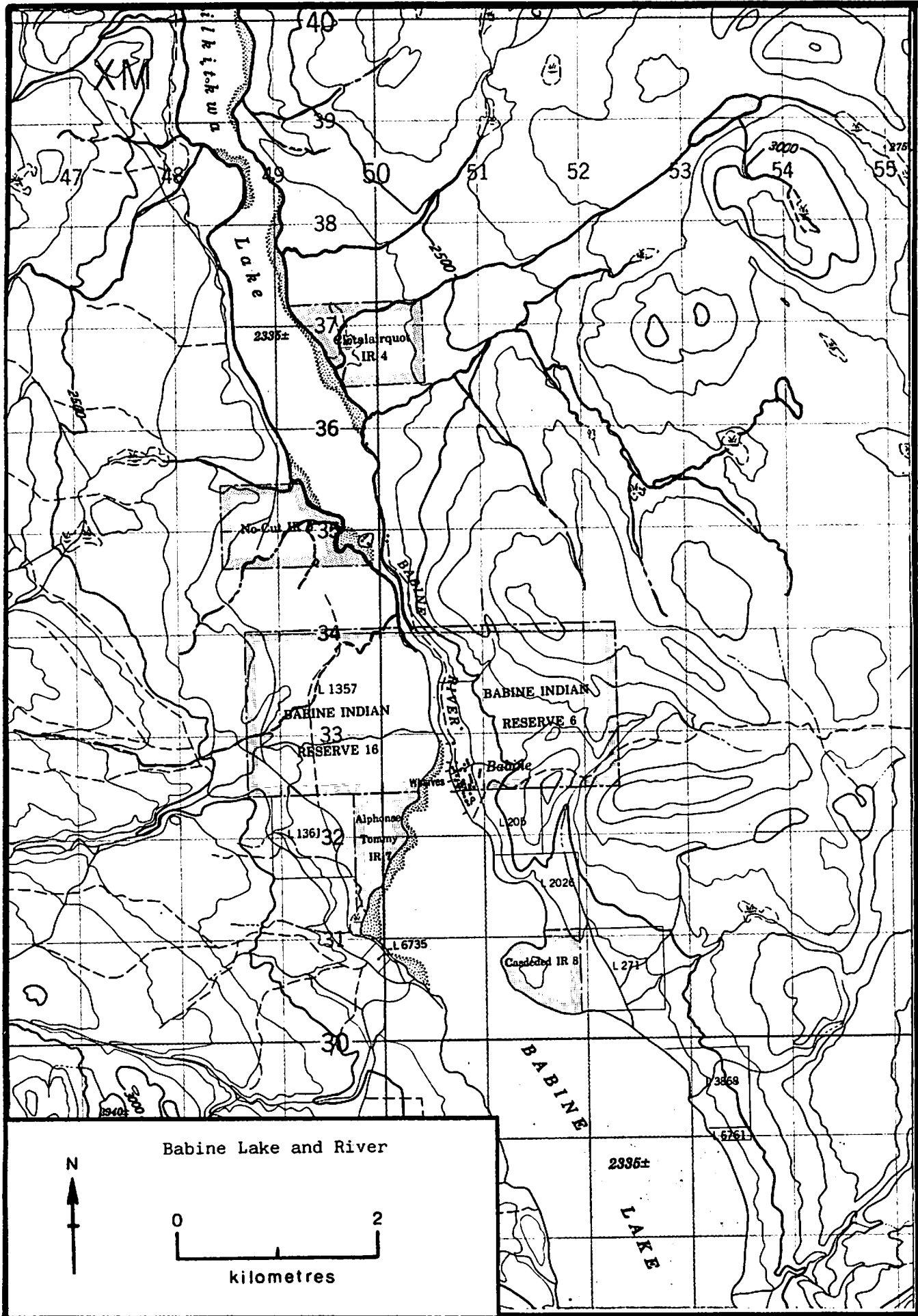
ESCAPEMENT RECORD FOR UPPER BABINE RIVER (Hatchery Section)
Section #2 Flowing into #3

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947	Obs	Obs	Obs	-	Obs	Obs
48	80,000	Obs	Obs			Obs
49	100,000	Obs	1,000	-	-	Obs
50			No Record	No Record		
51	7,000	-	-	-	-	-
52	35,000		1,500			
53	60,000		500			
54	55,000		200			
55	4,000		200			
56	25,000		400			
57	50,000		400			
58	60,000		1,000			
59	70,000		900			
60	20,000		350			
61	80,000		1,000			
62	80,000		350			
63	55,350		350			
64	95,000		400			
65	50,000		300			
66	30,000		250			
67	55,000		350			
68	70,000		200			
69	91,000		500			
70	75,000		600			
71	100,000		800			
72	65,000		600			
73	45,000		1,000			
74	63,310		2,000			
75	Figures included in Upper Area #1 report					
76	Figures included in Upper Area #1 report					
77	100		8,000			
78						
79						
80						
81						
82						
83						
84						
85						

TIMING:

ARRIVE	Aug		Sept			
START	E-M Sept		E Oct			
PEAK	E Sept-M Oct		M Oct-M Nov			
END	M Oct-M Nov		L Nov			

REMARKS 1947 Sockeye 20% lge., 20% med., 45% sm., 15% runts; Coho med.; Springs med.
1948 Sockeye 60%, lge., 30% med., 10% sm. Sex ratio M 45% F 55%
1952 Sex ratio M 56% F 36% 8% Jacks
1959 Sex ratio M 37% F 58% 5% Jacks
Sex ratios vary considerably from year to year



Babine Lake and River



kilometres

NAME OF STREAM BABINE RIVER (Upper) SECTION #3
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flowing into Nilkitkwa Lake
 POSITION 55°23' 126°40' W
 LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25
 0.25 - 0.50
 0.50 - 0.75
 0.75 - 1.00
 > 1.00

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

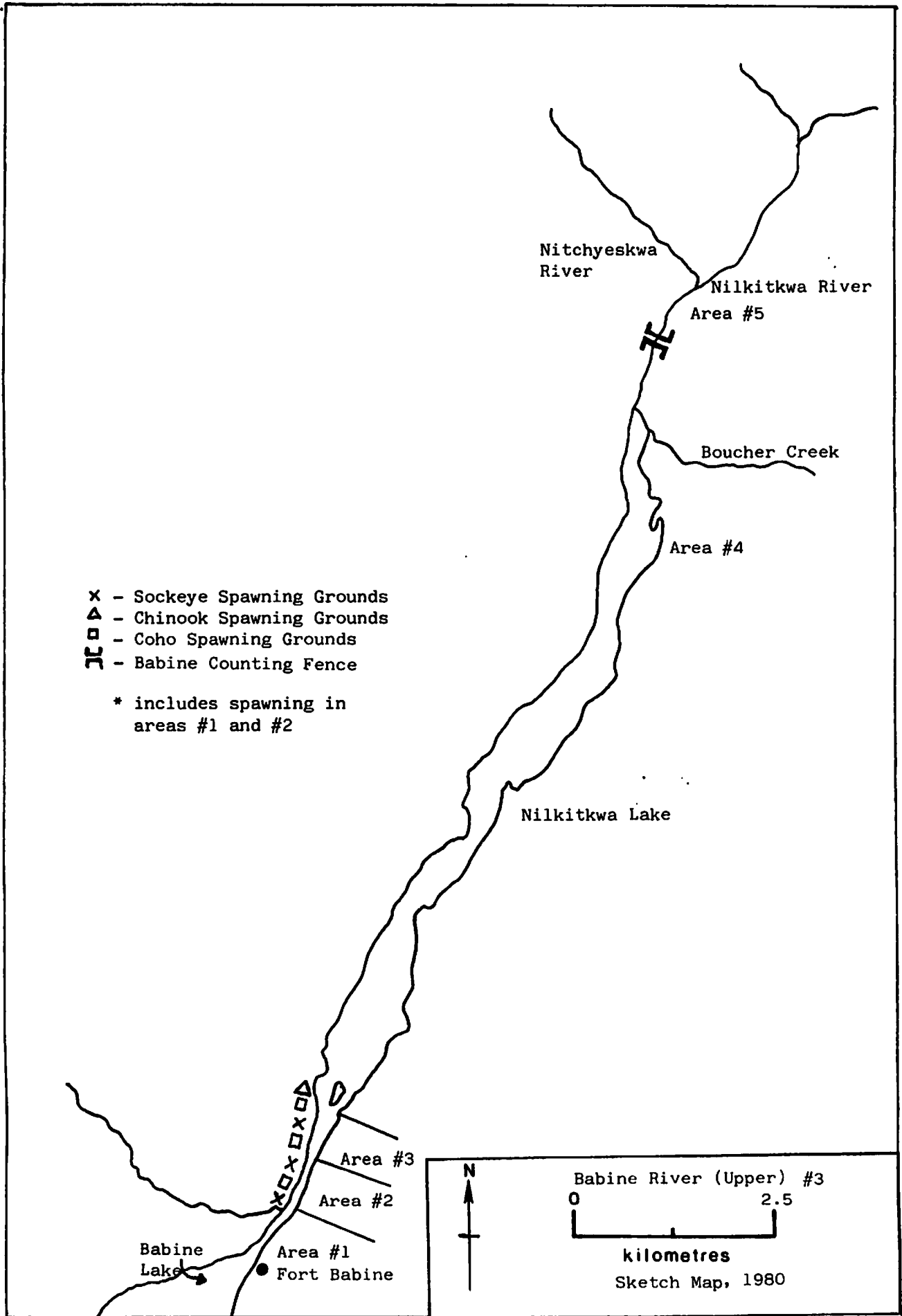
BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	throughout from outlet to Nilkitkwa Lake. Heaviest in shallow area
CHINOOK	observed in Nilkitkwa Lake
COHO	throughout from outlet to Nilkitkwa Lake
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1948 Indian food fishery allowed on this part of river under strict supervision. Excellent area for trout fishing. Coho peak later.
1949 Count difficult because of size of run.
1951 Only Indian fishery on Nilkitkwa.
1952 Many unspawned dead sockeye and coho from injured and fatigued fish.,
1962 Heavy sport fishery 67 and 68. 1966 Sport fishery and boat traffic.
1969 Light sport fishery on coho. Native food fishery.
1970 Sport fishery and Indian food fishery.
Sockeye sex ratios very considerably from year to year.
Some silting at Lake and near mouth 1951 and 1962. Water levels subject to fluctuation.
Heavy bird predation destroys many eggs -- eagles, merganzers ducks, gulls.
 This stretch of river supports heavy sports fishery and native food fishery.



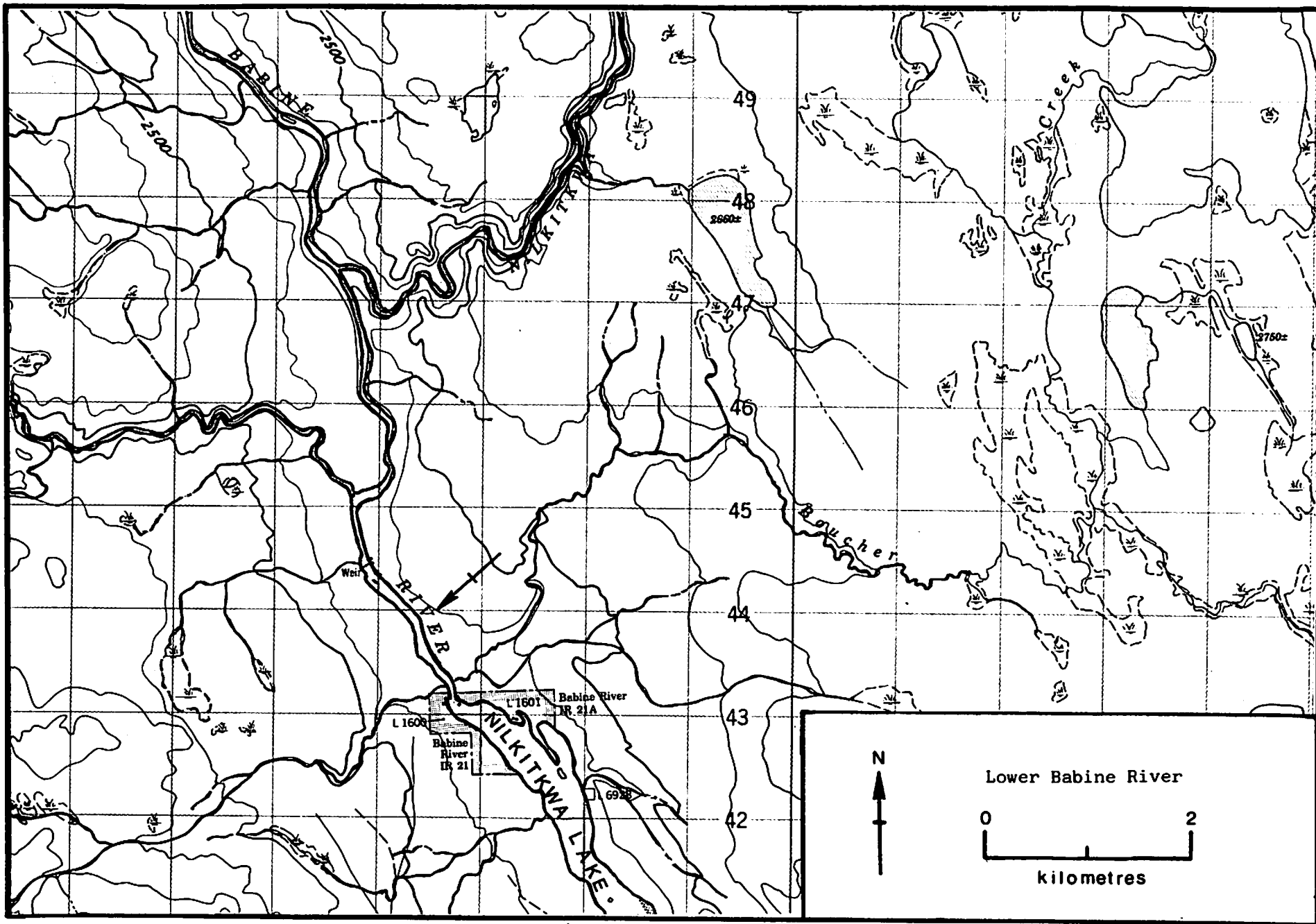
ESCAPEMENT RECORD FOR UPPER BABINE RIVER ³⁰ Section #3 Flowing into Nilkitkwa Lake

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947	Obs	Obs	Obs	Obs	Obs	Obs
48	85,000	Obs	Obs	N/O	N/O	Obs
49	90,000	500	10,000	-	-	Obs
50			No Record	No Record		
51	8,000	-	200	-	-	-
52	35,000	-	3,500	-	-	-
53	50,000	-	300	-	-	-
54	45,000	-	100			
55	3,500		250			
56	25,000		500			
57	40,000		400			
58	50,000		300			
59	50,000		700			
60	12,000		250			
61	50,000		400			
62	60,000		900			
63	49,200		350			
64	75,000		200			
65	30,000		200			
66	20,000		200			
67	45,000		300			
68	65,000		250			
69	12,000		500			
70	29,000		600			
71	38,000		800			
72	40,000		600			
73	40,000		1,000			
74	60,000		2,000			
75	Figures included in upper # report					
76	Figures included in upper # report					
77	121,232		10,500			
78	32,900		11,000			
79		No Record	No Record			
80	150,650		4,400			
81	70,000		2,166			
82	92,647		2,287			32
83						
84						
85						

TIMING:

ARRIVE	Aug	Sept			
START	E Aug-M Sept	Sept-Oct			
PEAK	E Sept-Oct	Sept-E Oct			
END	E Oct-M Nov	E Oct-Nov			

REMARKS 1947 Sockeye 20% lge., 20% med., 45% sm., 15% runts; Coho med.; Chinook med.; Pinks med. and small; Steelhead heavy run according to Indians.
 1948 Sockeye 60% lge., 30% med., 10% sm. Sex ratio M 45% F 55%
 1952 Sockeye Sex ratio M 56% F 36% Jacks 8% Sockeye sex ratios vary considerably
 1955 Sockeye Sex ratio M 35% F 30% Jacks 35% from year to year.
 1959 Sockeye Sex ratio M 37% F 58% Jacks 5%
 1980 Coho figures are fence counts.



NAME OF STREAM BABINE RIVER (Lower) AREA 4 ABOVE WEIR

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH Flows into Area 5 then West into Skeena River, Cassiar

POSITION 55 127 NW

LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____

SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	
COHO	
CHUM	good seeding throughout from Nilkitkwa Lake to Babine counting fence.
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1952 Many sockeye and coho died unspawned due to fatigue and injuries.

1953 and 1966 Some chinook and coho harvested by Indian Food Fishery. Some steelhead angling.

1954,58,60,65,69 Minor egg digging by later spawning fish.

1957,59 Some loss of pink eggs due to digging by later spawning sockeye.

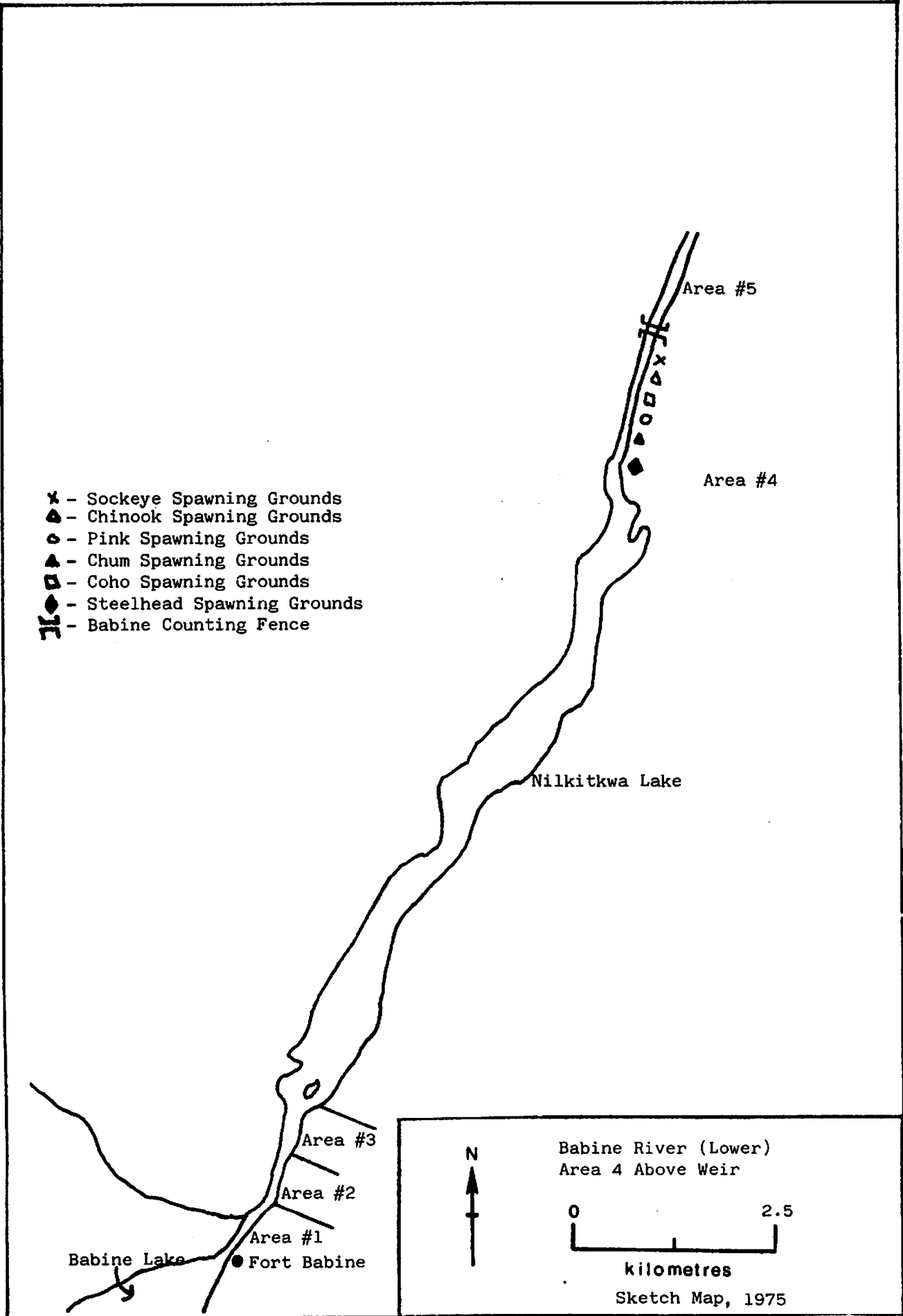
1962 Heavy sports fishery most years in 60^s and in 70/71.

1966 Boating traffic.

Some years sex ratio uneven in sockeye.

Subject to seasonal fluctuation in water levels.

Predators: ducks, eagles and bears.



ESCAPEMENT RECORD FOR LOWER BABINE RIVER (Area 4 - Above Weir)

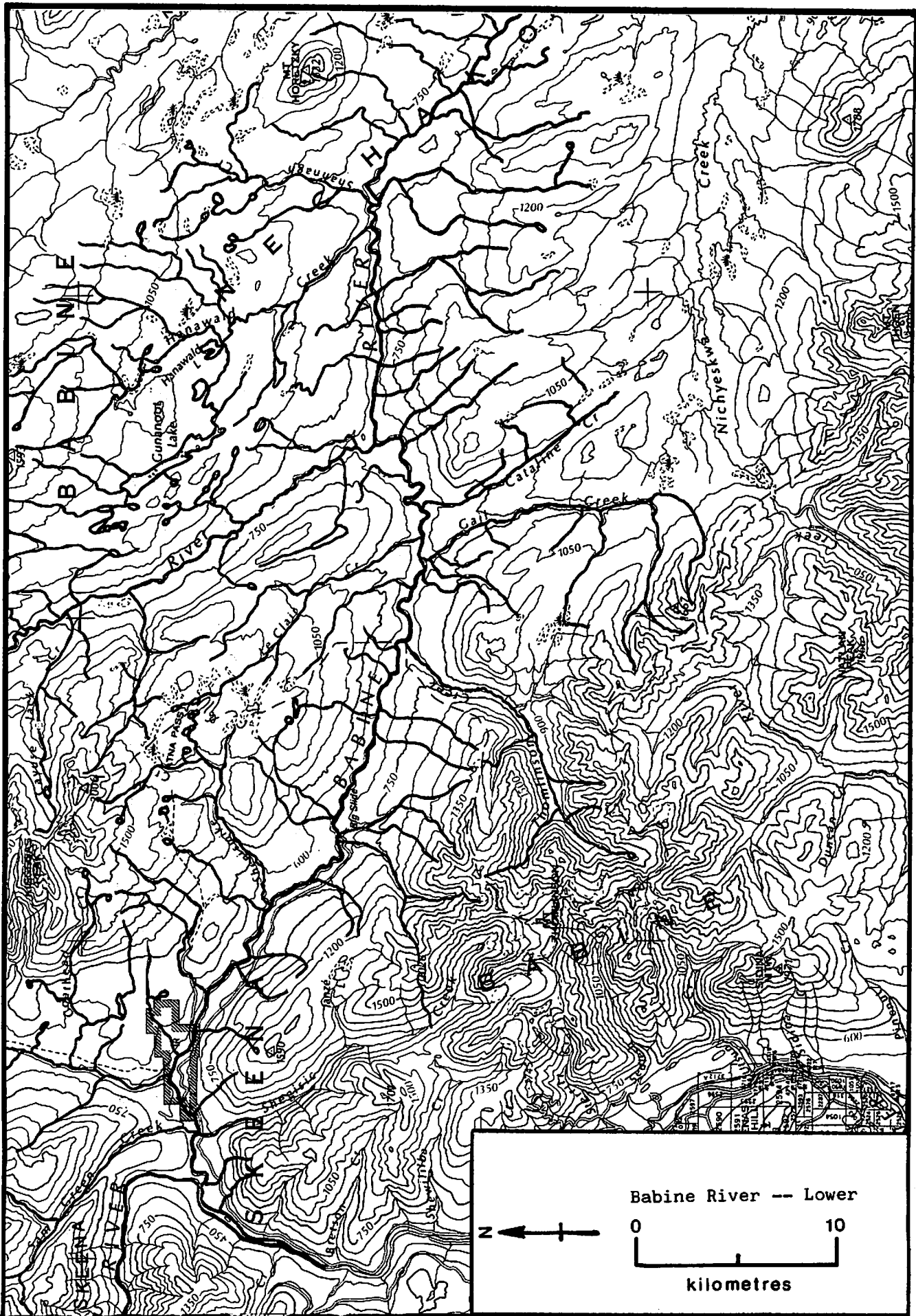
YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
*1947						
48				7		
49	150,000	7,000	6,000		29,000	medium run
50						
51						
52	75,000	3,500	1,500		3,500	OBS
53	130,000	8,000	500	17	1,000	300
54	100,000	6,000	500	50	4,500	250
55	150,000	3,200	2,000		2,000	
56	55,000	4,000	1,000	3	2,500	100
57	70,000	6,000	800	15	25,000	200
58	110,000	8,000	2,000	10	6,500	100
59	130,000	9,000	2,500	20	5,600	81
60	60,000	2,500	800	6	4,500	200
61	175,000	2,500	1,500		70,000	
62	75,000	3,000	2,500	23	37,000	80
63	55,350	3,000	500	25	90,000	75
64	48,000	3,000	400		35,000	
65	120,000	3,000	500		67,000	
66	114,000	4,100	500		46,000	200
67	55,000	2,000	600		43,000	
68	37,000	2,050	500		84,000	100
69	60,000	1,300	400	9	40,000	
70	84,000	1,500	500	15	166,000	
71	96,000	2,500	600	7	93,000	50
72	70,000	500	500	N/R	32,000	40
73	40,000	600	1,000	6	110,000	40
74	35,000	2,376	2,000	2	17,850	
75	3,000	1,000	500		297,000	
76	3,000	563			93,800	
77	40,351	619			68,077	
78	10,895	492		3	177,708	23
79						
80						
*81	20,000		723		130,390	65
82		300				
83						
84						
85						

TIMING:

ARRIVE	Aug	Aug		E Sept	E Sept	
START	L Aug-M Sept	M Aug-Sept	Sept	E Sept	E Sept	E Sept
PEAK	Sept-E Oct	L Aug-M Sept	M Oct	M Sept	M Sept	M Sept
END	L Sept-L Oct	L Sept-E Oct	Nov	L Sept	L Sept-E Oct	L Oct

REMARKS *Sockeye - light 20% lge., 20% med., 40% sm., 20% runts. Coho - average, even sex ratio. Chinook - medium run. Pink - medium heavy run. Chum - few. Steelhead - heavy run in spring and fall.

*1981 chinook and 146 jacks not included in count. Babine fence count adjusted upward 25% to include chinooks spawning below the fence. Pink figures include spawners above and below the fence. N/R - No Record.



NAME OF STREAM BABINE RIVER (Lower) AREA 5 BELOW COUNTING WEIR

CONSERVATION DISTRICT _____ STATISTICAL AREA _____

LOCATION OF MOUTH Flows W. into Skeena River, Cassiar Dist.

POSITION 55 127 NW.

LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____

SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

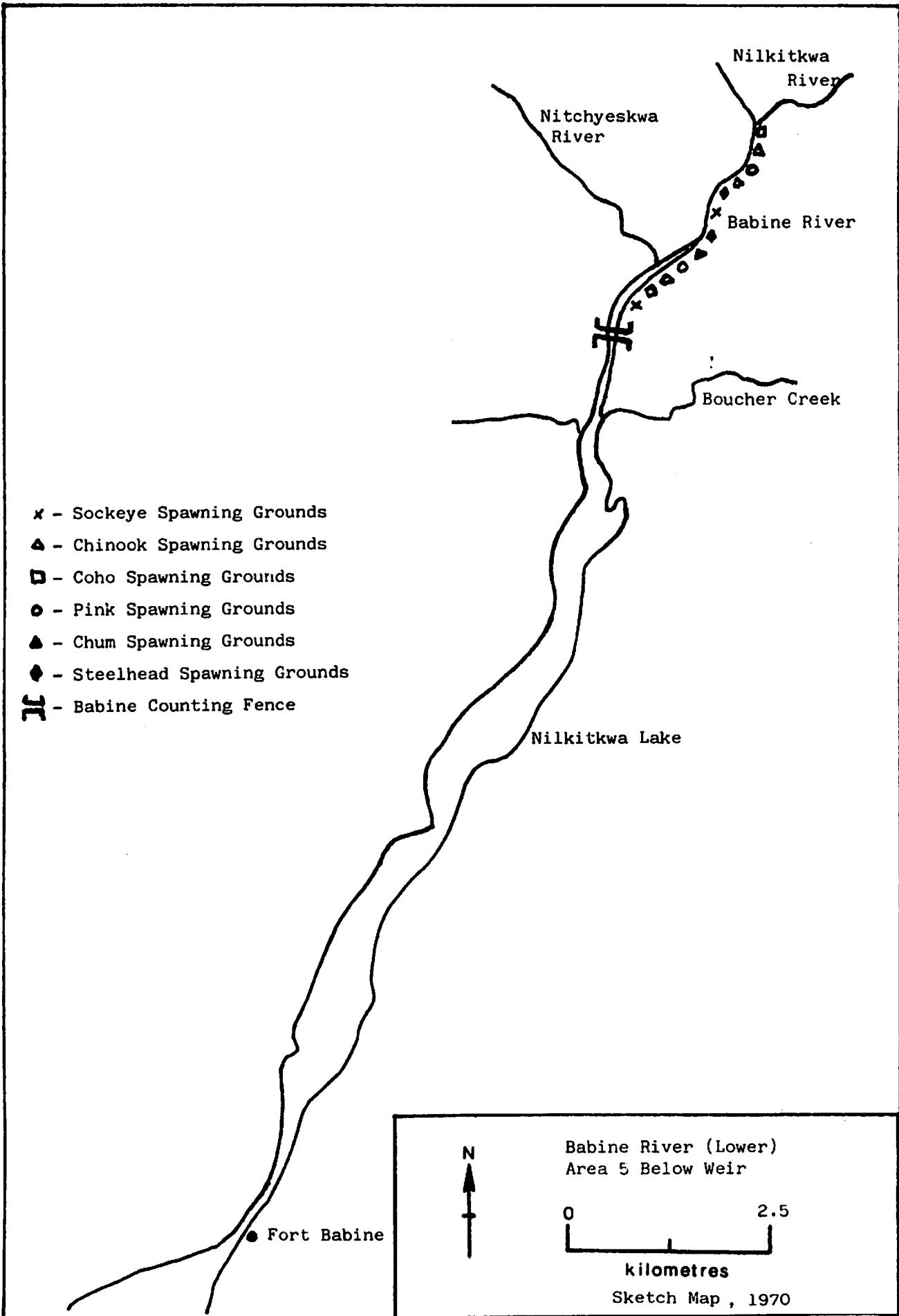
BARRIERS OR POINTS OF DIFFICULT ASCENT Counting fence 1.6km below Nilkitkwa Lake outlet.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- good spawning, well distributed between
CHINOOK	- Babine counting fence and the Nilkitkwa
COHO	- River -- a distance of approx 11.2 km.
CHUM	- " " "
PINK (ODD YEAR)	- " " "
PINK (EVEN YEAR)	- " " "
STEELHEAD	- " " "

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1948 - Numerous large fish all species. Counting fence partially washed-
1968,69,70 Good sports fishery. out.
1951 Indian Food Fishery for chinook. Above and below counting fence late
spawners caused minor disturbance of eggs deposited earlier in the season.
1953 Heavy concentration of silt.
1954 High water hampered observation.
1973 Silting due to road construction.
Subject to seasonal fluctuations in water levels.
Predators: gulls, ducks, bear, eagles and other birds.



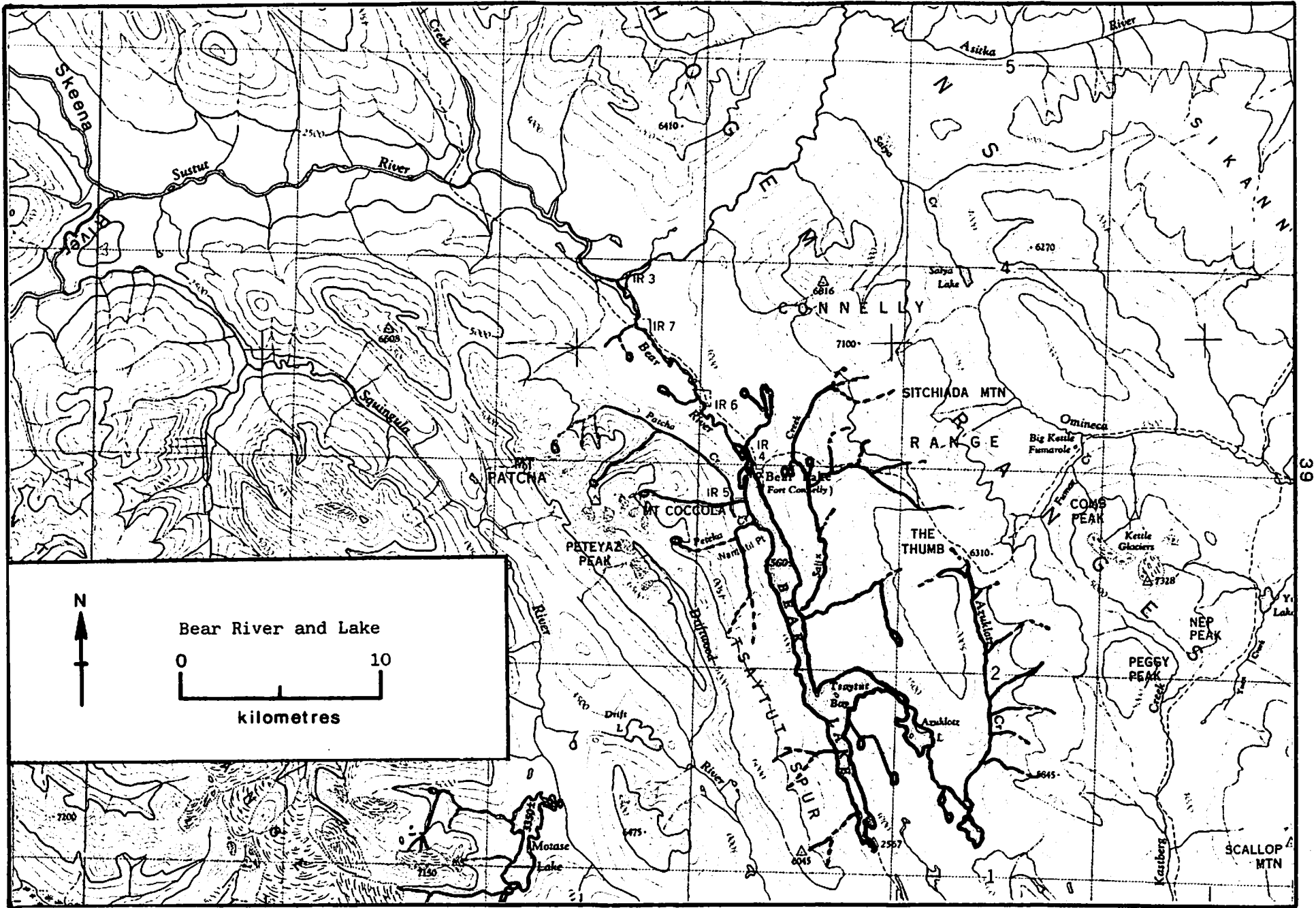
ESCAPEMENT RECORD FOR LOWER BABINE RIVER
(Area 5 - Below Counting Weir)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48	150,000	2,000	2,000		130,000	OBS
49						
50						
51	12,000	2,000	400		50	OBS
52						
53		2,000	OBS		2,500	OBS
54		1,000	500		1,000	OBS
55		3,000	1,500		3,000	
56		500	500		700	
57		1,200	700		2,500	300
58		2,000	1,000		20,000	200
59		2,500	3,000	100	20,000	500
60		1,000	500	100	2,500	400
61		500	800		20,000	
62		1,000	1,200	OBS	3,000	OBS
63		400	600		4,000	600
64		300	400		2,000	OBS
65	2,000	300	300		1,800	
66		150	500		1,000	300
67		200	400		500	
68		200	600		400	600
69		200	500		500	
70		150	500		10,000	
71		300	600		5,000	
72		100	N/O		2,000	N/O
73		200	N/O		20,000	1,200
74		500	N/O		N/O	N/R
75		200	N/R		100,000	
76		25	N/R		15,000	
77						
78		12	N/R		15,000	
79						
80	8,175	918			326,451	18
81	34,300	300			100,000	-
82						
83						
84						
85						

TIMING:

ARRIVE		Aug	Sept		E Sept	L Aug
START	Aug-M Sept	M Aug-E Sept	E Oct	E Sept	E Sept	Sept-E Oct
PEAK	Sept-E Oct	L Aug-L Sept	L Oct	M-L Sept	M Sept	L Sept-L Oct
END	Sept-L Oct	L Sept-E Oct	Nov	L Sept	L Sept	L Nov

REMARKS N/R - No Record



NAME OF STREAM BEAR LAKE
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Head of Bear River, W. of Connelly Range, Cassiar Dist.
 POSITION 56 126 SW
 LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	-scattered on the beach and in deep water -- spawning at various
CHINOOK	-Patcha and Petaka Creeks points around lake and
COHO	-in lake and Salix Creek upper end N. and N.W.
CHUM	sections identified
PINK (ODD YEAR)	on sketch map.
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1951 - Small sockeye run unexplained. Many fish arrived on the spawning grounds in advanced condition and exhausted.
1952 - More lake spawners observed than originally estimated.
1953 - Significant beach spawning though accurate assessment hampered by turbid water.
1954/55 - High water restricted observation of beach spawning sockeye.
1956/57 - High winds hampered inspection.
1957/58 - Coho and sockeye spawn in the lake. If Salix and Azuklotz creeks are low, fish will lake spawn.

(cont'd)

continued.

GENERAL REMARKS BEAR LAKE.

1962 - With the exception of years 1951 and 1960-61, this would appear to be a very light return. Beginning with a four year brood stock of 5,000 -10,000 there is a severe reduction of adult returns to this lake--with no apparent reason. No adverse lake or stream conditions have been encountered.

1967,68 Weather prevented complete assessment of spawning runs.

1973 Some siltation resulting from rail grade in Salix Creek.

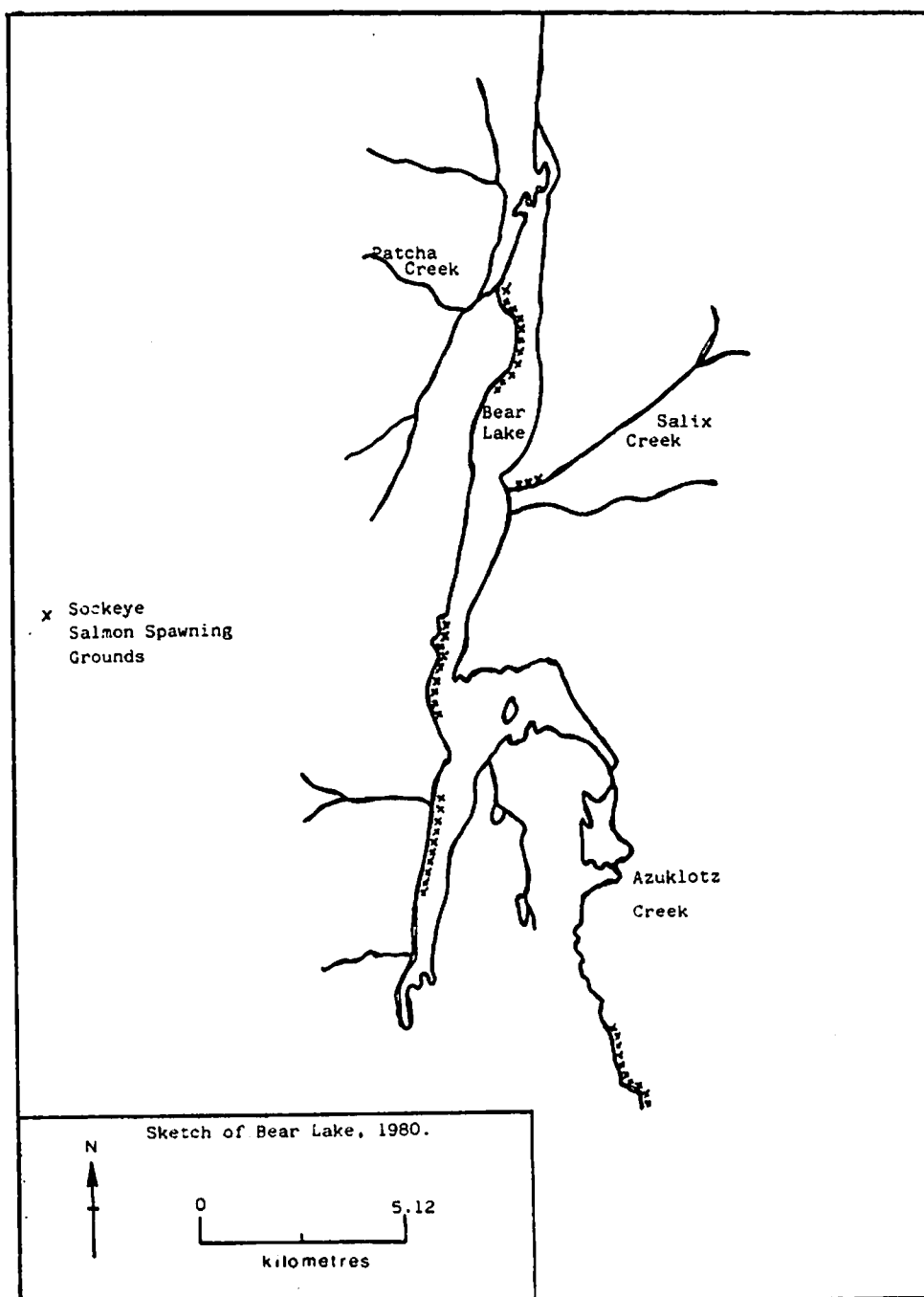
1980 2030 sockeye taken from lake.

150 sockeye " " Salix Creek.

700 sockeye " " Azuklotz Creek.

Seasonal fluctuations in water levels.

Predators: Eagles, other birds and bears.



ESCAPEMENT RECORD FOR BEAR LAKE

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49	11,000					
50	15,000		few			
51	500		-			
52	15,000		N/O			
53	9,000		75			
54	9,000		N/O			
55	4,500		UNK			1
56	7,500		UNK			UNK
57	7,500		UNK			UNK
58	7,500		N/I			
59	1,500		200			
60	200		750			
61	500					
62	500		UNK			
63	500					
64	450					
65	500					
66	300					
67	500					
68	500					
69	N/R					
70	500	1,000	100			
71	200	400				
72	3,500	100				
73	5,000	400	500			
74	N/O	N/O	N/O			
75	50		50			
76	N/R		N/R			
77	N/O		N/O			
78	50					
79	N/O	N/O	N/O			
80	N/O	N/O	N/O			
81	70					
82	N/O					
83						
84						
85						

TIMING:

ARRIVE		Aug				
START	Aug-M Sept	E Sept	Sept			
PEAK	M Sept-E Oct	M Sept	Sept-Oct			
END	L Sept-L Oct	E Oct	Oct-Nov			

REMARKS N/R - No Record, N/I - Not Inspected

Stream: Babine River - Sect. 1 (upper)

Year	Species:	Sockeye	Pink	Chum	Coho	Chinook
		Obs.	N/O	Obs	Obs	Obs
1947						
1948		50,000			Obs	Obs
1949		50,000		0	Obs	Obs
1950		40,000			No count	
1951		5,000				
1952		15,000			750	
1953		40,000			150	
1954		40,000			20	
1955		8,000			400	
1956		20,000			200	
1957		40,000			500	
1958		50,000			500	
1959		45,000			300	
1960		9,000			150	
1961		70,000			750	
1962		70,000			200	
1963		36,900			200	
1964		80,000			200	
1965		40,000			Obs.	
1966		20,000			150	
1967		35,000			300	
1968		50,000			250	
1969		200,000			500	
1970		130,000			600	
1971		183,000			800	
1972		84,000			600	
1973		68,000			1000	
1974		80,219				
1975		92,000			4000	
1976		127,159				
1977		121,232				
1978		32,915				
1979		272,555				
1980		150,640				
1981		70,000				
1982		94,647				
1983		74,000			1	648 (408 Jacks)
1984						

BABINE river section 2 (Bridge sect.)

Year	Species:	Sockeye	Pink	Chum	Coho	Chinook
1947		Obs	Obs	Obs	Obs	Obs
1948		80,000			Obs	Obs
1949		100,000			1,000	
1950		50,000			SEVERAL HUNDRED SEEN	Obs
1951		7,000				
1952		35,000			1500	
1953		60,000			500	
1954		55,000			200	
1955		4,000			200	
1956		25,000			400	
1957		50,000			400	
1958		60,000			1,000	
1959		70,000			900	
1960		20,000			350	
1961		80,000			1000	
1962		80,000			350	
1963		55,350			350	
1964		95,000			450	
1965		50,000			300	
1966		30,000			250	
1967		55,000			350	
1968		70,000			200	
1969		91,000			500	
1970		75,000			600	
1971		100,000			800	
1972		65,000			600	
1973		45,000			1000	
1974		63,310			2000	
1975						
1976						
1977						
1978						
1979						
1980						
1981						
1982						
1983						
1984						

Babine River section 3 (hatchery sect.)

Year	Species:	Sockeye	Pink	Chum	Coho	Chinook
1947		Obs	Obs	Obs	Obs	Obs
1948		85,000			Obs	Obs
1949		90,000			10,000	500
1950		40,000			SEVERAL HUNDRED SEED	
1951		8,000			200	
1952		35,000			3500	
1953		50,000			300	
1954		45,000			100	
1955		3,500			250	
1956		25,000			500	
1957		40,000			400	
1958		50,000			300	
1959		50,000			700	
1960		12,000			250	
1961		50,000			400	
1962		60,000			900	
1963		49,200			350	
1964		75,000			200	
1965		30,000			200	
1966		20,000			200	
1967		45,000			300	
1968		65,000			250	
1969		120,000			500	
1970		29,000			600	
1971		38,000			800	
1972		40,000			600	
1973		40,000			1000	
1974		60,000			2000	
1975						
1976						
1977						
1978						
1979						
1980						
1981						
1982						
1983						
1984						

Babine River section 4 (Above Weir)

Year	Species:	Socketeye	Pink	Chum	Coho	Chinook
		Obs	Obs	Obs	Obs	Obs
1947						
1948		150,000	130,000		2000	2000
1949		150,000	29,000	5	6000	7000
1950		145,000	44,000	7	3500	7000
1951		12,000	50		400	2000
1952		75,000	3500		1500	3500
1953		130,000	1000	17	500	8000
1954		100,000	4500	50	500	6000
1955		15000	2000		2000	3200
1956		55000	2500	3	1500	4000
1957		70,000	25000	15	800	6000
1958		110,000	6500	10	2000	8000
1959		130,000	56000	20	2500	9000
1960		60,000	4500	6	800	2500
1961		175,000	70,000		1500	2500
1962		75,000	37,000	23	2,500	3000
1963		55,350	90,000	25	500	3000
1964		48,000	35,000		450	3000
1965		120,000	67,000		500	3000
1966		114,000	46,000		500	4100
1967		55,000	43,000		600	2000
1968		37,000	84,000		500	2050
1969		60,000	40,000	9	400	1300
1970		84,000	166,000	15	500	1500
1971		96,000	93,000	7	600	2500
1972		70,000	32,000	N/R	500	500
1973		40,000	110,000	6	1000	600
1974		35,000	17,850	2	2000	2376
1975		3,000	297,000		500	1000
1976		3,000	93,800		4400	563
1977		40,351	68,077		1044	619
1978		10,895	177,709		11,446	492
1979		19,770	55,702		2909	822
1980		8175	251,441		4209	918
1981		20,000	115,220		2,166	723
1982		34,300	280,342		2,222	600 (317 jacks)
1983		7,000	404,089		2,324	648 (408 jacks)
1984			69,422	3	2,956	1400 (322 jacks)

* Includes sockeye, actual since counts

Babine River section 5 (below weir)

Year	Species:	Sockeye	Pink	Chum	Coho	Chinook
1947						
1948						
1949						
1950						
1951						
1952						
1953			2,500		Few	2,000
1954			1,000		500	1,000
1955			3,000		1,500	3,000
1956			700		500	500
1957			2,500		700	1,200
1958			2,000		1,000	2,000
1959			20,000	100	3,000	2,500
1960			2,500	100	500	1,000
1961			20,000		800	500
1962			3,000		1,200	1,000
1963			4,000		600	400
1964			2,000		400	300
1965		2,000	1,800		300	300
1966			1,000		500	150
1967			500		400	200
1968			400		600	200
1969			500		500	200
1970			10,000		500	150
1971			5,000		600	300
1972			2,000		N/O	100
1973			20,000		N/C	200
1974			N/O		N/O	500
1975			100,000		N/R	200
1976			15,000		N/R	25
1977			8,000		N/R	100
1978			15,000			
1979			15,000		N/R	12
1980			75,000			
1981			15,000			
1982			100,000			300
1983			100,000			300
1984						

Babine Lake

Year	Species:	Sockeye	Pink	Chum	Coho	Chinook
1947						
1948						
1949						
1950		30,000				
1951		15,000				
1952		40,000				
1953		25,000				
1954						
1955						
1956						
1957						
1958		100,000				
1959						
1960						
1961		75,000				
1962		UNK				
1963		100,000				
1964		N/O				
1965		Obs				
1966		Obs				
1967		20,000				
1968		50,000				
1969		80,000				
1970		75,000				
1971		70,000				
1972		66,000				
1973		110,000				
1974		127,223				
1975		105,000				
1976		File missing				
1977		126,000				
1978		152,643				
1979		215,720				
1980		164,852				
1981		578,134				
1982		417,000				
1983		257,193				
1984						

BEAR RIVER

see

BEAR LAKE p. 40

1902

1903

1904

1905

1906

1907

1908

1909

1910

1911

1912

1913

Continued on p. 44

NAME OF STREAM BEAR RIVER
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows N.W. into Sustut River, Cassiar Dist.
 POSITION 56 126 SW.
 LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT Falls 4.0km from stream mouth. passable depending on water levels.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- upper river near Bear Lake outlet and old air strip.
CHINOOK	- below falls throughout lower 4.8 km below Bear Lake.
COHO	- above falls in upper river and tributary stream.
CHUM	- lower river
PINK (ODD YEAR)	- scattered in lower and upper middle river.
PINK (EVEN YEAR)	
STEELHEAD	

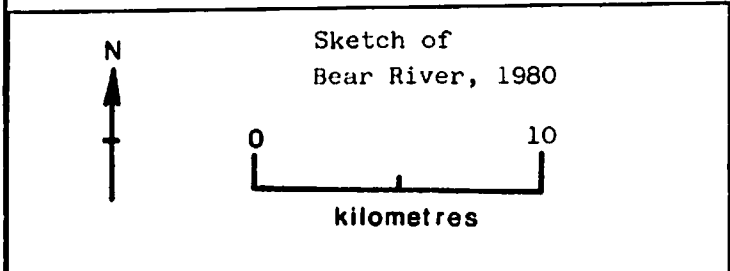
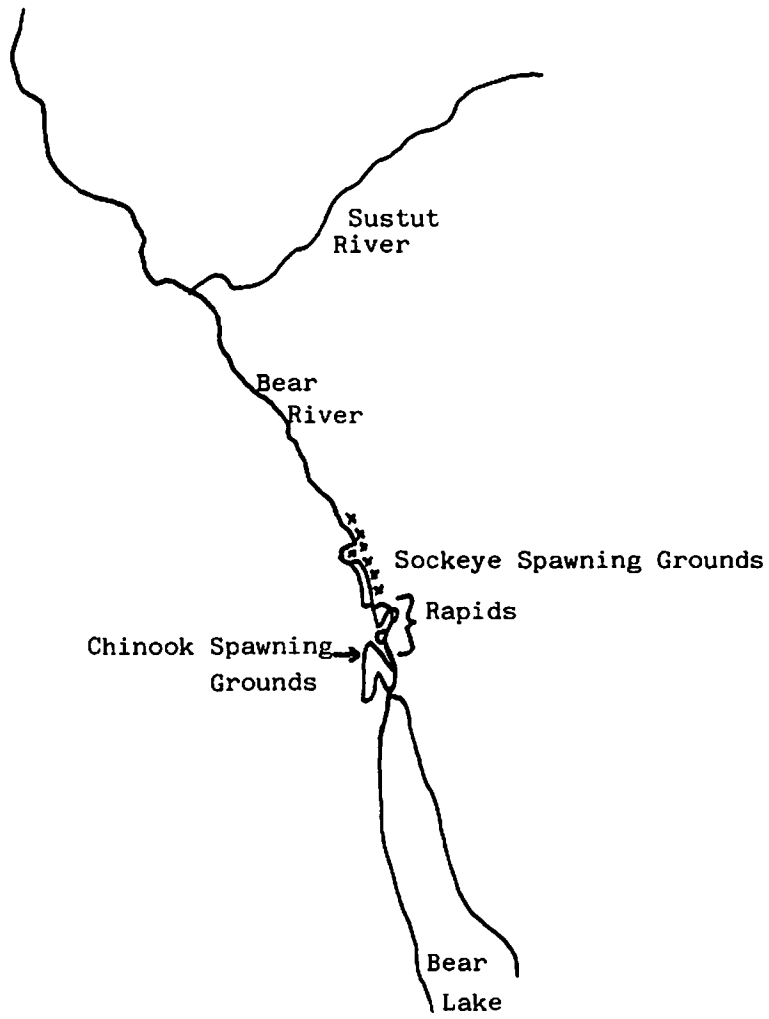
POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1951 Decline in chinook stocks unexplained,
1952 Native catch estimate 750 chinook, 300 sockeye, 200 coho.
1953 Not a heavy run for all species although springs showed up well and medium seeding should result. Native catch estimate 800 chinook, 500 sockeye.
1959 Good chinook and pink escapements due to fishermen's strike. Large chinook observed. 312 sockeye, 916 chinook and 84 pink taken under Indian food permit.
1960 Indian food fish catch was down because chinook spawned earlier than usual. Bear River Indians harvested 337 chinooks and 300 sockeye. Large sockeye observed.
1961 Two native families harvested the river this year.
1962 4000 Jack chinook showed up on spawning grounds.

(cont'd)

BEAR RIVER

- 1963 Good runs of chinook, sockeye coho and pinks. Fish in good condition.
- 1964 Spawning occurred earlier than expected and chinook run arrived in early August when water levels were high.
- 1967 Two Indian families took about 500 sockeye for food.
- 1968 Heavy sports fishery from Driftwood Lodge 69.
- 1970 P.G.E. Railroad enables Takla Indians to take fish from this system for food.
- 1971 Streambed affected by siltation and erosion from rail grade on lower river.
3% 1971, 10% 1972, 15% 1973.
- 1976 River bank slumping near old air strip in upper river region near Bear Lake outlet.
- 1977 Slumping affecting 30% of upper river area. B.C. Rail told to remove debris during May and June and no later than early July and to provide some form of bank stabilization at that point.
- 1978 Air strip slumping stabilized. No attempt by B.C.R. to remove slumping debris.
- 1982 High probability of coho, but river was not inspected during Sept. or Oct.



Sketch of
Bear River, 1980

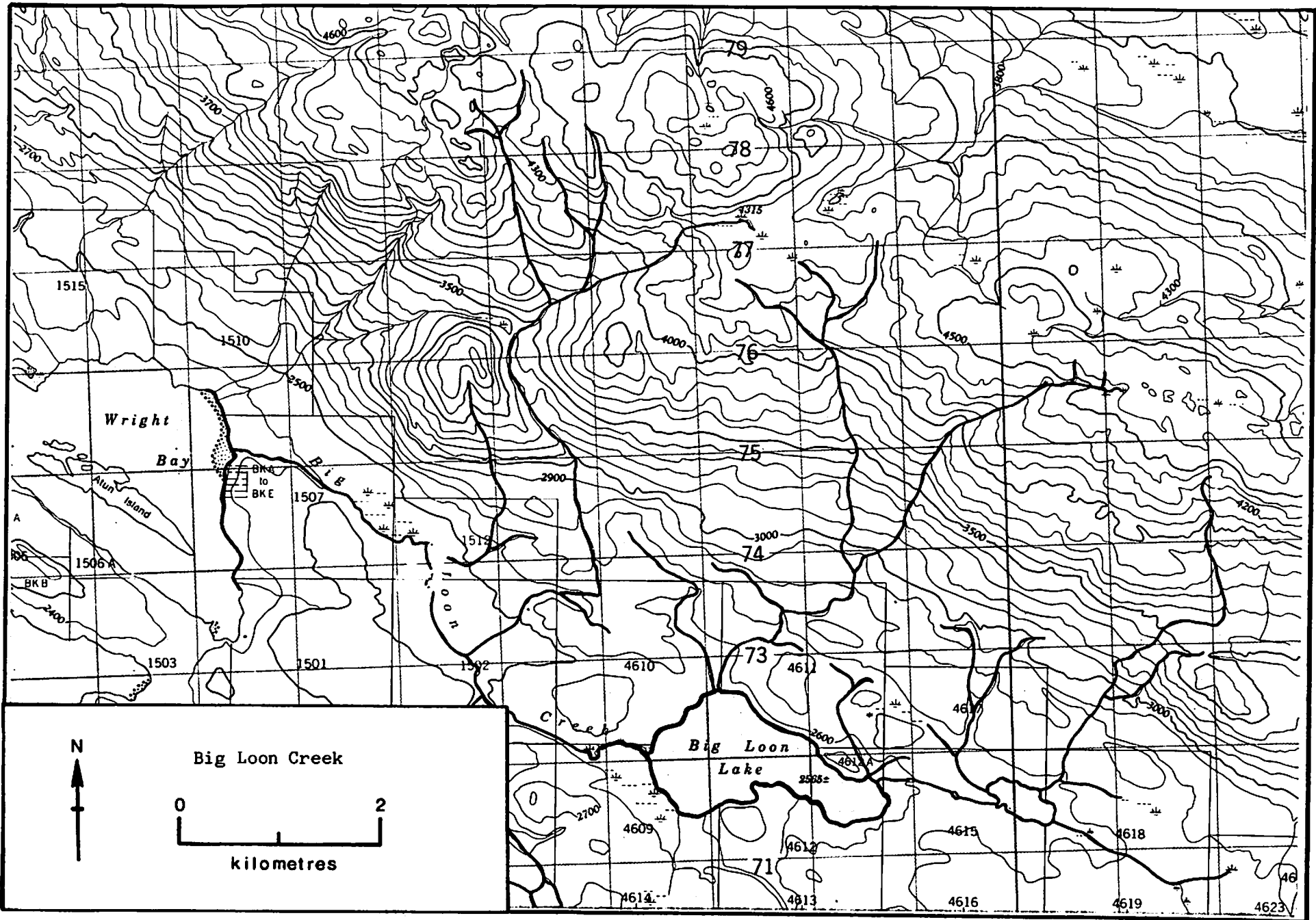
ESCAPEMENT RECORD FOR BEAR RIVER

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49	N/R	35,000	N/R		5,000	N/O
50						
51		4,000	few		2,506	
52		7,500	*200		7,500	few
53		10,000	750		1,500	400
54		12,000	500		1,500	N/O
55		20,000	N/R		6,000	N/O
56	200	15,000	N/R		N/O	N/R
57		7,500	N/R		15,000	750
58		15,000	1,500			400
59		75,000	400		35,000	
60		15,000	N/O		N/O	
61		4,000	1,200		3,000	
62	100	10,000	1,000			
63	4,000	8,000	2,000		15,000	
64	N/O	7,500	N/O			
65		1,500	1,000		2,000	
66	100	1,200	400			
67	250	5,000	500		200	
68	500	5,000	500		N/O	
69	N/R	2,000	300		200	
70	N/O	1,600	N/O		N/O	
71	N/O	800	N/O		N/O	
72	6,000	3,000	46			
73	600	8,900	500		400	
74	N/O	4,500	N/O		N/O	
75	250	1,500			1,000	
76	N/R	950			50	
77	800	1,800			N/O	
78	300	3,500			N/O	
79						
80	N/O	9,000	N/O		N/O	
81	N/O	5,100				
82		3,000				
83						
84						
85						

TIMING:

ARRIVE					
START	M Aug-E Sept	Aug-E Oct	Sept	Aug	E Aug-E Sept
PEAK	L Aug-M Sept	Aug-L Oct	Oct	Sept	M Aug-Sept
END	M Sept-Oct	Sept-L Nov	Nov	Sept	L Aug-Oct

REMARKS N/R - No Record, * seen passing through lake



Big Loon Creek

0 2

kilometres

NAME OF STREAM BIG LOON CREEK (Wright Creek)

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH Flows into Wright Bay, Rge. 5, Coast Dist.

POSITION 54 125 NW

LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____

SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

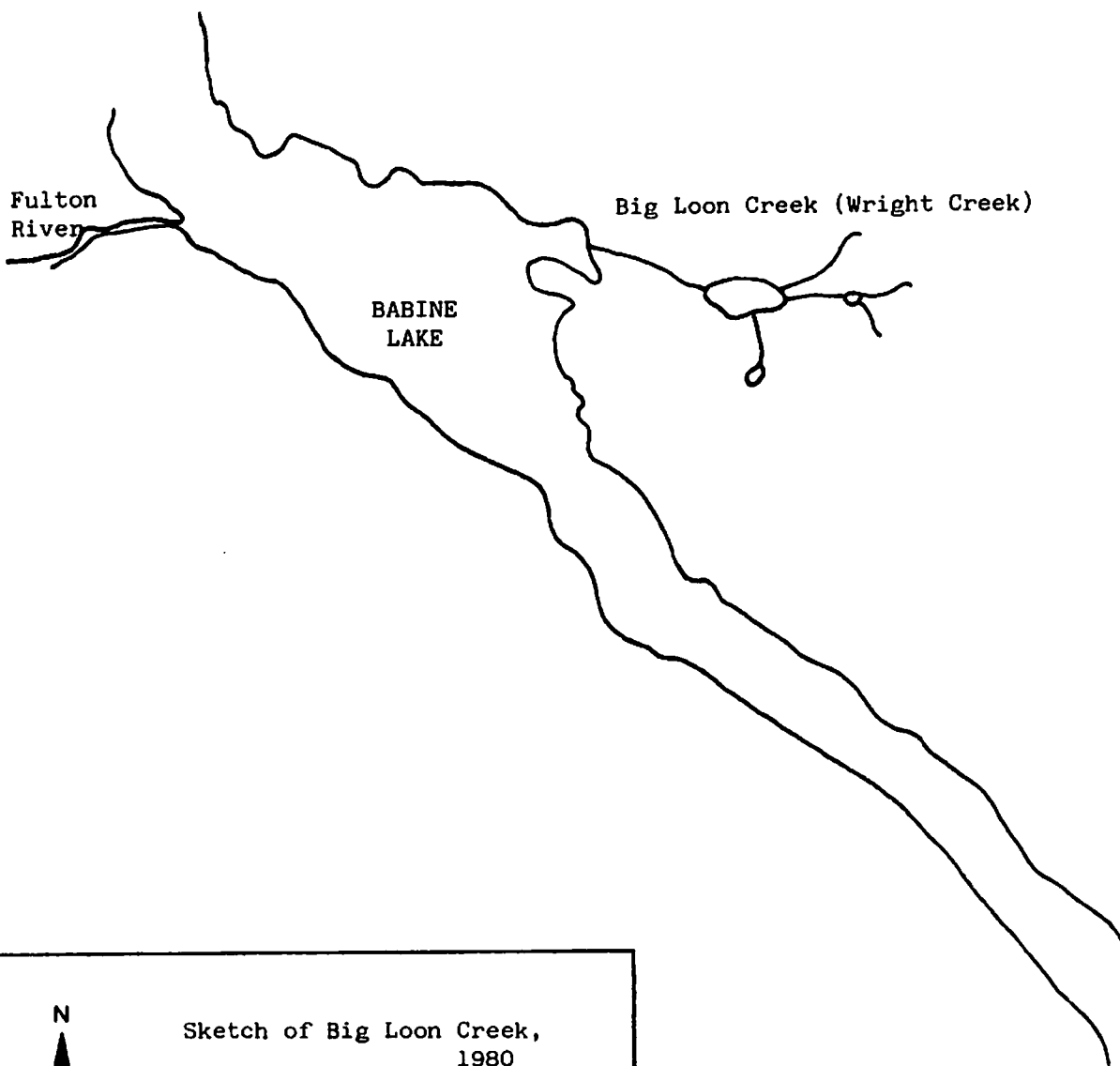
BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	3.2 km from mouth of stream (1959 report)
CHINOOK	
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS Last run 1959. Since then stream has been dry. Many windfalls throughout.



Fulton
River

Big Loon Creek (Wright Creek)

BABINE
LAKE



Sketch of Big Loon Creek,
1980



kilometres

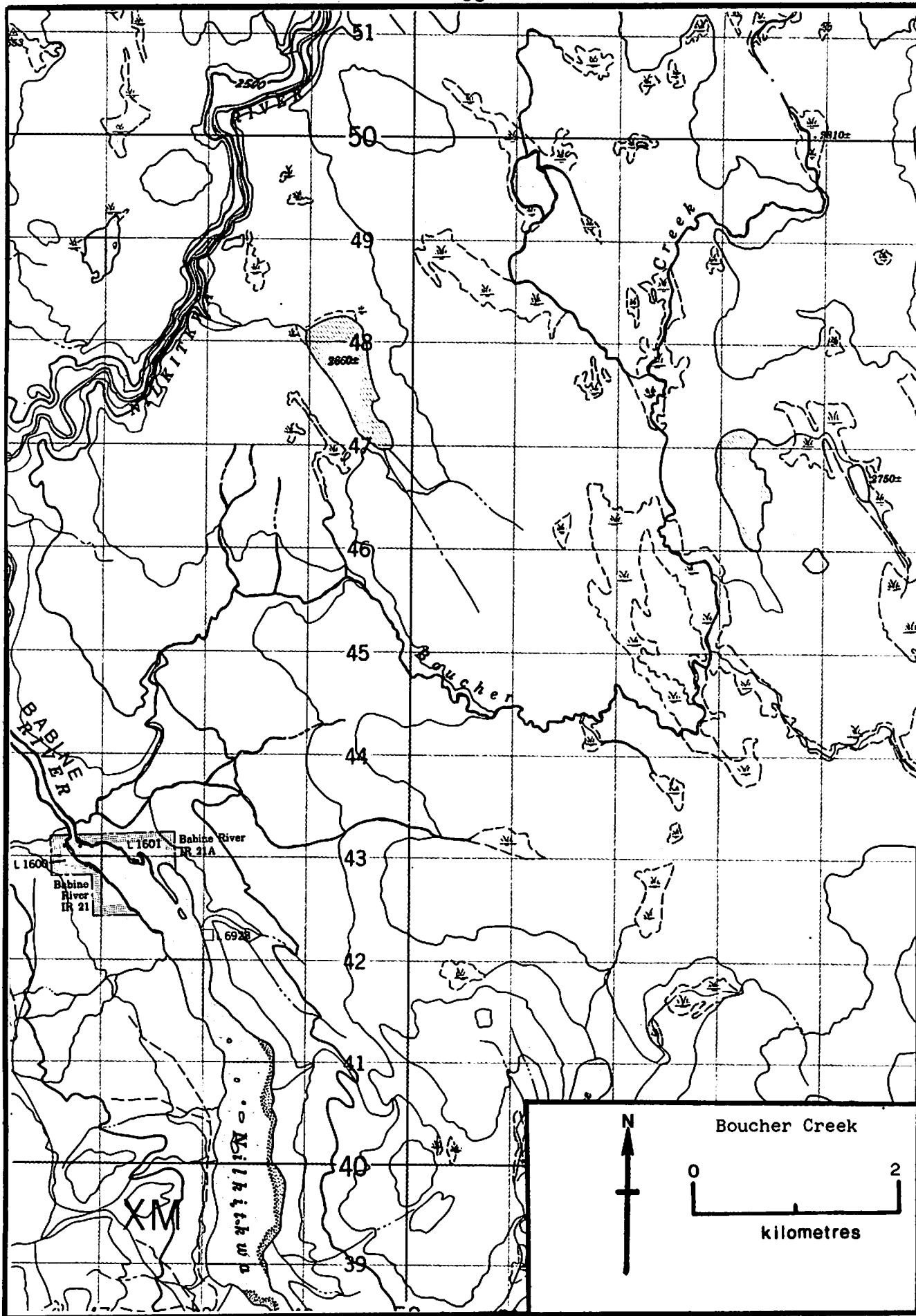
ESCAPEMENT RECORD FOR BIG LOON CREEK (Wright Creek)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59	800					
60	N/O					
61	N/O					
62						
63						
64						
65						
66						
67						
68						
69						
70						
71						
72						
73						
74						
75						
76						
77						
78						
79						
80	UNK					
81	N/I					
82	UNK					
83						
84						
85						

TIMING:

ARRIVE	E Aug					
START	Aug					
PEAK	M Aug					
END	Sept					

REMARKS N/I - Not Inspected



NAME OF STREAM BOUCHER CREEK (McDonald Creek)
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows S.W. into N. end of Nilkitkwa Lake. Cassiar Dist.
 POSITION 55 126 SW.
 LENGTH 1.6 km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

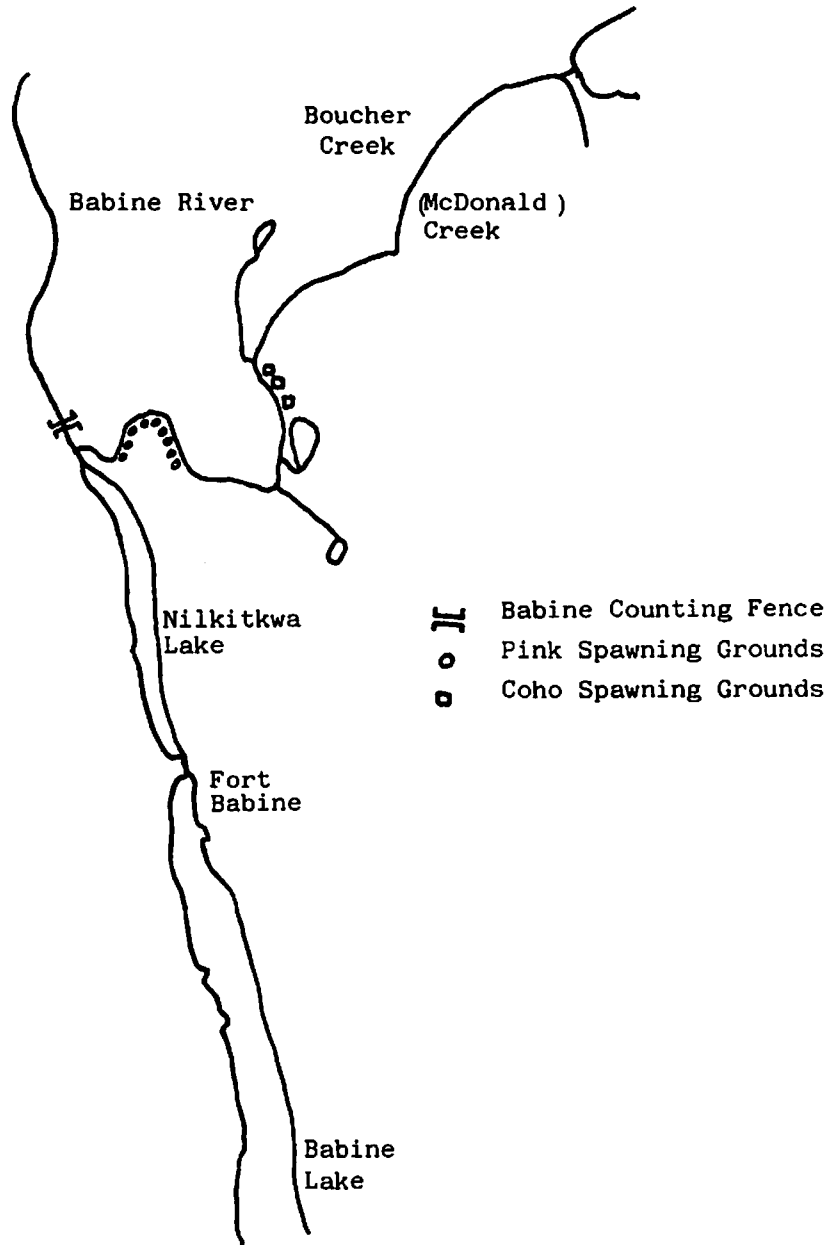
BARRIERS OR POINTS OF DIFFICULT ASCENT Accessibility dependent on flows.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- first 1.6km below swamp area
CHINOOK	- " " "
COHO	- " " "
CHUM	
PINK (ODD YEAR)	- " " "
PINK (EVEN YEAR)	- " " "
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1948 - 30% medium, 70% small pinks. Heavy rains washed pinks back into river. Small log jams but passable throughout.
1949 - Low water prevented salmon from entering the river.
1951 - Acidity of water suggested as possible reason for poor spawning escapements.
1952 - All sockeye died unspawned, 40% of soho died unspawned within first 1.6 km.
1953 - This stream is thought to be used by late spawners and Babine River overflow.
1954 - Rock slide 1.6 km from mouth but not restricting fish passage.
- Between 1960 and 1974 this creek was dry or had only low flows.
1978 - S.E.P. stream clearance crew removed log jams and debris to swamp area.
Subject to seasonal fluctuations in water levels. Utilized only in high flow
Predators: bears and birds. _____ years.



Sketch of
Boucher Creek, 1980



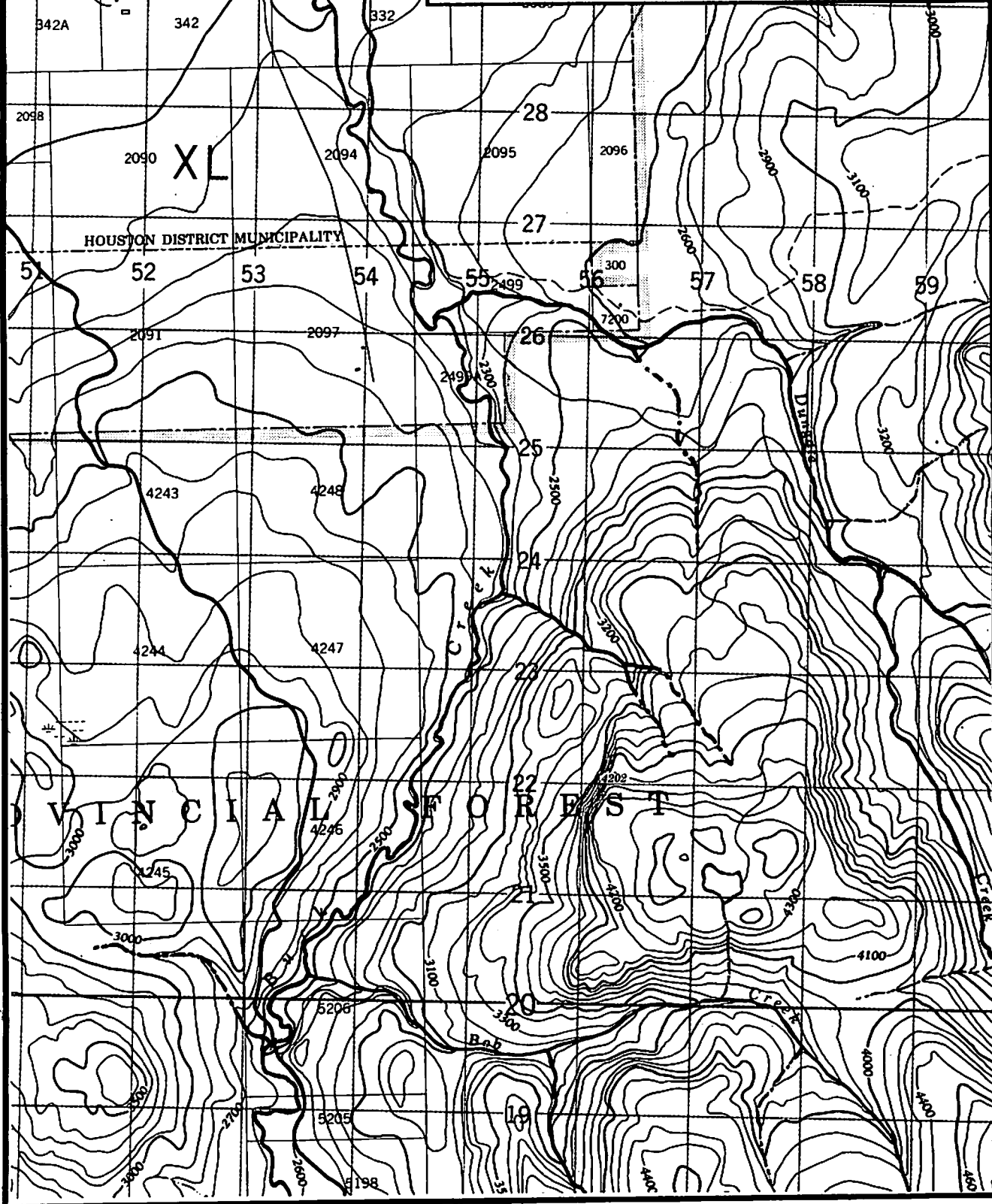
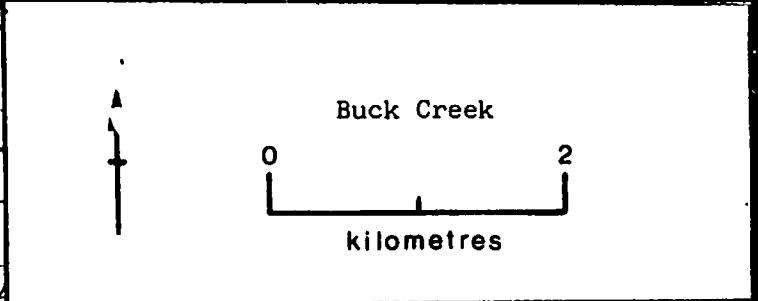
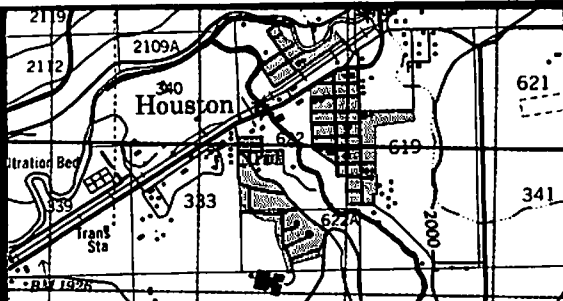
ESCAPEMENT RECORD FOR BOUCHER CREEK (McDonald Creek)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947	8	2	50			
48	50		150		500	
49	N/O	N/O	N/O			
50						
51						
52	400		75			
53	4,000		100			
54	400		75			
55			100			
56						
57			200			
58						
59			100		500	
60						
61						
62						
63					400	
64					800	
65						
66						
67			610		120	
68					300	
69			N/R		100	
70			N/R		N/R	
71			N/R		N/R	
72			N/R		N/R	
73	N/R					
74	N/R					
75	N/R		N/R		N/R	
76					200	
77		10	200		300	
78	6	10	250		760	
79						
80	UNK	UNK	UNK		UNK	
81	UNK	UNK	UNK		UNK	
82	UNK	UNK	UNK		UNK	
83						
84						
85						

TIMING:

ARRIVE						
START						
PEAK						
END						

REMARKS N/R - No Record



NAME OF STREAM BUCK CREEK

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH Flows N. into Bulkley River, Rge.5, Coast Dist.

POSITION 54 126 SW.

LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____

SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT

- _____ Falls 9.75 km from stream mouth
- _____ Gravel removal for lower 4.8 km.
- _____ Cascades in canyon approx. 5 km. from mouth. passable with good
- _____ Heavy log jams throughout canyon area and above. _____ water levels.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	- 1st. 3.2 km. when present
COHO	- very scattered below falls in riffle areas, near Buck Flats.
CHUM	
PINK (ODD YEAR)	- near mouth
PINK (EVEN YEAR)	- " "
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

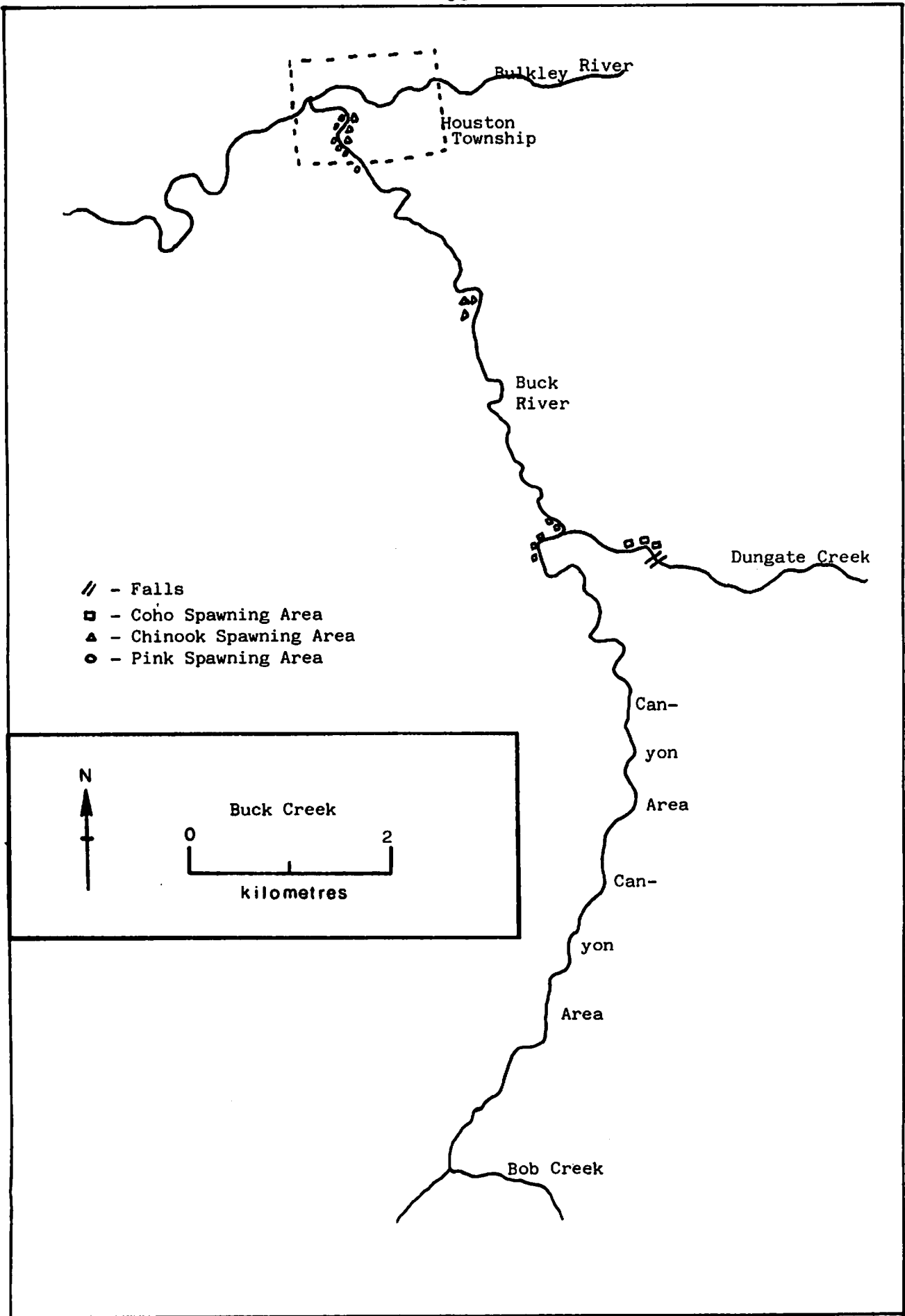
GENERAL REMARKS 1967 - Ditching by Houston Village, C.N.R. and Sawmill has altered character of lower river.

1970 - Houston Municipality cleaned out river and rip-rapped banks through built up area of town. Banks stabilized; silting minimized.

1976 - River diverted at estuary to cut out bad horseshoe bend.

1980 - Erosion, silting and scouring in lower river. Silt from mining road affecting 10% of river below Dungate.

Predators: Some loss of fish from bear in upper area and juveniles in Houston Village. Heavy beaver activity in upper river.



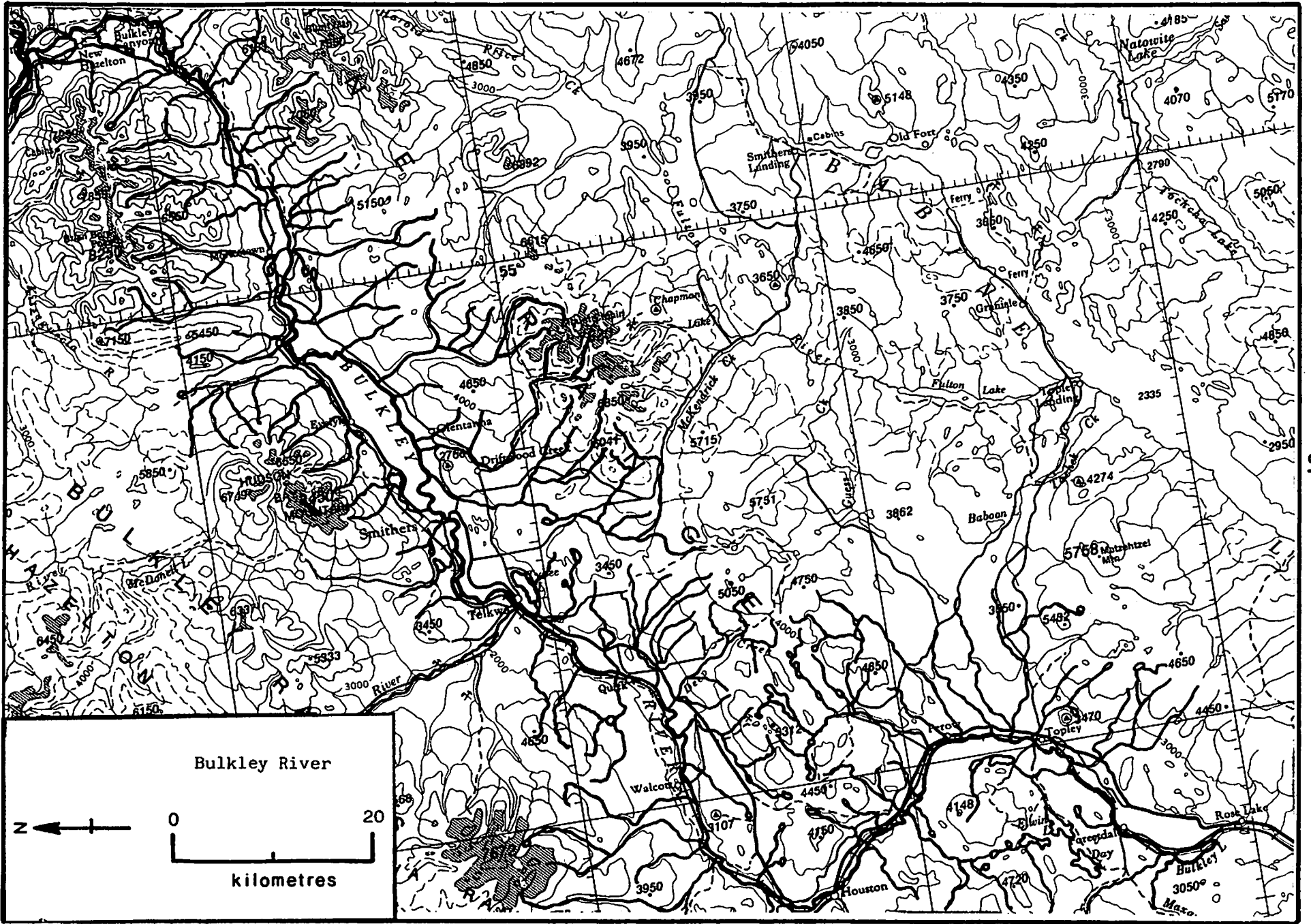
ESCAPEMENT RECORD FOR BUCK CREEK

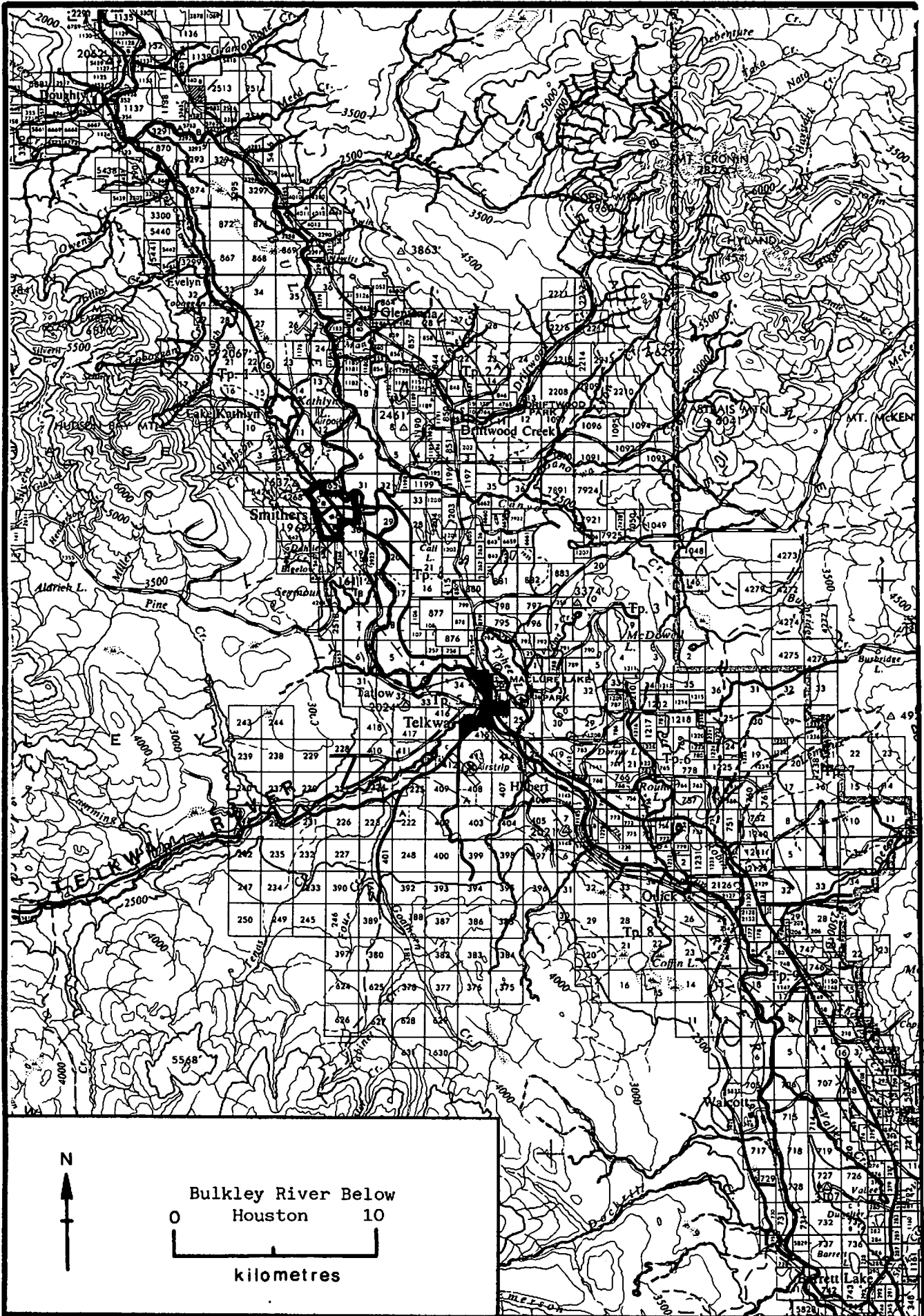
YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48			few			
49			N/O			
50						
51			300			
52			200			
53			300			
54			N/R			
55			60			
56			75			
57			75			
58			200			
59			200			
60			200			
61						
62			500			
63			400			
64			600			
65			200			
66			200			
67			200		100	
68			200			
69			300		N/O	
70		50	300			
71		N/O	300			
72		25				
73		N/O	N/O		N/O	
74		N/O	N/O		N/O	
75		N/O	150		N/O	
76		N/R	200		N/R	
77		N/O	250		N/R	
78		N/O	200		N/O	
79						
80		N/O	N/O		N/O	
81		N/O	N/O		N/O	
82		12	50			
83						
84						
85						

TIMING:

ARRIVE	Aug	Sept			
START	E Sept	Sept-M Oct		Aug	
PEAK	M Sept	Sept-L Oct		Aug	
END	L Sept	E-L Nov		Sept	

REMARKS N/R - No Record





NAME OF STREAM BULKLEY RIVER (Below Morice River)
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows N.W. into Skeena River at New Hazelton. Cassiar Dist.
 POSITION 55 127 SW.
 LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25
 0.25 - 0.50
 0.50 - 0.75
 0.75 - 1.00
 > 1.00

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

Moricetown Canyon difficult to negotiate under low flow conditions until 1951 when fishway completed.

Hagwilget canyon obstruction removed in 1959 and allow salmon to pass right through.

1956 Beaver dams prevented coho from reaching upper river spawning grounds.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- Maxan Lake
CHINOOK	- Morice River estuary near Houston
COHO	- widely scattered throughout river and in upper Bulkley River
CHUM	
PINK (ODD YEAR)	- widely scattered throughout River below Moricetown Canyon
PINK (EVEN YEAR)	- on gravel bars between Morice R. and Buck Creek. in back
STEELHEAD	and side channels and mainstem riffles.

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

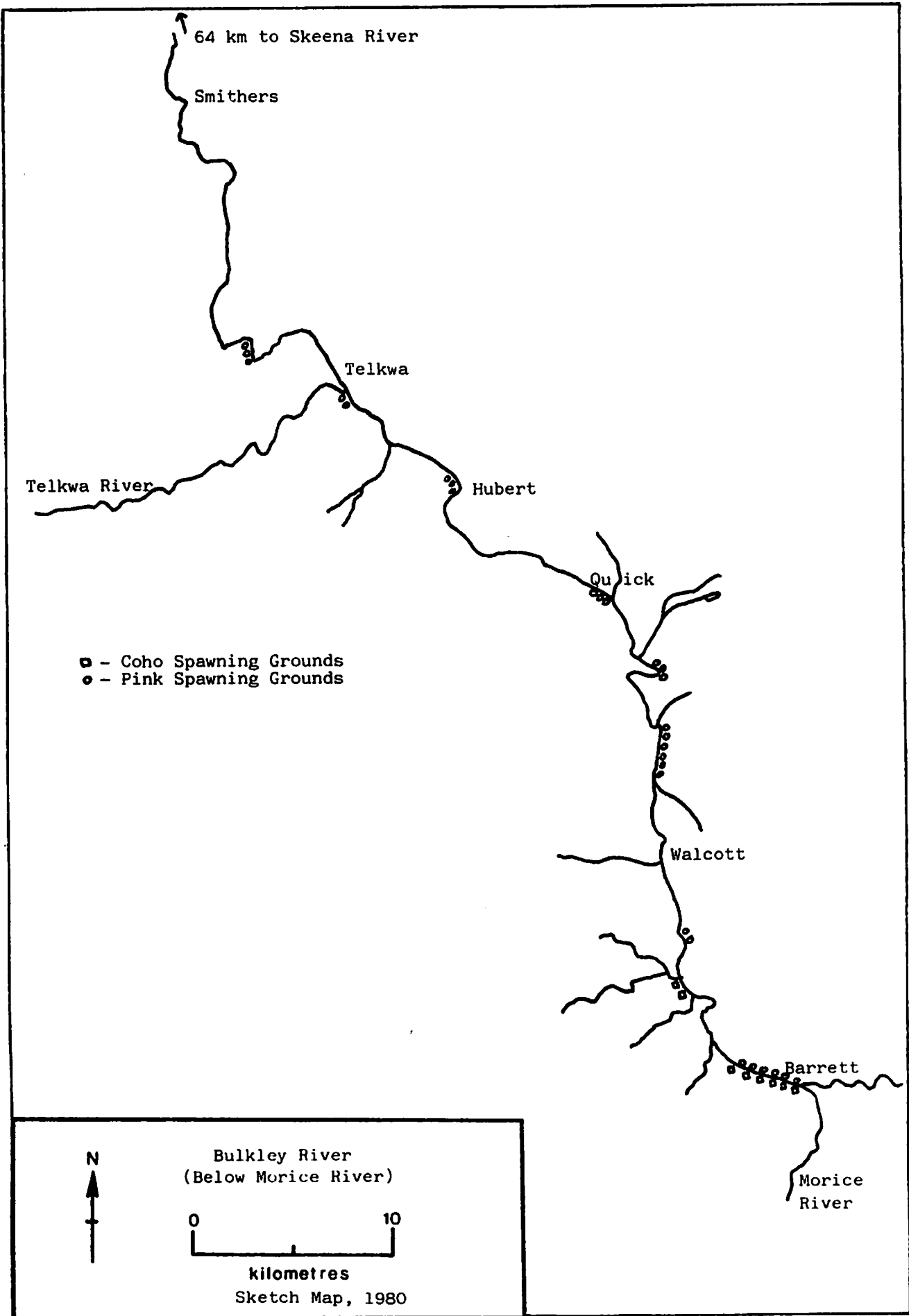
GENERAL REMARKS This section of river supports a heavy sports fishery and Indian food fishery.

1953 - Good steelhead runs resulted from Smithers Rod and Gun club hatchery at Kathlyn Lake.

1980 High pink escapement probable. Undetermined numbers of fish caught in Moricetown food fishery. Houston juveniles jig for chinook and coho.

1982 Probable that springs, coho and steelhead use section between Driftwood Creek and Trout Creek.

Predators: eagles and bears.



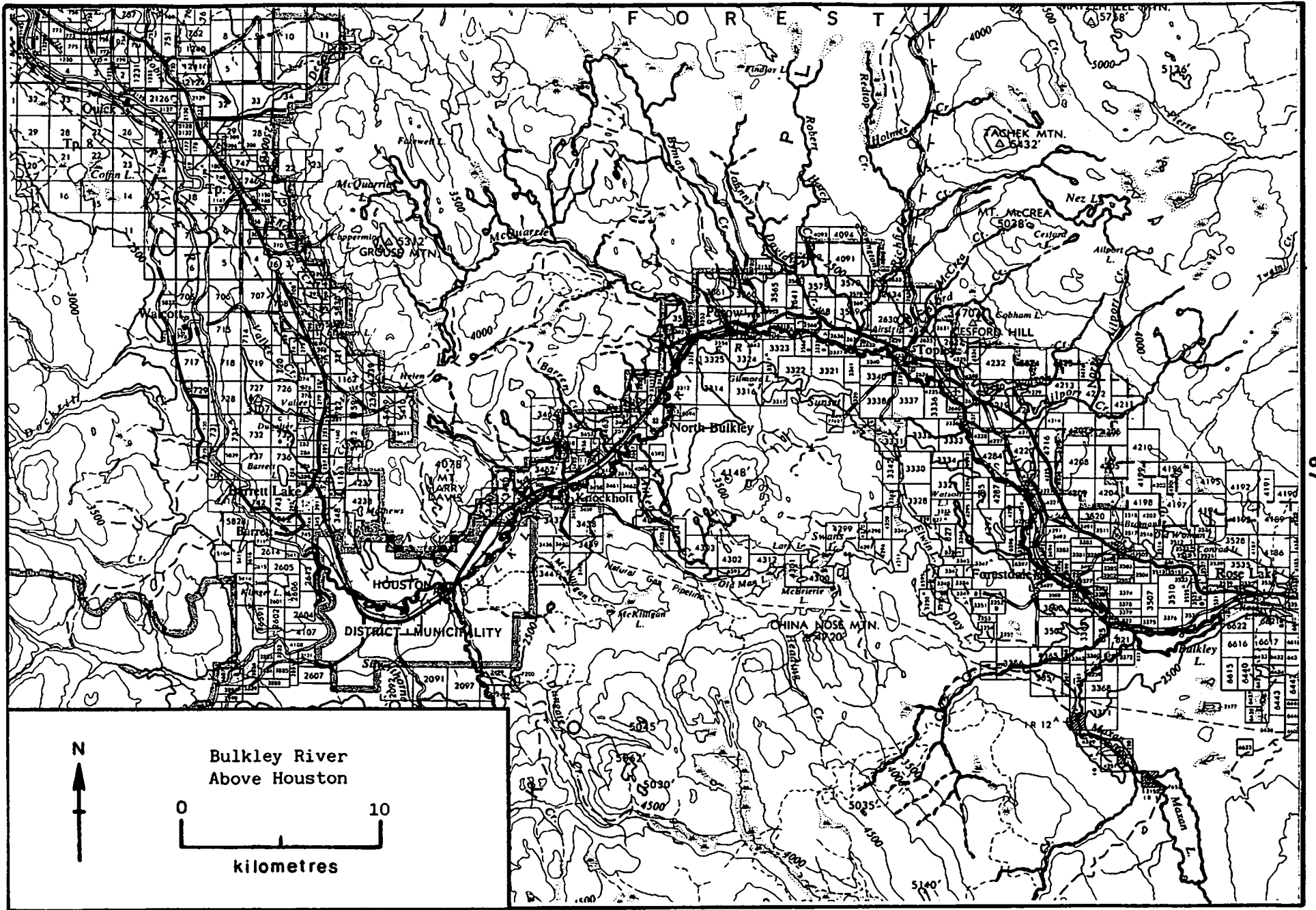
ESCAPEMENT RECORD FOR BULKLEY RIVER (below Morice River)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947	OBS	OBS	OBS	OBS	OBS	OBS
48						
49	1,500				1,500	
50						
51	1,500	OBS	OBS		750	OBS
52	400	OBS	OBS		1,500	OBS
53	750	OBS	OBS		1,500	3,500
54	750	OBS	1,500		750	750
55	75		3,000		3,000	500
56	N/O		3,500		750	1,500
57	N/O		1,500		400	1,500
58			3,500		400	750
59			N/O		400	750
60			3,500		400	N/O
61			1,500		400	
62			N/O		N/O	
63			5,000		10,000	
64			50		2,000	
65		300	700		500	
66		400	2,000		1,000	
67		500	1,200		200	
68		400	2,000		350	400
69		50	1,500		500	
70		100	1,600		3,500	
71		100	300		400	
72		70			1,500	
73		75	1,000		500	
74		N/O	N/O		200	
75	N/O	34				
76		N/O	N/O		200	
77		350	N/O		2,000	
78		500	N/O		300	
79						
80		N/O	N/O		N/O	
81	UNK	UNK	UNK		UNK	
82	UNK	UNK	UNK		UNK	
83						
84						
85						

TIMING:

ARRIVE		L July-E Aug		Aug	
START	E Sept	L July-Sept	E Aug	E Aug-Sept	L Oct
PEAK		L Aug-Sept	L Aug-E Nov	M Aug-L Sept	Nov
END		M-L Sept	Sept-E Dec	L Aug-L Sept	M Dec

REMARKS



NAME OF STREAM BULKLEY RIVER (Above Morice River)

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH Flows N.W. into Skeena River at Hazelton

POSITION 55 127 SW.

LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____

SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT Falls between Topley and Forestdale.

Log jams and numerous beaver dams throughout.

1949/50 Suggest installing fishway at falls.

1952 Low water prevented late spawners from getting past falls.

1955 Beaver activity causing problems. Several dams removed, but soon rebuilt.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- to Maxan and Bulkley Lakes
CHINOOK	- scattered to falls and above.
COHO	- between Forestdale to just before mouth of Maxan Lake
CHUM	
PINK (ODD YEAR)	- scattered to Bulkley Falls from Houston to Topley.
PINK (EVEN YEAR)	- " " "
STEELHEAD	- smaller creeks

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS This river frequently changes course for various reasons. Some

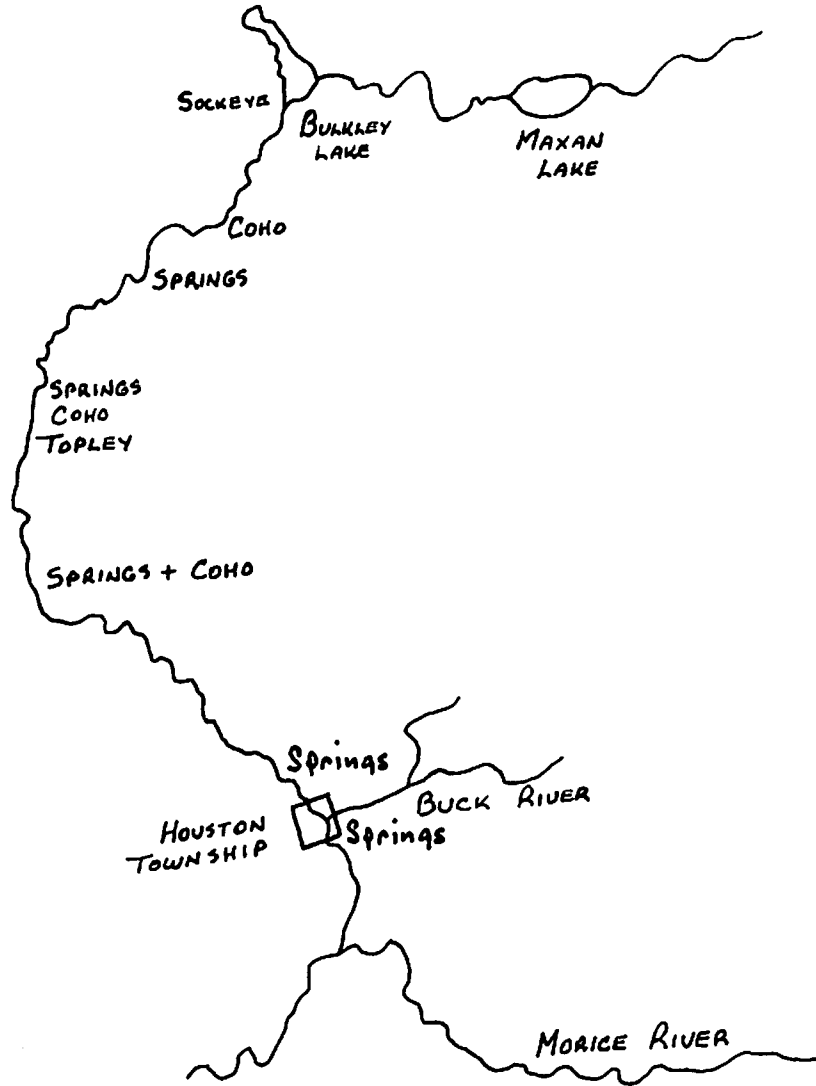
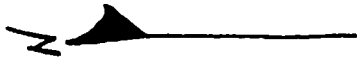
bank erosion between Bulkley Falls and Houston, 35% reported in 1973.

Seasonal fluctuations in water levels effect fish passage.

Moderate sized gravel 10-15cm deep -- clay bottom.

Very heavy beaver activity -- dams removed to assist migration. Good sports

fishing area.



SKETCH OF BULKLEY RIVER
(ABOVE HOUSTON), 1970

Sketch of Bulkley River (Above
Morice River), 1970



kilometres



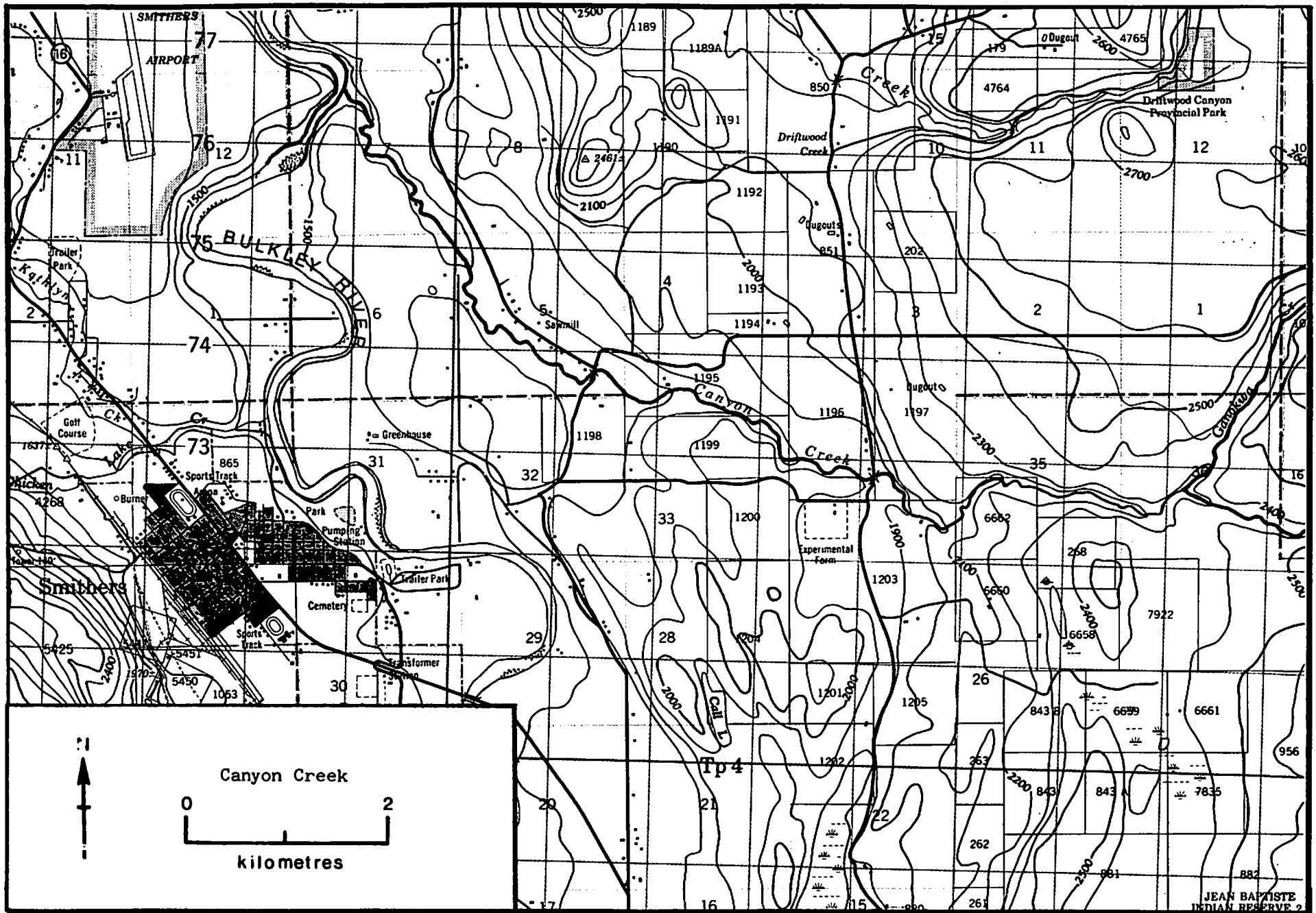
ESCAPEMENT RECORD FOR BULKLEY RIVER (above Morice River)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947	75		200			OBS
48		*400	*1,575			OBS
49			2,500			OBS
50						
51		750	3,500			OBS
52		750	3,500		OBS	
53		800	7,500		100	
54		1,500	7,500		N/O	N/O
55		900	5,000		N/O	N/O
56		1,500	7,500		N/O	N/O
57		200	750		N/O	N/O
58		200	1,500			
59		400	3,500			
60	200	750	3,500			
61						
62	400	1,500	2,500			
63	600	2,000	300			
64	300	2,000	200			
65	100	800	500			
66		300	1,000		50	
67		200	600		250	
68		125	1,000		150	
69		1,200	1,500		200	
70	50	150	600			
71	N/O	100	600		100	
72	300	55	2,500		450	
73	300	850	1,000		500	
74	200	N/O	200		N/O	
75	64	500	28		N/O	
76	N/O	15	22		N/R	
77	200	250	280		N/R	
78	50	400	1,200		N/R	
79						
80		500				
81	N/O	250				
82		100	UNK			
83						
84						
85						

TIMING:

ARRIVE	E Aug	E Aug	Aug		
START	E Aug-E Sept	E Aug	Aug-L Oct		Aug
PEAK	L Aug-M Sept	M Aug-E Sept	Sept-E Nov		Aug-Sept
END	L Aug-L Sept	E-M Sept	Oct-M Dec		Sept

REMARKS *Chinook and coho were large with the exception of some jacks.



NAME OF STREAM CANYON CREEK (Cass Creek, Carr Creek)
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows N.W. into Bulkley River, Rge. 5, Coast Dist.
 POSITION 54° 127° NE.
 LENGTH 3.2 km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25

0.25 - 0.50

0.50 - 0.75

0.75 - 1.00

> 1.00

WETTED AREA _____ m² SPAWNING AREA _____ m²DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

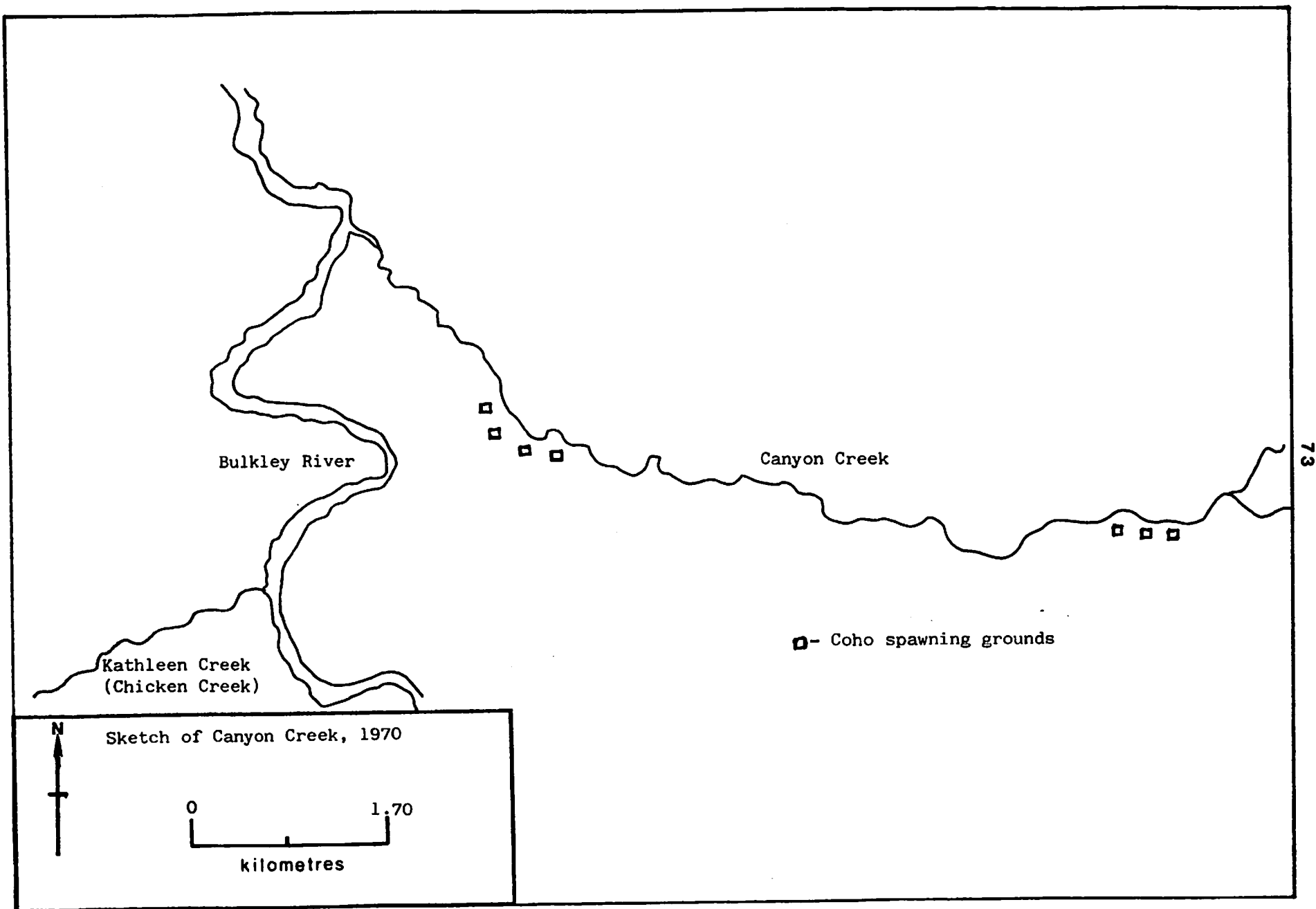
BARRIERS OR POINTS OF DIFFICULT ASCENT A few passable log jams and beaver dams which cause problems only during low flows.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	
COHO	- upper river, scattered over 3.2 km, odd pair in lower riffles.
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1948,49 Spawning covers large area and fish difficult to see.
1951 - Impossible to estimate numbers of spawners during inspection due to ice.
1952 - Low water delayed upstream migration beyond inspection period.
1953 - High flows hampered enumeration.
1958 - If beaver activity increases stream clearance may be required.
1961 - Hot dry summer caused stream to dry up.
1964 - Higher flows thought to be responsible for good escapement.
1965 - Slight scouring in lower creek.
Subject to seasonal fluctuation in water levels.
Predators: bear.
1962 - Small log and beaver jams throughout stream--a consequence of low water levels.
spawning stocks very limited under these conditions. 63.



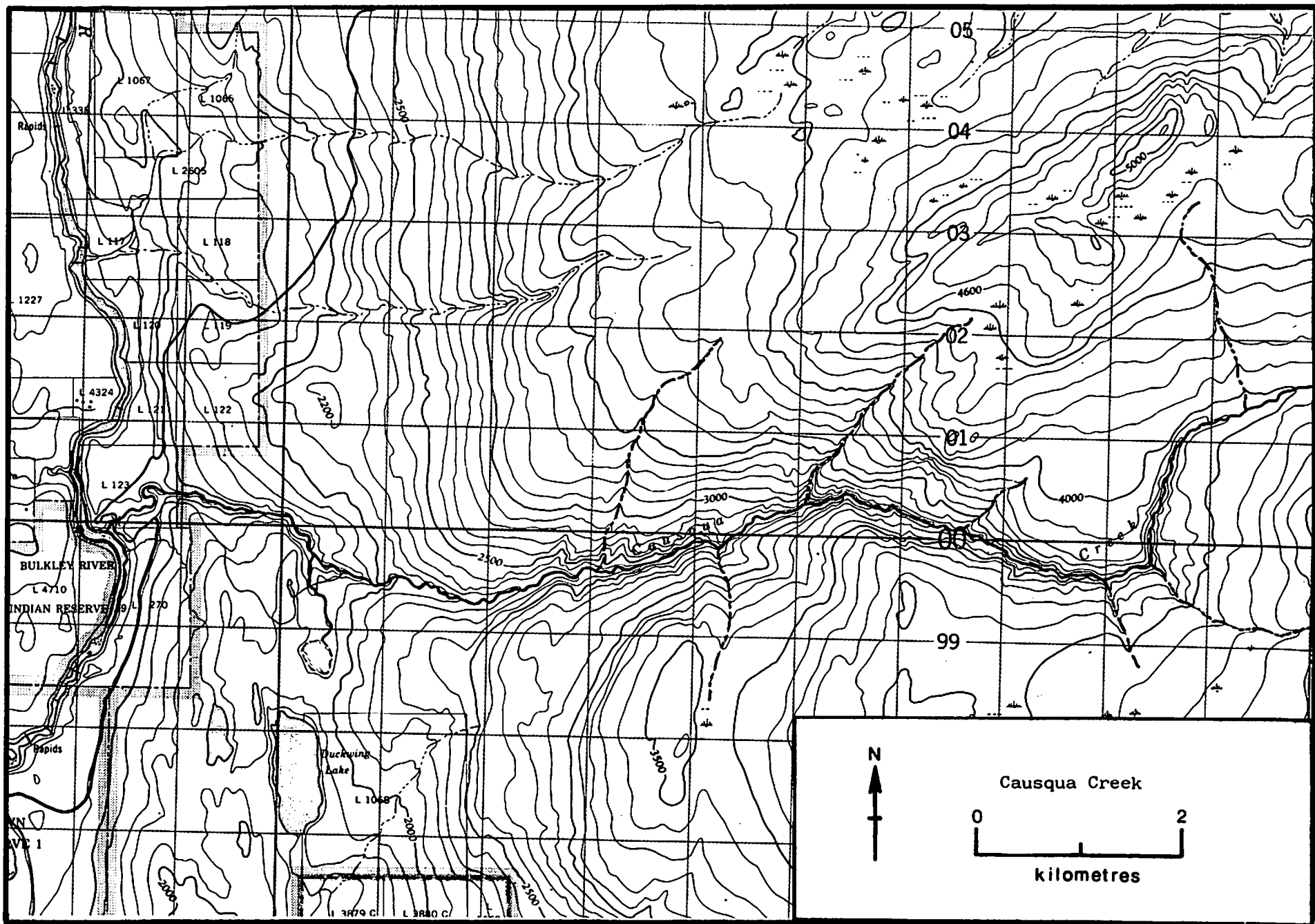
ESCAPEMENT RECORD FOR CANYON CREEK (Cass Creek, Carr Creek)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53			60			
54			70			
55			100			
56			200			
57			N/O			
58			200			
59			75			
60			75			
61						
62			300			
63			300			
64			400			
65			300			
66			150			
67			N/O			
68						
69			200			
70			200			
71						
72			N/O			
73			N/O			
74			N/O			
75			N/R			
76			N/O			
77			N/O			
78			N/O			
79						
80						
81			N/O			
82			UNK			
83						
84						
85						

TIMING:

ARRIVE			Sept			
START			Sept-M	Oct		
PEAK			Oct-E	Nov		
END			E-M	Nov		

REMARKS N/R - No Record



NAME OF STREAM CAUSQUA CREEK (Fish Creek)
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows W. into Bulkley River, opposite Moricetown, Cassiar Dist.
 POSITION 55 127 SE.
 LENGTH 3.2 km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²
 DISCHARGE (m³/s) _____
 TEMPERATURE (°C) _____
 BARRIERS OR POINTS OF DIFFICULT ASCENT Impassable 21m falls at 3.2 km.

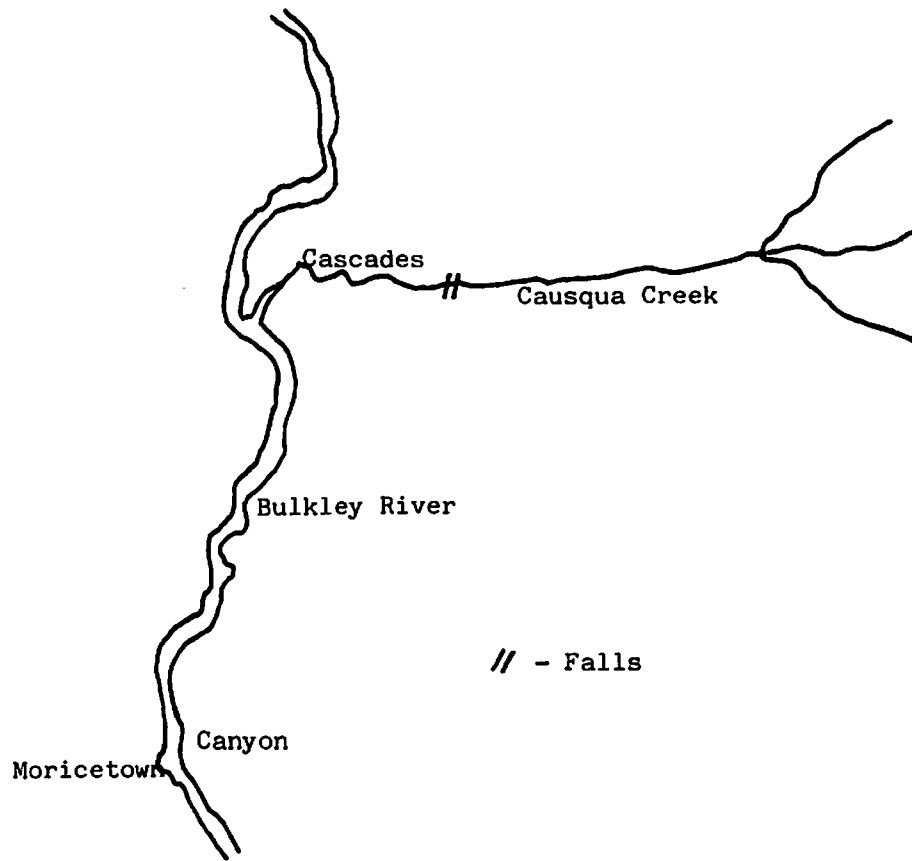
SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	
COHO	
CHUM	
PINK (ODD YEAR)	- near mouth
PINK (EVEN YEAR)	- " "
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS This small stream is not a consistent producer and escapements determined entirely by water supply. It is thought that most pinks passed through the Moricetown fishway and spawned upstream.

1969 Silver Standard Mine has a licence to withdraw about 900 m³ / day from this
 1977 Construction of floatation mill started this year approx stream.
5 km from confluence with Bulkley River



Sketch of
Causqua Creek, 1975



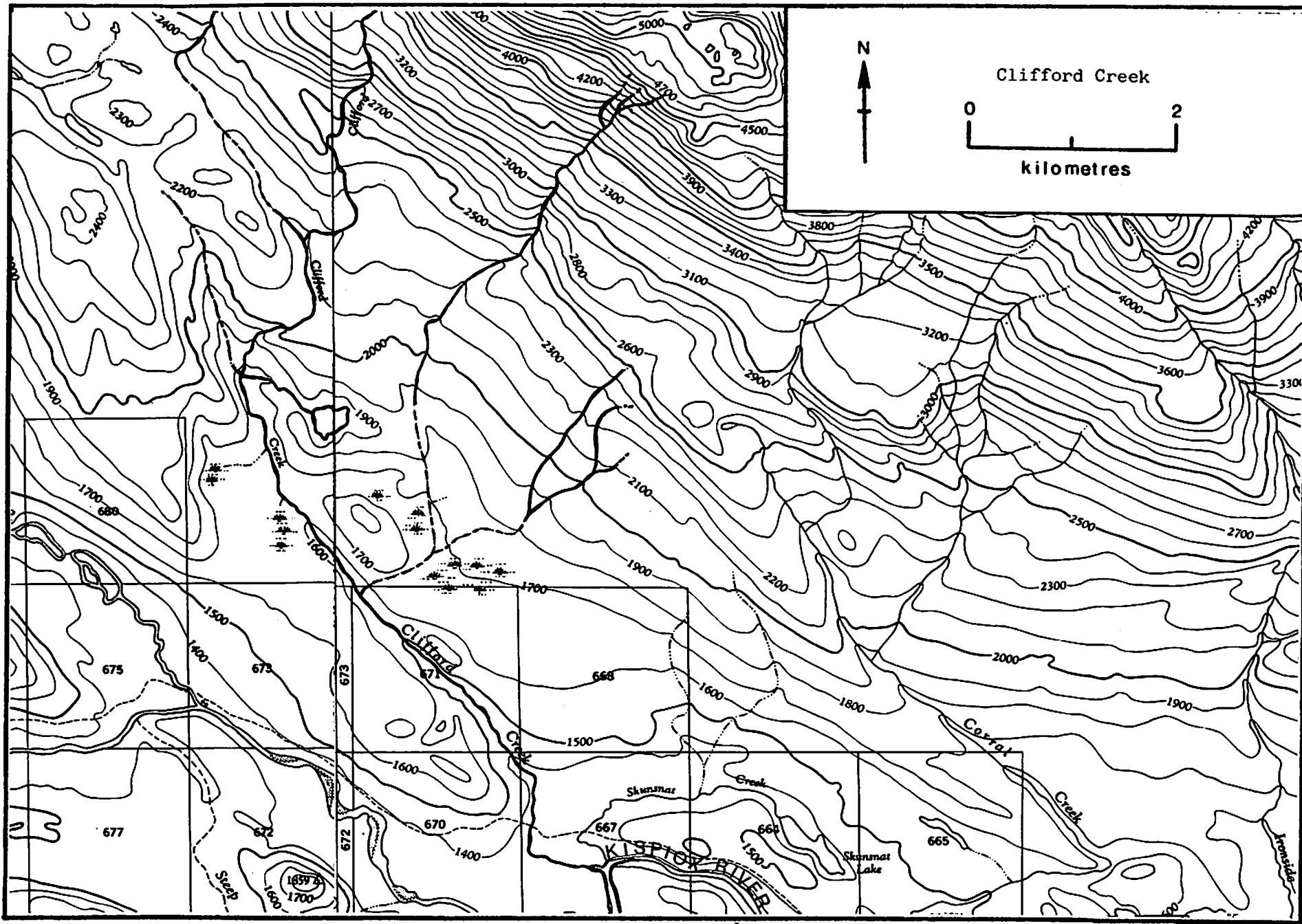
ESCAPEMENT RECORD FOR CAUSQUA CREEK (Fish Creek)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49					49	
50						
51					N/O	
52					25	
53					25	
54			N/O		N/O	
55			N/O		N/O	
56			N/O		N/O	
57					N/O	
58					N/O	
59					N/O	
60					N/O	
61					N/O	
62					600	
63					800	
64					N/O	
65					N/R	
66					N/O	
67					N/O	
68					N/O	
69					N/O	
70					N/O	
71					N/O	
72					N/O	
73					N/R	
74					N/R	
75					N/R	
76					N/O	
77					N/O	
78				5	10	
79						
80						
81						
82						
83						
84						
85						

TIMING:

ARRIVE						
START						
PEAK						
END						

REMARKS N/R - No Record



NAME OF STREAM CLIFFORD CREEK
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows S. into Kispiox River, Cassiar Dist.
 POSITION 55 128 NE
 LENGTH 11.2 km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25
 0.25 - 0.50
 0.50 - 0.75
 0.75 - 1.00
 > 1.00

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT

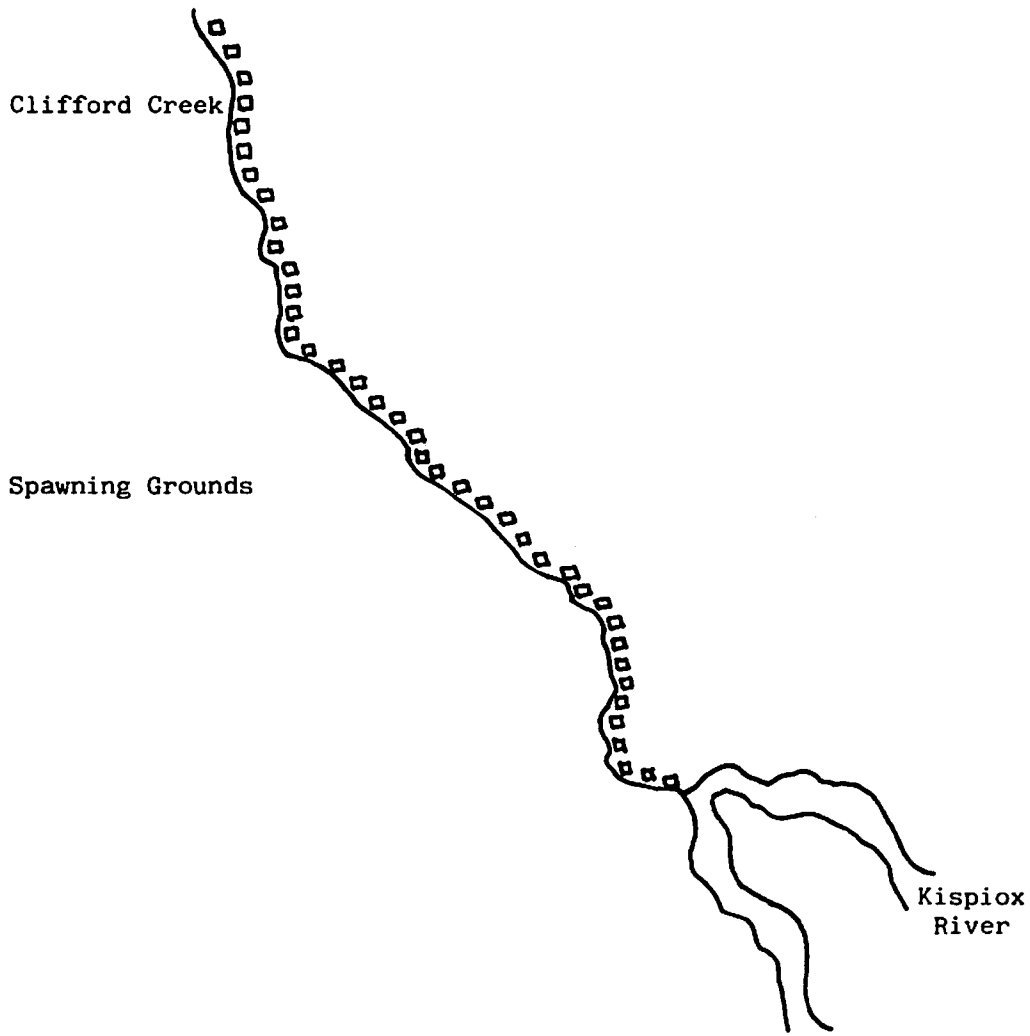
culvert at 0.8 km before Kispiox R. causes problem if fish
 are not assisted through at low and swift water.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	
COHO	- scattered 0.8 km past culvert
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1965 - Baffles placed in culvert to assist fish during low and swift flows. Suggest culvert be replaced by a bridge.
1966 - B.C.F.S. raised pool levels effectively reducing velocity. Narrow culvert opening still presents a problem for migrating fish.
1968 - Recommended that beaver dams 1.6 - 3.2 km from mouth be removed as required.
1970 - Beaver dams cleared.
1974-79 Silting erosion and scouring noted in lower section in 2nd week of October.
1978 - October floods did little damage because beaver dams kept high water in check.
1979 - Stream clearance. Coho removed by S.E.P., beaver dams removed throughout
1980 - Water too high for S.E.P. to take donor stock from this creek migration.
1981 - Suggest baffles in culvert.
 Predators: grizzly. Seasonal fluctuation in water levels.



□ - Coho Spawning Grounds



Sketch of
Clifford Creek, 1971



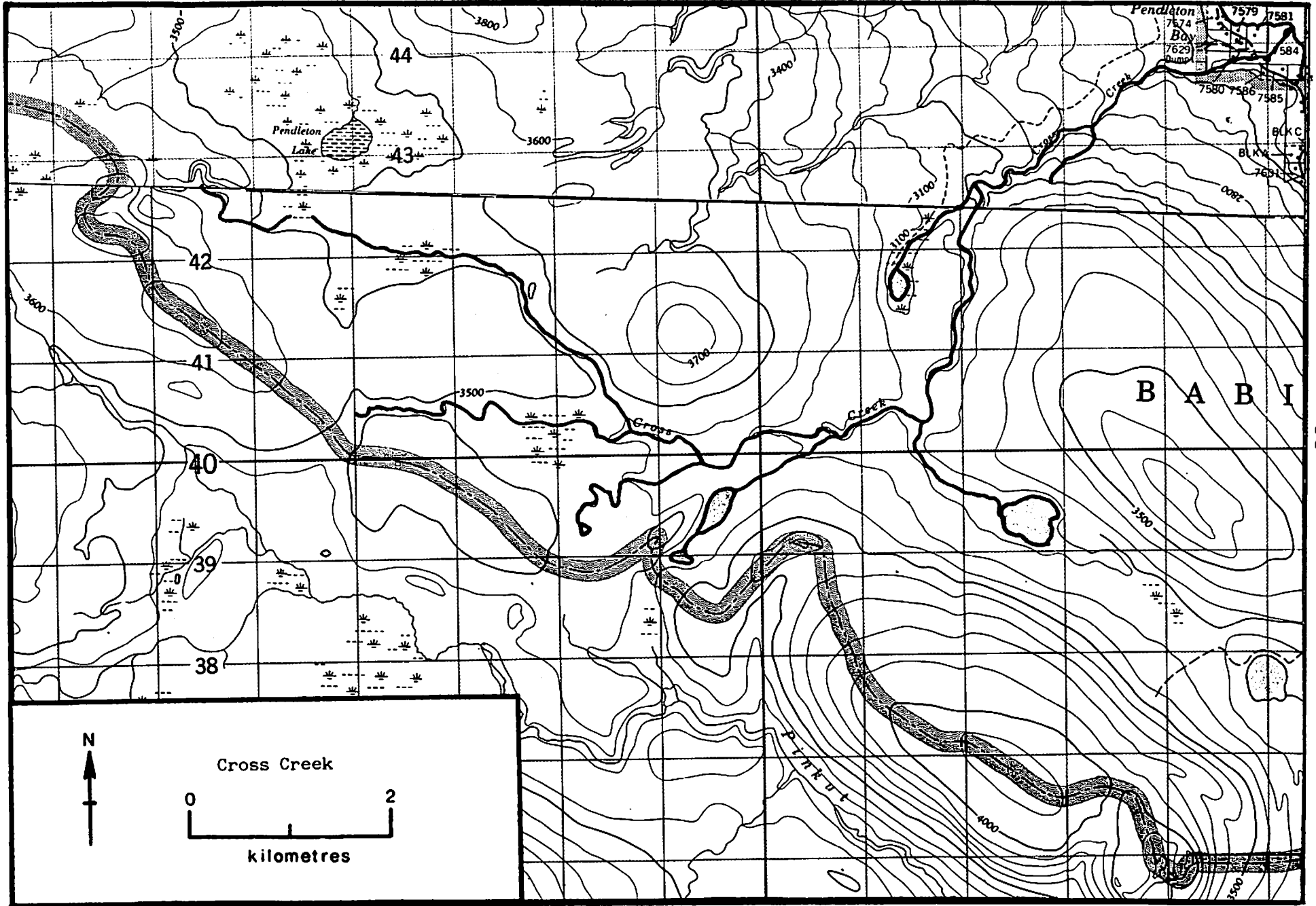
ESCAPEMENT RECORD FOR CLIFFORD CREEK

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65			200			
66			175			
67			25			
68			400			
69			75			
70			75			
71			75			
72			75			
73			75			
74			75			
75			75			
76			75			
77			75			
78			200			
79			25			
80			200			
81			200			
82						
83						
84						
85						

TIMING:

ARRIVE						
START						
PEAK						
END						

REMARKS _____



NAME OF STREAM CROSS CREEK (Pendleton Creek)
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows N.E. into Babine Lake, N. of Pinkut Lake, Rge.. 5, Coast
 POSITION 54 125 NW. Dist.
 LENGTH 6.4 km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT Falls 6.4 km from stream mouth
Some log jams hamper upstream migration

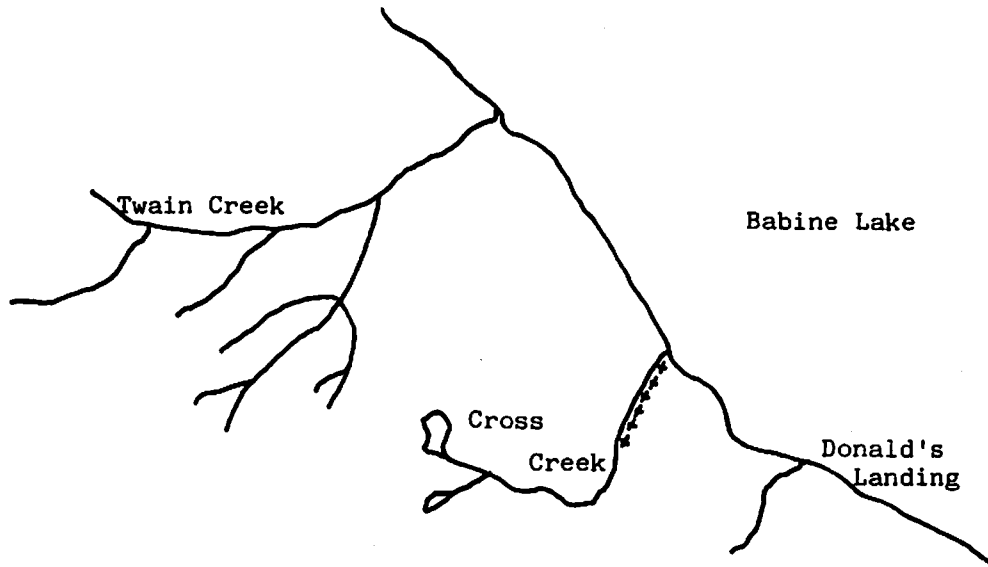
SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	-throughout stream to falls, particularly near mouth when water
CHINOOK	levels good.
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS Streambed composed of fine gravel. Used only sporadically
due to many years of low water. 1958 Some fish entered but died unspawned.
1959 Bridge washed out and replaced by two culverts.
1972 Run could improve now that sawmilling has vacated the area.
1982 Best run (5,500)

Predators: eagles and ravens



x - Sockeye Spawning Grounds



Sketch of
Cross Creek, 1980



kilometres

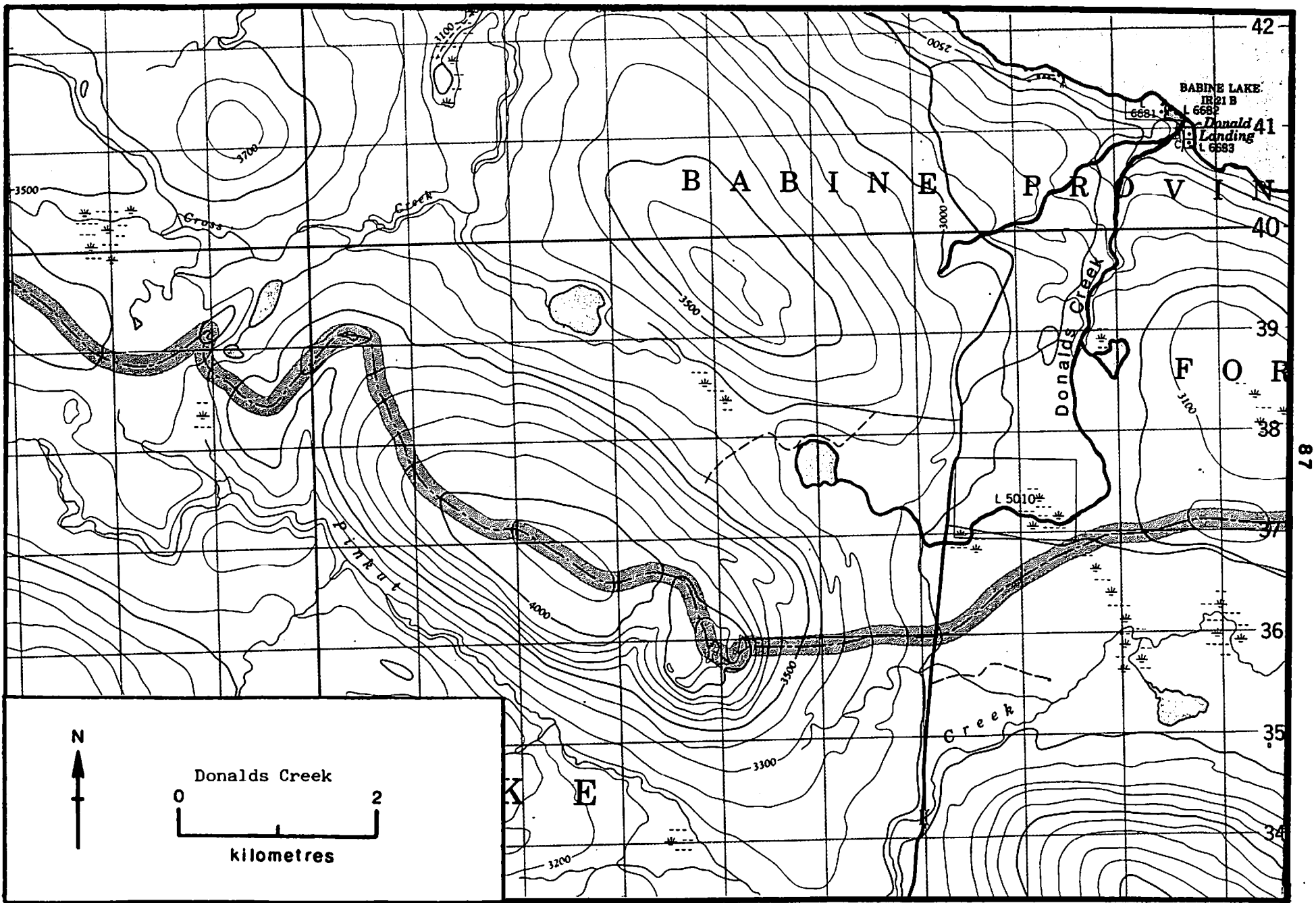
ESCAPEMENT RECORD FOR CROSS CREEK (Pendleton Creek)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947	1,396					
48	1,500					
49	1,058					
50						
51						
52	N/O					
53	1,500					
54	1,100					
55	N/O					
56						
57	300					
58	N/O					
59	2,500					
60	N/O					
61	N/O					
62	200					
63						
64	1,400					
65						
66						
67						
68						
69	OBS					
70						
71	N/R					
72	N/R					
73	N/R					
74	100					
75	N/R					
76	1,000					
77	600					
78	300					
79						
80						
81	600					
82	5,500					
83						
84						
85						

TIMING:

ARRIVE						
START	July-Aug					
PEAK	Aug					
END	Aug-Sept					

REMARKS N/R - No Records



NAME OF STREAM (Donalds Creek)
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Donald Landing, W. side of Babine Lake, Rge. 5, Coast Dist.
 POSITION 54 125 SW.
 LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

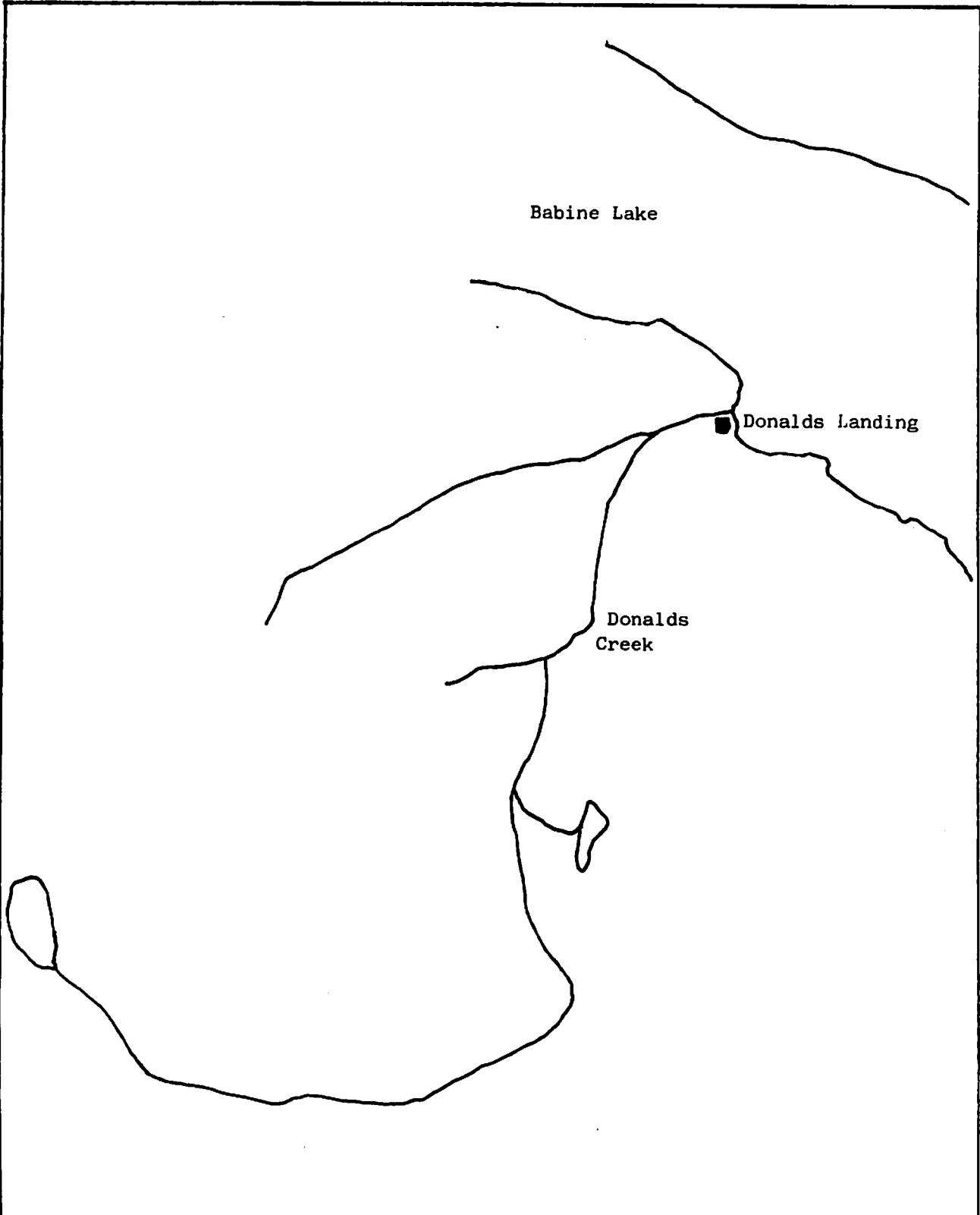
BARRIERS OR POINTS OF DIFFICULT ASCENT _____
Falls located 0.8km upstream -- passable only
during good flows.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	0.8 - 1.6km in good flow years
CHINOOK	
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1953 - 36% male 54% female 10% jacks
1964 - 48% male 52% female
1965 - Flash flood caused scouring near stream mouth.
1977 - Spawned on beach near mouth.
1974 - Recommended that stream be omitted from files because of
insufficient flows to accomodate runs.
Predators: few birds and bears.



Sketch of Donalds Creek, 1980



kilometres

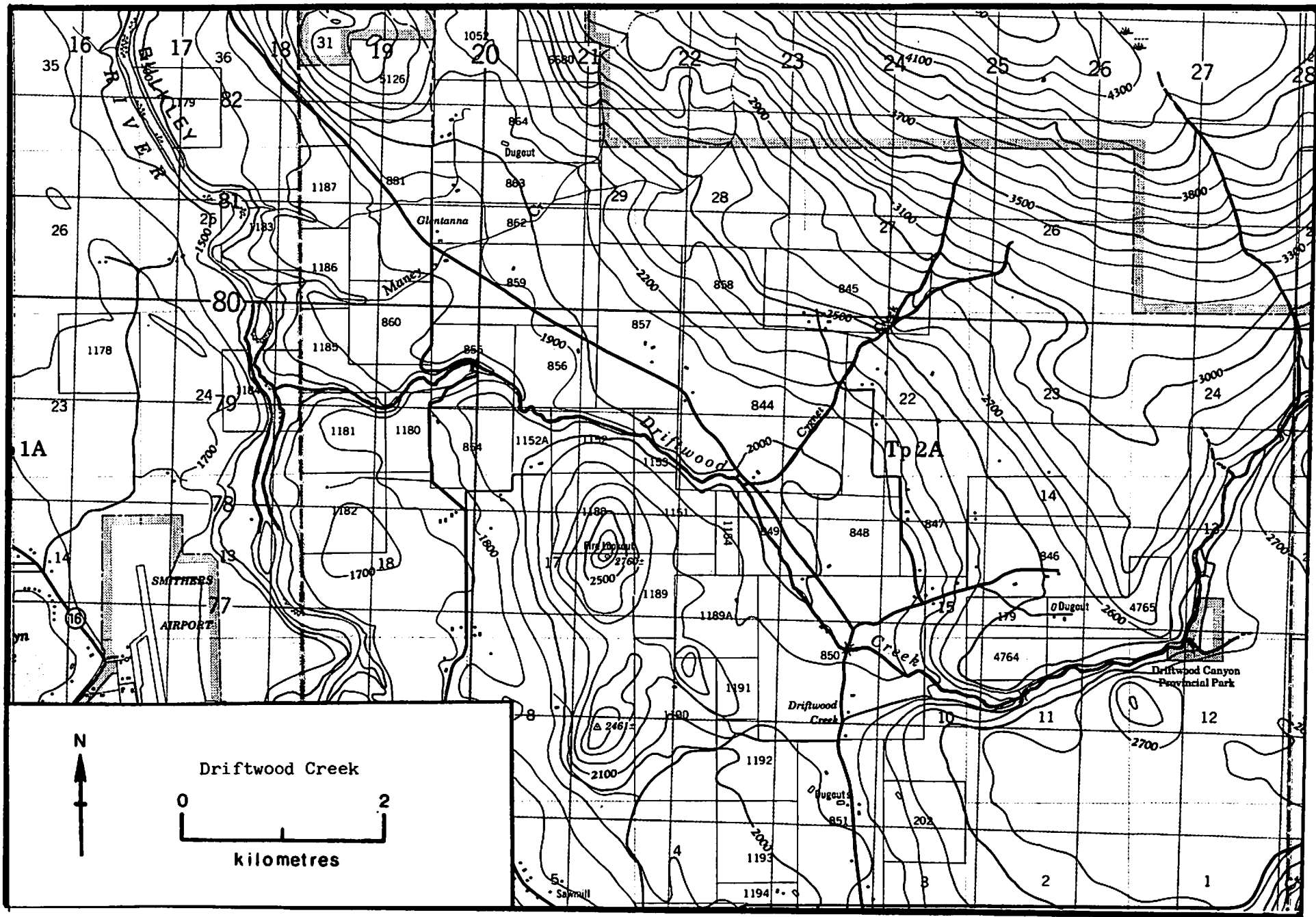
ESCAPEMENT RECORD FOR (Donalds Creek) 90

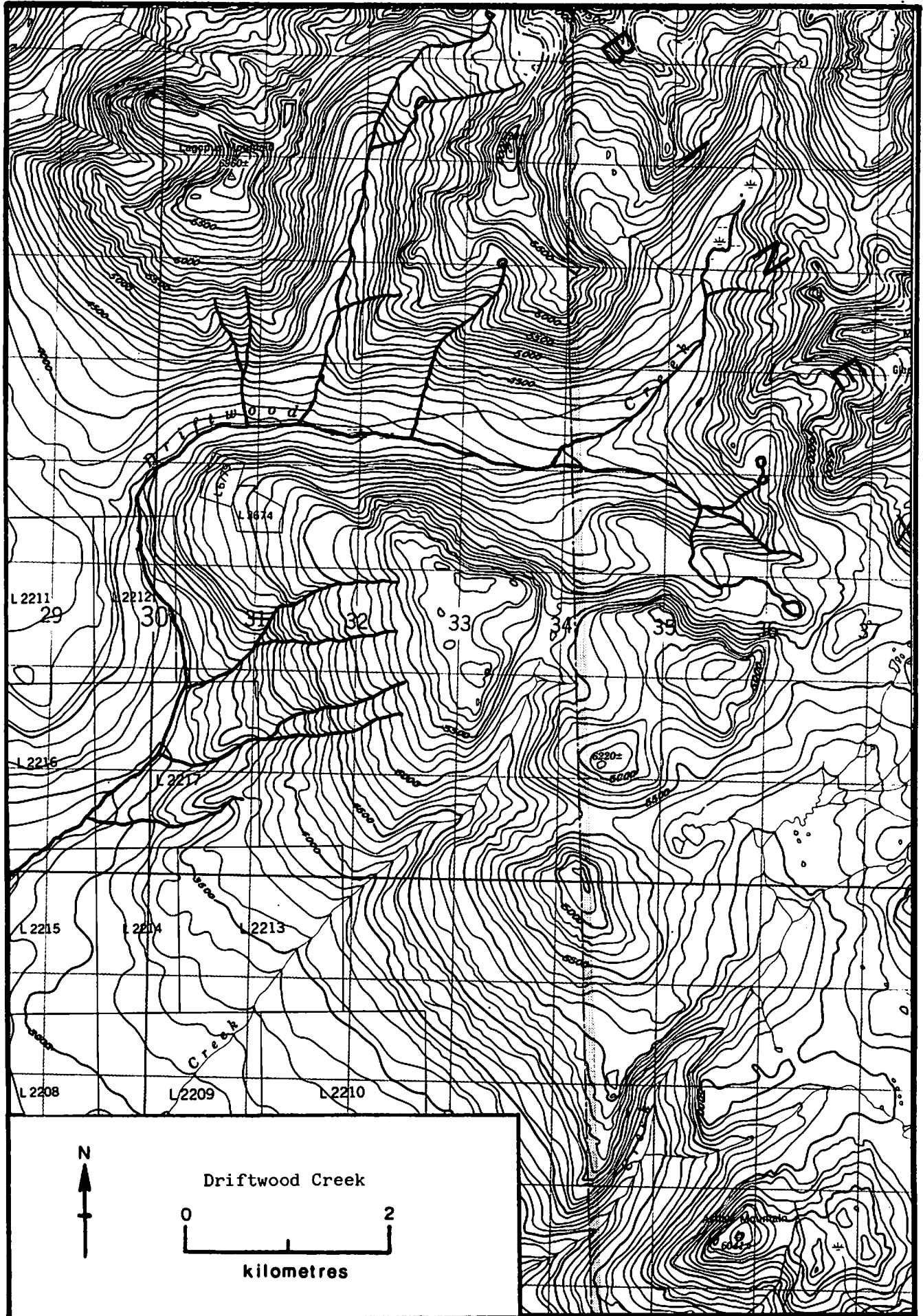
YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53	300					
54	300					
55	N/O					
56	N/O					
57	200					
58	N/O					
59	800					
60	N/O					
61	N/O					
62	N/O					
63	N/O					
64	800					
65	N/O					
66	N/O					
67	N/O					
68	N/O					
69	N/O					
70	N/O					
71	N/O					
72	N/O					
73	N/O					
74	N/O					
75	N/O					
76	N/O					
77	400					
78						
79						
80	N/O					
81	N/O					
82	N/R					
83						
84						
85						

TIMING:

ARRIVE						
START	E July-E Aug					
PEAK	L July-E Aug					
END	E Aug-E Sept					

REMARKS N/R - No Records





NAME OF STREAM DRIFTWOOD CREEK
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows W. into Bulkley River, N. of Smithers, Rge.5, Coast Dist.
 POSITION 54 127 NE
 LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

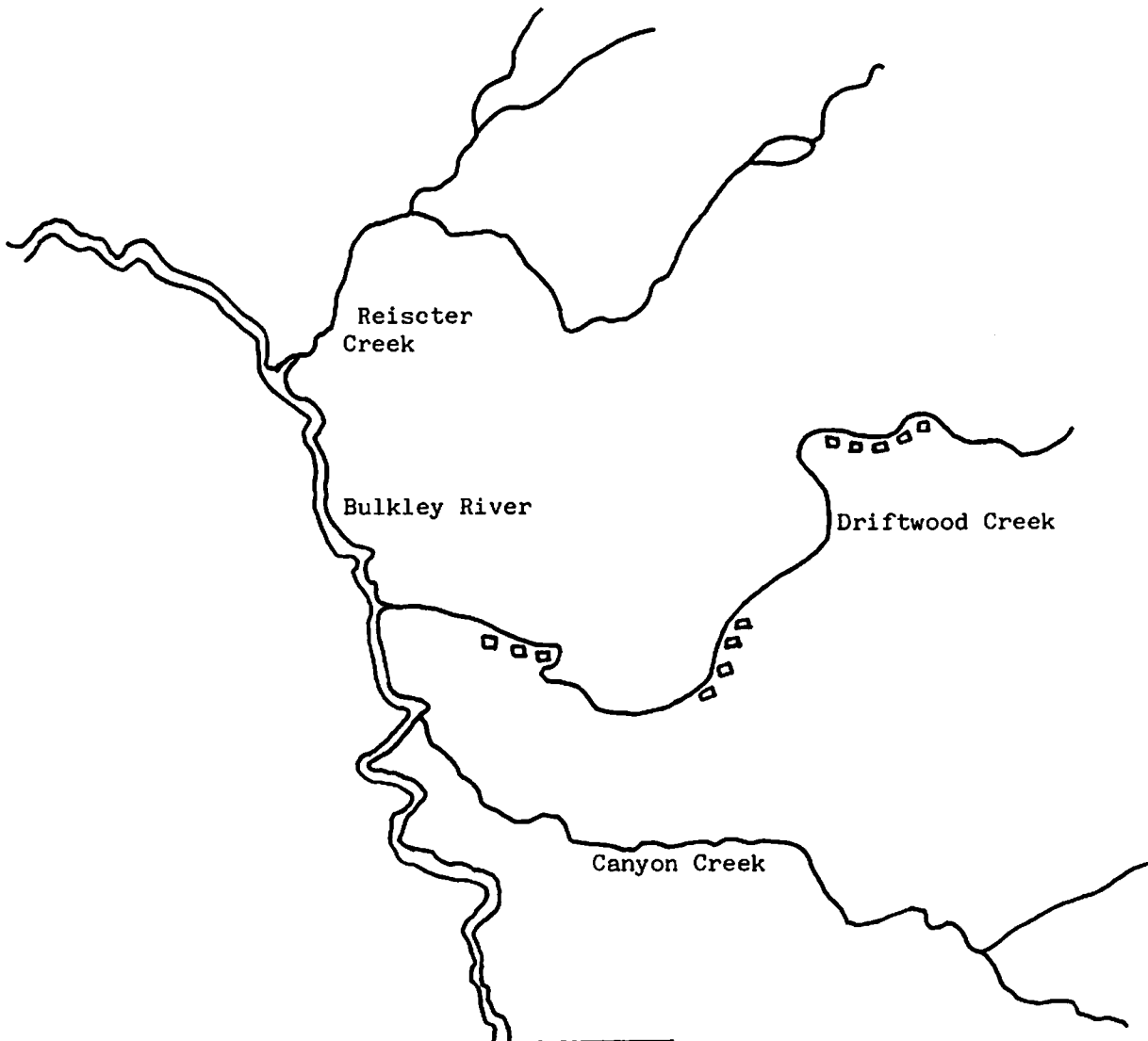
SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	
COHO	- upper reaches (scattered in riffles)
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1948 - Difficult to estimate because spawners so scattered.
1951 - Ice conditions hampered inspection.
1953,54 High water hampered inspection.
1958 - Minor spawning stream. Beaver dams could cause problems in future.
1959,60 Small log jams along length of stream.
1961,65 Dry stream bed.
1963 - Coho could be underestimated because fast flows make observation difficult.
1976,77,78 Ideal stream for local enhancement of coho with incubation boxes.
1977 - Slight erosion and scouring of gravel bars in lower reaches.
Subject to seasonal fluctuations in water levels. Predators: bear and birds.

□ - Coho Spawning Grounds



Driftwood Creek



kilometres
Sketch Map, 1980

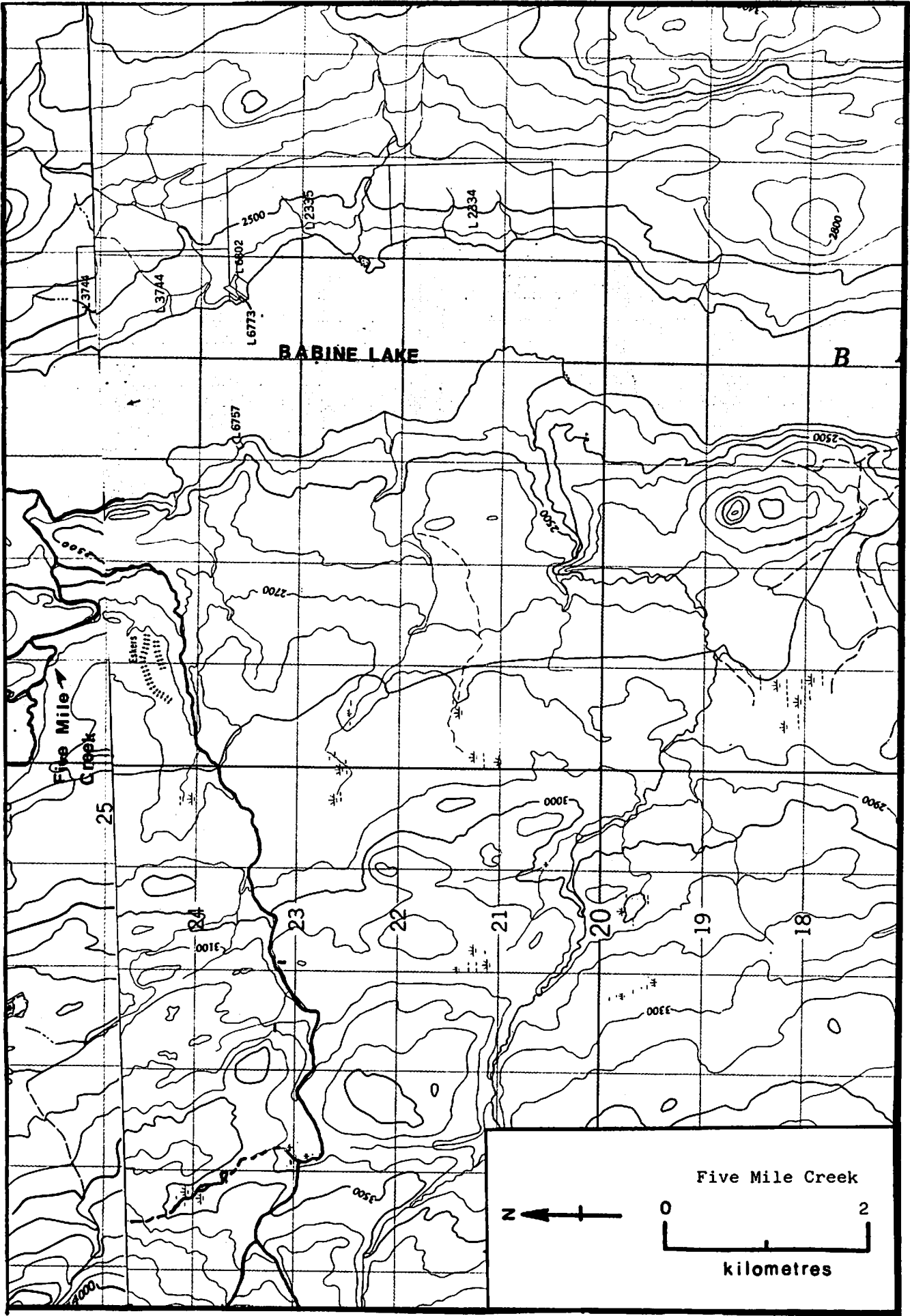
ESCAPEMENT RECORD FOR DRIFTWOOD CREEK

YEAR	SOCKEYE	CHINQOK	COHO	CHUM	PINK	STEELHEAD
1947						
48			OBS			OBS
49			OBS			OBS
50						
51			OBS			OBS
52			75			N/O
53			50			N/O
54			150			
55			200			
56			75			
57			75			
58			200			
59			75			
60			75			
61						
62			N/I			
63			300			
64			300			
65			N/R			
66			50			
67			N/O			
68			N/O			
69			100			
70			150			
71			N/O			
72			N/R			
73			N/O			
74			N/O			
75			N/R			
76			N/O			
77			N/O			
78			N/O			
79			N/O			
80			N/O			
81			N/O			
82						
83						
84						
85						

TIMING:

ARRIVE			Sept			
START			Sept-E	Nov		
PEAK			Oct-L	Nov		
END			Nov-E	Dec		

REMARKS N/R - No Records, N/I - Not Inspected



NAME OF STREAM (Five Mile Creek)
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH West side of Babine Lake 8.0 km south of Fort Babine.
 POSITION 55 126 SW
 LENGTH 4.0 km km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

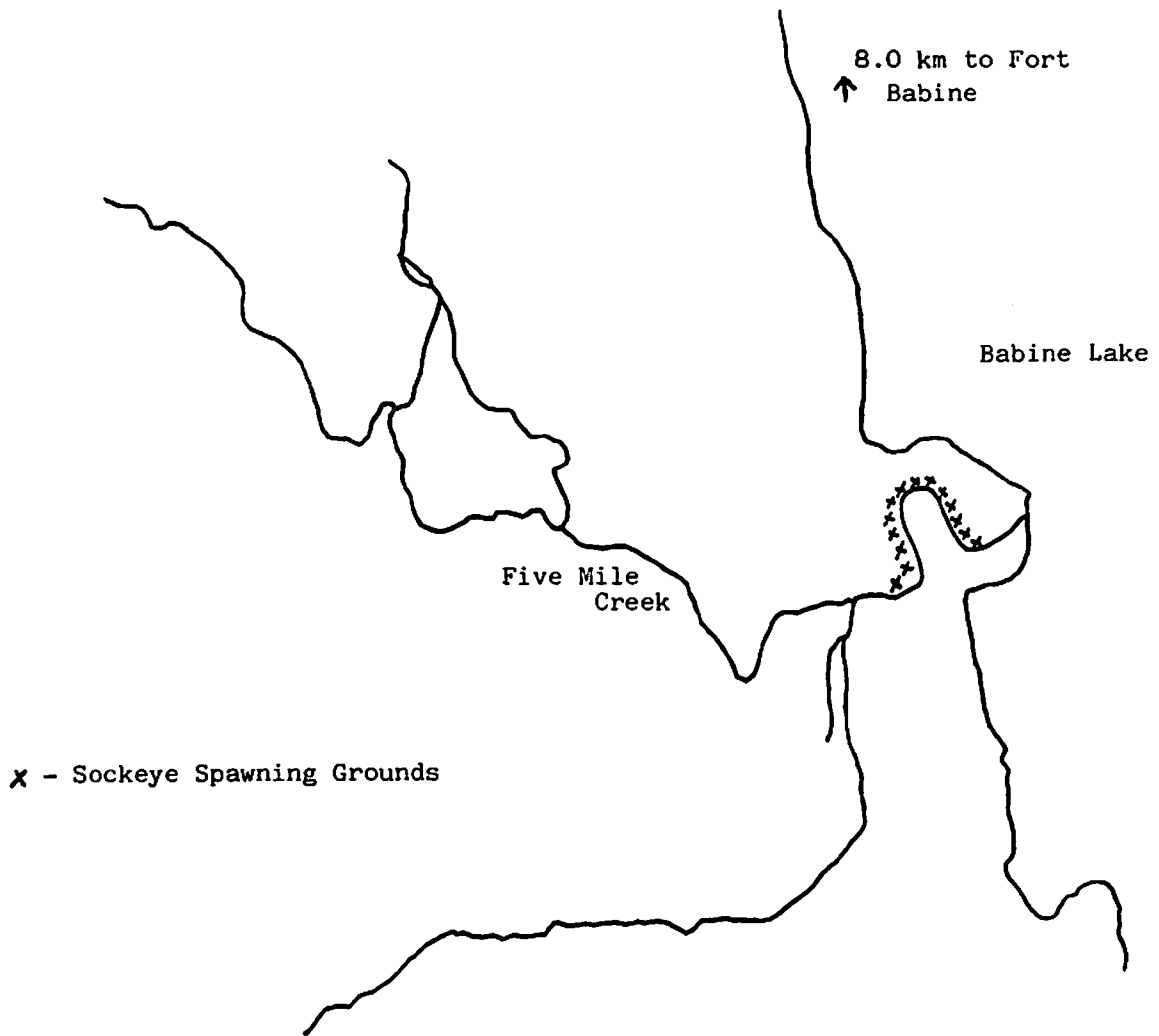
BARRIERS OR POINTS OF DIFFICULT ASCENT Rapids and fast water 0.8km from mouth and poor stream entrance conditions. Passable with good water levels.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- scattered 1st 1.6 km to canyon depending on water levels.
CHINOOK	
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1948 - First time stream inspected for salmon.
1948,49 - Log jams and debris in 1st 1.6 km.
1949,52,56,60,63 No fish entered because of low water.
1951 - Stream clearance work opened up stream.
1955 - Entrance conditions prevented most fish from migrating upstream.
1958 - Extensive gravel deposits at mouth prevented fish from entering.
1981 - Stream subject to low water and high temperatures at spawning time.
Gravel deposits exposed at low flows and block stream mouth.
Subject to seasonal fluctuation in water levels. Predators: bears,birds - light.



Sketch of Five Mile Creek, 1979



kilometres

not to scale

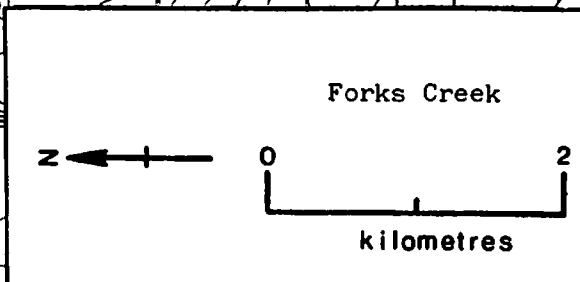
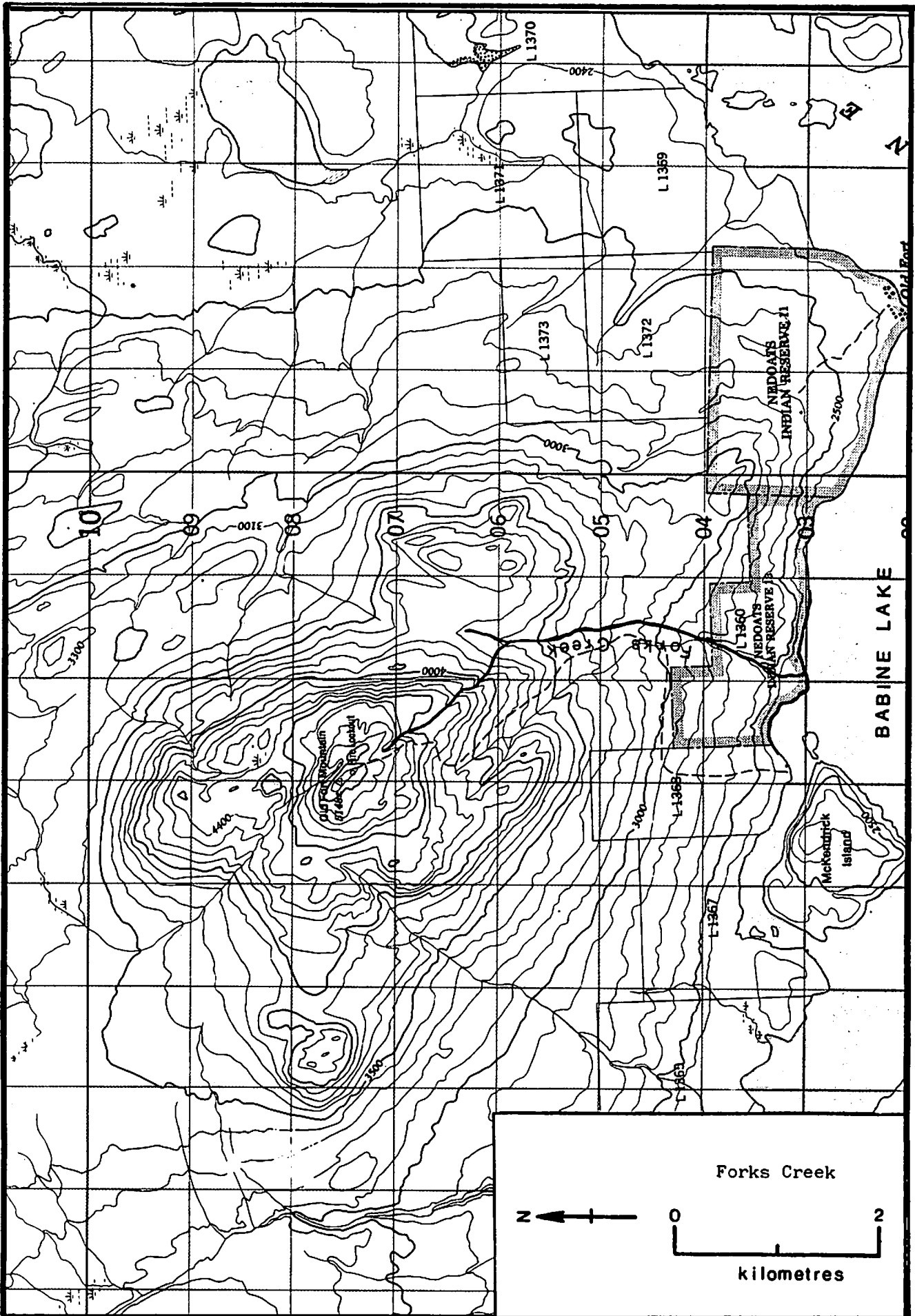
ESCAPEMENT RECORD FOR (Five Mile Creek)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947	40					
48	1,459					
49	N/R					
50						
51	58					
52	N/R					
53	300					
54	300					
55	100					
56	N/R					
57	200					
58	N/O					
59	600					
60	N/O					
61	500					
62	50					
63	N/O					
64	50					
65	150					
66	150					
67	100					
68	50					
69	400					
70	300					
71	200					
72	47					
73	90					
74	500					
75	250					
76	60					
77	40					
78	16					
79						
80	4					
81	N/R					
82						
83						
84						
85						

TIMING:

ARRIVE	Aug					
START	E Aug-E Sept					
PEAK	M Aug-E Oct					
END	M Aug-L Oct					

REMARKS N/R - No Record



NAME OF STREAM (Forks Creek)

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH Flows into Babine Lake

POSITION 55 126 SE.

LENGTH km WIDTH m DRAINAGE km²

COMPOSITION: BEDROCK BOULDER COARSE FINE SILT & SAND UNCLASSIFIED

PERCENT GRADIENT

Table with 2 columns: Percent Gradient (0.00 - 0.25, 0.25 - 0.50, 0.50 - 0.75, 0.75 - 1.00, >1.00) and empty cells for data entry.

WETTED AREA m² SPAWNING AREA m²

DISCHARGE (m³/s)

TEMPERATURE (°C)

BARRIERS OR POINTS OF DIFFICULT ASCENT Fast water 0.8km from mouth in years of high water.

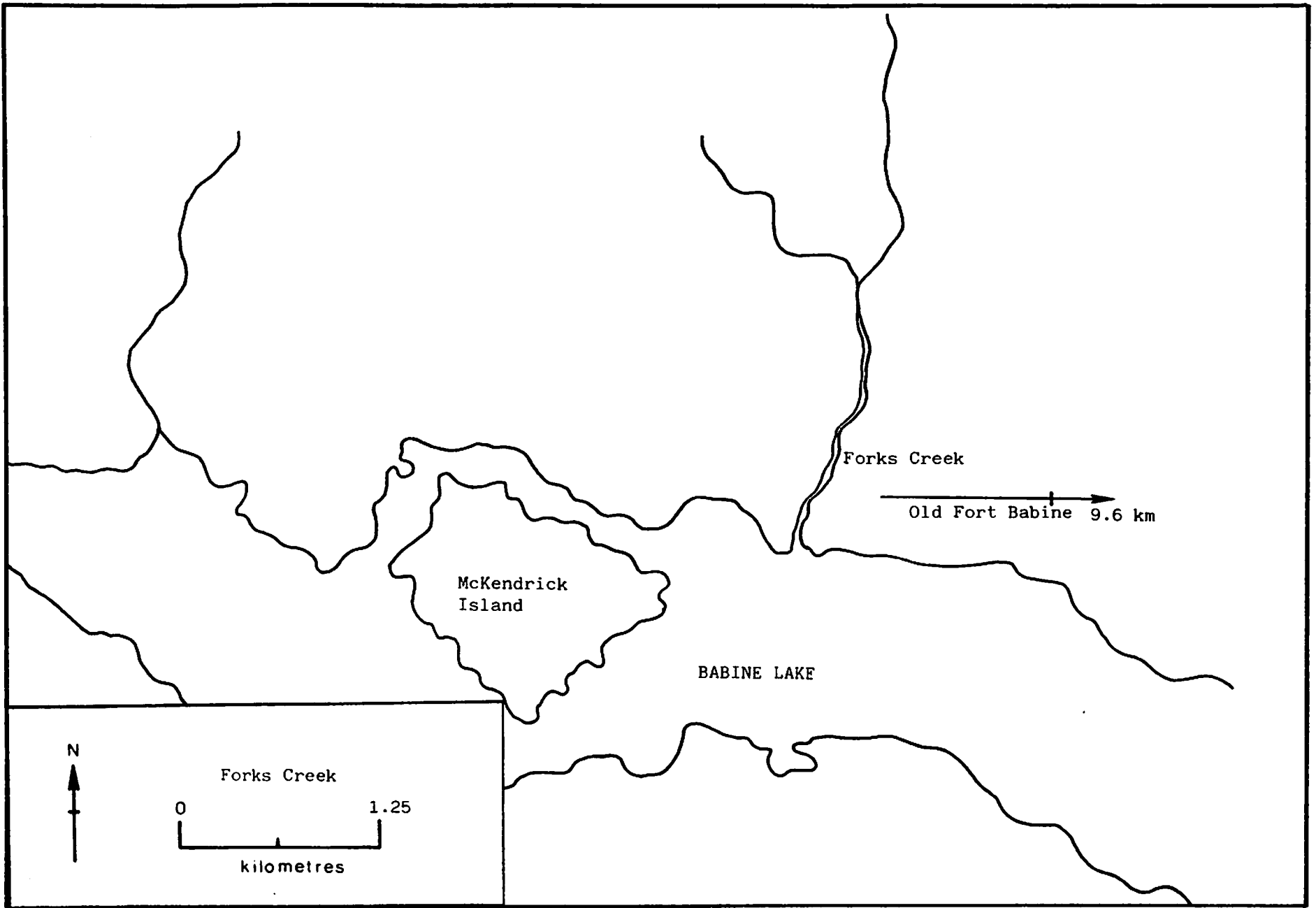
SPAWNING DISTRIBUTION

Table with 2 columns: SPECIES (Sockeye, Chinook, Coho, Chum, Pink (odd year), Pink (even year), Steelhead) and SECTION OF STREAM USED (- in first 0.8km of stream when present and along beach).

POTENTIAL OF INACCESSIBLE PORTION OF STREAM

GENERAL REMARKS Creek generally dry each year in August and is passable only in years of adequate flow.

Cancelled file in 1980.



ESCAPEMENT RECORD FOR (Forks Creek)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59	600					
60						
61						
62						
63						
64						
65	N/R					
66	N/R					
67	N/R					
68	N/R					
69	N/R					
70	N/R					
71	N/R					
72	N/R					
73	N/R					
74	N/R					
75	N/R					
76	N/R					
77	N/R					
78	N/R					
79						
80	N/R					
81						
82						
83						
84						
85						

TIMING:

ARRIVE						
START	E Aug					
PEAK	M Aug					
END	E Sept					

REMARKS N/R - No Records

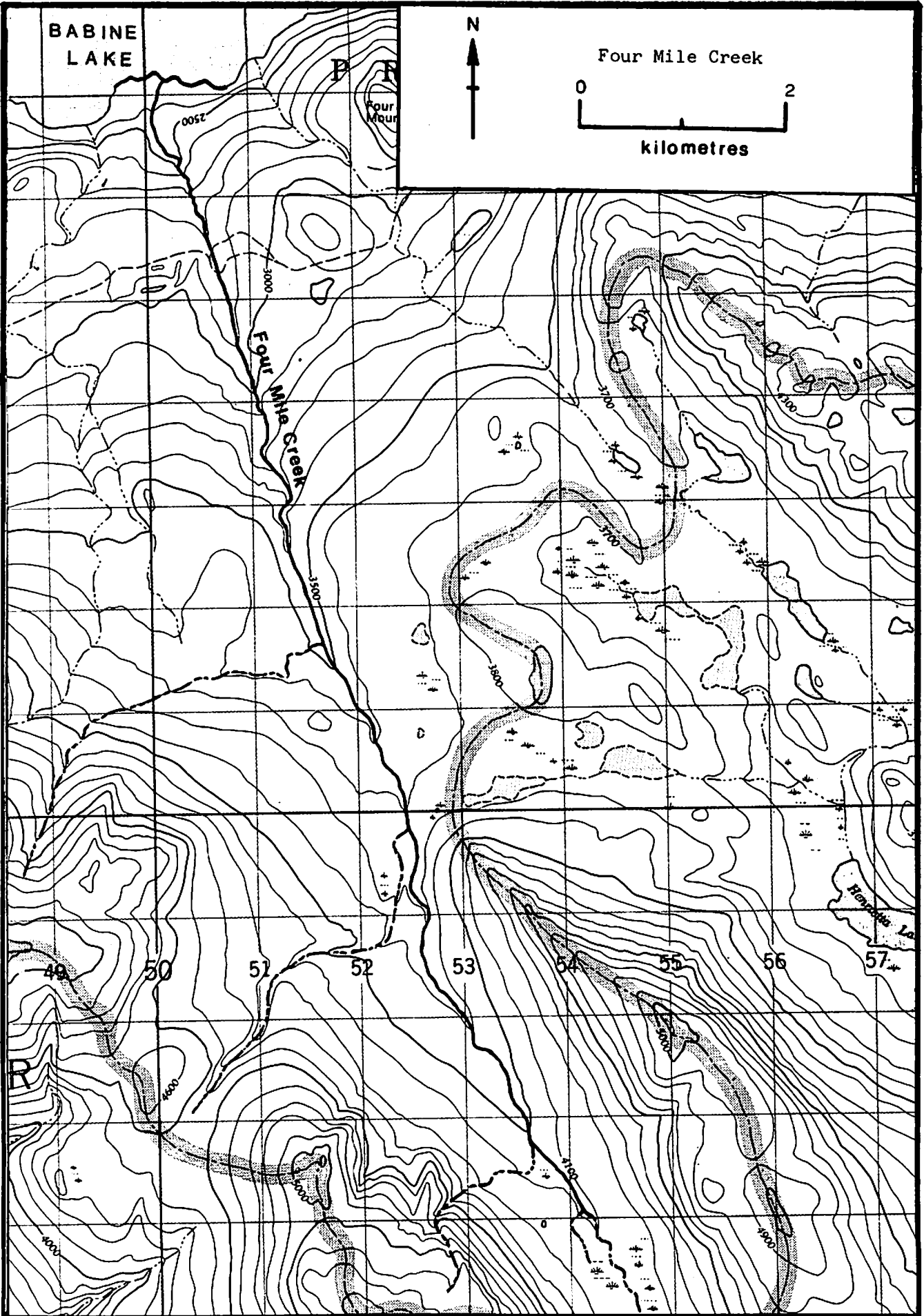
BABINE
LAKE



Four Mile Creek



kilometres



NAME OF STREAM (Four Mile Creek)
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Babine Lake -- S.E.end West of Telzalto Mountain
 POSITION 54° 27' 125° 15'
 LENGTH 4.8 km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

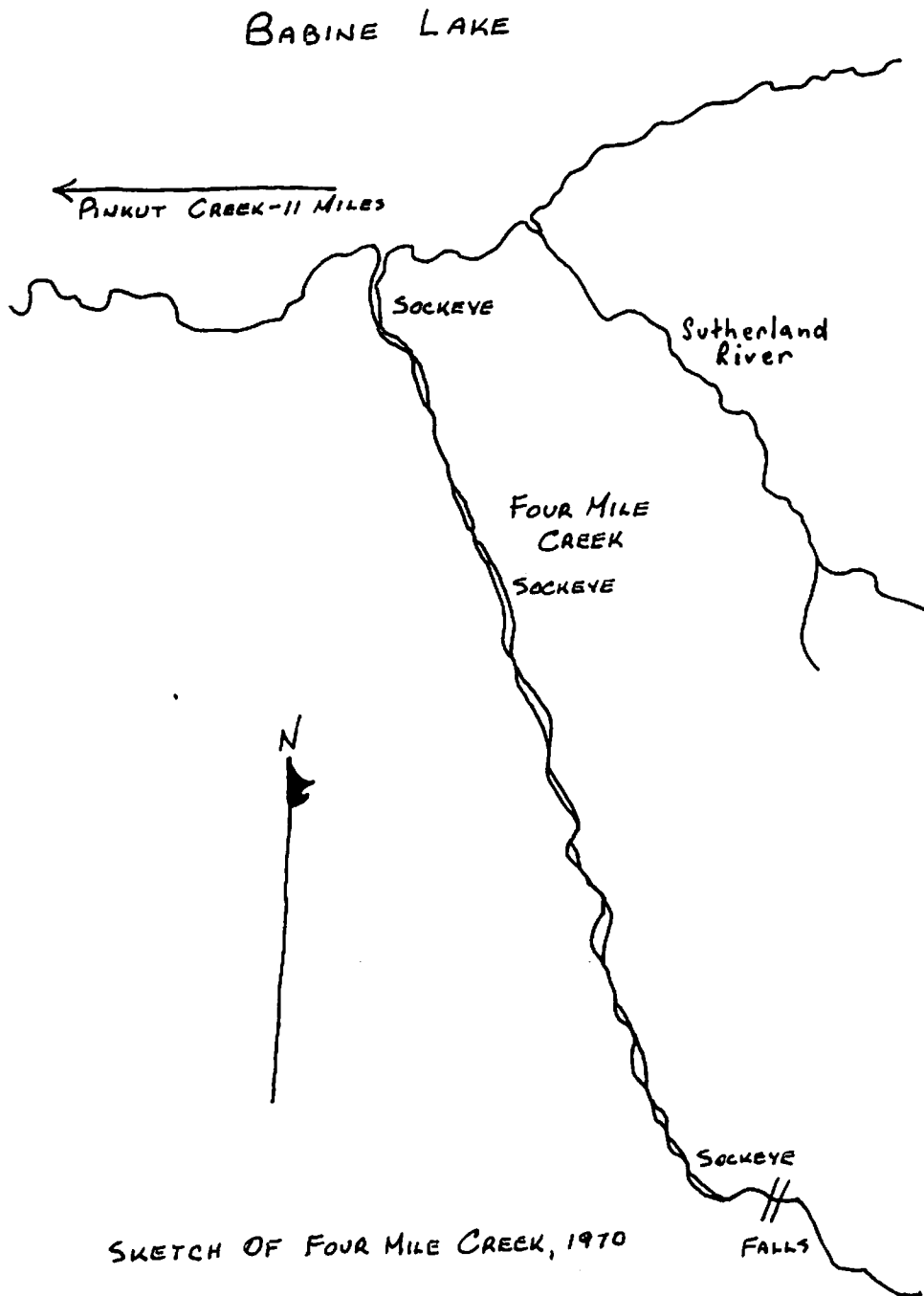
BARRIERS OR POINTS OF DIFFICULT ASCENT Impassable 15.2 m falls 4.8 km from stream mouth.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- throughout to falls
CHINOOK	
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1948,49 - Some erosion, scouring and silting observed. Some evidence of late spawners digging up previously deposited eggs in the upper reaches. Removal of log jams required.
1949 - Stream clearance work conducted. 4 coho sighted.
1951 - Stream clearance work enable fish to use the stream in spite of low flows.
1958 - An estimated 1000 sockeye died unspawned or were ineffectual in spawning.
1963,67 Gravel bars at stream mouth made access difficult.
1974 - 10-20% of females died unspawned. 1982 - overspaw.
Subject to seasonal fluctuations in water levels.
Predators - bears, eagles,ravens,crows.



SKETCH OF FOUR MILE CREEK, 1970

ESCAPEMENT RECORD FOR FOUR MILE CREEK

YEAR		SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947	¹	1,029					
48		3,500					
49		1,653					
50		4,664					
51		927					
52		200					
53	²	2,000					
54		2,200					
55		400					
56		400					
57		2,500					
58		7,000					
59		5,400					
60		2,000					
61	³	2,000					
62		3,000					
63		3,690					
64		2,064					
65		1,400					
66		1,500					
67		4,000					
68		4,000					
69		4,500					
70		2,500					
71		6,000					
72		7,370					
73		11,000					
74		7,256					
75		1,750					
76		800					
77		8,800					
78		6,000					
79							
80		3,600					
81		6,500					
82		15,000					
83							
84							
85							

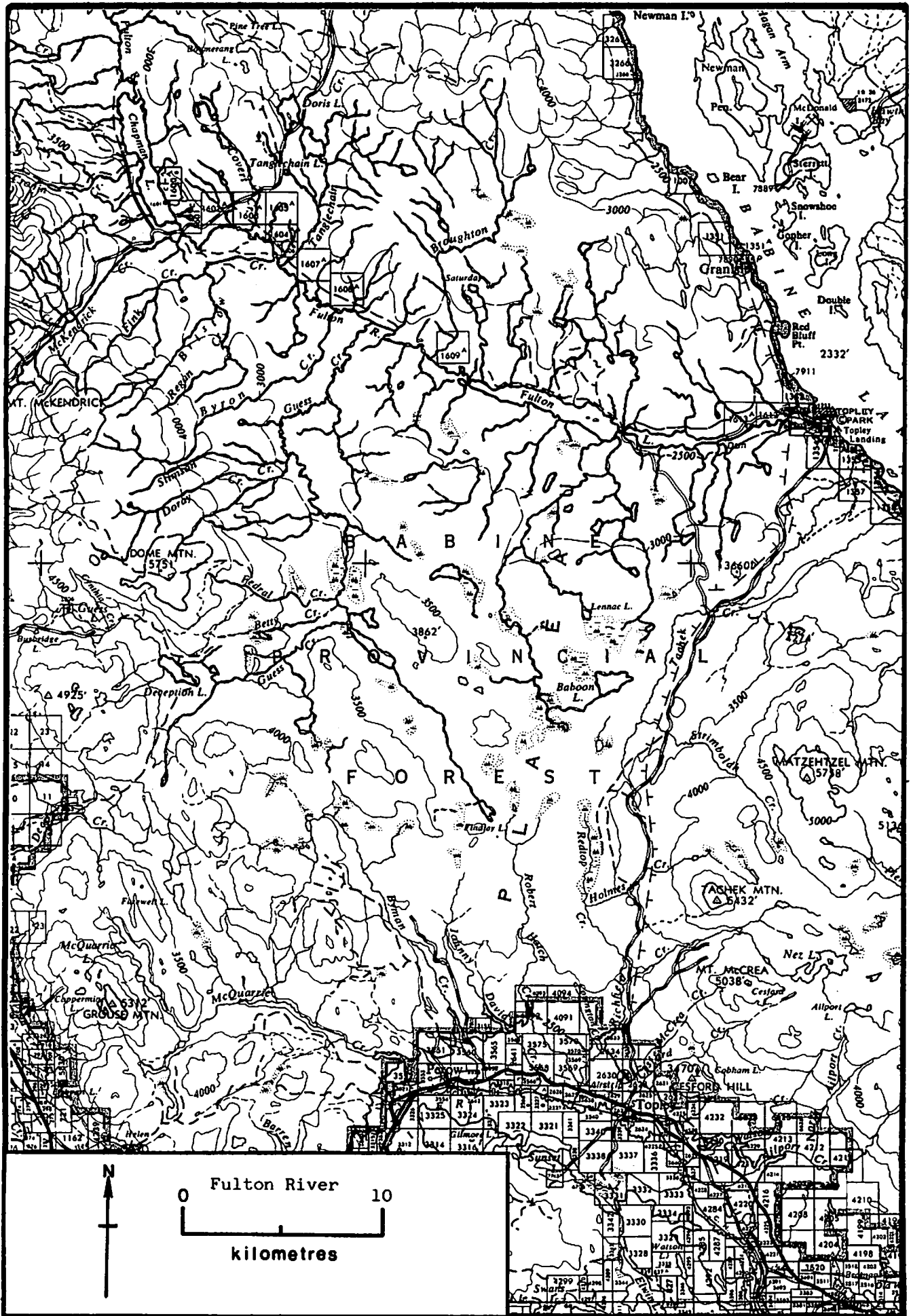
TIMING:

ARRIVE	E Aug					
START	E Aug-E Sept					
PEAK	M Aug-E Oct					
END	M Sept-L Oct					

REMARKS ¹ Even sex ratio 30% large, 30% medium 30% small and 10% runts.

² 39% male, 59% female, 2% jacks.

³ Half died unspawned due to low water conditions.



NAME OF STREAM FULTON RIVER
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows E. into Babine Lake, Rge.5, Coast Dist.
 POSITION 54 126 NE.
 LENGTH 6.4 km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT Fulton Falls 18m high --6.4km from mouth

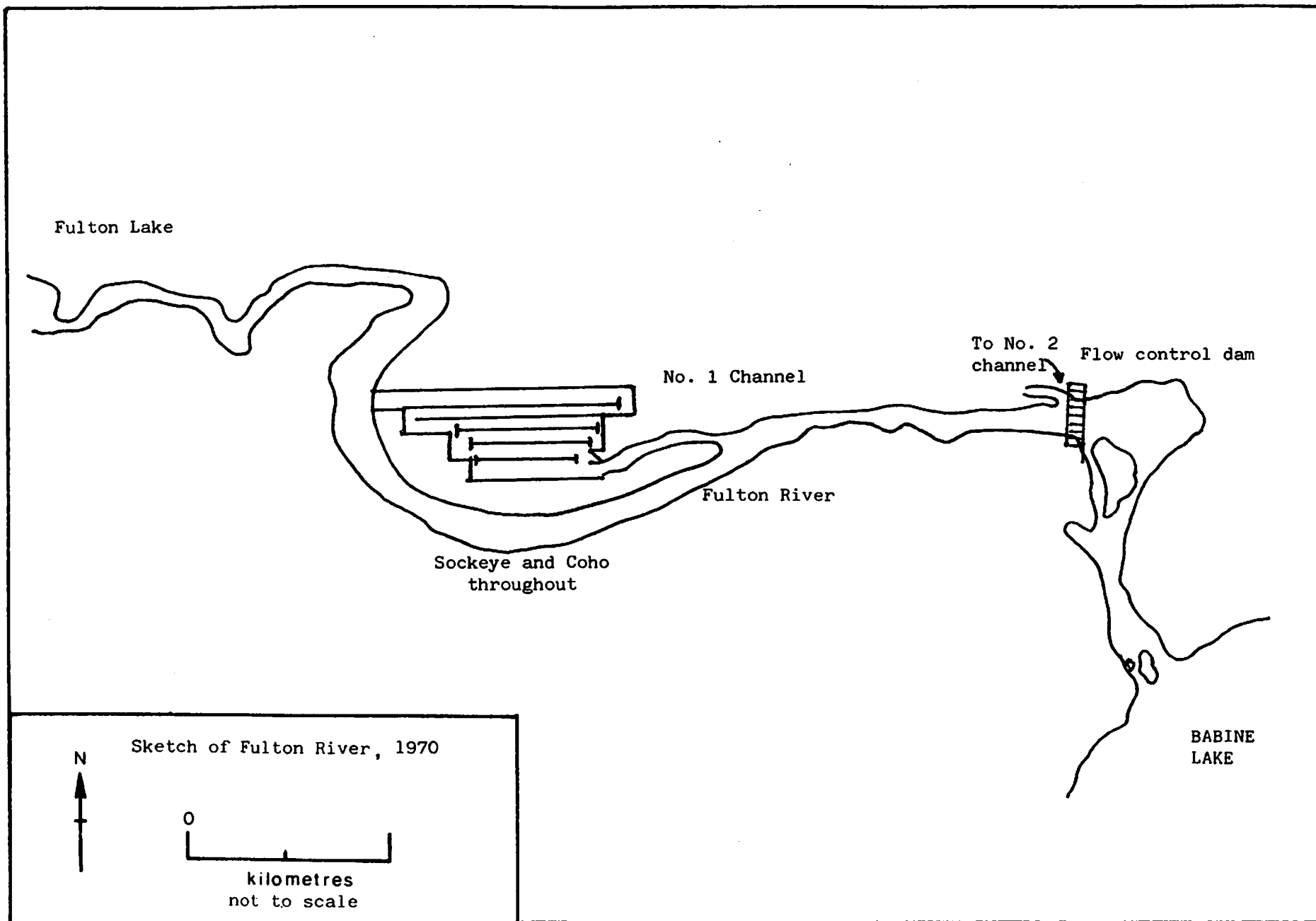
Large rapids 4.8km from mouth are passable depending on flows
Dam 6.4km from mouth

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- channels and river area to falls--or outside when river and
CHINOOK	channels filled to capacity
COHO	- same as sockeye distribution
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1951 - Cronin Mill moved in --not expected to affect the river.
1969 - New dam installed with controlled flow for stream improvements.
Controlled flow spawning channels fully utilized.
1972 Some silting from road and ditch runoff in lower river at Highway bridge.
Some egg digging by late spawners.
Predators: merganzers, eagles and bears -- range from light to heavy.
gulls,ravens,covotes,mallards,crows,fox,trout.
Seasonal fluctuations in water levels.



ESCAPEMENT RECORD FOR FULTON RIVER

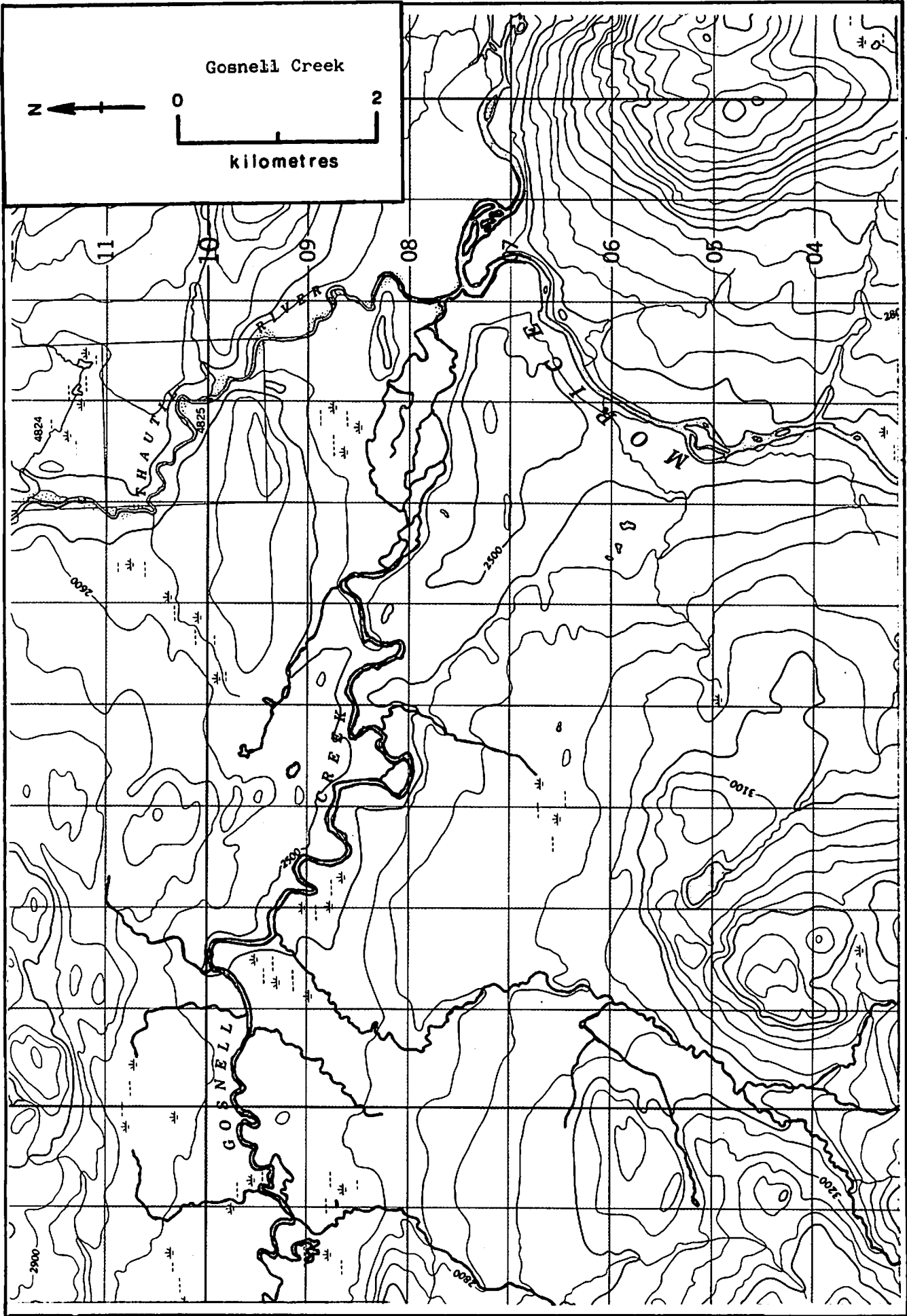
YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947	36,510					
48	50,000		750			
49	35,000		2,500			
50						
51	19,000		250			
52	35,000		1,500			
53	140,000		800			
54	110,000		500			
55	17,000		800			
56	90,000		600			
57	120,000		400			
58	90,000		300			
59	120,000		500			
60	40,000		500			
61	175,000		750			
62	80,000		1,000			
63	180,000		1,200			
64	140,000		1,000			
65	135,000		1,000			
66	91,000		1,000			
67	140,000		900			
68	130,000		400			
69	149,000		600			
70	241,000		1,000			
71	28,200		800			
72	210,000		900			
73	237,000		1,000		200	
74	139,211		N/R		N/R	
75	395,500		106		N/R	
76	300,000	2	300			
77	500,000	UNK	200		150	
78	236,000	OBS	OBS		200	
79						
80	112,658	8	5		210	
81	442,000	20	200		100	
82	500,000	N/R	N/R		N/R	
83						
84						
85						

TIMING:

ARRIVE	Aug		Aug-Sept		
START	E Aug-E Sept	Aug	Aug-E Oct		Aug
PEAK	Sept-E Oct	Sept	Aug-L Oct		Aug-Sept
END	E-L Oct	Sept-Oct	Sept-Nov		Sept

REMARKS

	1981	1982
SOCKEYE:	100,000 - below fence	
	176,000 - river	268,000 - river
	25,000 - channel #1	17,000 - channel #1
	146,000 - channel #2	115,000 - channel #2
N/R - No Records		



NAME OF STREAM GOSNELL CREEK
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows E. into Thautil River. N.E. of Morice Lake, Rge.5, Coast.
 POSITION 54 127 SE. Dist.
 LENGTH 35 km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

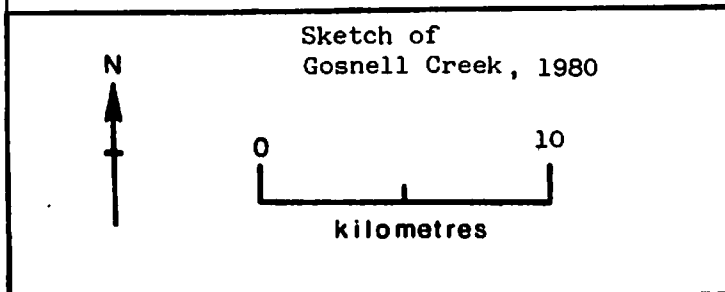
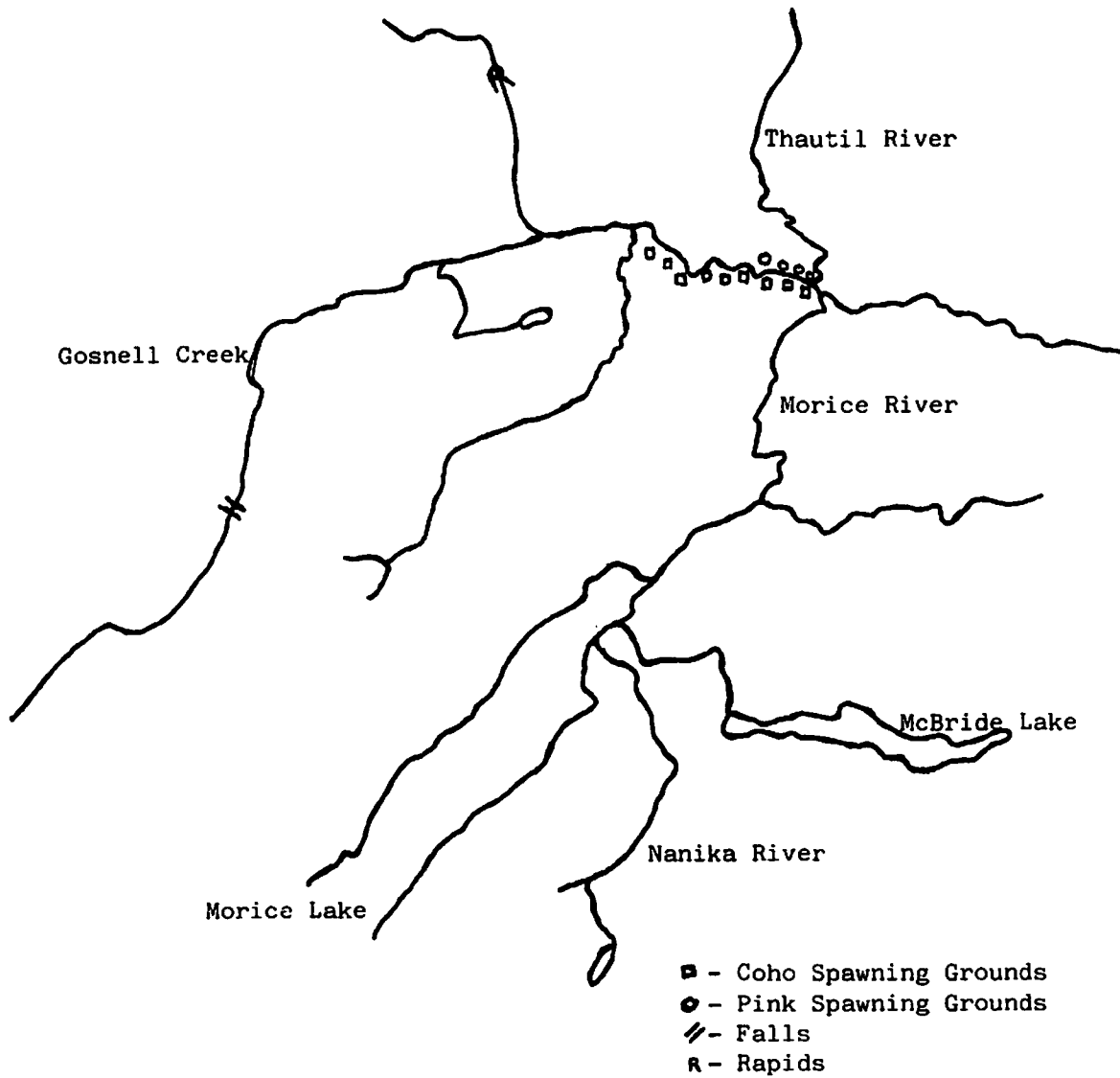
BARRIERS OR POINTS OF DIFFICULT ASCENT _____
4 m falls at 35km from mouth deters fish passage
beaver dams passable under favourable conditions -- cause scouring
in some years--removed by clearance crews as required.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	
COHO	- throughout
CHUM	
PINK (ODD YEAR)	- lower stream near mouth
PINK (EVEN YEAR)	- " "
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS Remote area makes observation and count difficult. Early numbers
given by local residentsRecent inspections by helicopter.
1977 - Northwood Pulp and Paper plans to bridge the Morice River near the mouth
of creek and build a logging road to the creek's head waters.
1980 - Log jammed across top of falls 25 km up the creek. Recommend removal. No
coho observed above obstruction.
Predators: bears and birds. Heavy beaver activity in upper area.



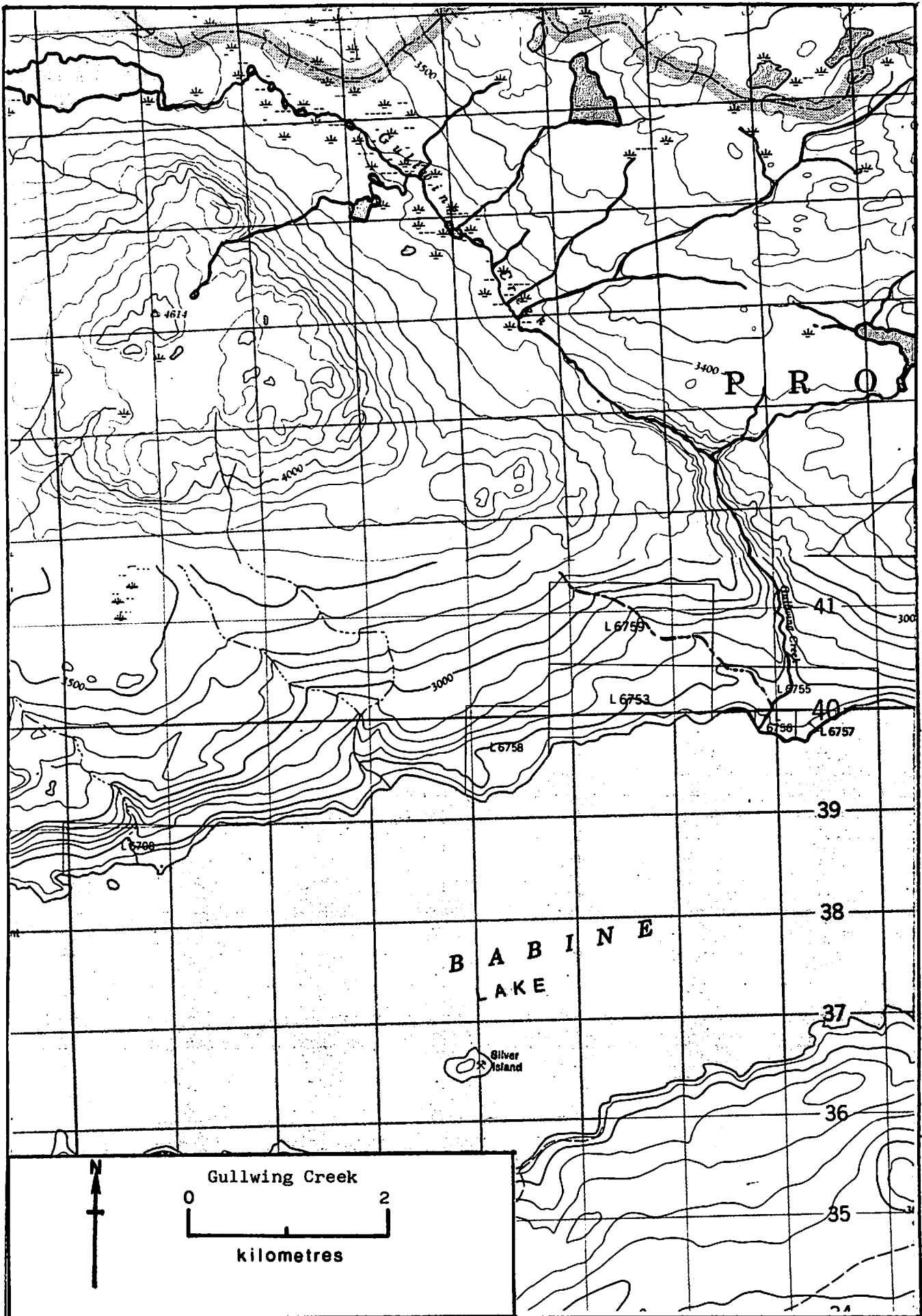
ESCAPEMENT RECORD FOR GOSNELL CREEK

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49	OBS		OBS			
50						
51	N/I		N/I			
52	N/I		N/I			
53	OBS		OBS			
54	N/I		N/I			
55	OBS		3,000			
56	N/O		4,000			
57	N/O		1,500			
58	N/O		3,500			
59			3,500			
60			1,500			
61			1,500			
62			N/I			
63			1,000			
64			500			
65			1,000			
66			1,000			
67			1,200			
68			1,500			
69			1,000			
70			1,000			
71			N/I			
72			N/I			
73			N/O			
74			N/I			
75			N/O		1,200	
76			N/O		N/O	
77			N/O		200	
78			N/I		N/I	
79						
80			1,000		N/O	
81	UNK		UNK		UNK	
82					2500*	
83						
84						
85						

TIMING

ARRIVE			Sept			
START			Sept-E Oct		Aug	
PEAK			L Oct		Aug	
END			E-M Nov		Sept	

REMARKS * Estimate from reports by sports fishermen. N/I - Not Inspected



NAME OF STREAM GULLWING CREEK (Six Mile Creek, Wiggins Creek)
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows S. into E. end of Babine Lake, Rge. 5, Coast Dist.
 POSITION _____
 LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

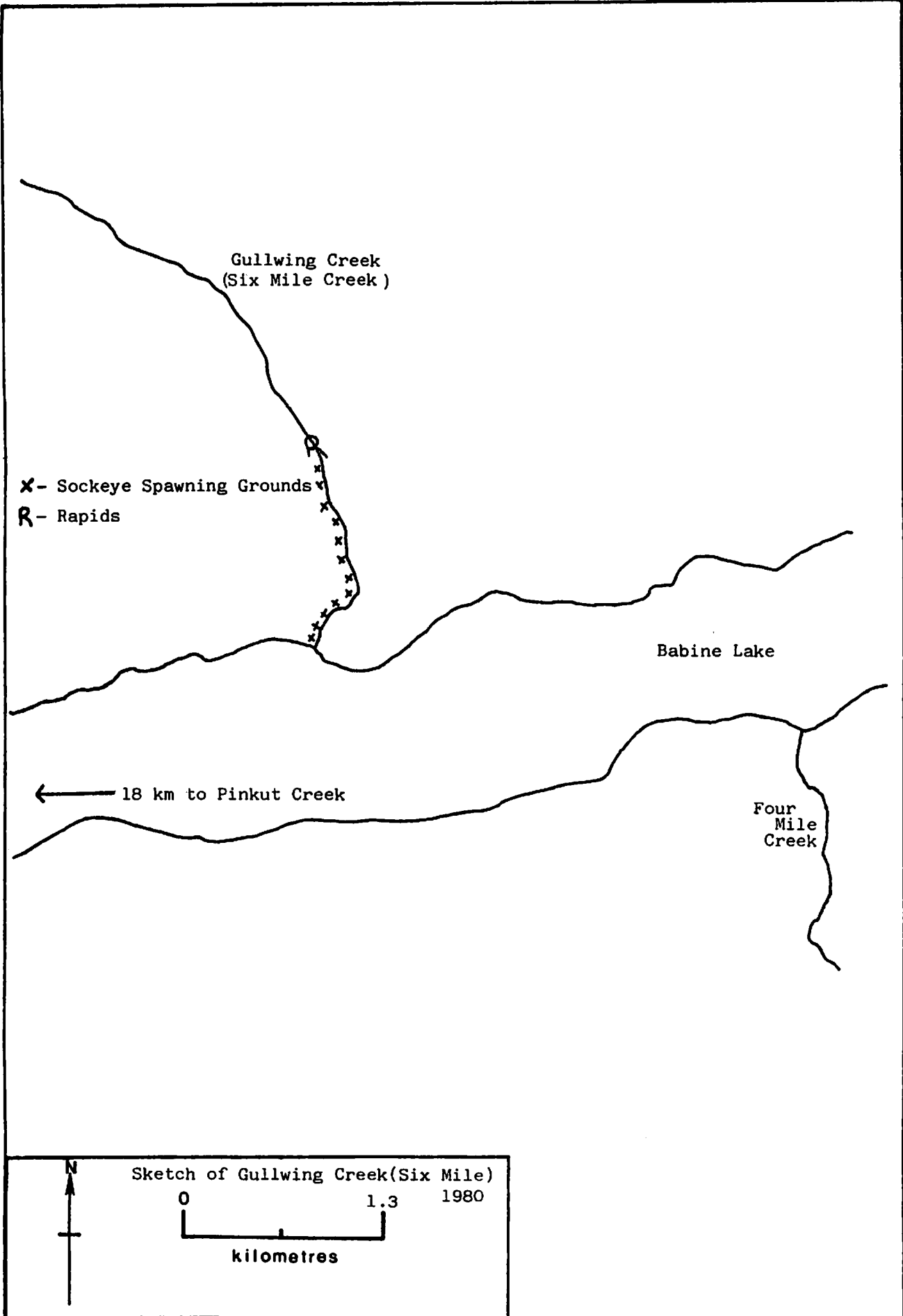
BARRIERS OR POINTS OF DIFFICULT ASCENT Rocks and fast water approx. 3.2 km from
mouth -- passable to rapids in canyon depending on water levels.
Gravel bar at mouth formed when water levels are low and current gets sluggish
and creates poor entrance conditions during low flow periods.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	<u>between mouth and rapids in canyon</u>
CHINOOK	
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

1959 - Stream clearance advised for area above canyon.
 GENERAL REMARKS 1948 - Some silting, scouring and erosion noted 69.
- some digging up of early spawned eggs by late spawners.
- good sized fish.
- Fisheries research board operated a fry counting fence with relative success.
1951 - Water too low to allow run. 1952 Stream dry--no run 56,61.
1958 - Counting fence removed to improve channel. About 250 early spawners died
due to low water and high temperatures.
1973 - Gravel bar increased in size in E. Sept. and completely blocked stream
entrance, but 4800 sockeye entered before water became too low.
Predators: eagles, raven and bear. Water levels fluctuate seasonally.



Gullwing Creek
(Six Mile Creek)

X- Sockeye Spawning Grounds
R- Rapids

Babine Lake

← 18 km to Pinkut Creek

Four
Mile
Creek



Sketch of Gullwing Creek(Six Mile)



kilometres

1980

ESCAPEMENT RECORD FOR GULLWING CREEK (Six Mile Creek, Wiggins Creek)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947	697					
48	3,500					
49						
50						
51	N/O					
52	N/O					
53	2,663					
54	1,800					
55	100					
56	50					
57	600					
58	2,500					
59	3,500					
60	1,000					
61	N/O					
62	1,000					
63	1,845					
64	1,500					
65	100					
66	300					
67	1,200					
68	1,000					
69	300					
70	600					
71	350					
72	1,400					
73	4,800					
74	880					
75	100					
76	450					
77	1,500					
78	300					
79						
80	1,300					
81	800					
82	6,000					
83						
84						
85						

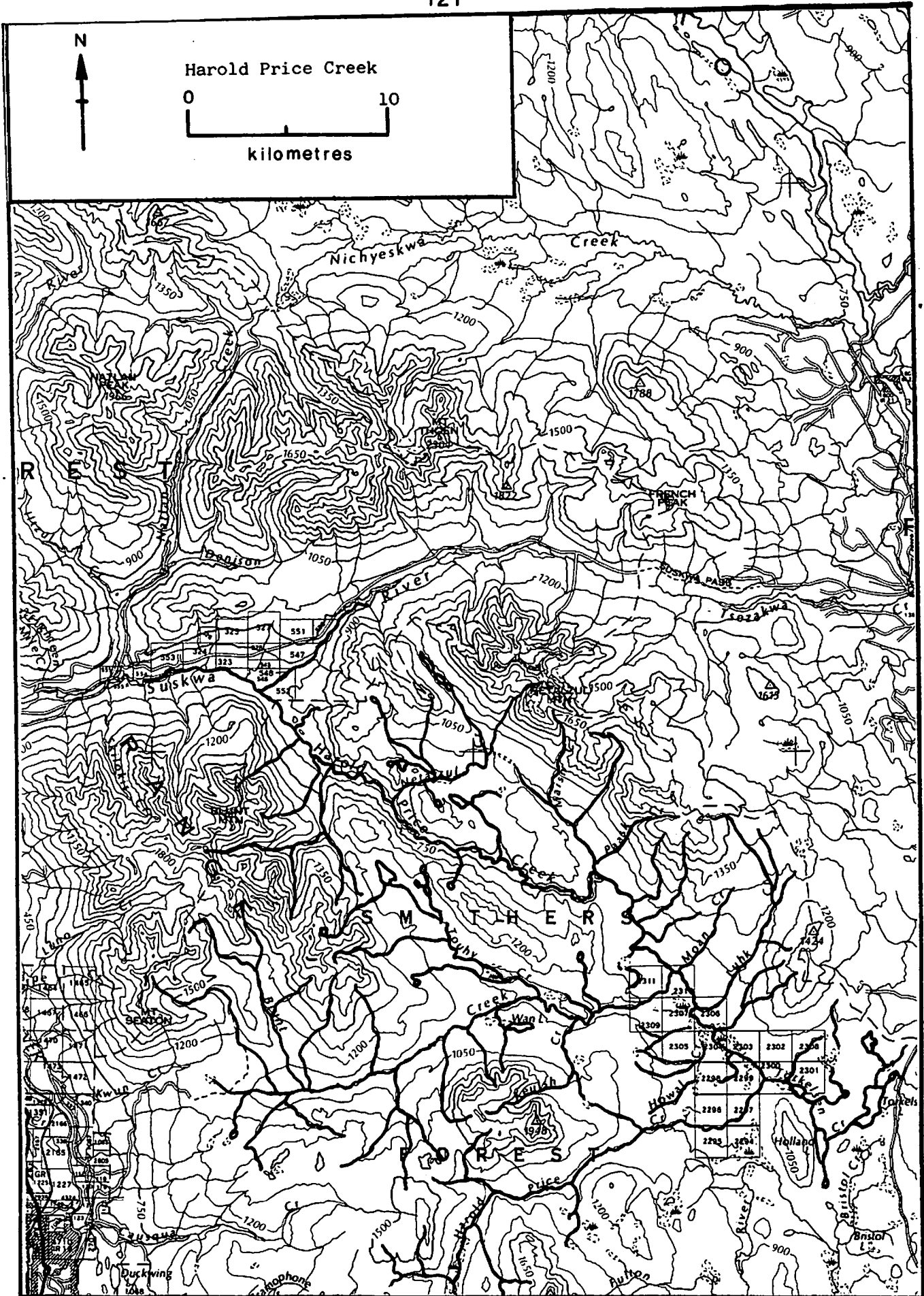
TIMING

ARRIVE						
START	E Aug-E Sept					
PEAK	L Aug					
END	M Sept-L Oct					

REMARKS



Harold Price Creek



NAME OF STREAM HAROLD PRICE CREEK

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH Flows N.E. and N.W. into Suskwa River, Cassiar Dist.

POSITION 55 127 SE.

LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____

SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION NOT KNOWN.

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS Water levels in this Creek are normal to low.

1980 - Due to the difficulty in getting to this stream the counts and spawning dates are subject to change when access becomes less time consuming.

1982 - Very difficult access.

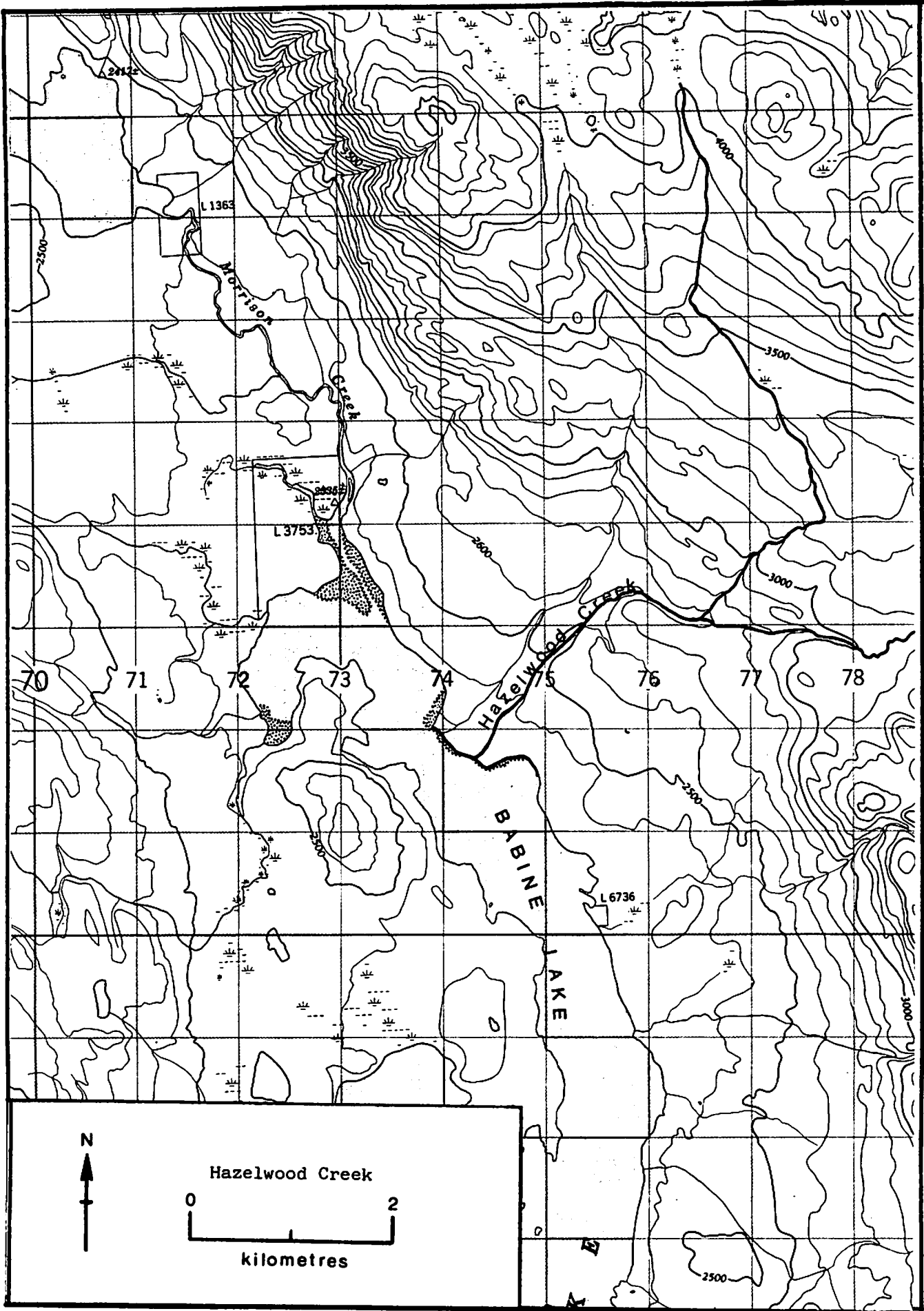
ESCAPEMENT RECORD FOR HAROLD PRICE CREEK

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65						
66						
67						
68						
69						
70						
71						
72						
73						
74						
75						
76						
77						
78						
79						
80				75		present
81				25		present
82		10		25		present
83						
84						
85						

TIMING

ARRIVE			E Sept			
START		Not Known	Sept 15			
PEAK			Sept 30			
END			Oct 30			

REMARKS



NAME OF STREAM _____ (Hazelwood Creek)

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH Flows S.W. into Babine Lake, Cassiar Dist.

POSITION 55 126 SE.

LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____

SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- lower 137 m
CHINOOK	
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

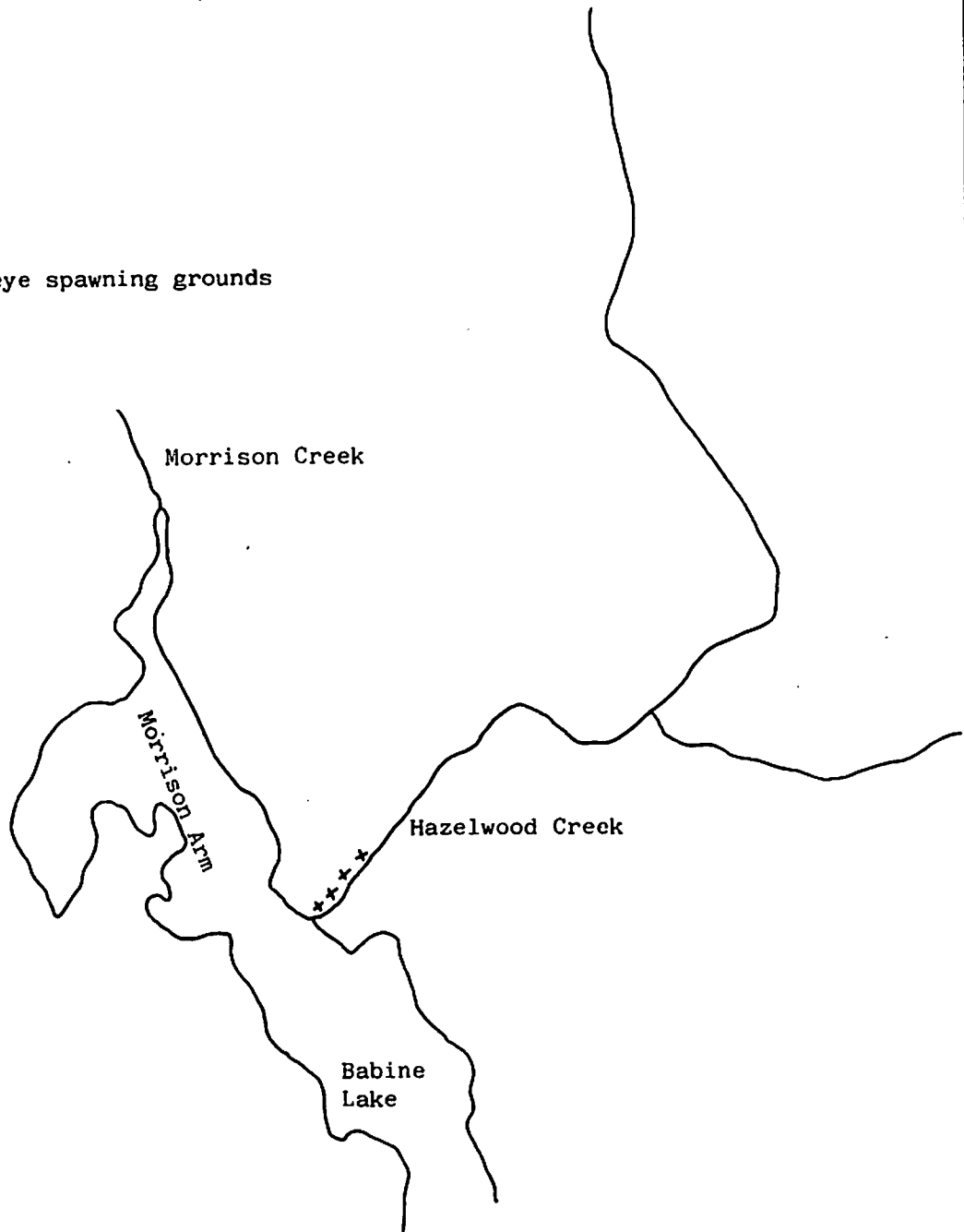
POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1980 - New stream discovered by T. Turnbull and Grant Hazelwood.

Low water level

Predators: birds and bear -- heavy.

x - Sockeye spawning grounds



Sketch of Hazelwood Creek, 1980



kilometres

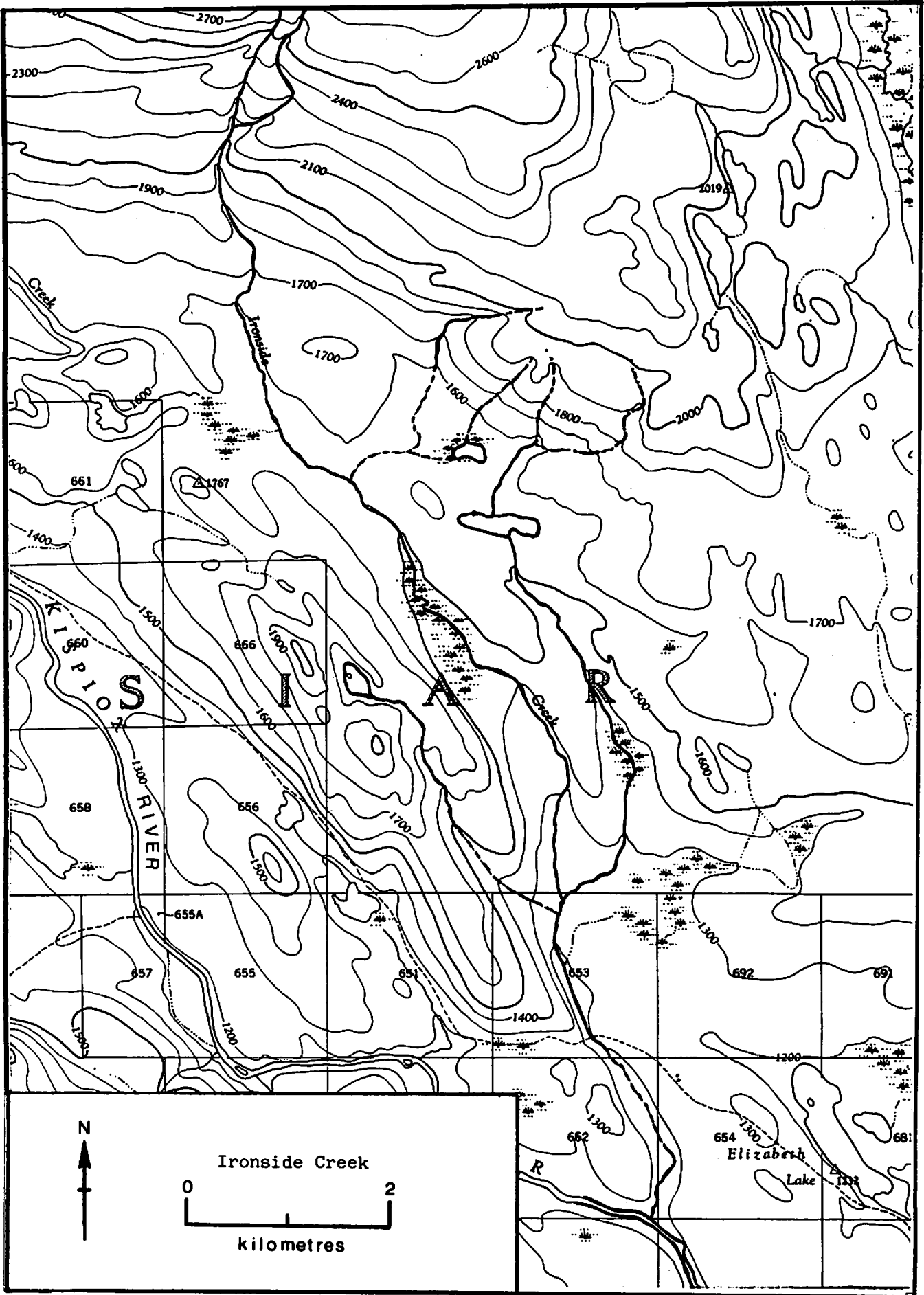
ESCAPEMENT RECORD FOR (Hazelwood Creek)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65						
66						
67						
68						
69						
70						
71						
72						
73						
74						
75						
76						
77						
78						
79						
80	50					
81	N/I					
82	N/I					
83						
84						
85						

TIMING

ARRIVE						
START	Aug					
PEAK	Sept					
END	Sept					

REMARKS N/I - Not Inspected



NAME OF STREAM IRNSIDE CREEK

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH Flows S. into Kispiox River, Cassiar Dist.

POSITION 55 128 NE.

LENGTH 9.6 km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____

SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

Culvert 4.8km from mouth obstacle to fish passage. Requires baffling to assist fish passage. Beaver dams can present problems during low flows.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	
COHO	- see sketch map
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1966 - Some fish injured from trying to negotiate culvert.
1969 - Forestry service replaced culvert with a bridge.
1970 - Stream clearance work to open stream and remove beaver dams.
1974 - Some erosion silting and scouring from Oct. flood.
1982 - Breached throughout the fall.

Creek meanders through beaver country — dams removed as required.
Good coho rearing areas. Subject to fluctuations in water levels.
Predators: bears.

Ironside Creek

□ - Coho Spawning Grounds

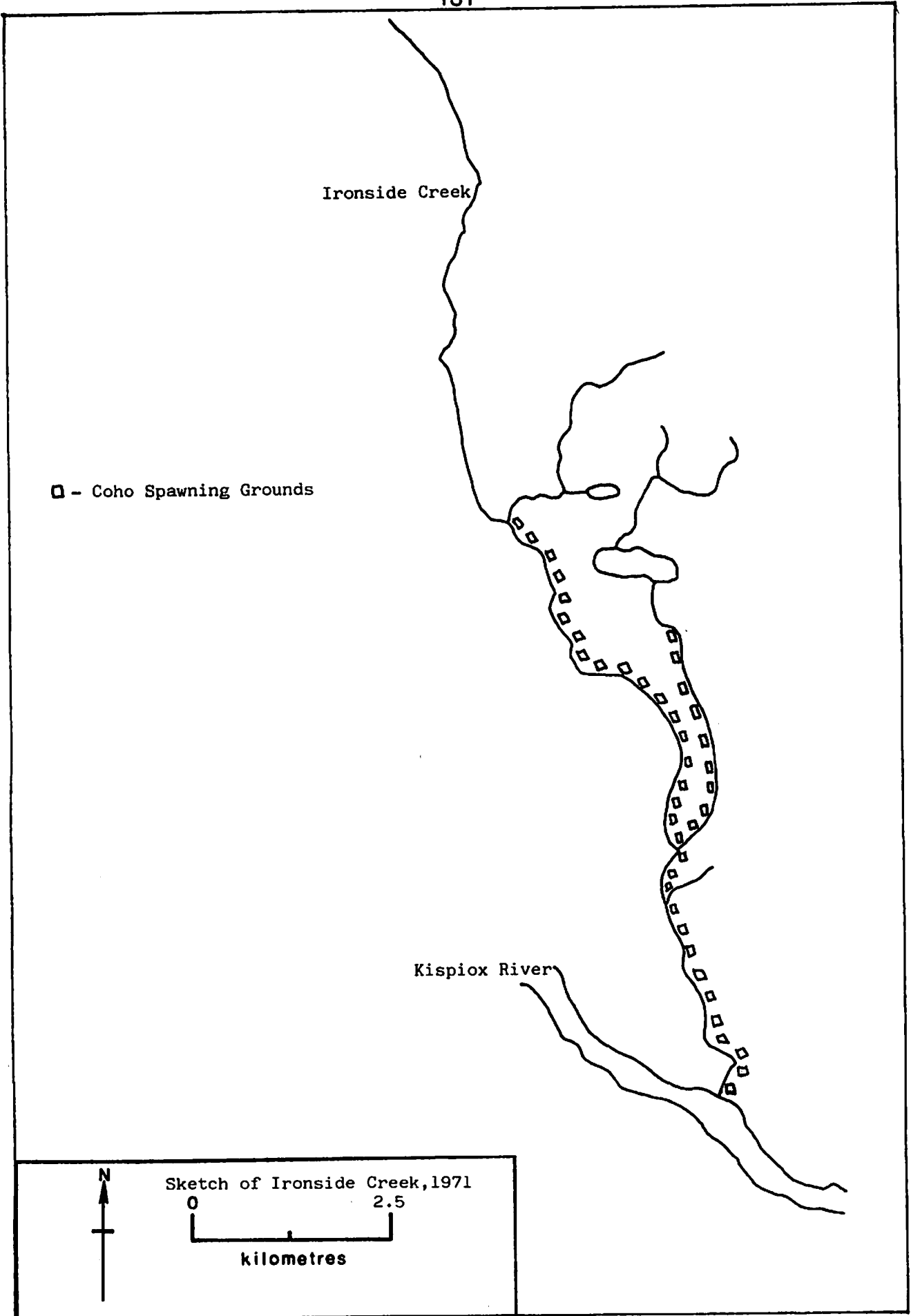
Kispiox River



Sketch of Ironside Creek, 1971



kilometres



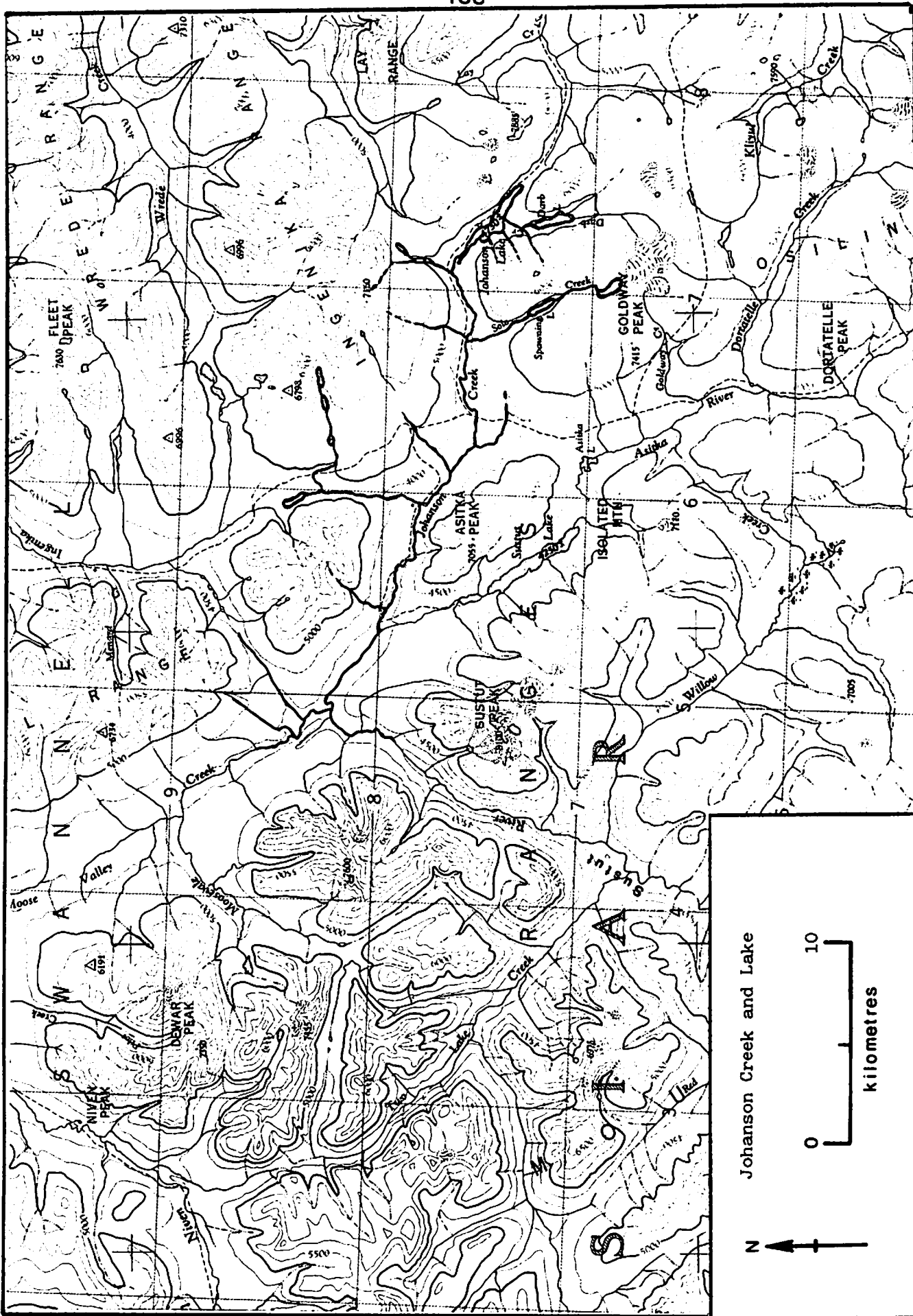
ESCAPEMENT RECORD FOR IRONSIDE CREEK

YEAR	SUCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65			750			
66			1,500			
67			400			
68			3,500			
69			750			
70			750			
71			750			
72			400			
73			400			
74			200			
75			200			
76			200			
77			400			
78			400			
79			25			
80			75			
81			75			
82			275			
83						
84						
85						

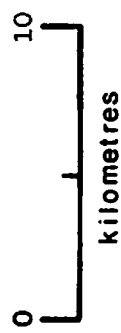
TIMING

ARRIVE			Sept-Oct			
START			L Sept-Oct			
PEAK			M Oct-M Nov			
END			Nov - E Dec			

REMARKS _____



Johanson Creek and Lake



NAME OF STREAM JOHANSON LAKE AND CREEK

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH Head of Johanson Creek, Cassiar District.

POSITION 56 126 NE.

LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____

SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT passable except when beaver dams act as obstruction

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- in lake (scattered) see sketch map
CHINOOK	
COHO	- in stream
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	- stream and lake narrows

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1957 - Sport fishermen reported good run of steelhead.

1960 - Good steelhead fly fishing.

1964 - Information obtained from F.R.B. personnel.

1977 - Well placed mining road along Johanson Creek and Sustut to Mooseville Creek with no observable destruction to fish habitat.

1978 - Silting from mining road noticed.

Occasional beaver dams in upper reaches. Observation conditions often difficult.
Seasonal fluctuation in water levels. Predators: bear and birds.

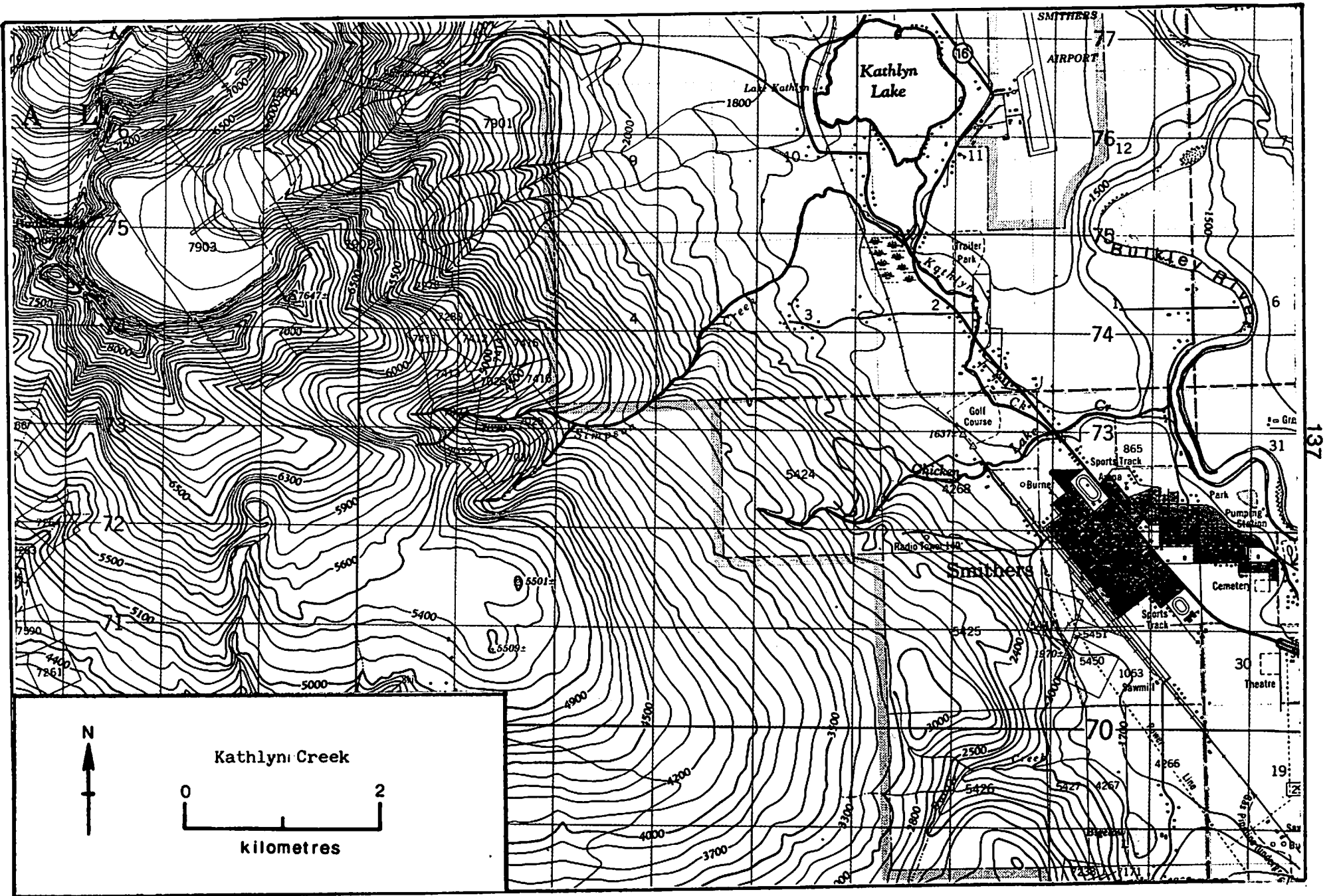
ESCAPEMENT RECORD FOR JOHANSON LAKE & CREEK

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57	75					750
58	200					400
59	25		75			750
60	25		N/O			400
61	250					
62	250					
63	300					
64	200					
65	100					
66	N/O					OBS
67	50					
68	600					
69	300					
70	500					
71	N/O					
72	800					
73	300					
74	50					
75	N/R					
76	N/I					
77	40					
78	2	100				
79						
80	100	N/R				
81	N/O	10				
82	N/I	N/I				
83						
84						
85						

TIMING

ARRIVE		No Data				E Sept
START	Aug-E Sept	No Data	L Sept			M Sept
PEAK	Aug-M Sept	No Data				Oct
END	L Sept-E Oct	No Data				Nov

REMARKS N/R - No Record, N/I - Not Inspected



NAME OF STREAM KATHLYN CREEK (Chicken Creek)
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows S.E. into Bulkley River, North of Smithers, Rge. 5,
Coast Dist. POSITION 54 127 NE.
 LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

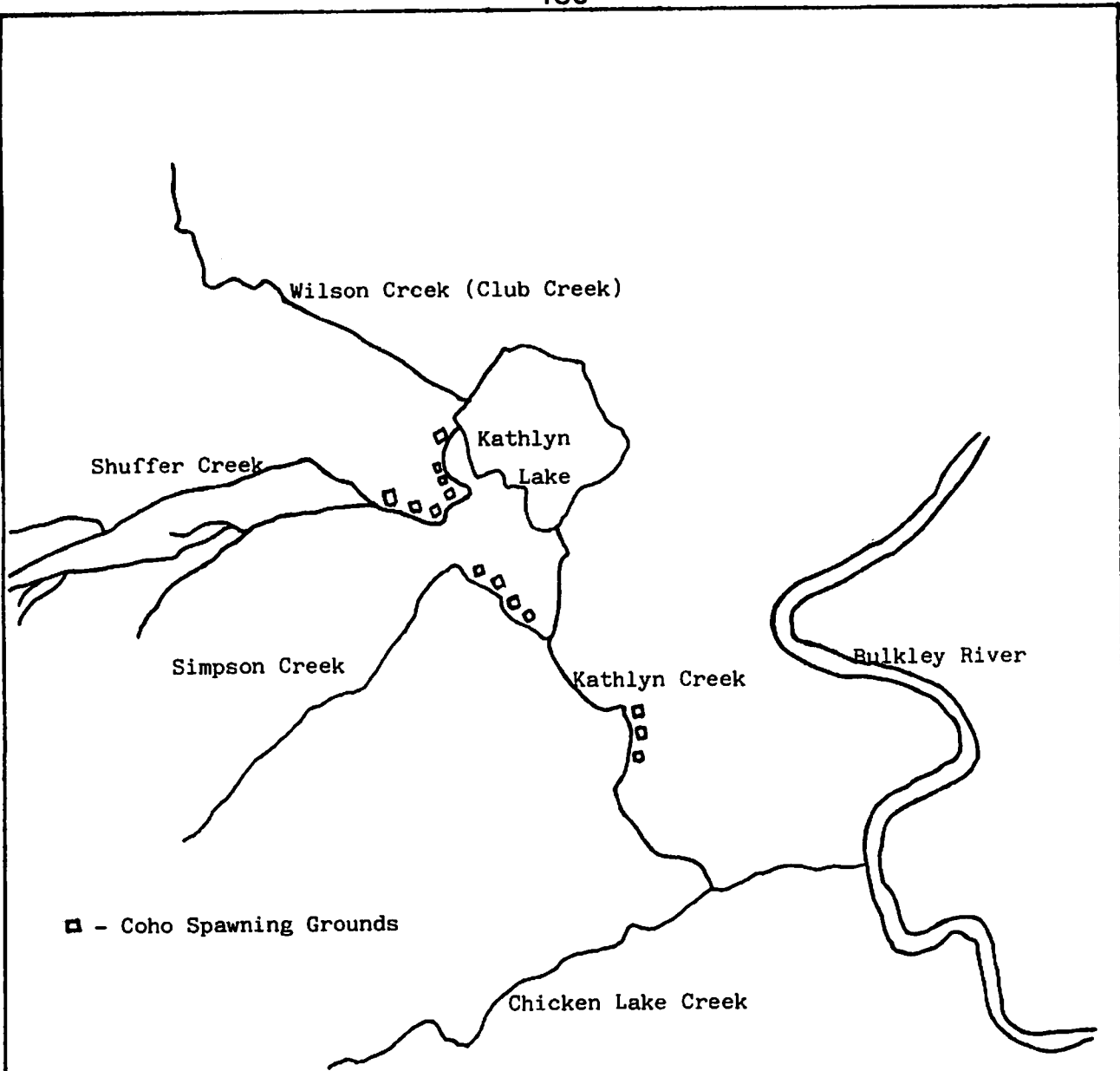
BARRIERS OR POINTS OF DIFFICULT ASCENT _____
Extensive beaver activity, 1982 Beaver dams removed on a weekly
basis during spawning migration.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	
COHO	- above Kathlyn Lake in Shuffer Creek and downstream from lake.
CHUM	
PINK (ODD YEAR)	- lower reaches when present
PINK (EVEN YEAR)	- " "
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1951 Some oil pollution from C.N.R. Roundhouse.
1958 - It is expected that this stream will have sludge from city septic
tanks flushed into it this spring. Summer camps and housing on and
around Lake Kathlyn has increased water diverted for domestic use.
1960 - Lake water polluted from lakeside septic tanks--Lake supplies water
for creek.
Very small stream, but good gravel at various location -- good cover
willows and alder.
1967 Heavy sports fishery at mouth.
In recent years increased domestic water use has raised the pollution level
from sewage disposal.



N
↑
Sketch of Kathlyn Creek (Chicken) Creek, 1980
0 2
kilometres

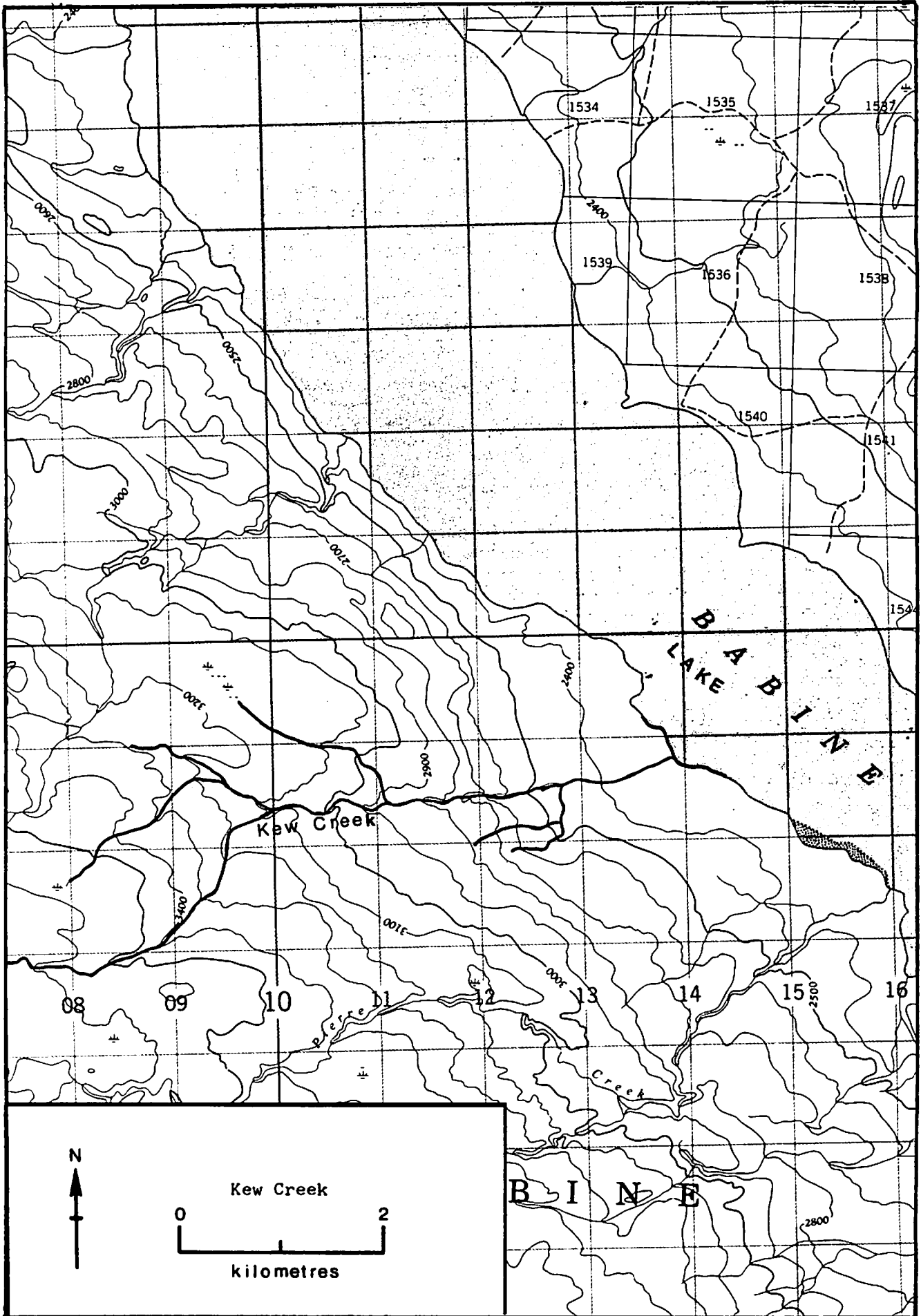
ESCAPEMENT RECORD FOR KATHLYN CREEK (Chicken Creek)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947			25			
48			400			
49			575			
50						
51			750			
52			750			25
53			600			60
54			600			40
55			500			30
56			400			25
57			200			25
58			400			25
59			200			
60			200			
61			400			
62			800			
63			350		2,500	
64			200		1,500	
65			500			
66			300			
67			300			
68			300			
69			350			
70			300			
71			200			
72			N/0			
73			200			
74			150			
75			32			
76			100			
77			350			
78			350		150	2
79		75				
80			40			
81						
82			25			
83						
84						
85						

TIMING

ARRIVE					
START		Oct	Sept-E Oct		E Sept M-L Oct
PEAK		Oct	Oct-E Nov		M Sept L Oct
END		Nov	M Nov-M Dec		L Oct

REMARK



NAME OF STREAM (Kew Creek)

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH Flows into Babine Lake.

POSITION _____

LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____

SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT fast water 0.8 km from stream mouth.

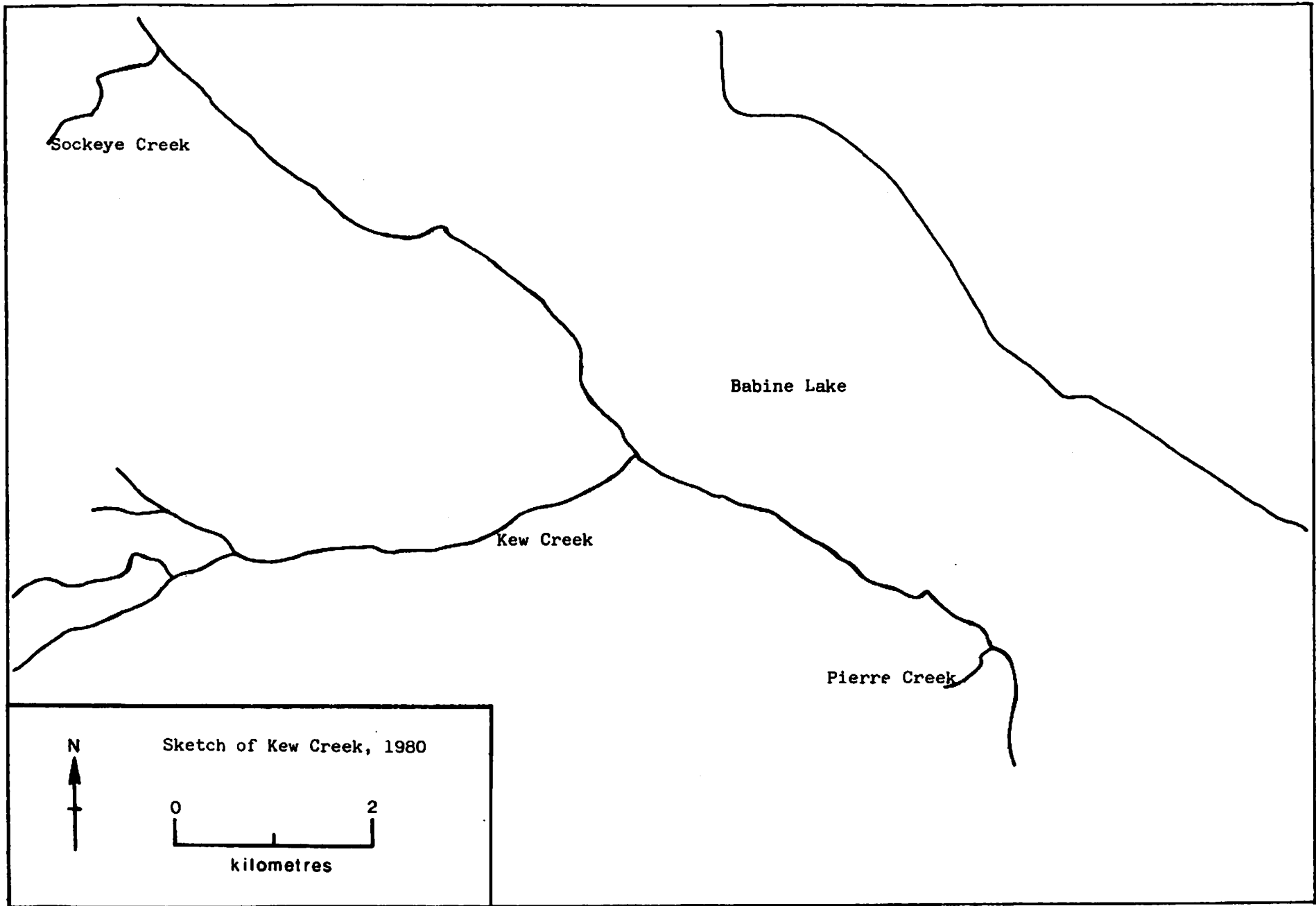
Passable in high water years.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	<u>for about 0.8km from mouth.</u>
CHINOOK	
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS Creek dries at time of migration. Dry each year since 1959.
Recommend that stream be struck from spawning reports. No report since 1959.



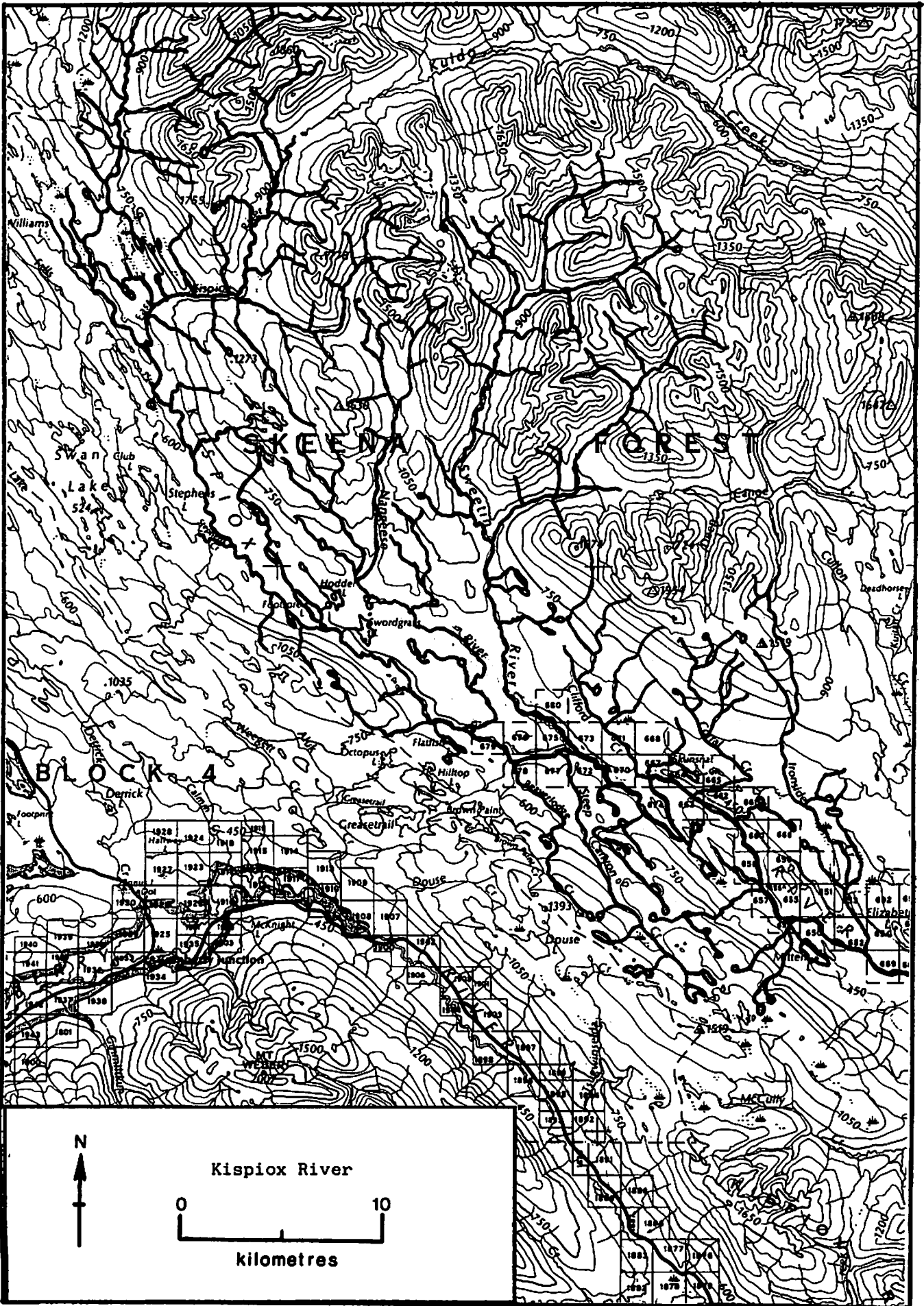
ESCAPEMENT RECORD FOR (Kew Creek)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53	100					
54	300					
55						
56	N/O					
57	N/O					
58	N/O					
59	400					
60	N/O					
61	N/O					
62	N/O					
63	N/O					
64						
65	N/O					
66	N/O					
67	N/O					
68	N/O					
69	N/O					
70	N/O					
71	N/O					
72	N/O					
73	N/R					
74	N/R					
75	N/R					
76	N/R					
77	N/R					
78						
79						
80	N/O					
81	N/I					
82	UNK					
83						
84						
85						

TIMING

ARRIVE						
START	L July-E Aug					
PEAK	E-L Aug					
END	L Aug-Sept					

REMARK N/R - No Record, N/I - Not Inspected



NAME OF STREAM KISPLOX RIVER
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows S.E. into Skeena River, North of Bulkley River, Cassiar Dist

POSITION 55 127 SW.
 LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

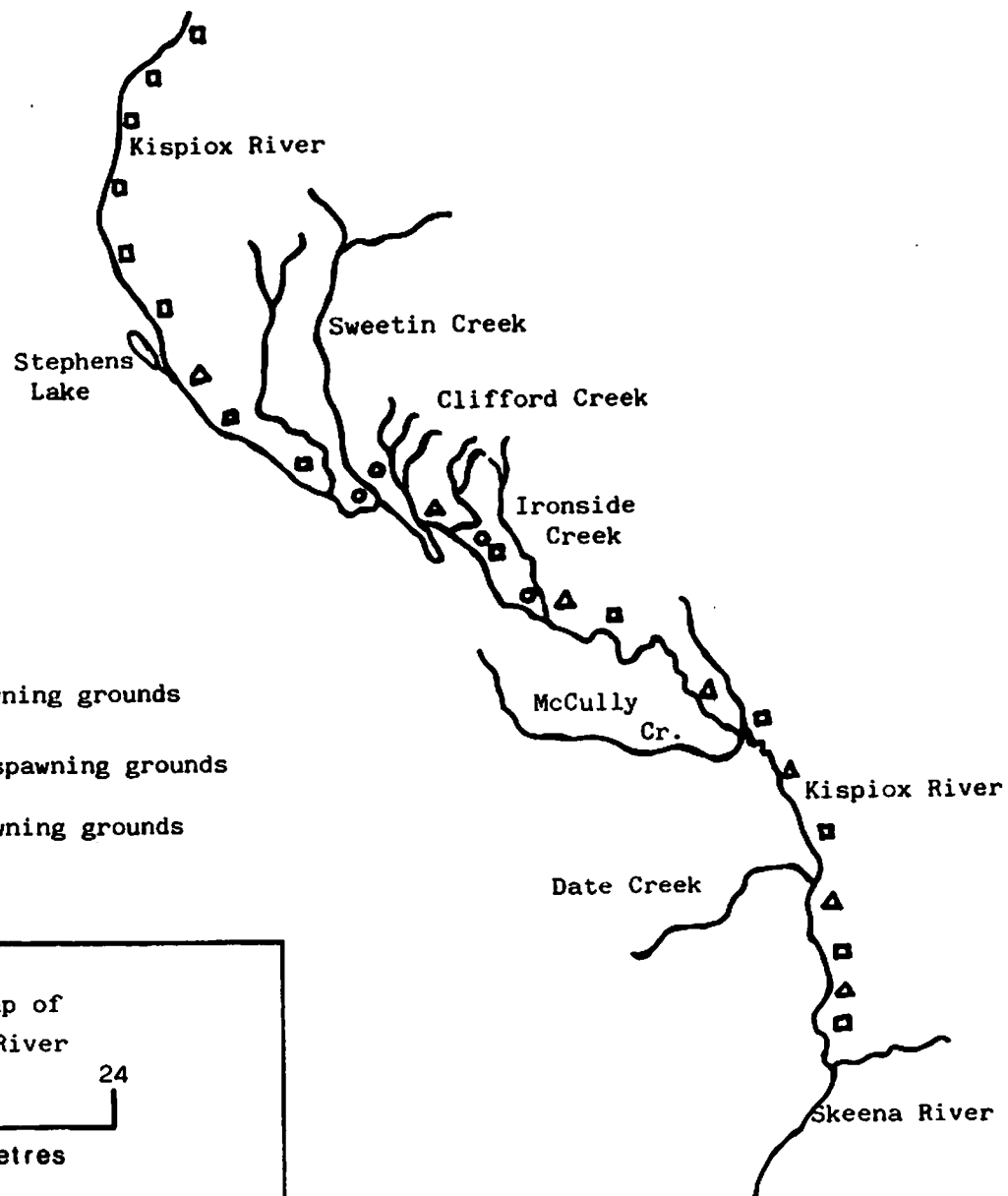
BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	- scattered to Stevens Lake
COHO	- upper section
CHUM	- near Date Creek, Sweetin River and Nangeese River
PINK (ODD YEAR)	- between McQueen River and Sweetin River
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM Approx 32 km of good spawning gravel above Gitwangulf Falls.

GENERAL REMARKS 1964/66 Forestry access roads improved inspection of canyon area. Growing sports fishery. Road open for 85 km in from Kisplox. 1970-80 Stream clearance for approx 96 km. 1981 Chinook count by S.E.P. was under 300 spawners. 1982 Although this river is a major system in the sub district, it was not inspected due to economic restraints. Seasonal fluctuations in water levels. Predators: birds and eagles.



ESCAPEMENT RECORD FOR KISPIOX RIVER

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947	OBS	OBS	OBS	OBS	OBS	OBS
48						
49			OBS	OBS	OBS	
50			OBS	OBS	OBS	
51						
52			OBS	OBS	OBS	OBS
53		OBS	OBS		OBS	OBS
54		3,500	7,500	15,000	75,000	OBS
55		3,500	3,500	1,500	100,000+	
56		3,500	7,500	1,500	75,000	
57		15,000	15,000	3,500	500,000	
58		3,500	35,000	1,500	70,000	
59		3,500	1,500	1,500	750,000	
60		UNK	UNK	200	60,000	UNK
61	OBS		3,500	450	30,000	UNK
62		25	400	25	67,500	
63		N/O	OBS	OBS	32,500	
64		75	750	200	7,500	
65		1,500	750	400	35,000	
66		400	75	750	1,500	
67		N/R	N/R		74,000	
68		400	1,500	400	3,500	OBS
69		400	750	400	180,000	OBS
70		400	750	400	7,500	
71		400	750	400	400,000	
72		400	750	3,500	15,000	
73		3,500	750	1,500	398,000	
74		3,000	750	1,500	5,000	
75		3,500	750	750	200,000	
76		750	750	750	10,000	
77		750	750	750	200,000	
78		400	1,500	200	10,000	
79		400	750	25	90,000	
80		300	600	75	5,000	
81		725	500	25	130,000	
82		N/R	N/R	N/R	N/R	
83						
84						
85						

TIMING

ARRIVE	July-Aug	Sept	Aug	E Aug	
START	M Aug	Oct	E-M Aug	M Aug	Aug
PEAK	E Sept	E Nov	M-L Aug	L Aug-E Sept	M Aug
END	Sept	Nov-Dec	M Sept	M-L Sept	

REMARK N/R - No Record



Kluatantan River



kilometres

NAME OF STREAM KLUATANTAN CREEK

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH Flows W. into Klumatantan River, Cassiar District.

POSITION 55 128 NE

LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____

SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1967 - Beaver dams washed out.
1969 - 10% scouring of spawning beds--inspection limited because of weather condition
1980 - anglers and local inhabitants report undetermined numbers of sockeye and coho.
1970,76,77,78 glacial waters are very murky -- spawning fish impossible to see and counts are estimated from floaters.

Predators: bear and birds.

x - Sockeye Spawning Grounds

Kluayaz Lake

Skeena River

Kluatantan Lake

Tantan Creek
(Kluatantan Creek)

Kluatantan River



Sketch of Kluatantan Creek (1980)



ESCAPEMENT RECORD FOR KLUATANTAN CREEK

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65						
66						
67		New File	New File			
68						
69	N/R	N/R	N/R			
70	50	N/O	N/O			
71	N/I					
72	N/I					
73	N/I					
74	N/I					
75	N/I					
76	N/I	N/I	N/I			
77	N/I	N/I	N/I			
78	N/O					
79						
80	N/I					
81	N/I					
82	N/I					
83						
84						
85						

TIMING

ARRIVE						
START	Aug	July	Sept			
PEAK	Sept	Aug	Oct			
END	Oct	Sept	Nov			

REMARK N/R - No Record, N/I - Not Inspected

KLUAYAZ CREEK AND LAKE

see

Kluatantan Creek p. 149

NAME OF STREAM KLUAYAZ CREEK AND LAKE

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH Flows S.W. into Klutatantan River, Cassiar Dist.

POSITION 57 128 SE.

LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____

SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- both sides of lake near outlets of small inlet streams
CHINOOK	
COHO	- small tributaries to lake.
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

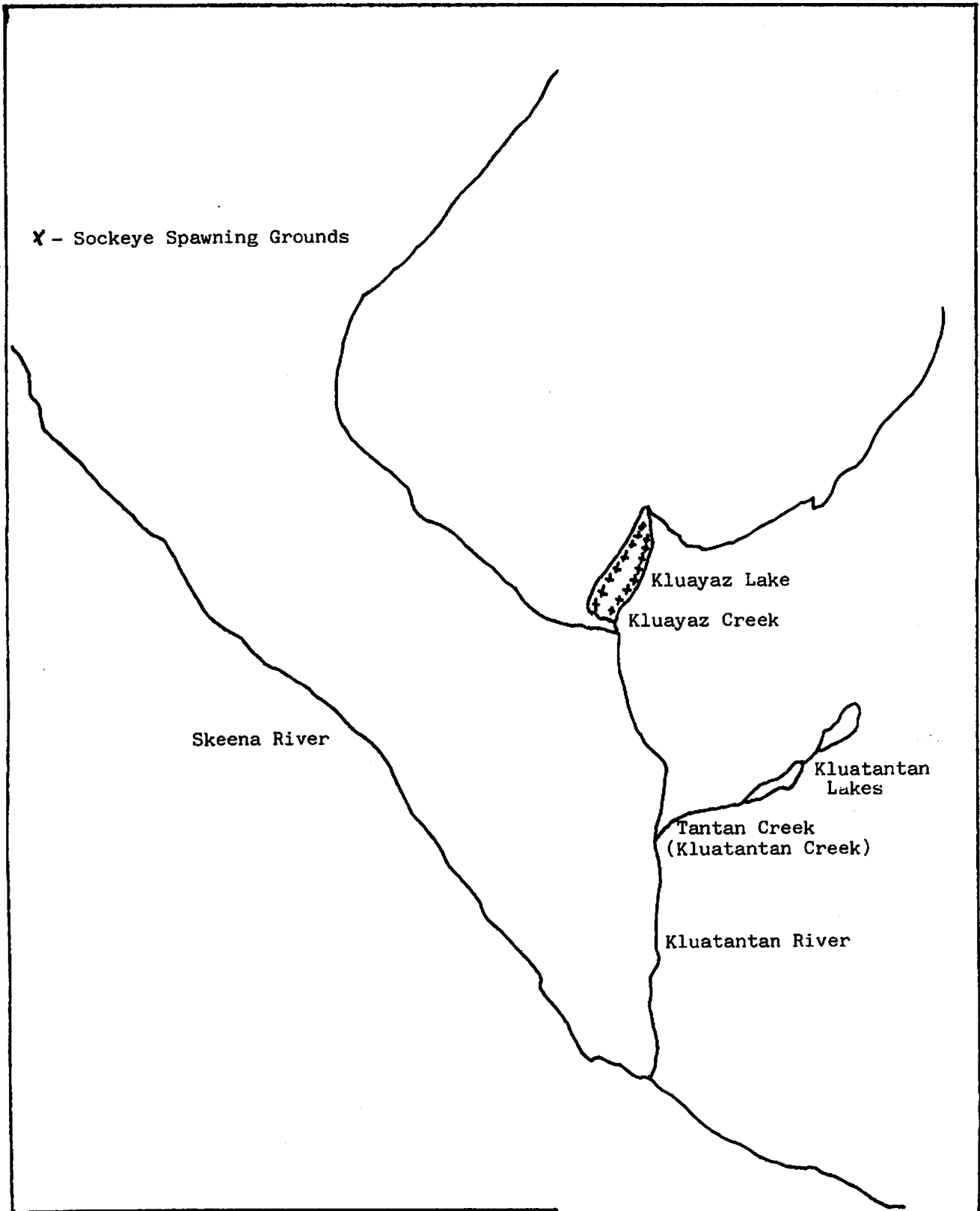
POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1967 - Beaver dams washed out.

1980 - Undetermined numbers of sockeye and coho must be present if sightings and anglers reports are taken into consideration.

Very milky glacial water obscures spawners. Counts estimated on numbers of dead floaters and game guide reports.

Predators: birds and bears.



X - Sockeye Spawning Grounds

Kluayaz Lake

Kluayaz Creek

Skeena River

Kluatantan
Lakes

Tantan Creek
(Kluatantan Creek)

Kluatantan River



Sketch of Kluayaz Lake and Creek,
1980



kilometres

ESCAPEMENT RECORD FOR KLUAYAZ CREEK/LAKE

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65						
66						
67	N/O					
68	N/I					
69	N/R		N/R			
70	600		300			
71	N/I		N/I			
72	N/I		N/I			
73	N/I		N/I			
74	N/I		N/I			
75	400		N/O			
76	N/O		N/O			
77	N/I		N/I			
78	N/O		N/O			
79						
80	N/I		N/I			
81	N/I					
82	UNK					
83						
84						
85						

TIMING

ARRIVE						
START	Aug		Sept			
PEAK	Sept		Oct			
END	Oct		Nov			

REMARK N/R - No Record, N/I - Not Inspected



McDonnell Lake System



kilometres

NAME OF STREAM McDONELL LAKE AREA (at head of Zymoetz River)

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH Head of Zymoetz River, Rge. 5, Coast Dist.

POSITION 54 127 NW.

LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____

SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT Beaver dams hamper fish passage
depending on water levels -- removed as required.

log jams throughout but do not hinder migrating
salmon 6l.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- see sketch map
CHINOOK	- just above Passby Creek
COHO	- in Passby Creek and upper reaches
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1953 - Sil-Van Mine opened in summer and silt entered the system.
1954 - Although mine did not operate, coho did not use upper reaches as they
have in previous years.
1964 Large coho -- averaged 5 - 6 kg.
1979 Chinook enhancement initiated.

High glacial silt content. Subject to seasonal fluctuations in water levels.
In some years sockeye runs have uneven sex ratios and large numbers of jacks.

Predators: bear, wolves, coyotes, birds.

(cont'd)

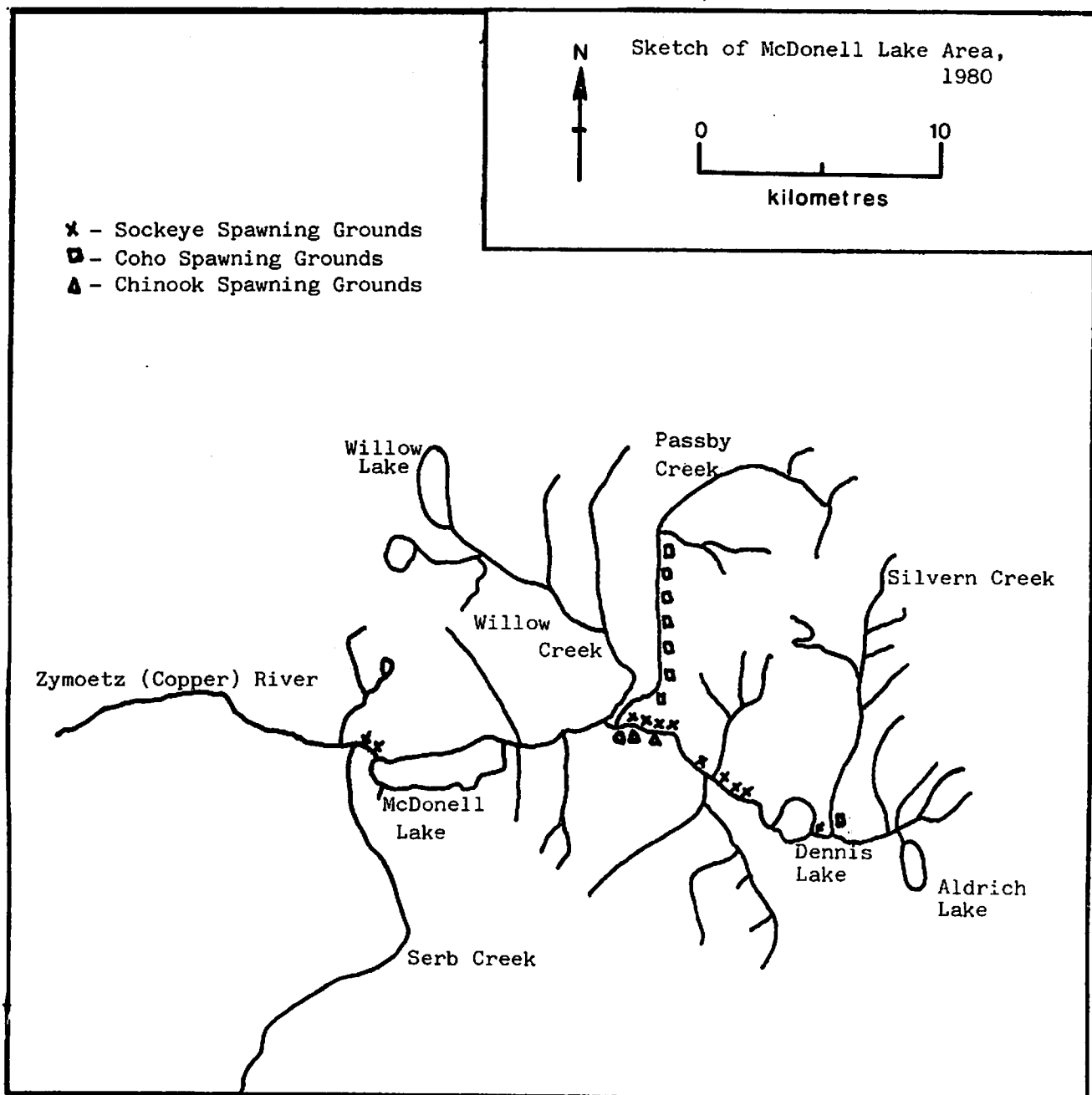
McDONELL LAKE AREA (at head of Zymoetz River)

References

Demontier, D., Minter, P., Sheng, M. 1980. Chinook and Steelhead Enhancement Potential for the Outlet of McDonell Lake, Zymoetz River System. S.P.U., S.P.D., S.E.P., D.F.O. Memo 5830-13-15-3 3 pp plus maps and figures.

Brown, R.F. 1980. 1980 Zymoetz (Copper) River Pilot Chinook Salmon Enhancement project. S.P.U., S.P.D., S.E.P., D.F.O. Copper River Files. 6 pp plus maps and figs.

Giroda, S. 1982. Copper River Chinook Hatchery 1981, Brood Stock Collection. S.P.U., S.P.D., S.E.P., D.F.O., Copper River Files 4pp plus map, figures and tables.



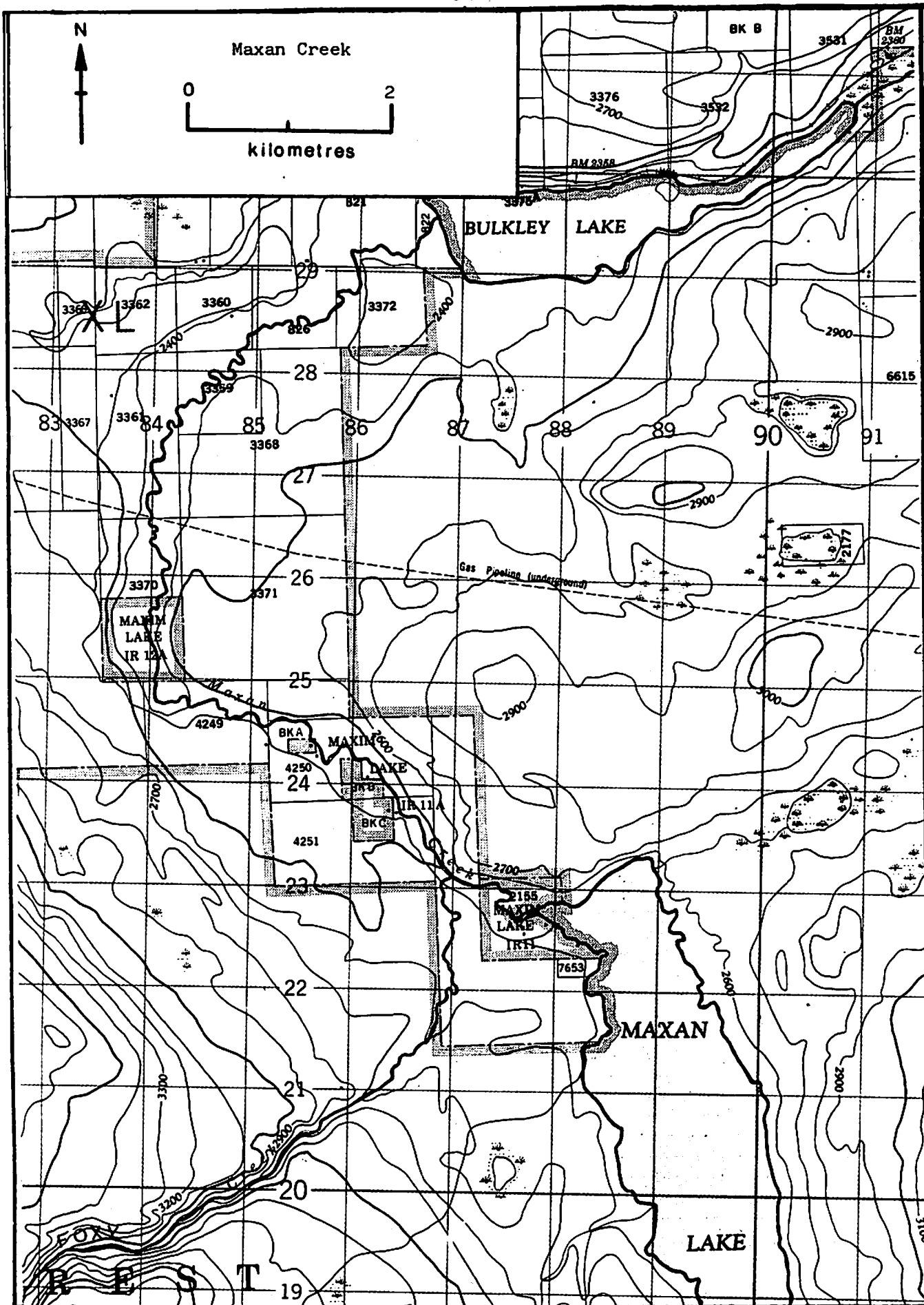
ESCAPEMENT RECORD FOR McDONELL LAKE AREA (at head of Zymoetz River)

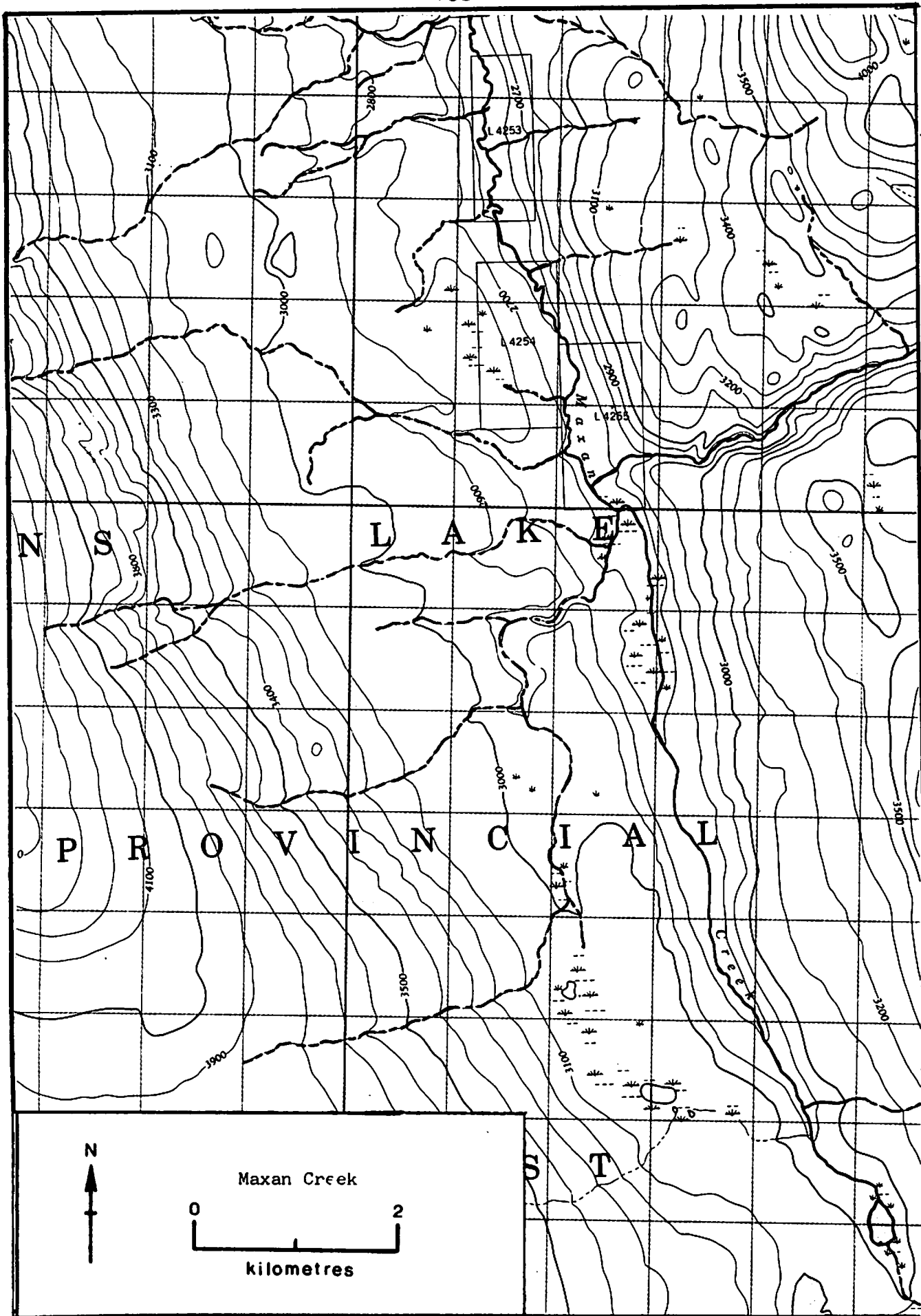
YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48	1,500					
49	1,200		N/I			
50						
51	6,000		750			OBS
52	3,500		750			
53	5,000		1,500			OBS
54	1,000		750			
55	1,000		1,000			N/O
56	750		1,500			N/O
57	3,500		3,500			200
58	1,500		3,500			200
59	750		3,500			200
60	750	200	1,500			200+
61	750		750			
62	500		1,500			
63	800		400			
64	500		500			
65	3,000		500			
66	4,000		500			
67	200		200			
68						
69	972		350			
70	1,500		800			
71	1,300		600			
72	600		1,200			
73	2,000		400			
74	1,800		400			
75	100		50			
76	N/R					
77	600		400			
78	4,000		1,500			
79						
80	140		N/R			
81	1,500		25			
82						
83						
84						
85						

TIMING

ARRIVE					
START	Aug-E Sept	E Sept	Sept- M Oct		E Nov
PEAK	M-L Sept	M Sept	M Oct-M Nov		
END	L Sept-E Oct	L Sept	Nov- E Dec		M Dec

REMARK N/R - No Record





NAME OF STREAM MAXAN CREEK
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows N. into Bulkley Lake, Rge. 5, Coast Dist.
 POSITION 54 126 SE.
 LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- Maxan Creek, below lake and in tributary streams
CHINOOK	
COHO	- Maxan Creek and above lake
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

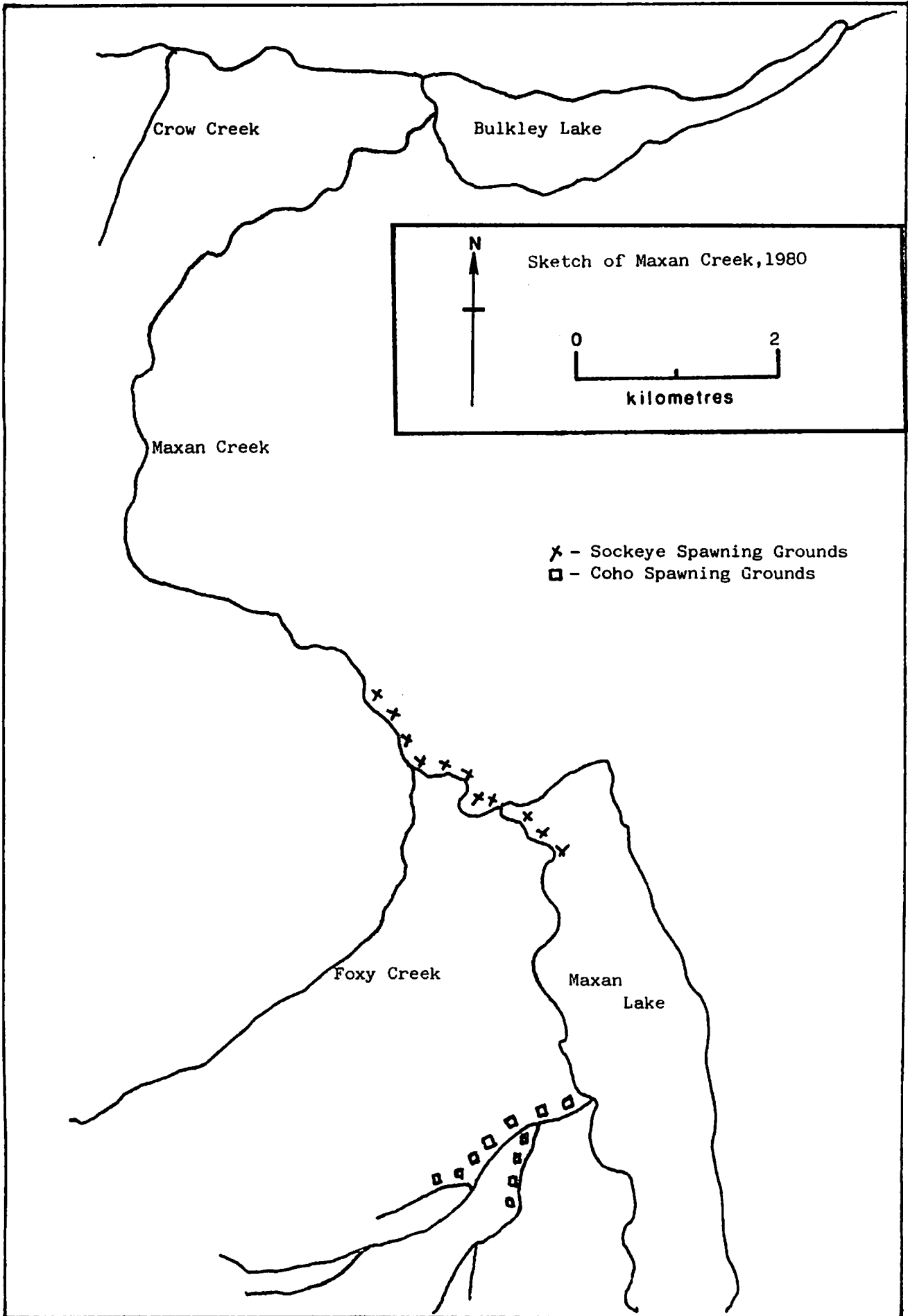
POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS Active beaver area 1965/69 74,78

Passable with good water levels. 1966/69 80
Beaver dams removed 1969 and 1978
Creek dry 1970,1980

Access improved by construction of logging roads.

Subject to seasonal fluctuations in water levels and drying.
Predators: bears and birds.



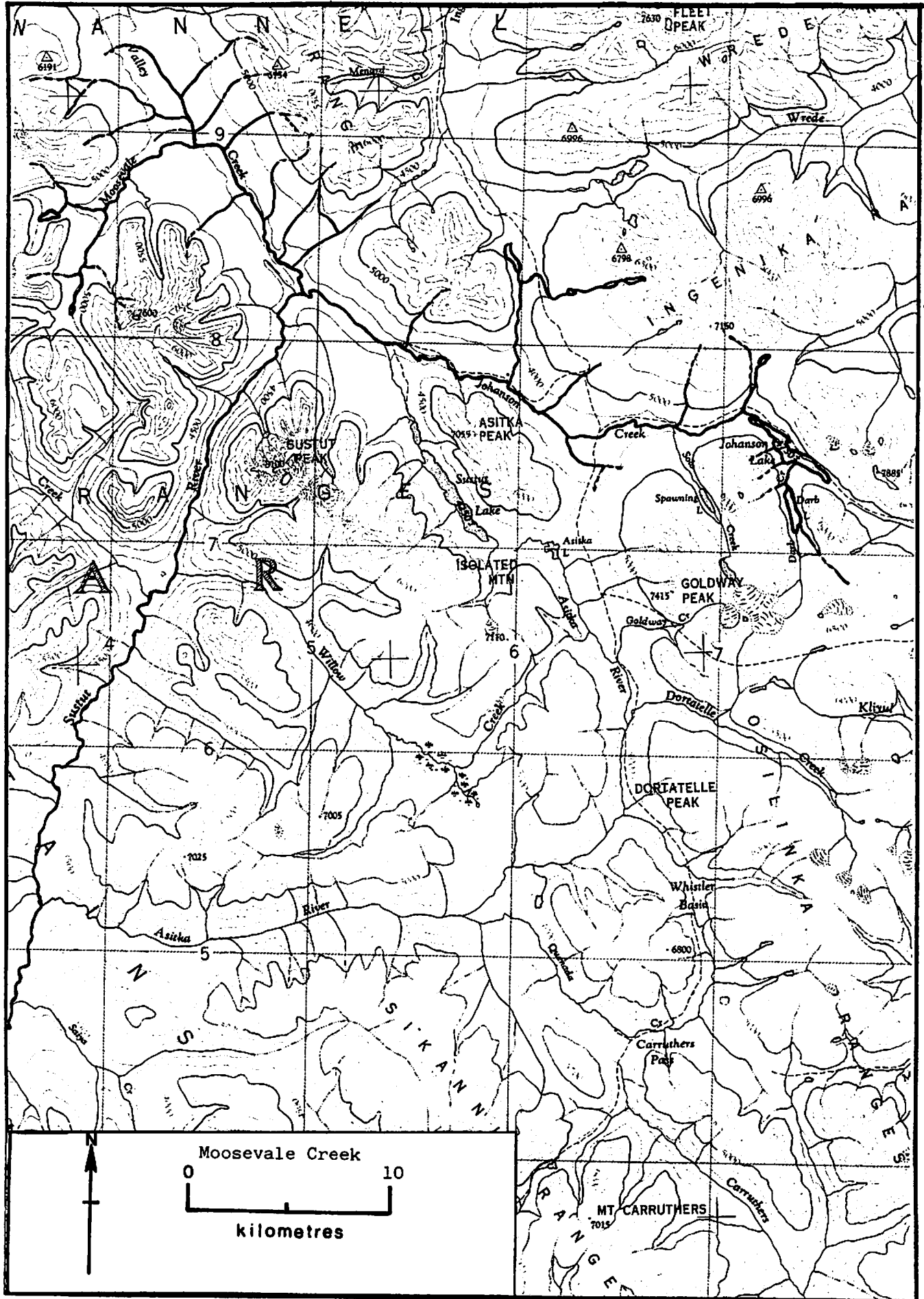
ESCAPEMENT RECORD FOR MAXAN CREEK

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65			100			
66			200			
67						
68			400			
69	200		500			
70	N/O		N/O			
71	300		300			
72			70			
73	N/I					
74	N/R		N/R			
75	N/R		N/R			
76	N/O		N/O			
77	100		N/O			
78			N/O			
79						
80			N/O			
81	N/R		N/R			
82	UNK		UNK			
83						
84						
85						

TIMING

ARRIVE					
START	Aug		Sept		
PEAK	Sept		Oct		
END	Sept		Nov		

REMARK N/R - No Record, N/I - Not Inspected



NAME OF STREAM MOOSEVALE CREEK -- NORTH FORK
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flowing SE, into Sustut River, N.W. of Sustut Lake, Cassiar Dist
 POSITION 56 126 NW.
 LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²
 DISCHARGE (m³/s) _____
 TEMPERATURE (°C) _____
 BARRIERS OR POINTS OF DIFFICULT ASCENT _____

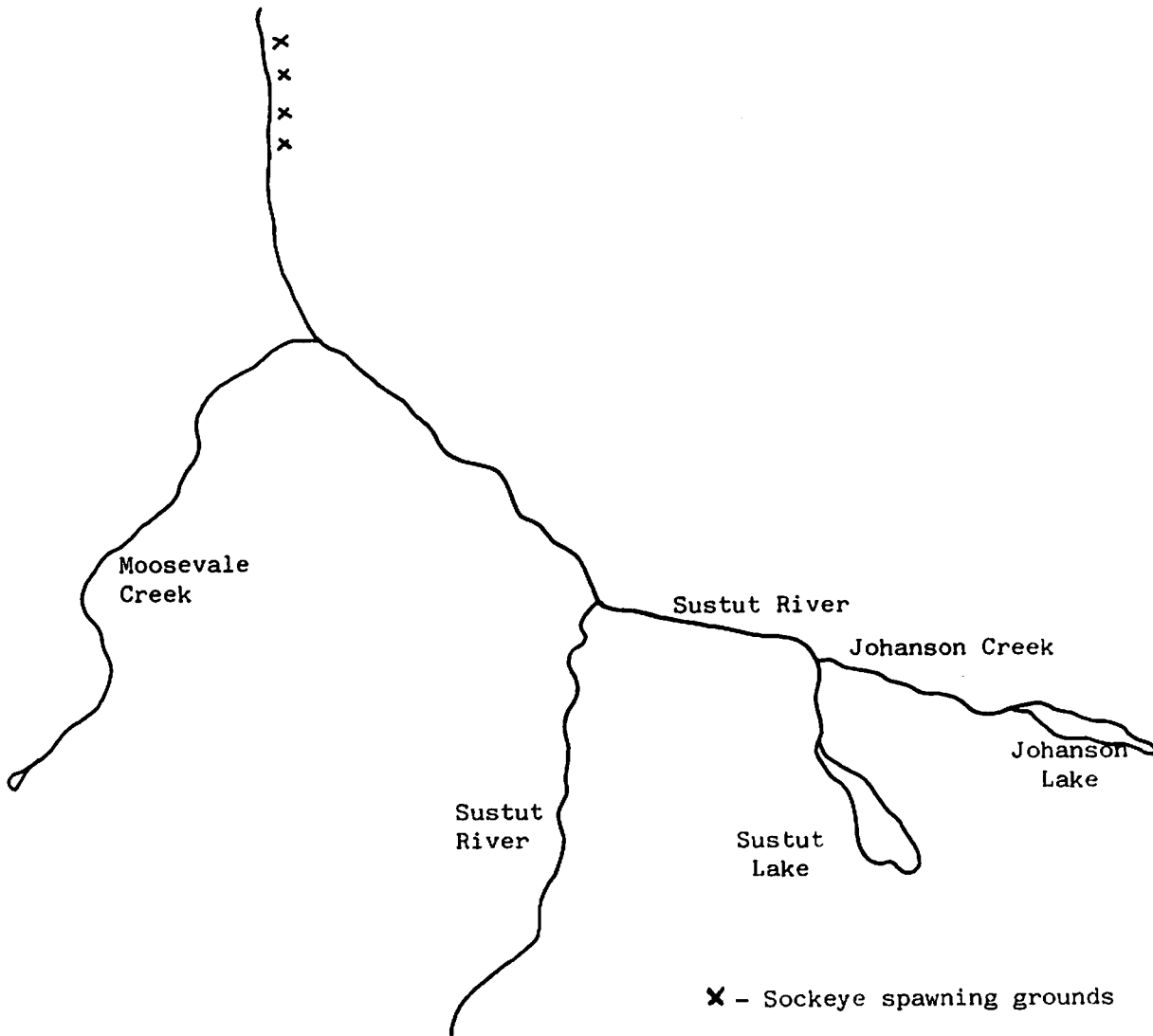
SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	
COHO	- North branch to Moosevale Lodge and upper end of West branch
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1978 Some beaver activity 8 km. from stream mouth. Recommend removal during migration.

Predators: bears and birds.



Sketch of Moosevale Creek (North Fork), 1980



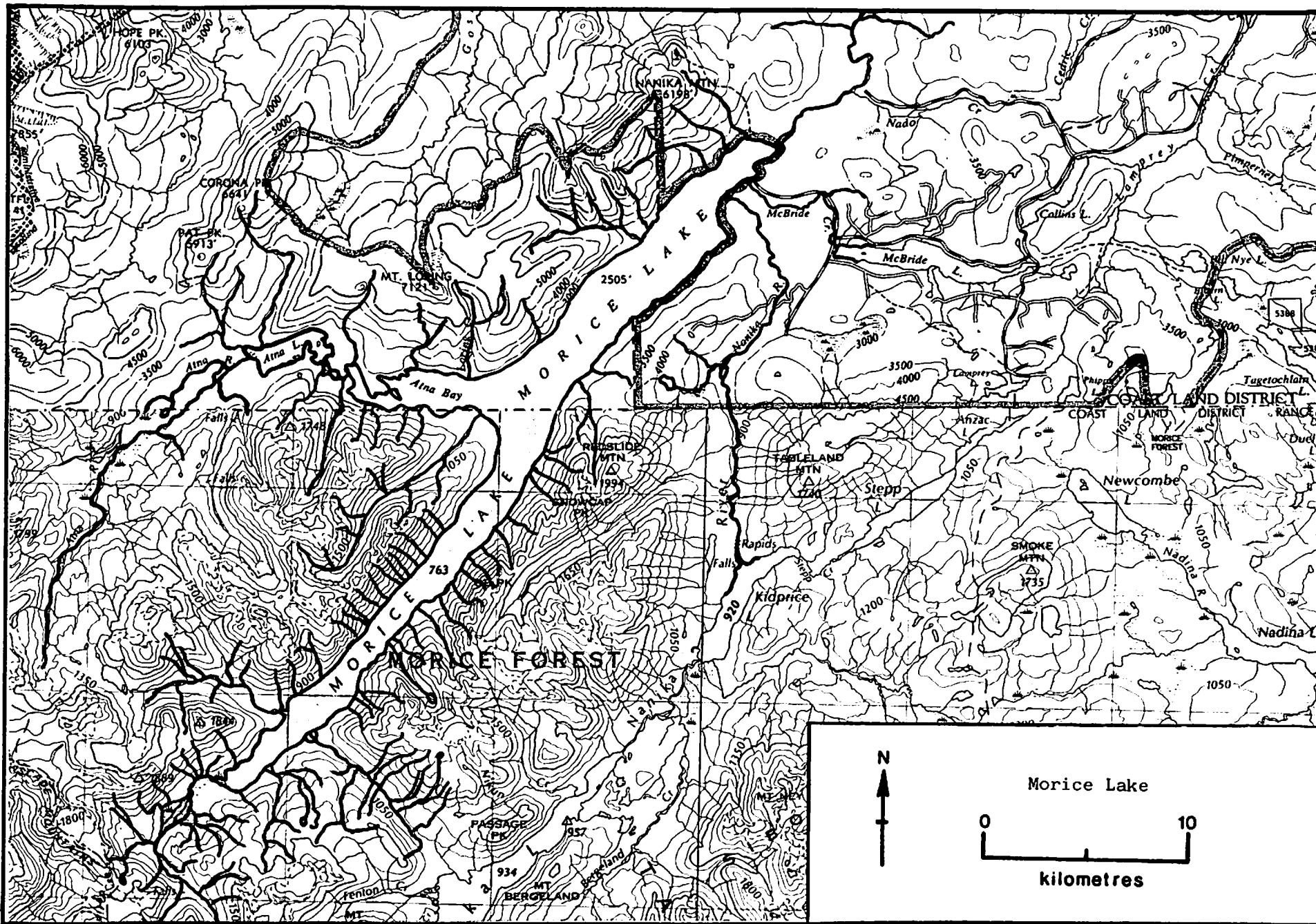
ESCAPEMENT RECORD FOR MOOSEVALE CREEK/NORTH FORK

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65						
66						
67						
68						
69						
70						
71						
72						
73						
74						
75						
76						
77						
78			75			
79						
80			N/R			
81			50			
82						
83						
84						
85						

TIMING

ARRIVE						
START						
PEAK						
END						

REMARK N/R - No Record



NAME OF STREAM MORICE LAKE

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH Head of Morice River, N.W. of Nanika Lake, Rge. 4, Coast Dist.

POSITION 53 127 NW.

LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____

SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- at stream mouths and springs
CHINOOK	
COHO	- lower reaches of McBride Creek
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS - Lake spawners difficult to estimate 67,68,74,75,76

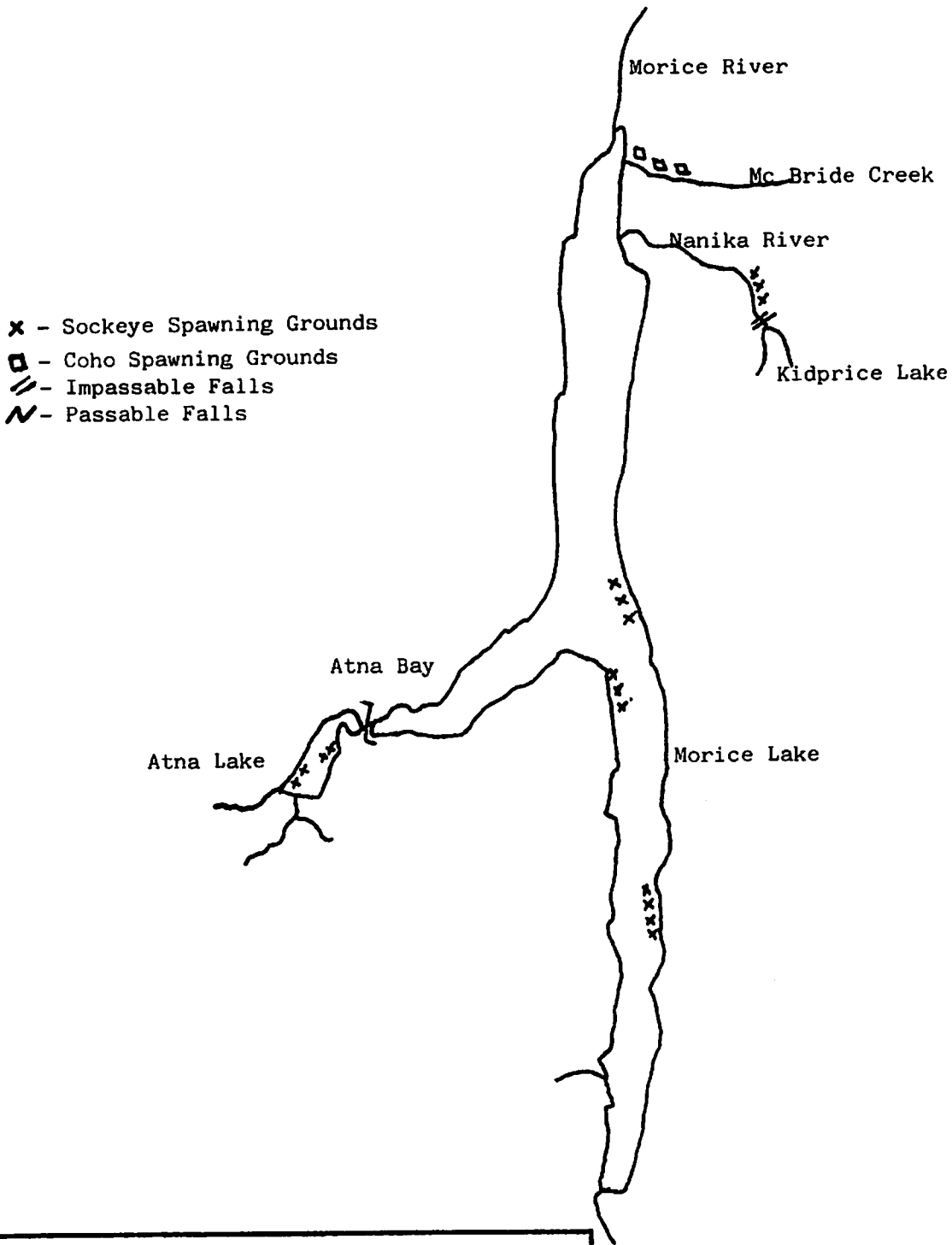
1967 - Fall storms hampered observation.

1970 - Shore spawners across from Atna Bay 80.

1980 - McBride Creek riddled with beaver dams.

subject to seasonal fluctuations in water levels.

light predation by bears.



Sketch of Morice Lake, 1980



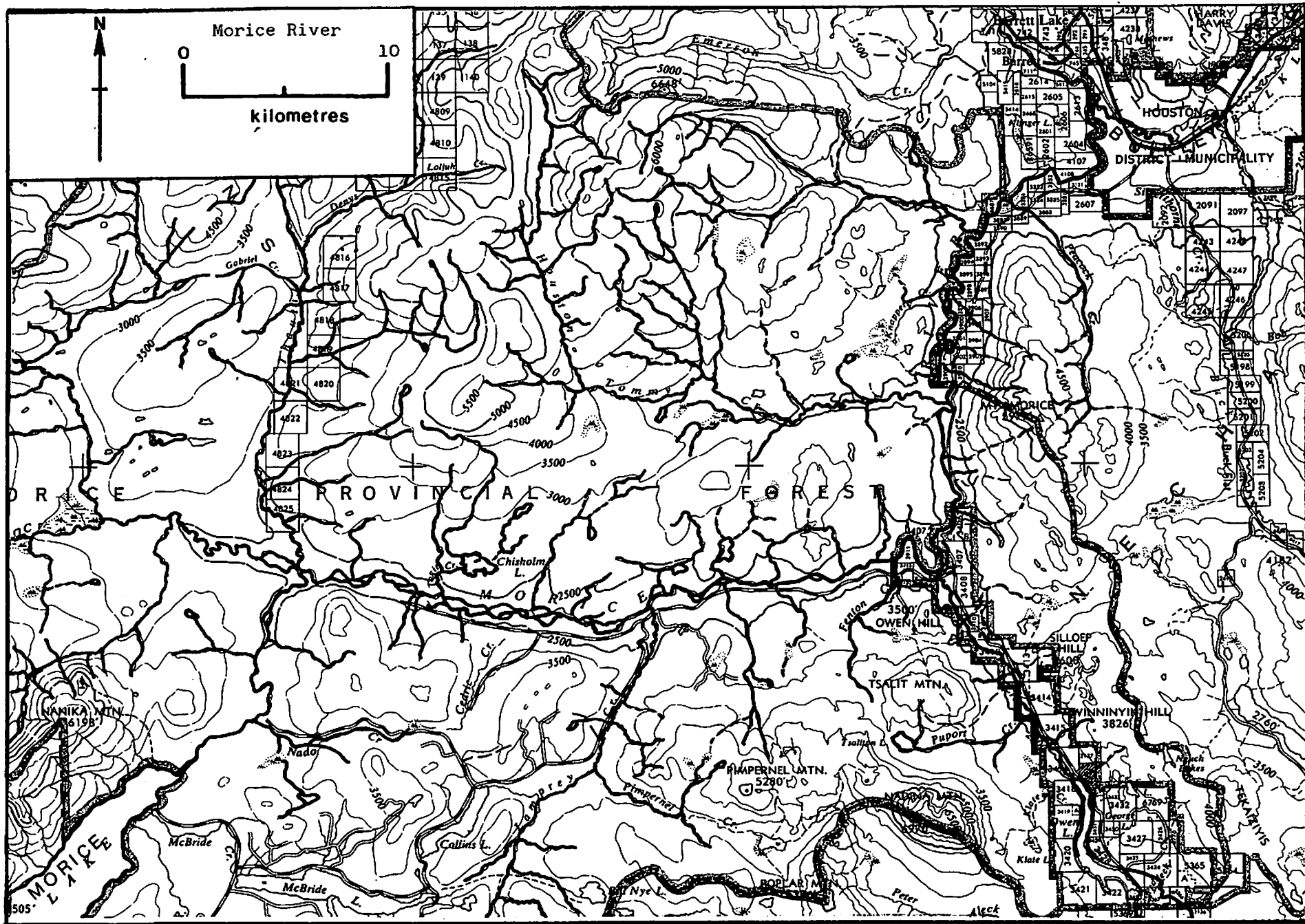
ESCAPEMENT RECORD FOR MORICE LAKE

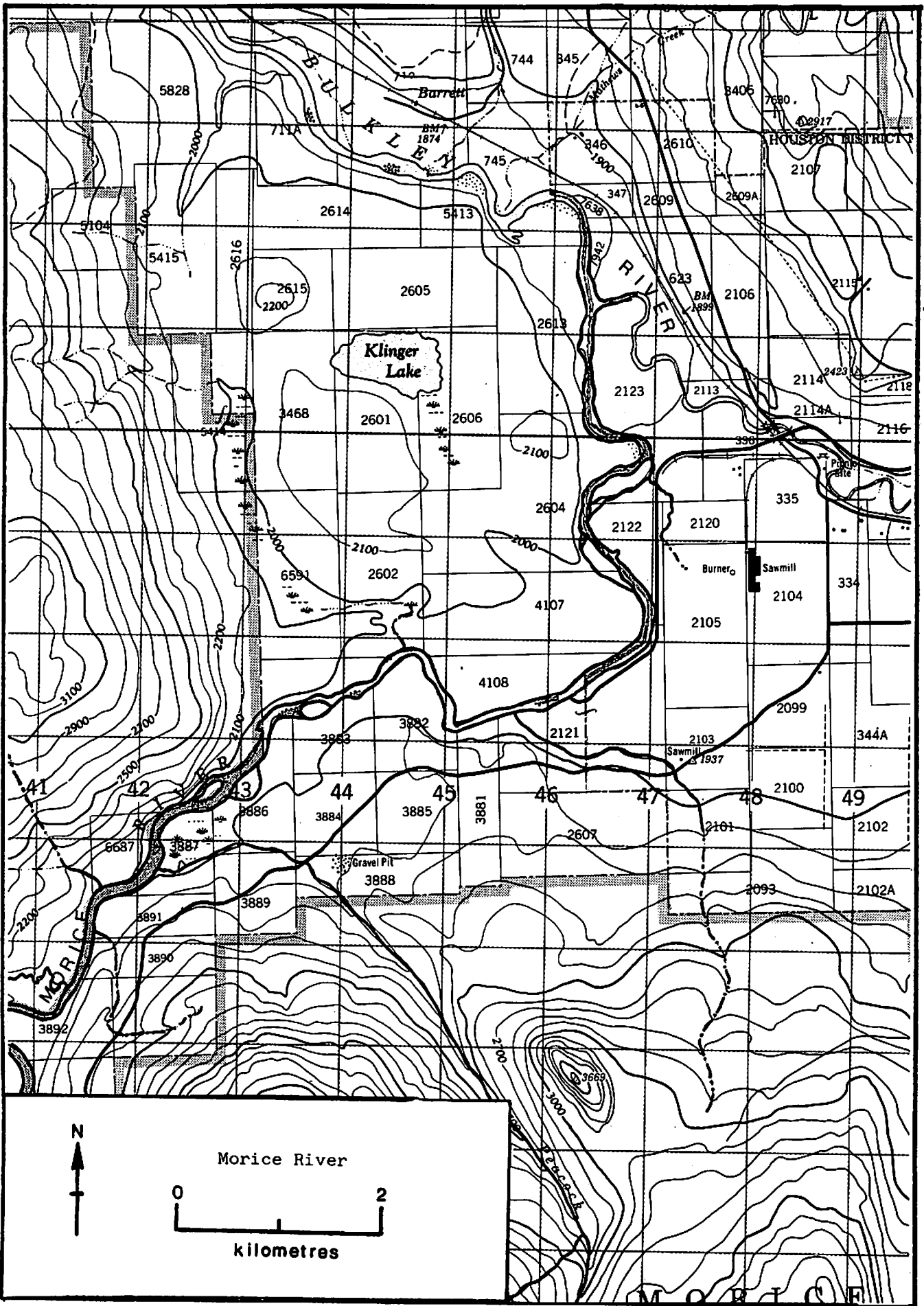
YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65	300					
66	300					
67	N/O					
68	300					
69	N/O					
70	N/I					
71	N/I					
72	N/I					
73	N/O					
74	N/I					
75	N/I					
76	N/R					
77	N/R					
78	50					
79						
80	N/O			20		
81	N/I					
82	UNK			UNK		
83						
84						
85						

TIMING

ARRIVE						
START	E Sept		Sept			
PEAK	M Sept-E Oct		Oct			
END	L Sept-L Oct		Oct			

REMARK N/R - No Record, N/I - Not Inspected





NAME OF STREAM MORICE RIVER
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows N. into Bulkley River, S.E. of Barrett, Rge. 5, Coast Dist.
 POSITION 54 126 SW
 LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25
0.25 - 0.50
0.50 - 0.75
0.75 - 1.00
> 1.00

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

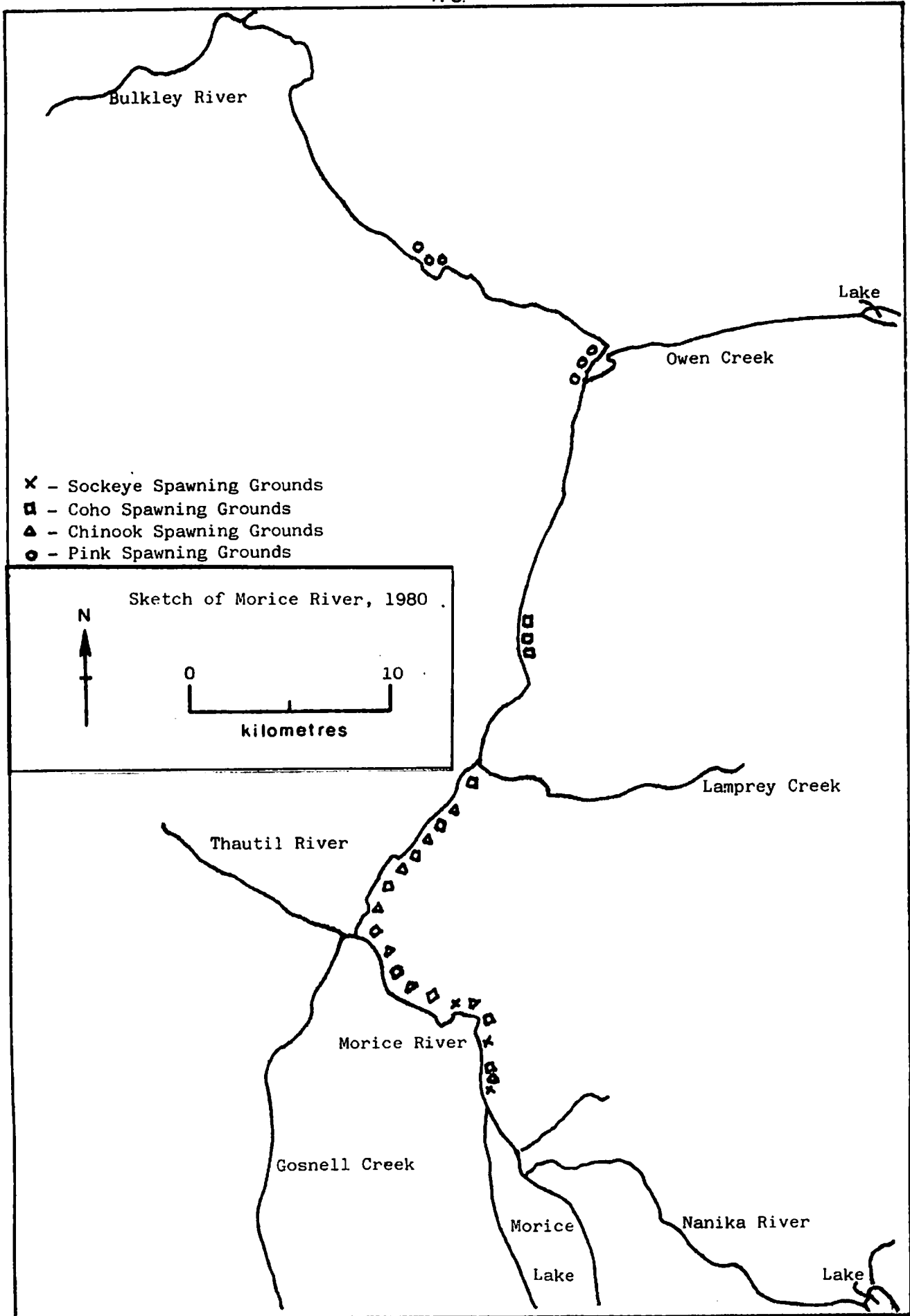
SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- below Morice Lake
CHINOOK	- 1st 4.8km below Morice Lake and above Lamprey Creek
COHO	- scattered
CHUM	
PINK (ODD YEAR)	- near Bulkley-Morice River confluence
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1949 Some silting noticed 7/77
1953 Pink run increasing since fishways installed -- good steelhead runs.
1957 Blockage at Hagwilget Canyon affecting migration
Very heavy sports fishery reported during the 60^s -- closure suggested 1960/62
1969/70 Considerable log debris between Lamprey Creek and Lake.
1982 A total of 82,000 spring eggs were taken for Emerson Creek incubation box on
Sept 16. Coho holding off mouth of Gosness. Coho spawn in Oct-Nov on the
spring spawning areas.

Seasonal fluctuations in water levels. Predators: bears, wolves, ducks, gulls,
 eagles, coyote, merganzers.



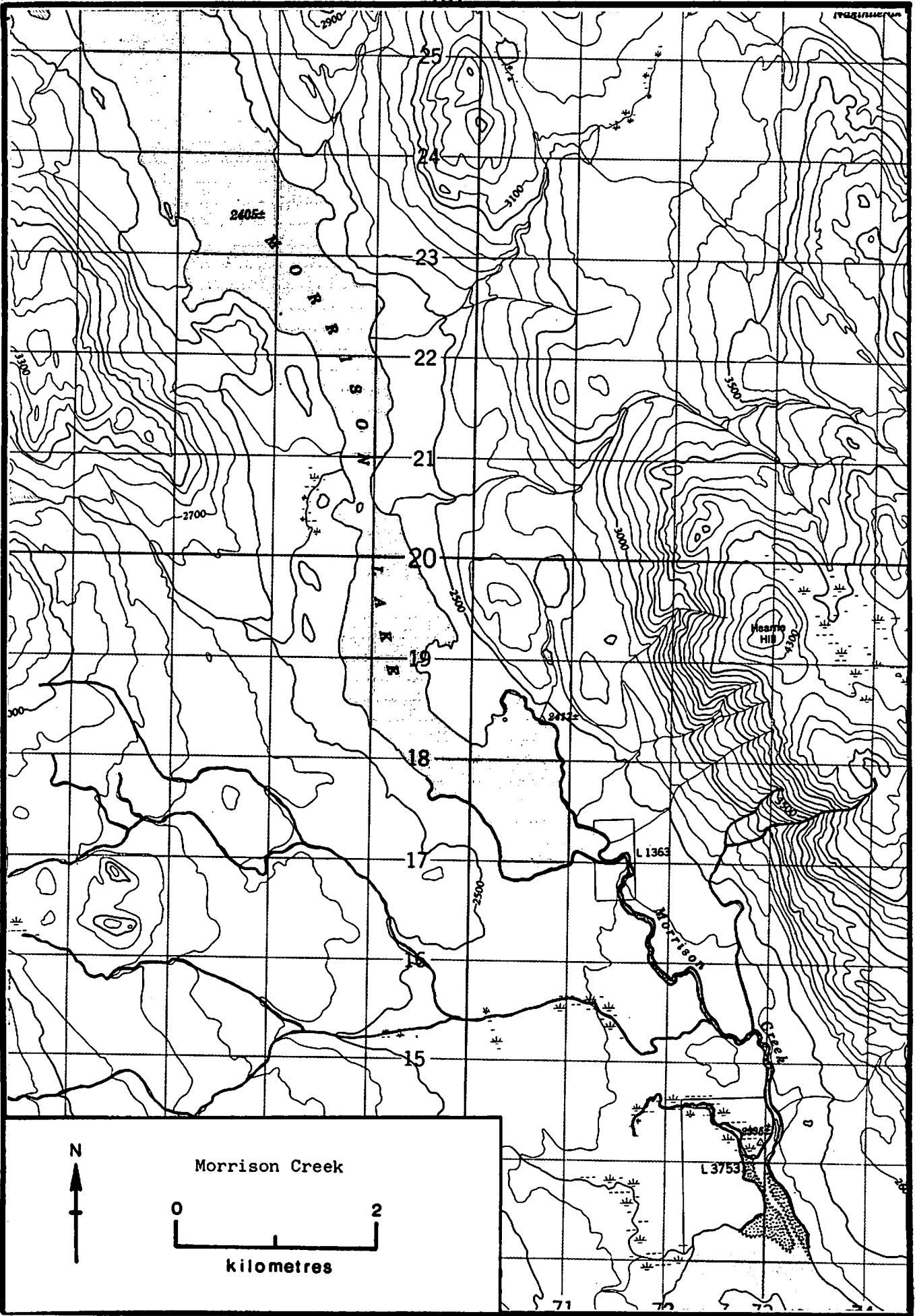
ESCAPEMENT RECORD FOR MORICE RIVER 180

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48	OBS	OBS	OBS			OBS
49	400	10,000	6,000			OBS
50						
51	400	3,500	7,500			
52	N/O	7,500	7,500			OBS
53	700	10,000	7,500		3,500	3,500
54	N/O	1,000	10,000		1,000	1,500
55	N/O	7,000	10,000		4,000	2,000
56	N/O	15,000	15,000		N/O	3,500
57	N/O	15,000	3,500		N/O	1,500
58	N/O	15,000	3,500		OBS	1,500
59	N/O	15,000	3,500		3,500	1,500
60	N/O	3,500	7,500		N/O	750
61		3,500	1,500		1,500	
62	N/O	4,000	1,500		N/O	
63	1,000	7,500	1,000		1,000	
64	3,000	5,000	1,000			
65	200	5,000	1,500		500	
66	100	6,000	1,500		500	
67		12,000	2,500		400	1,000
68		7,000	2,500			1,000
69		5,000	3,000		2,500	
70		4,600	2,500		N/R	
71		4,200	3,000		4,500	
72		8,400	3,500		1,000	
73		12,000	4,000		14,000	
74		9,000	3,000		N/R	
75	100	2,500	30		50,000	UNK
76	N/R	1,700	N/R		100	
77		4,500	4,000		25,000	
78		6,000	3,000		200	
79						
80		4,500	N/O		100	
81		3,000	500		12,500	
82		3,000	UNK		-	
83						
84						
85						

TIMING

ARRIVE					May
START	Aug-E Sept	July-E Sept	Aug-M Oct		E Aug-M Sept M Sept-Nov
PEAK	Aug-E Oct	Aug-M Sept	L Sept-Nov		M Aug-Sept M Nov
END	Sept-L Oct	M Sept-M Oct	Oct-E Dec		L Sept

REMARK N/R - No Record



NAME OF STREAM MORRISON CREEK (Hatchery Creek)

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH Flows S. into Babine Lake, from Morrison Lake, Cassiar Dist.

POSITION 55 126 SE.

LENGTH 6.4 km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT Passable log jam 2.4 - 3.2 km
from mouth.
Beaver dams cleared as required.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- mouth to lake
CHINOOK	
COHO	- lower reaches
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

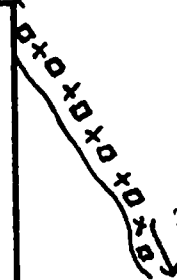
GENERAL REMARKS 1947 Coho run - mostly large and medium fish.
1948 Sockeye run mostly large fish -- coho run late.
1952 Beaver dam built following upstream migration.
1958 Low water and high temperatures during Tahlo River run resulted in
the loss of approx 1000 sockeye.
1959 Forestry Service cut new trail improving access to stream.
Beaver dams checked routinely and removed as required.
Uneven sex ratios in sockeye in some years.
Seasonal fluctuations in water levels. Predators: eagles, ravens, crows,
bears and wolves.

Morrison
Lake

Morrison Creek

- x - Sockeye Spawning Grounds
- - Coho Spawning Grounds

Sketch of Morrison Creek (Hatchery
Creek),
1980



To Morrison Arm
(Babine Lake)

ESCAPEMENT RECORD FOR MORRISON CREEK (Hatchery Creek)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947	15,000		1,100			
48	30,000		75			
49	1,500		500			
50						OBS
51	2,200		100			
52	400		400			
53	16,000		400			
54	12,000		400			
55	600		200			
56	18,000					
57	20,000					
58	9,000		800			
59	22,000		250			
60	6,000		400			
61	18,000		250			
62	9,000		200			
63	32,500		250			
64	16,000		200			
65	50,000					
66	9,000					
67	14,000		150			
68	35,000		300			
69	12,250		100			
70	7,200		100			
71	6,000		200			
72	8,000		N/R			
73	17,200		N/R			
74	13,755		N/R			
75	16,000		N/R			
76	3,600		N/R			
77	9,000		N/R			
78	1,500		50			
79						
80	4,000		OBS			
81	5,000					
82	3,500				10	
83						
84						
85						

TIMING

ARRIVE					
START	Aug-Sept		Sept-M Oct		
PEAK	Sept-Oct		Sept-Oct		
END	Sept-Oct		Oct-Nov		

REMARK N/R - No Record

MOTASE LAKE

see

BEAR RIVER AND LAKE p.39

NAME OF STREAM MOTASE LAKE

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH Expansion of Squingula River, Cassiar Dist.,

POSITION 56 127 SE.

LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____

SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION

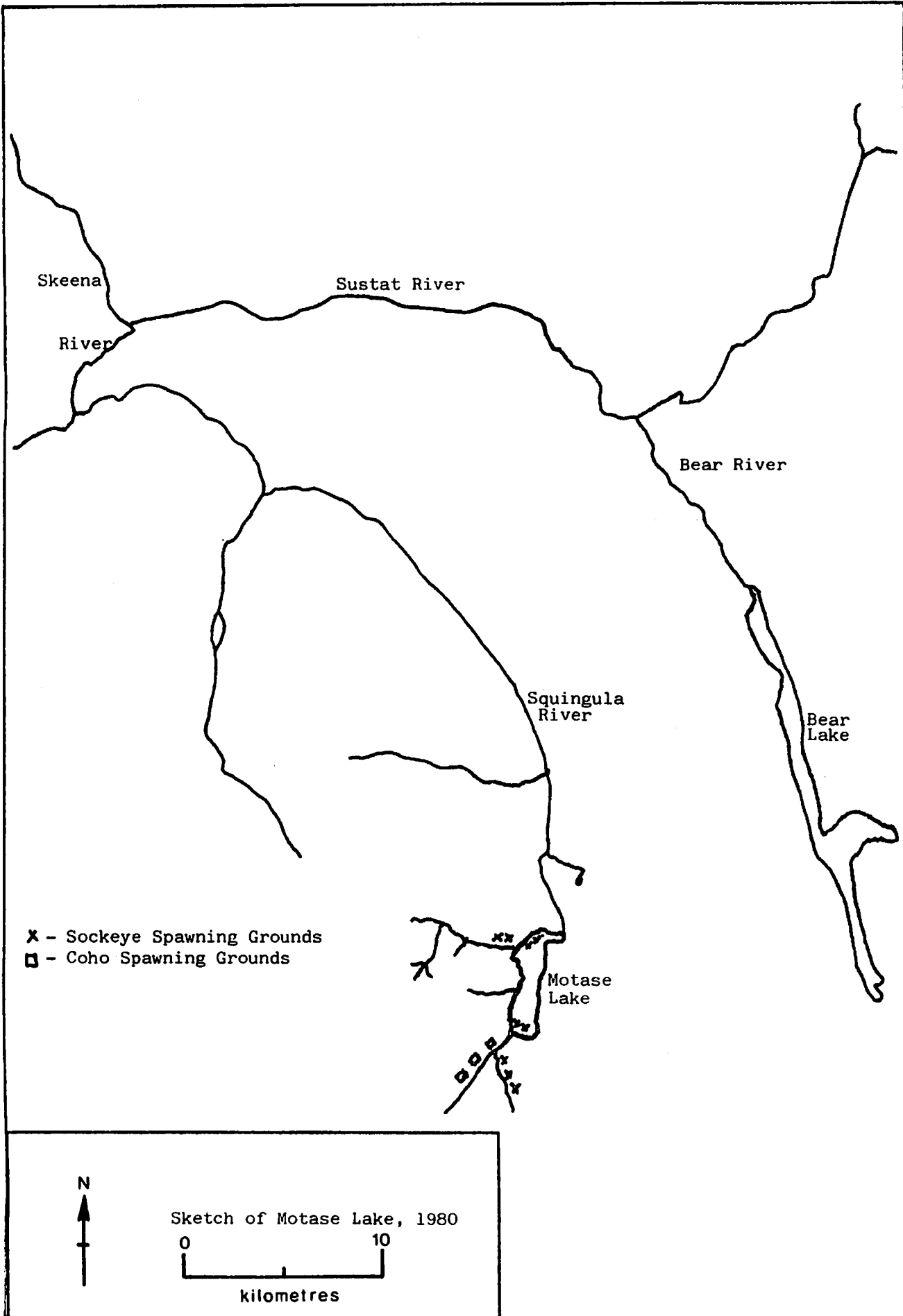
SPECIES	SECTION OF STREAM USED
SOCKEYE	- lake spawning
CHINOOK	
COHO	- in feeder streams
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1968 Inspection dependent on weather 69,76

1980 Undetermined numbers of sockeye and coho must be present if past year sightings, angler reports and guides reports are taken into consideration.

silt content impairs visibility, 1970/76
predators: birds and bears.



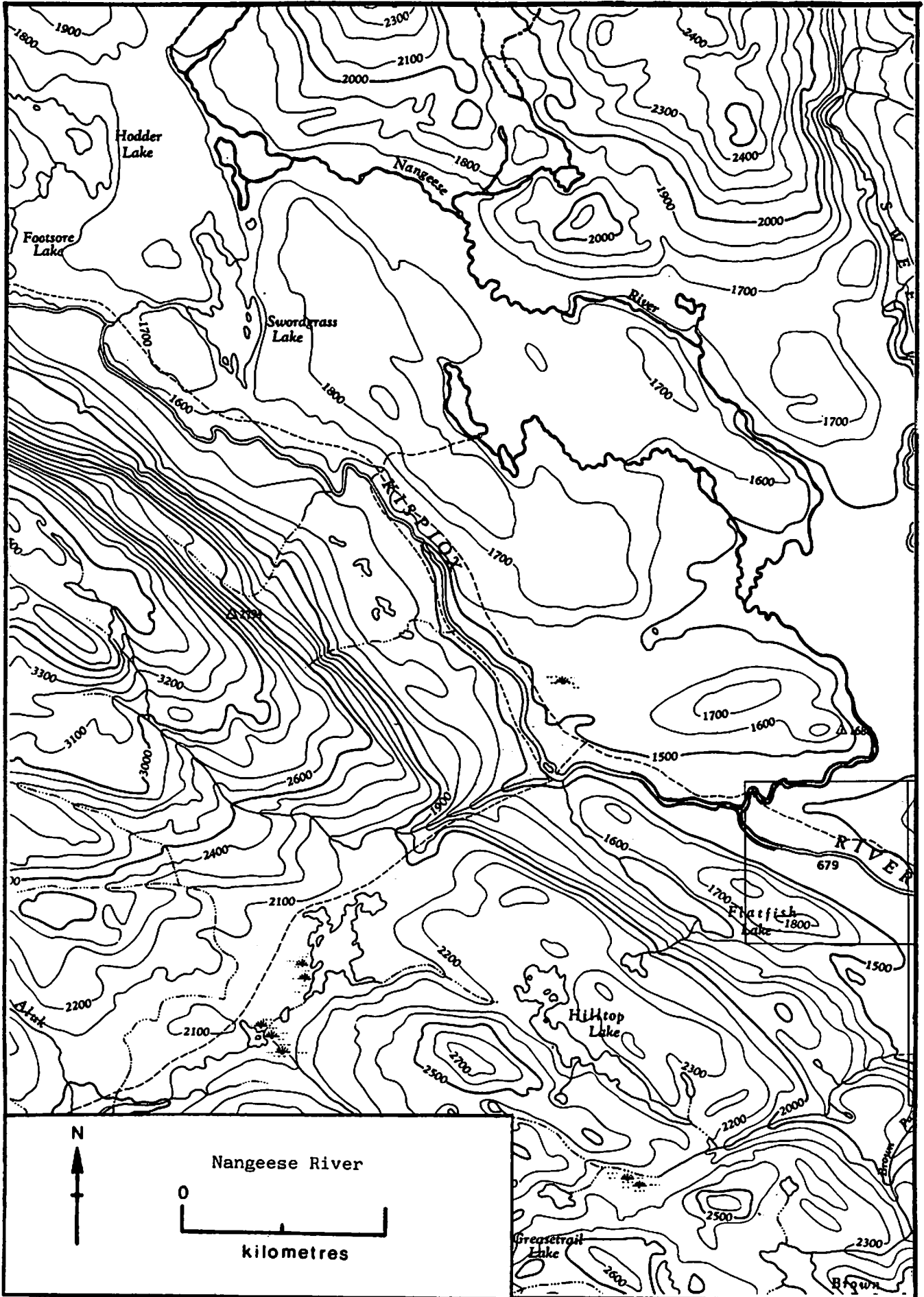
ESCAPEMENT RECORD FOR MOTASE LAKE

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65						
66						
67	N/O					
68	N/I					
69	N/I					
70	800		200			
71	N/O		N/O			
72	300					
73	3,000					
74	N/R		N/R			
75	33		N/R			
76	N/I		N/I			
77	N/I		N/I			
78	N/I		N/I			
79						
80	N/I		N/I			
81	N/I		N/I			
82	UNK					
83						
84						
85						

TIMING

ARRIVE						
START	E Sept		Oct			
PEAK	M Sept-Oct		Nov			
END	L Sept-Oct		Nov			

REMARK N/R - No Record, N/I - Not Inspected



NAME OF STREAM NANGEESE RIVER
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows S. into Kispiox River, Cassiar Dist.
 POSITION 55 128 NE.
 LENGTH 11.2 km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

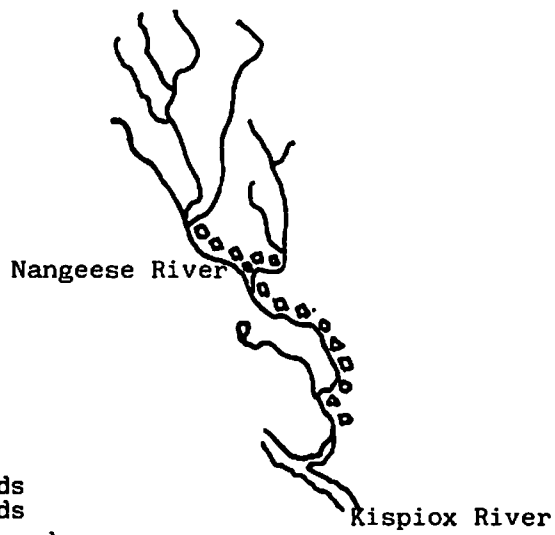
BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- 0.8 km. above bridge
CHINOOK	- scattered from mouth to 3.2 km upstream
COHO	- upper reaches
CHUM	
PINK (ODD YEAR)	- scattered from mouth to 3.2 km. upstream
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1947 - Sockeye-light, pinks-heavy, steelhead-heavy (numbers based on reports from local Indians)
1965 - Hazelton Sawmills logged 50,000,000 board ft. of timber in this region.
1974,78,79,80 Silting erosion and scouring in lower section.
1978 Obstruction removed by clearance crew 79,80.
Bridge and road construction posed no apparent problems to fish migration.
Upper reaches -- beaver swamp. Numerous blow-downs and beaver dams throughout, monitored routinely and removed as required.
Seasonal fluctuations in water levels. Predators: bear.



- ◻ - Coho Spawning Grounds
- - Pink Spawning Grounds
- △ - Chinook Spawning Grounds

Sketch of Nangeese River, 1971



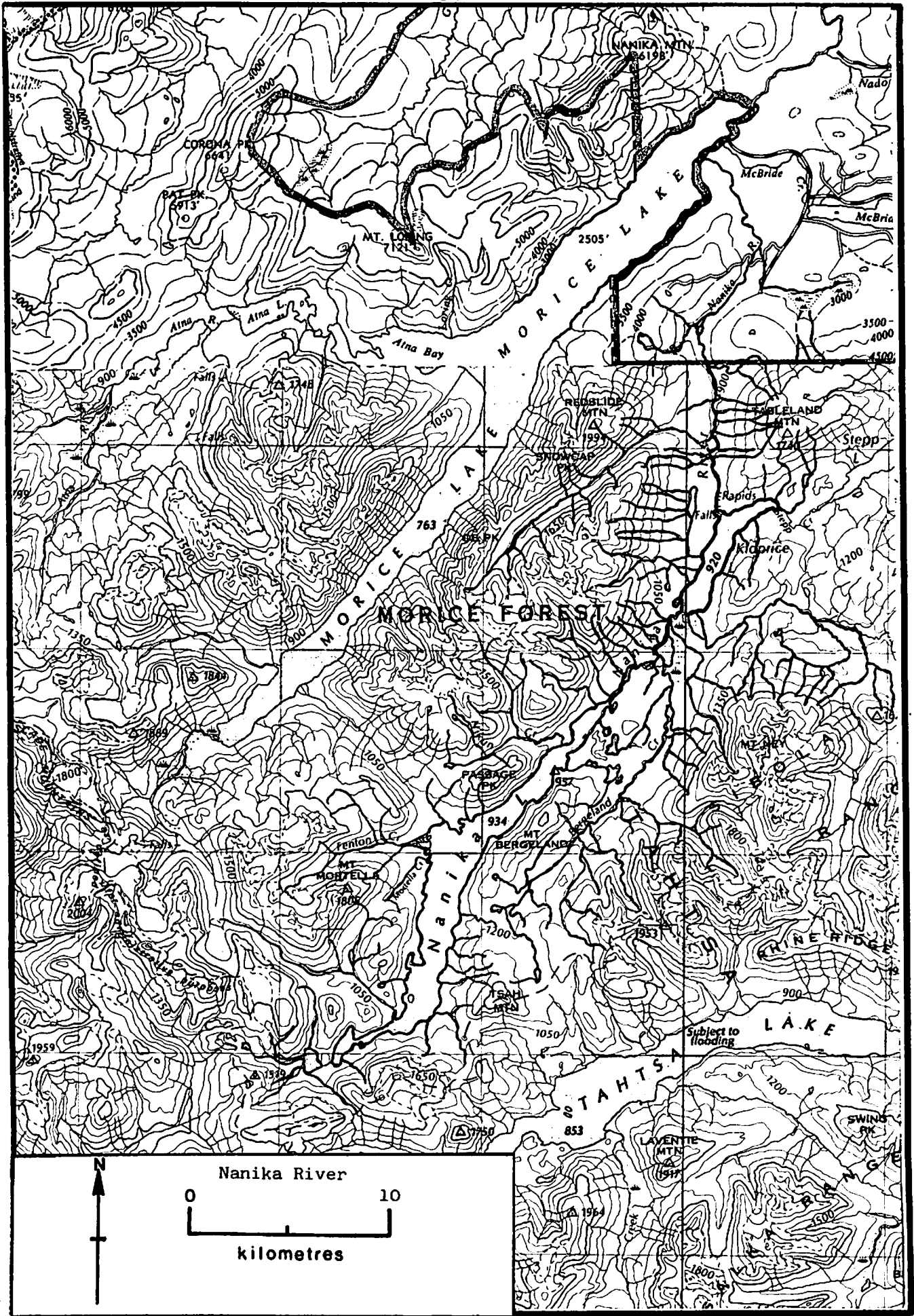
ESCAPEMENT RECORD FOR NANGEESE RIVER

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947	OBS		N/O		OBS	OBS
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65			750		OBS	
66		75	400		20	
67		N/O	25		N/O	
68		75	1,500			
69		25	400		N/O	
70		25	750		400	
71		25	750		400	
72		25	750		75	
73		200	400		750	
74		200	400		25	
75		25	400		200	
76		25	400		25	
77		75	400		200	
78		N/O	400		N/O	
79		N/O	75		N/O	
80		N/O	400		OBS	
81	200	25	200		OBS	
82	N/O		300		200	
83						
84						
85						

TIMING

ARRIVE	July	Aug	Oct		Aug	
START	E Aug	M Aug-E Sept	E-M Oct		M Aug	
PEAK	M Aug	E-M Sept	L Oct-M Nov		E Sept	
END	Sept	Sept-Oct	Nov-Dec		Sept	

REMARK



NAME OF STREAM NANIKA RIVER
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows N.W. into Morice Lake, Rge. 5, Coast Dist.
 POSITION 53 127 NW
 LENGTH 32 km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT _____
11.2m falls approx. 26km from stream mouth about
274 m from outlet of Kidprice Lake

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	Upper reaches below falls to Glacier Creek
CHINOOK	" " "
COHO	" " "
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____
Suitable spawning gravel above falls

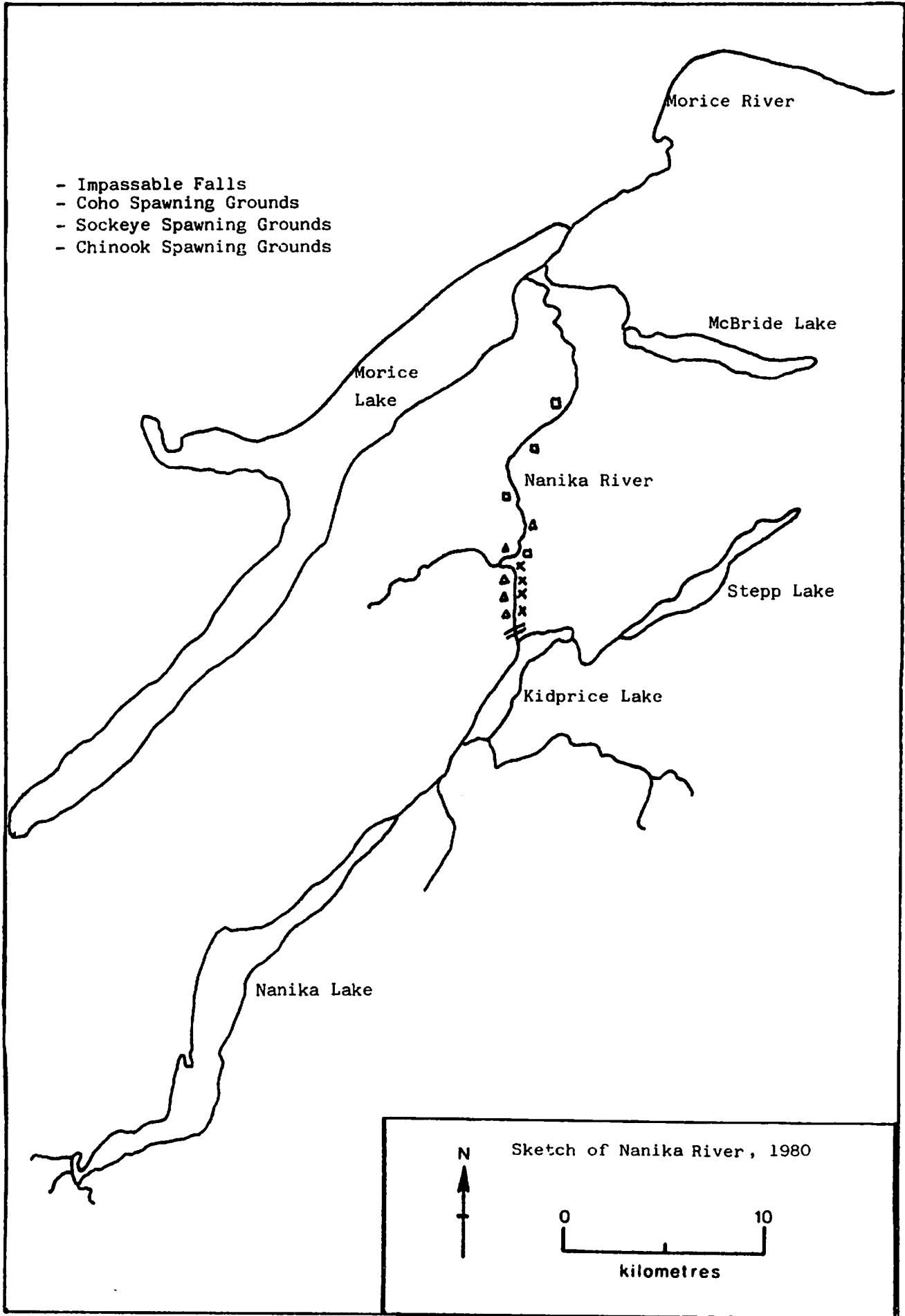
GENERAL REMARKS 1954 - possibility of building a fishway studied.
1956/57 Good Indian food fish catches.
1958 - Remedial work on Hagwilget Canyon proposed for winter .
1958/59 Nanika River sockeye pass through the commercial fishery between June 23
and July 20. Increased protection of the Nanika run through expanded
closures should afford considerable protection while exploiting the
less endangered Babine runs. In fact the early run will likely be totally
unfished and the later portion only partially exploited. Nanika River
thought to be seriously declining.

(cont'd)

NANIKA RIVER

- 1958 Coho run late -- good steelhead run estimated.
1960 Pilot hatchery built on lower Nanika R. to rehabilitate the run.
310,000 eggs were taken from 15 Mile Creek and transferred to the hatchery site.
1962 Possibility of installing fish ladder at Nanika Falls investigated 65,66.
1964 Coho escapement thought to be underestimated 80.
1965 Nanika River Hatchery has been rebuilding sockeye run to this area.
1967 Good sports fishery on Morice R. 69.
1969 Good sport fishery on lower Nanika. 70

Predators: bear, gulls, crows, hawks and eagles.



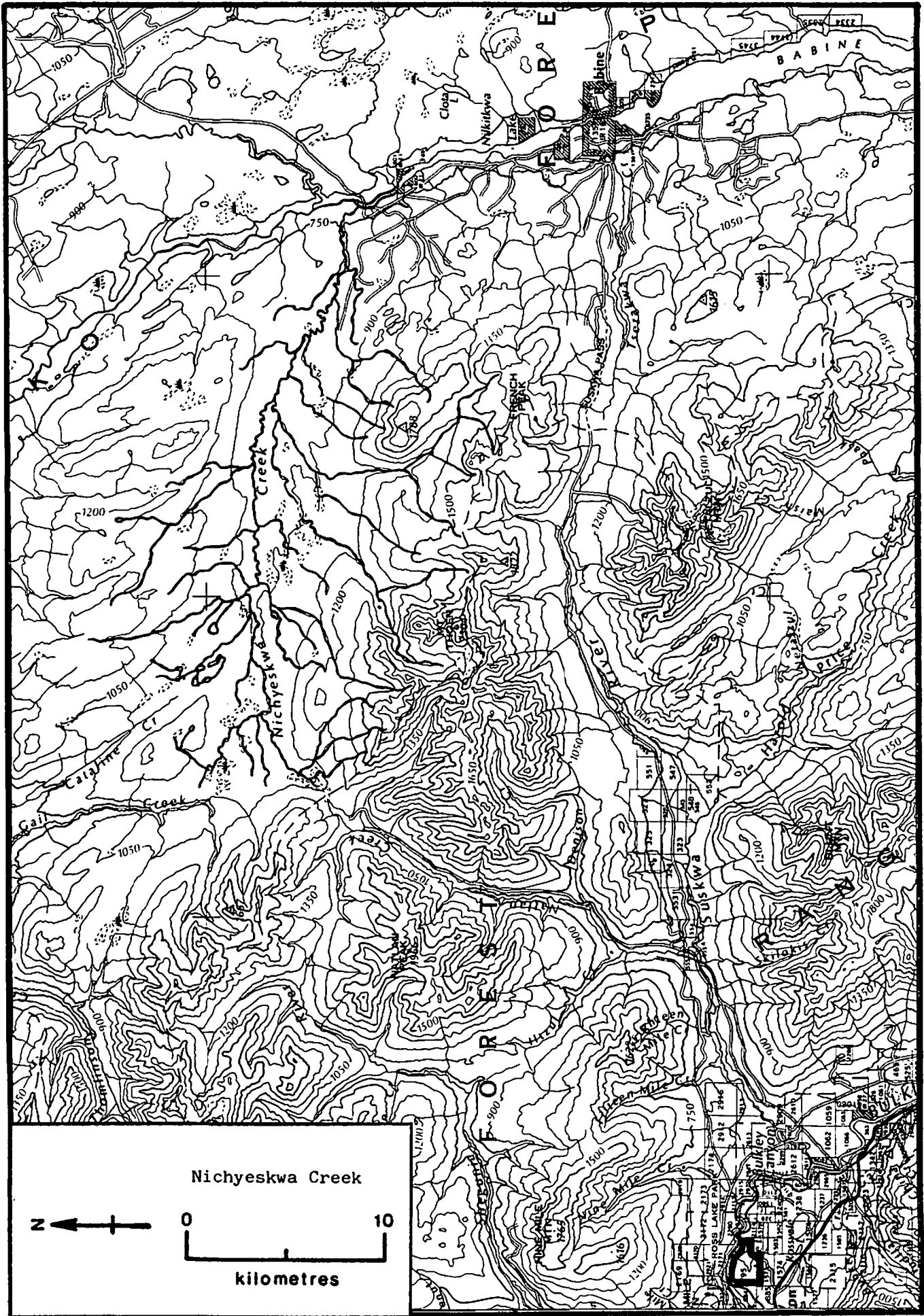
ESCAPEMENT RECORD FOR NANIKA RIVER

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48	OBS		OBS			OBS
49	70,000					
50	42,000					
51	58,800	OBS	OBS			
52	200					
53	35,000		N/O			
54	OBS		OBS			
55	4,000		OBS			
56	6,000		N/I			
57	1,000		N/O			
58	25		N/I			N/I
59	750	75	25			
60	3,500	200	N/O			
61	7,500					
62	3,000		500			
63	1,000		400			
64	5,000		500			
65	10,000		300			
66	6,000	150	300			
67	3,400	200	300			
68	3,000	100	200			
69	3,300	OBS	300			
70	4,700	OBS	300			
71	3,300	25	300			
72	1,800	400	200			
73	1,000	N/R	N/R			
74	1,200	N/R	N/R			
75	225	50				
76	100	120	N/R			
77	600	25	N/R			
78	500	50				
79						
80	400	75	N/R			
81	1,000	40	*500			
82	3,000	150	N/O			
83						
84						
85						

TIMING

ARRIVE					
START	Aug-E Sept	Aug-E Sept	E Sept-E Oct		
PEAK	L Aug-E Oct	M Sept	L Oct		
END	E-L Oct	L Sept	M-L Nov		

REMARK N/R - No Record, N/I - Not Inspected, * estimated figure.



NAME OF STREAM NICHYESKWA RIVER

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH Flows East into Babine River, N. of Nilkitkwa, Cassiar Dist.

POSITION 55 126 SW

LENGTH 26 km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT Fast water for 16km depending on water levels

SPAWNING DISTRIBUTION

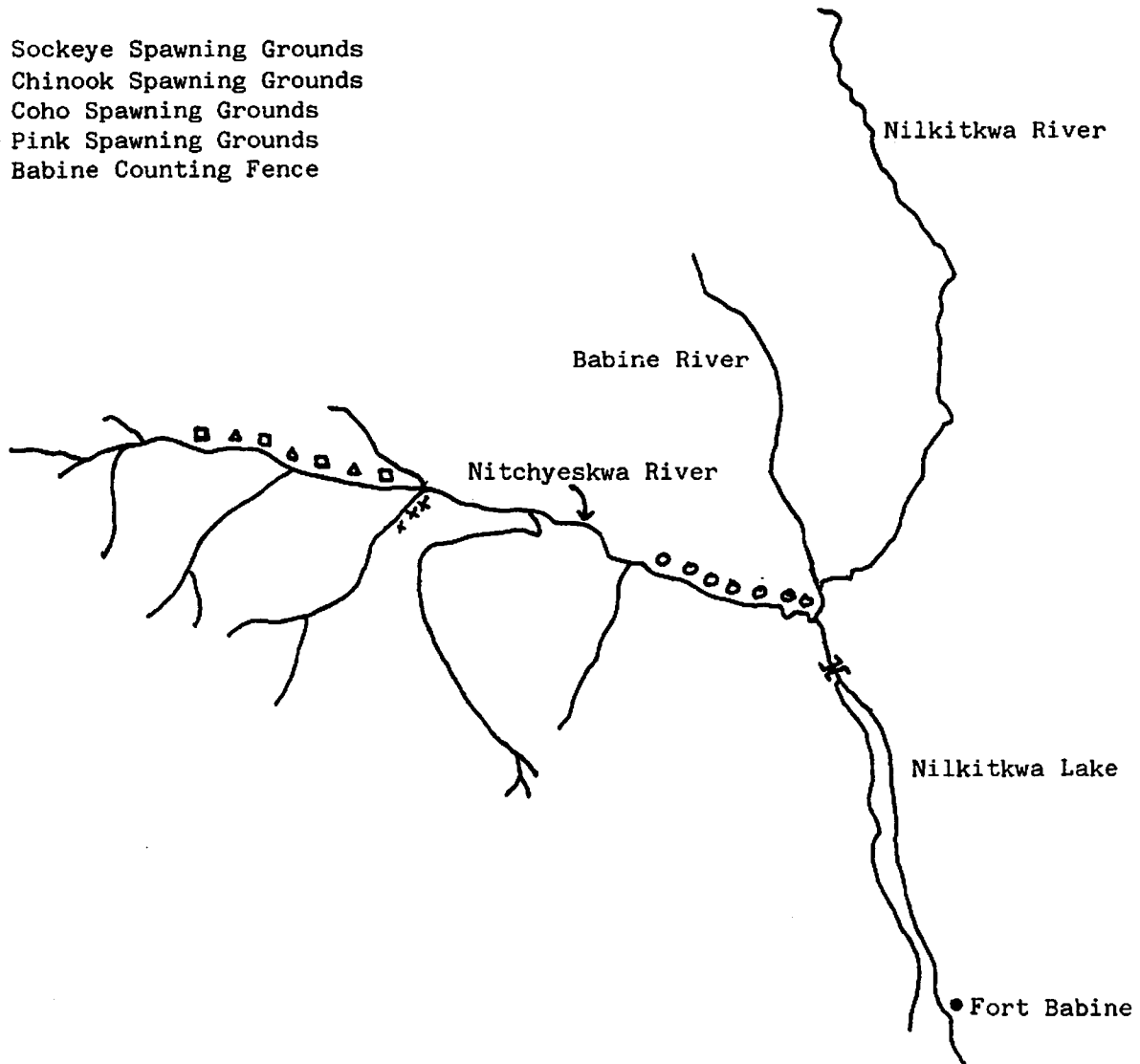
SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	- upper river
COHO	- upper river
CHUM	
PINK (ODD YEAR)	- scattered on lower river riffles
PINK (EVEN YEAR)	- " " "
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1957 - High water impaired observation
1972 Silting and scouring 73,74,75,76,78

- Good gravel in upper river
- Stream poorly utilized
- Difficult stream to survey
- Seasonal fluctuations in water levels
- Predators: birds, eagles and bears

- x - Sockeye Spawning Grounds
- △ - Chinook Spawning Grounds
- ▣ - Coho Spawning Grounds
- - Pink Spawning Grounds
- ⌈ - Babine Counting Fence



Sketch of Nitchyeskwa River, 1980



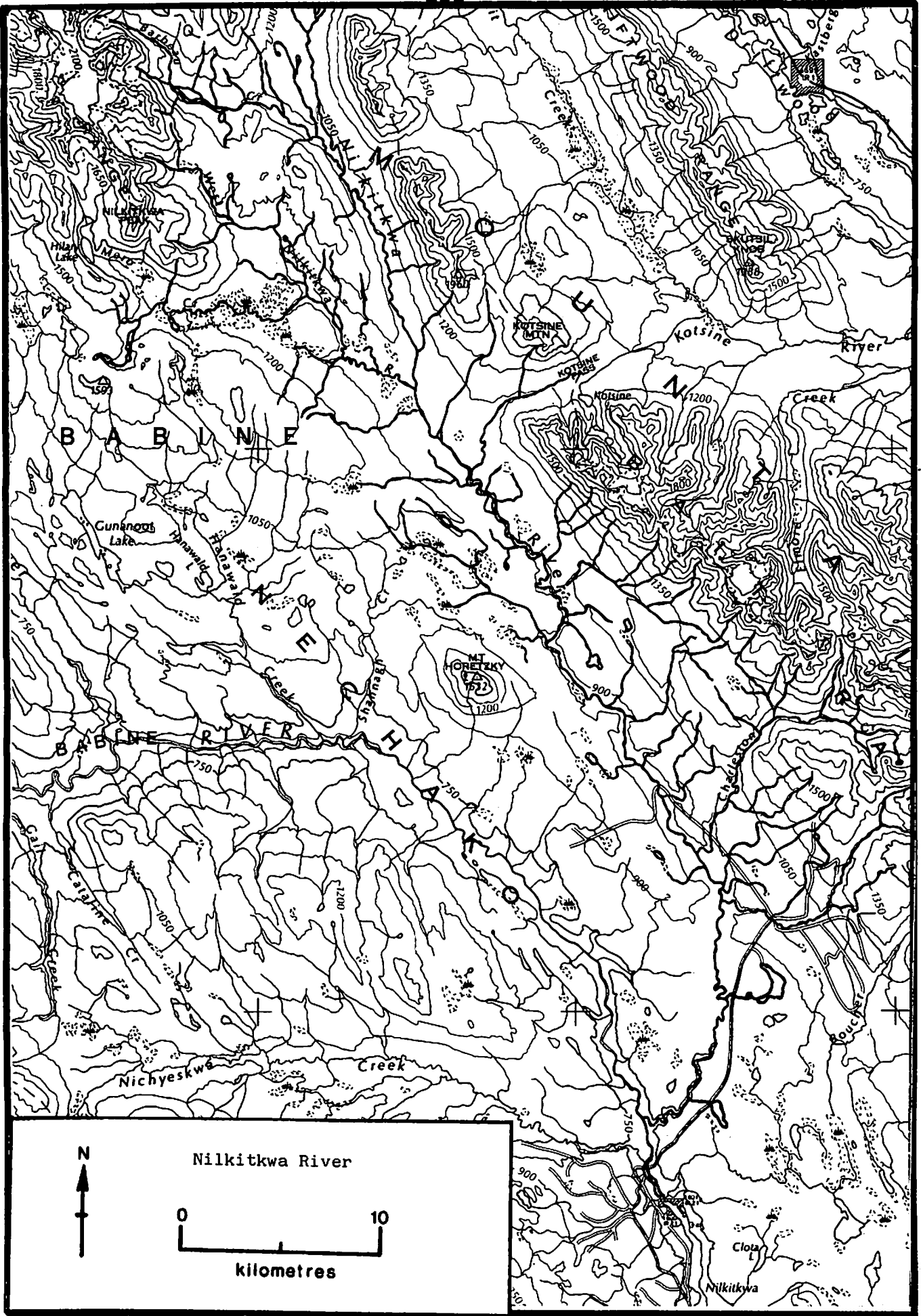
ESCAPEMENT RECORD FOR NICHYESKWA RIVER (Nitchyeskwa River)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53		200	400			
54		300	400			
55		500	300			
56		500	600			
57		400	250			
58		500	300			
59		800	1,000			
60		400	500			
61		100	750			
62		50	250			
63		75	150			
64		150	200			
65		100	300			
66		50				
67		50	100		60	
68		N/I	N/I			
69		200	200		100	
70		N/O	N/O			
71		N/I	N/I			
72		N/O	N/O			
73					200	
74					N/R	
75					2,000	
76					N/R	
77	1,600	N/R	N/R		1,550	
78	N/R				N/R	
79						
80	1,000					
81	300		OBS		OBS	
82						
83						
84						
85						

TIMING

ARRIVE		E Aug	Sept		L Aug	
START	July-Sept	M Aug	Sept-E Oct		E Sept	
PEAK	Aug-Sept	Aug-L Sept	Sept- M Oct		L Sept	
END	Aug-Sept	L Sept	L Oct		L Sept	

REMARK N/R - No Record, N/I - Not Inspected



NAME OF STREAM NILKITKWA RIVER AND LAKECONSERVATION DISTRICT 8 STATISTICAL AREA 4LOCATION OF MOUTH Flows S. into Babine River, N. of Nilkitkwa Lake, Cassiar Dist.POSITION 55 126 SW.LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____

SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25

0.25 - 0.50

0.50 - 0.75

0.75 - 1.00

>1.00

WETTED AREA _____ m² SPAWNING AREA _____ m²DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT Beaver dams potentially hazardous for fish passage.

SPAWNING DISTRIBUTION

SPECIES

SECTION OF STREAM USED

SOCKEYE

- in and near Onerka Lake

CHINOOK

COHO

- upper reaches and tributaries

CHUM

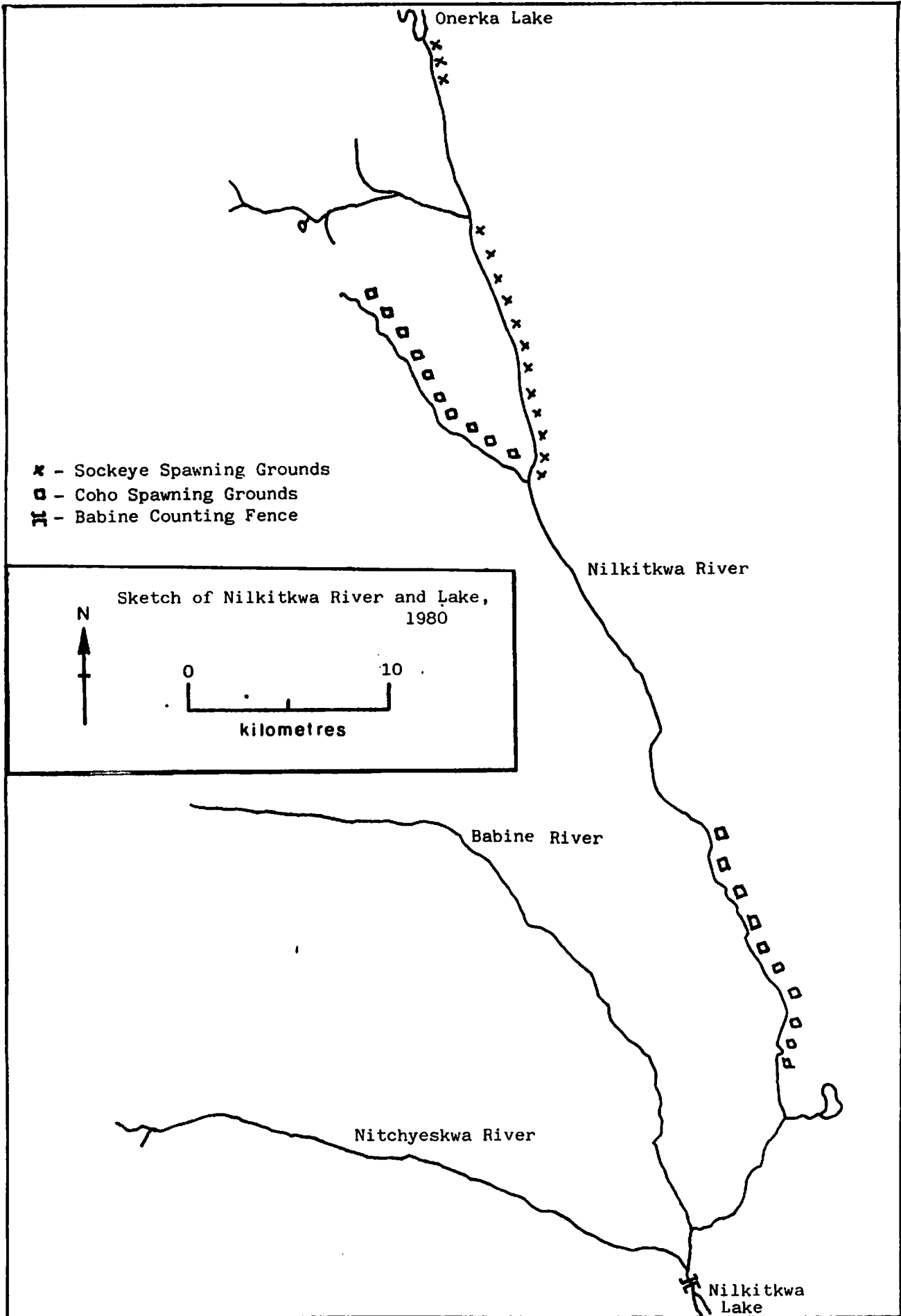
PINK (ODD YEAR)

PINK (EVEN YEAR)

STEELHEAD

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1969 - Debris noted about 16 km. upstream1971/76 silting1977 lower river free of glacial silt.Numerous beaver dams in area near Onerka Lake. May hamper spawners and cleared as required.Seasonal fluctuations in water levels.Predators: birds, bears and wolves.



- x - Sockeye Spawning Grounds
- o - Coho Spawning Grounds
- | | - Babine Counting Fence

Sketch of Nilkitkwa River and Lake, 1980



kilometres

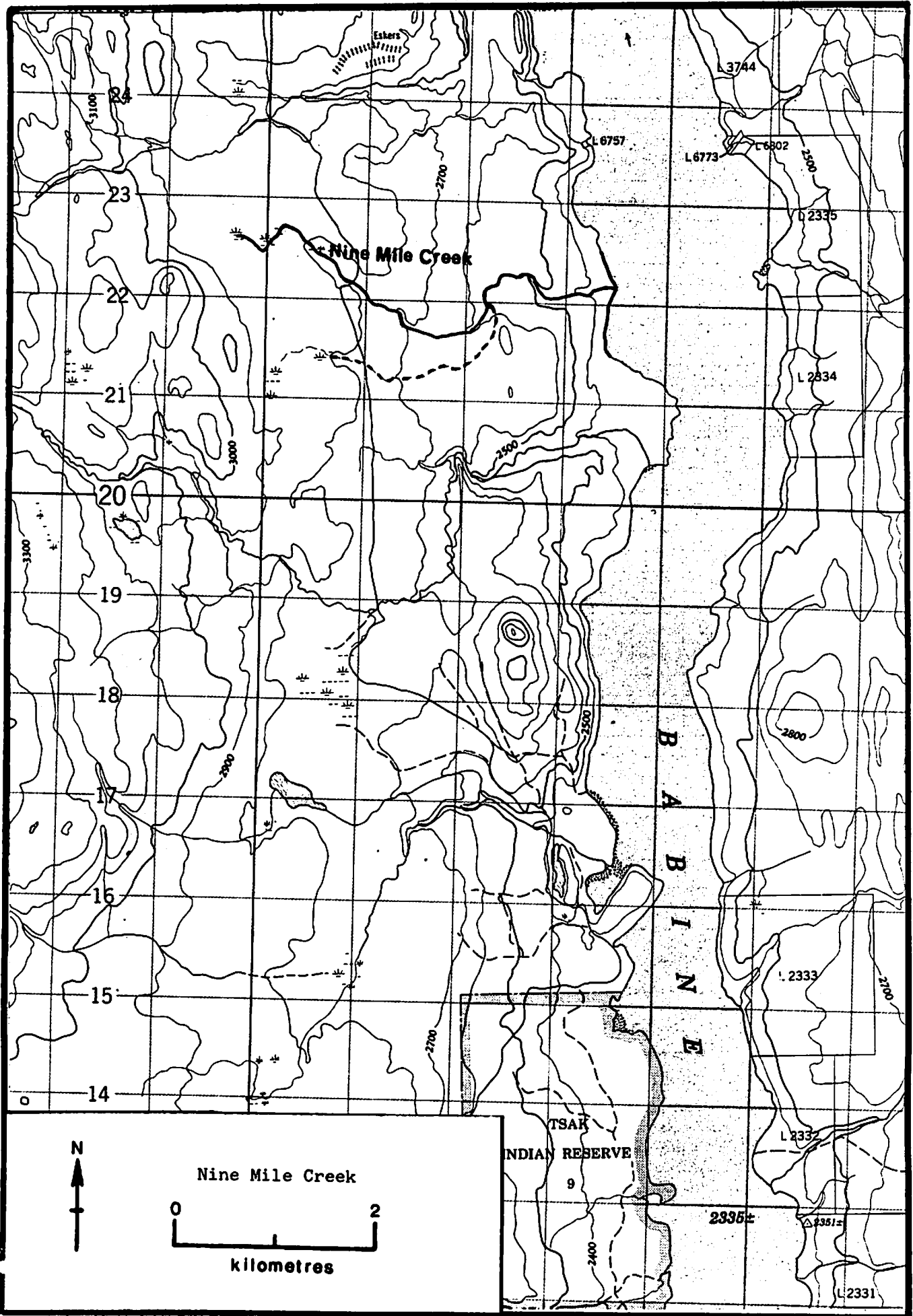
ESCAPEMENT RECORD FOR NILKITKWA RIVER and Lake

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51	8,000					
52						
53						
54						
55						
56						
57						
58						
59						
60		250	300			
61		50	250			
62		50	200			
63	400					
64	200					
65	OBS					
66	OBS					
67	N/O					
68	N/O					
69	400		400			
70	400		400			
71	N/O					
72	N/O	N/O	N/O			
73	N/R					
74	N/R		N/R			
75	N/R		N/R			
76	N/R		N/R			
77	N/R		N/R			
78	N/R	N/R	N/R			
79						
80	6					
81	N/I		N/I			
82			UNK			
83						
84						
85						

TIMING

ARRIVE					
START	Aug	L Aug	L Sept		
PEAK	Aug		Oct		
END	Sept		Oct		

REMARK N/R - No Record, N/I - Not Inspected



NAME OF STREAM (Nine Mile Creek)
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows into Babine Lake.
 POSITION 55 126 SW.
 LENGTH 8 km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT Cascades 3.2 km from stream mouth --
passable depending on water levels.

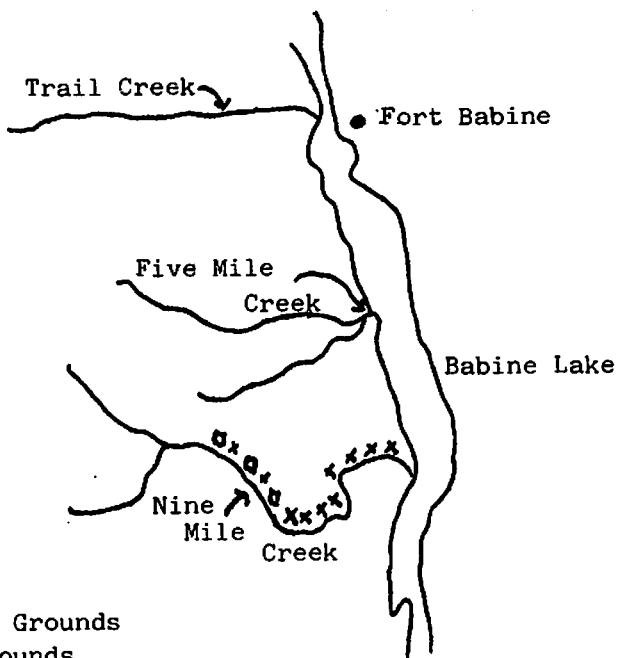
large gravel deposits hamper access to stream during
low water. Cleared in 57, but rapidly filled in again.
Clearance needed annually. S.E.P. crews worked on this
in 1978.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- throughout, though greater concentration on lower 3.2 km.
CHINOOK	
COHO	- upper reaches.
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1948 - Stream changed course near mouth 63-65. Most fish
medium size.
1951 Storm caused heavy erosion -- some disturbance of deposited spawn
by late spawners.
Log jams and debris monitored routinely and removed as required.
Sex ratios are frequently uneven in Sockeye run.
Seasonal fluctuations in water levels.
Predators -- gulls, ravens, bears and eagles.



X - Sockeye Spawning Grounds
□ - Coho Spawning Grounds

Sketch of Nine Mile Creek, 1980



kilometres

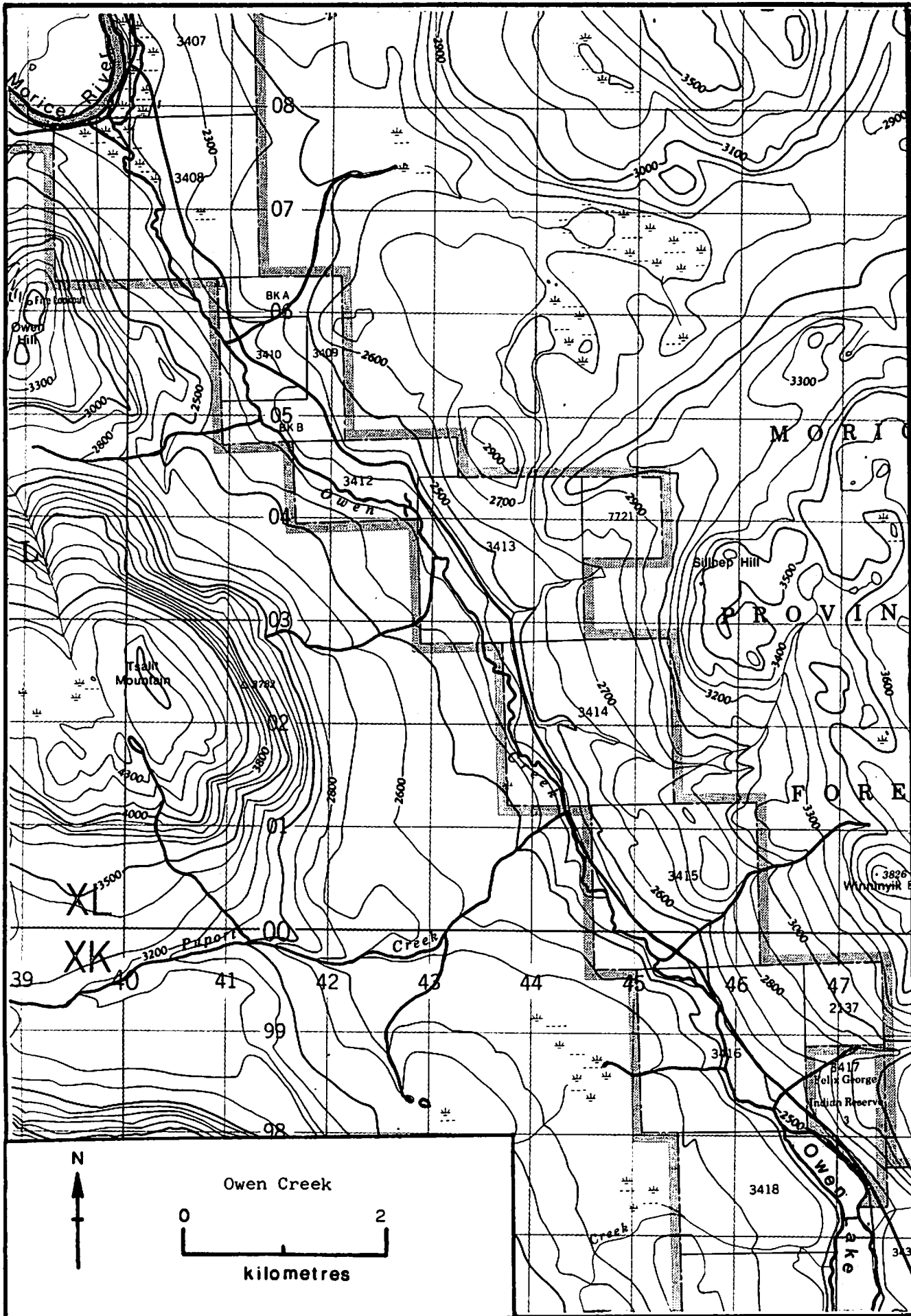
ESCAPEMENT RECORD FOR (Nine Mile Creek) ²¹⁰

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947	565					
48	3,984					
49	75					
50						
51	407					
52	75		25			
53	2,500		100			
54	1,000					
55	60					
56	N/O					
57	4,000					
58	N/O					
59	2,400					
60	2,000					
61	4,000					
62	500					
63	1,230					
64	1,500					
65	500					
66	1,000					
67	1,000					
68	600					
69	1,110		25			
70	1,200		UNK			
71	1,200		N/R			
72	802		N/R			
73	1,100				100	
74	950		N/R			
75	140				940	
76	900					
77	900					
78	215				15	
79						
80	750					
81	500					
82	1,000					
83						
84						
85						

TIMING

ARRIVE					
START	E Aug-E Sept		Sept		E Sept
PEAK	L Aug-E Oct		Sept		M Sept
END	E Sept-L Oct		Oct		L Sept

REMARK N/R - No Record



NAME OF STREAM OWEN CREEK
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows N.W. into Morice River, N.W. of Owen Lake, Rge. 5.
 Coast Dist. _____ POSITION 54 126 SW.
 LENGTH 11.2 km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT _____
Considerable beaver activity -- dams monitored and removed as necessary.

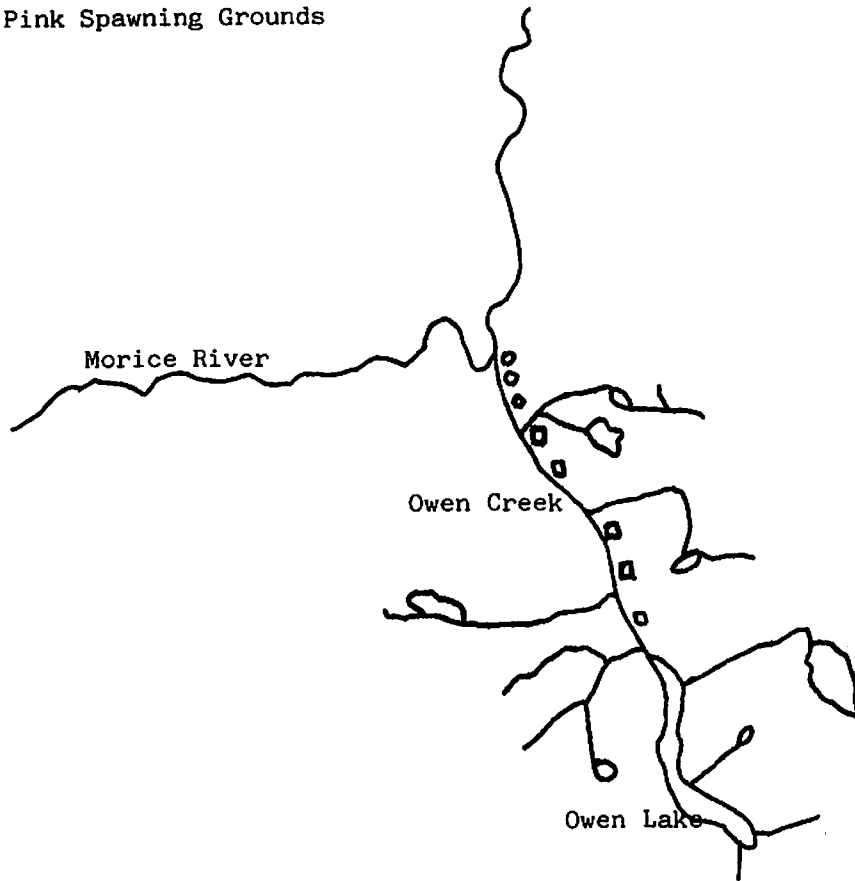
SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	
COHO	- scattered throughout upper reaches to lake.
CHUM	
PINK (ODD YEAR)	- lower river to culvert
PINK (EVEN YEAR)	- " "
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1955 - Because lower river very slow moving and overgrown, B.C. Forest Service intends relocating the outlet some 200 m. upstream.
1959 Coho negotiated new stream entrance satisfactorily.
1965 Beaver dams delayed migration.
1970 Some silting and scouring 71,76.
Culvert at highway causes problems at low flows.
1972 Suggestion made that culvert be replaced by a bridge.
1981 Sockeye, chinook and coho fry trapped in stream during season.

- ▣ - Coho Spawning Grounds
- - Pink Spawning Grounds



Sketch of Owen Creek, 1980



kilometres

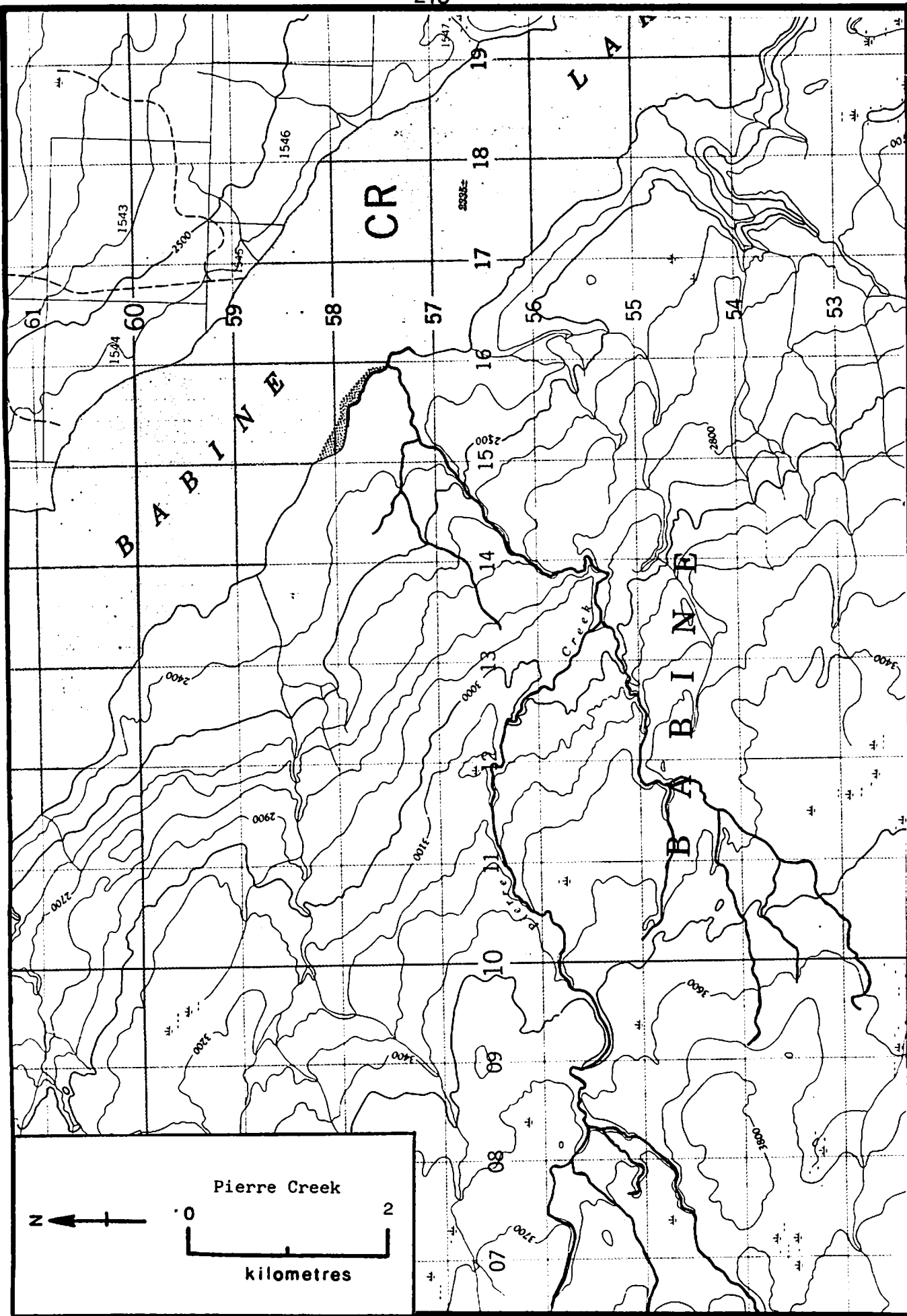
ESCAPEMENT RECORD FOR OWEN CREEK

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49			OBS			
50						
51			N/I			
52			N/I			
53			200			
54			N/I			
55			400			
56			400			
57			200			
58			200			
59			400			
60			200			
61			N/O			
62			300			
63			400			
64			200			
65			200			
66			50			
67			N/O			
68			200			
69			60		OBS	
70			100			
71			N/O			
72			400		12	
73			100			
74			100			
75			30			
76			50			
77			N/R			
78			N/R			
79						
80			600			
81			UNK			
82			N/O			
83						
84						
85						

TIMING

ARRIVE					Aug	
START			Aug-M Oct		Aug	
PEAK			Sept-L Oct		Aug-Sept	
END			E-M Nov		Sept	

REMARK N/R - No Record, N/I - Not Inspected



NAME OF STREAM PIERRE CREEK
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows E. into Babine Lake S. of Wright Bay, Rge. 5, Coast Dist.
 POSITION 54 125 NW.
 LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT Impassable 12m falls 4.0km from mouth.

Log jams frequently reported 1952-70

Beaver dams noted between 65-69

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	<u>- to falls</u>
CHINOOK	
COHO	<u>- riffles below falls</u>
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1948, 51, 52, 53 Scouring and silting. Bare rock spawning resulted in egg loss.

1951 - Stream cleared of debris -- minimal egg loss reported. Logging road constructed alongside creek without any damage to stream.

1953 - Heavy egg loss reported.

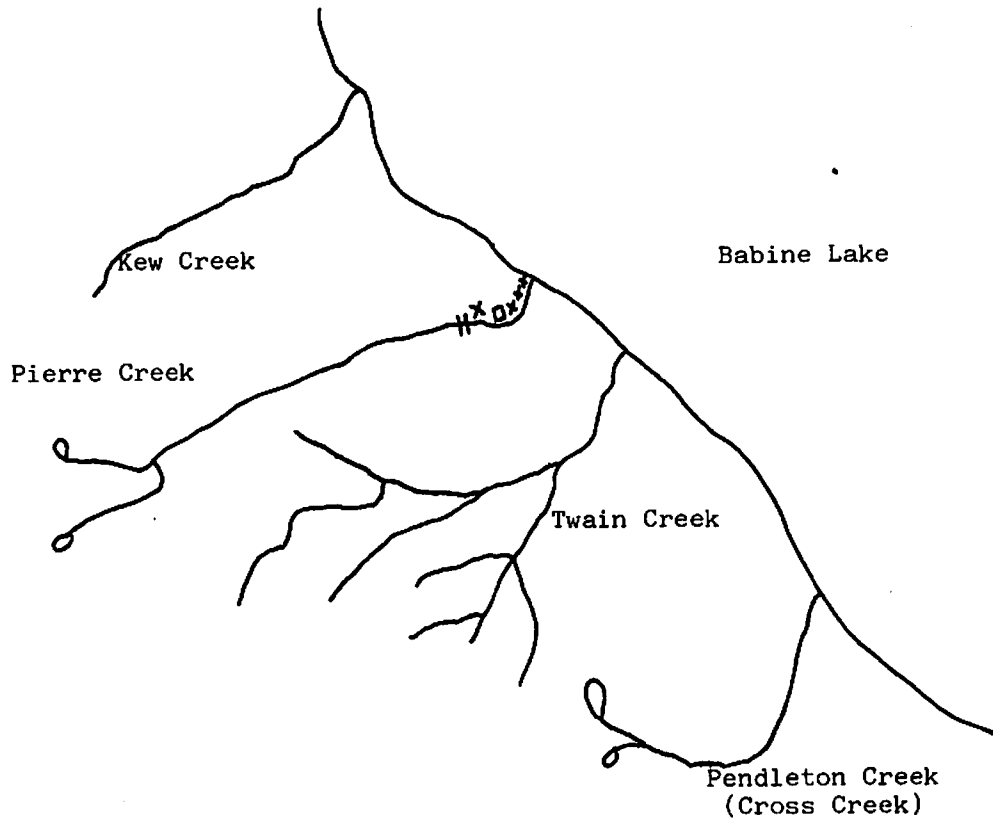
1958 - Low water and high temperatures resulted in crowding and loss of an estimated 50,000 spawners.

1961 - An estimated 30,000 sockeye dies unspawned from high temperatures.

1976 - Poor showing for early sockeye this year.

Uneven sex ratios common in sockeye run.

Predators: eagles, ravens, crows, coyotes, wolves, bears, piscivorous ducks, trout.



- X - Sockeye Spawning Grounds
- || - Coho Spawning Grounds
- // - Impassable Falls



Sketch of Pierre Creek, 1980



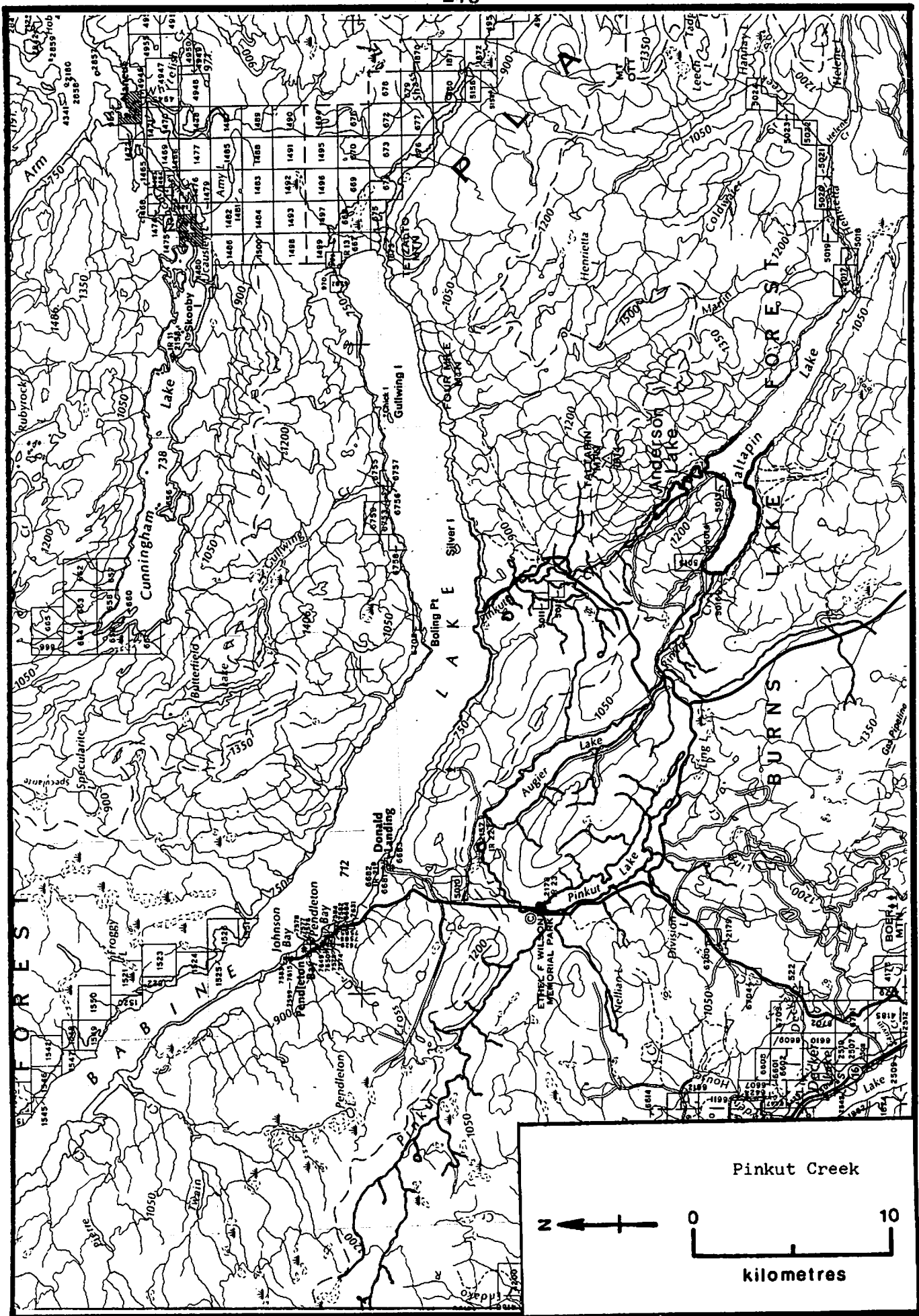
ESCAPEMENT RECORD FOR PIERRE CREEK

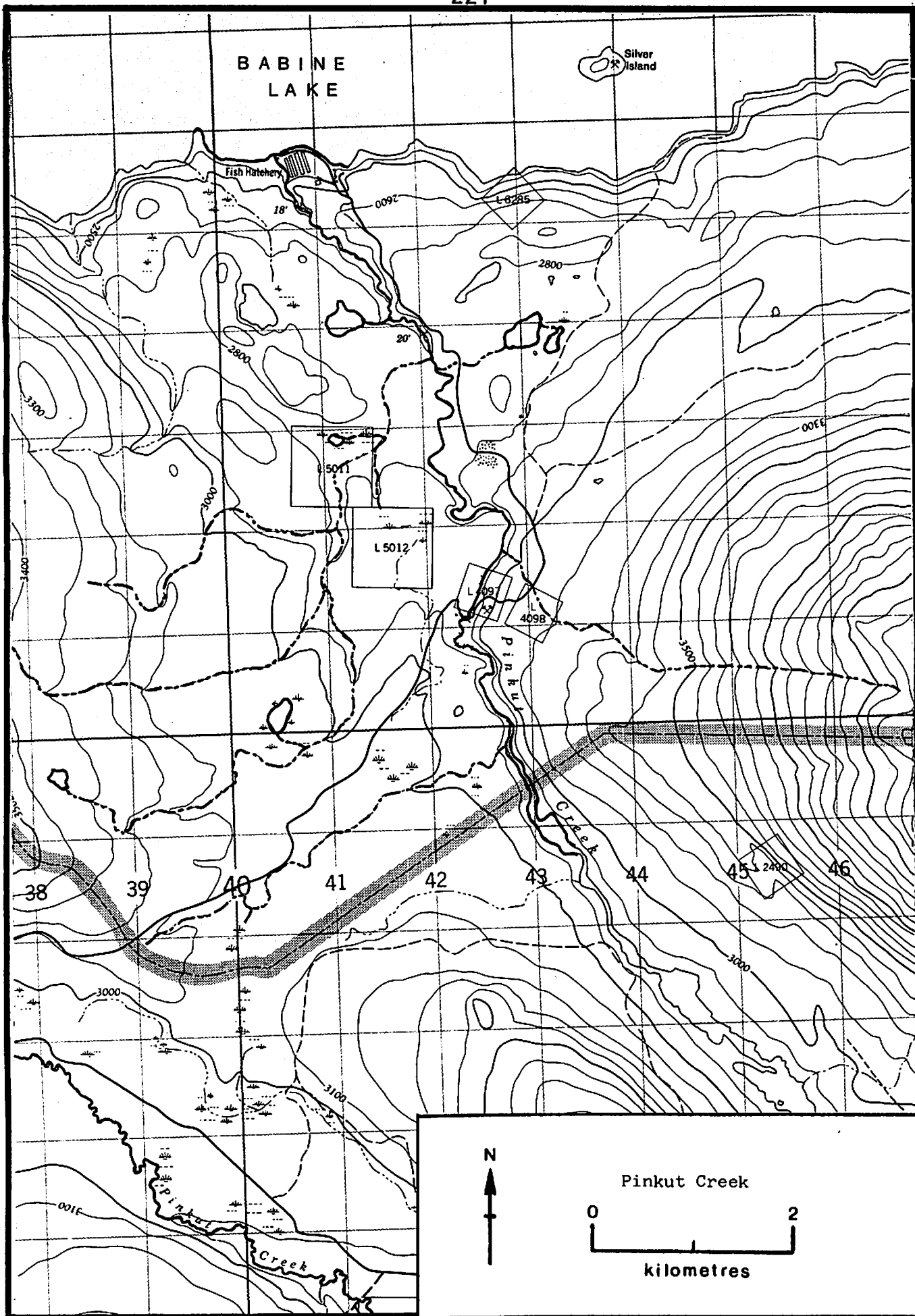
YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947	9,717					
48	15,000					
49	4,370		263			
50						
51	12,460		26			
52	3,500		200			
53	20,000		200			
54	17,000		100			
55	4,000		150			
56	20,000					
57	23,000					
58	80,000		200			
59	34,000		300			
60	11,000		200			
61	55,000		150			
62	4,500		35			
63	36,900		25			
64	22,000		25			
65	10,000		150			
66	11,000		OBS			
67	40,000					
68	25,000					
69	25,000		OBS			
70	44,000		200			
71	14,200		N/R			
72	25,075		250			
73	60,890					
74	42,920					
75	20,100					
76	2,430		N/R			
77	10,000		N/R		20	
78	4,000					
79						
80	3,750				N/O	
81	10,000				OBS	
82	20,000					
83						
84						
85						

TIMING

ARRIVE			E Oct			
START	L July-E Aug		E-M Oct		Aug	
PEAK	L Aug-E Sept		M Oct		Sept	
END	M Sept-M Oct		Nov		Sept	

REMARK N/R - No Record





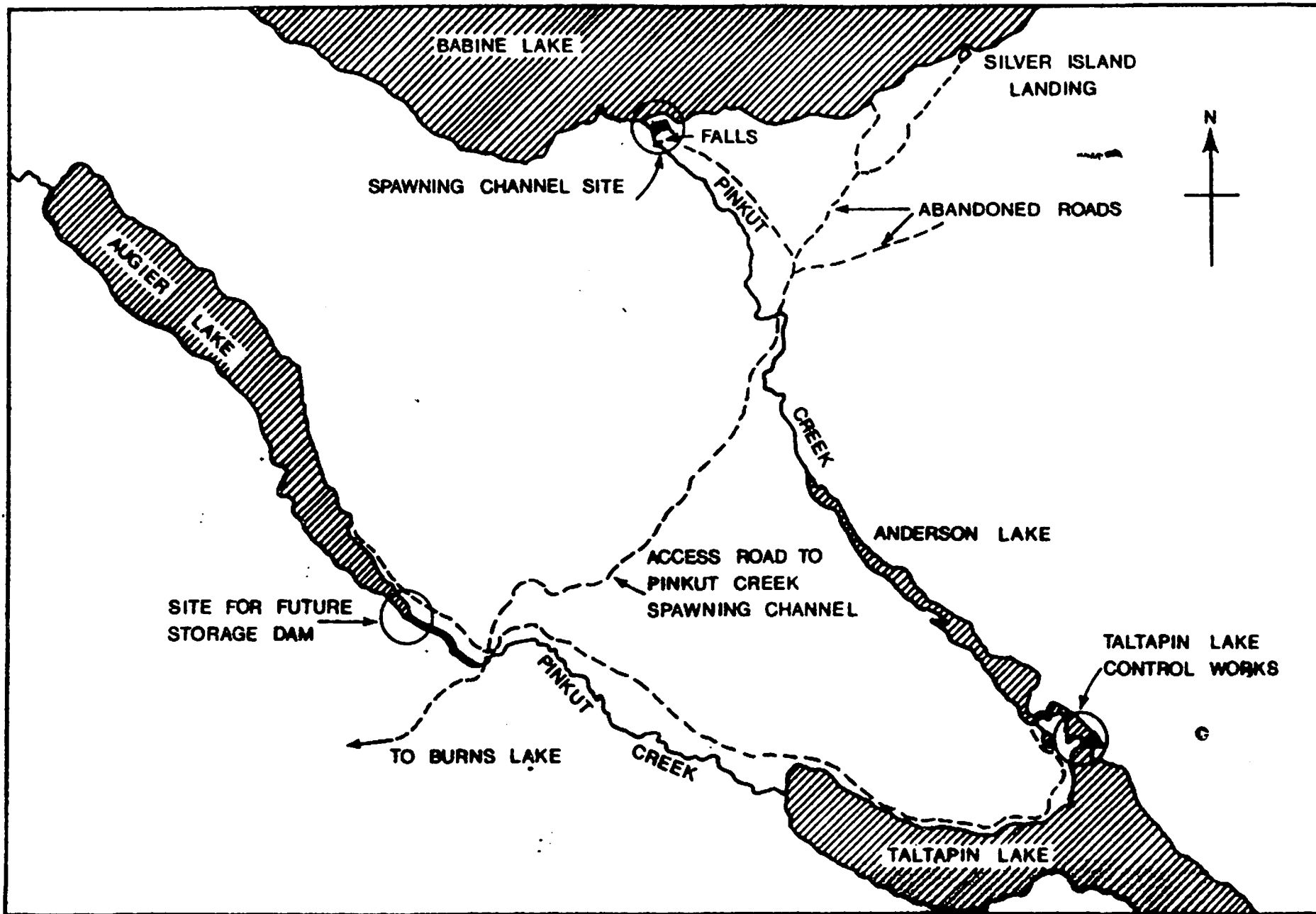


Figure 10: Location map of the Pinkut Creek enhancement project in relation to the Pinkut Creek watershed.

NAME OF STREAM PINKUT CREEK (15 Mile, Anderson Creek)
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows N. into Babine Lake, N. of Taltapin Lake, Rge,5,
Coast Dist. POSITION 54 125 SE.
 LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT Cascading falls 1.2-1.6km from mouth.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- historically to 3rd cascade, but now lower river, channels and
CHINOOK	air-lifted sections.
COHO	- lower 0.8km and spawning channel.
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

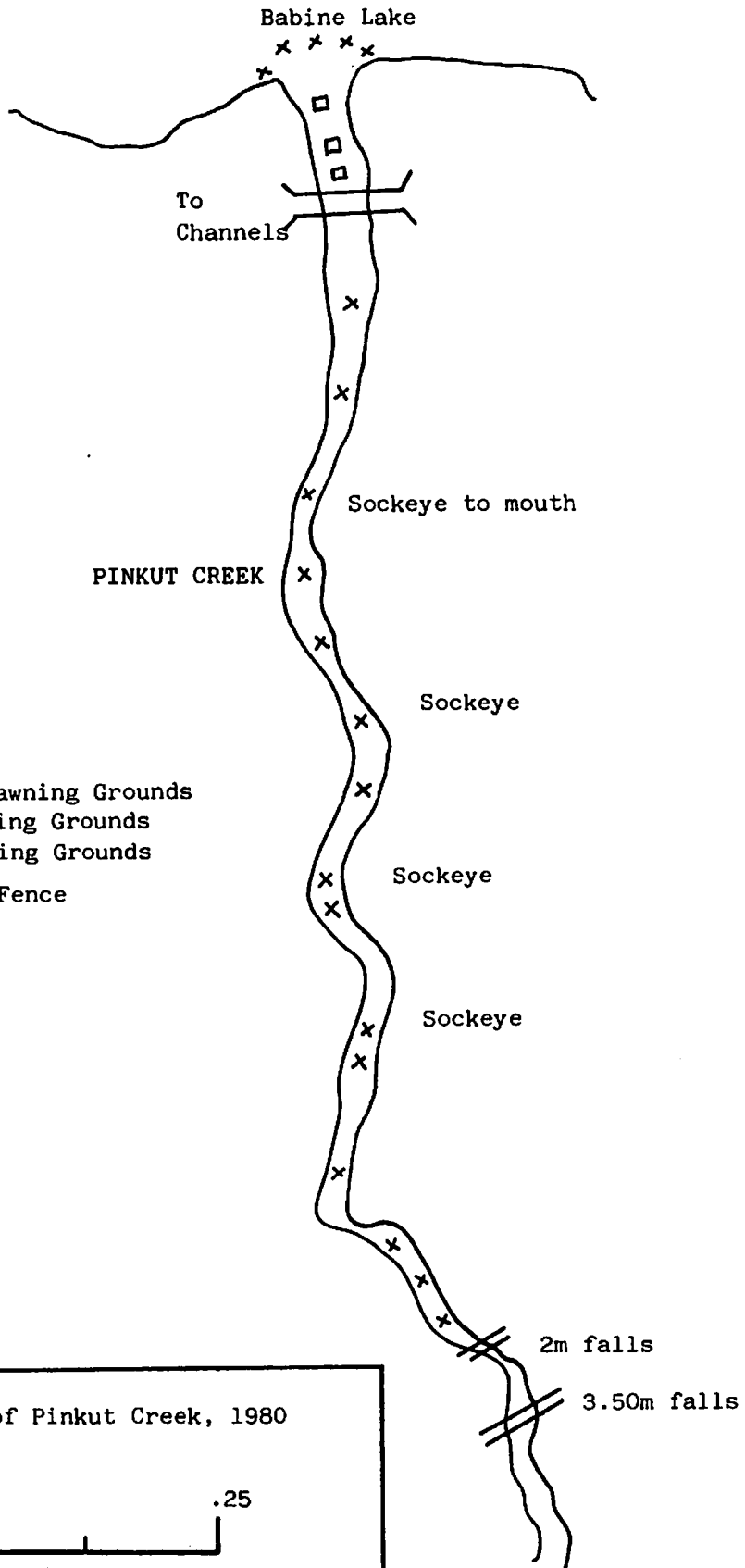
POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____
suitable spawning beds above falls

GENERAL REMARKS 1948-52 Egg loss due to bare rock spawning. Complete inspection
required above falls. Good coho run expected.
1949 - Stream inspected above falls - suitable gravel beds, but stream requires
considerable cleaning to make it worthwhile installing fish ladders to
access this area.
1951 - 6 small sawmills operate on lakes in upper reaches. Fir will be logged
near the mouth except on the Fish Hatchery reserve.
Sockeye redd sampling revealed eggs and alevins in good condition.
1953 Expect that lower reaches will be logged as far up as Taltapin Lake.
1958 About 500 sockeye from 4 and 6 mile creeks died unspawned in Pinkut Cr.
because they couldn't enter other streams.
1960 Approx 350,000 sockeye eggs were taken for Nanika Hatchery in Bulkley R.
watershed.

PINKUT CREEK

1961 - 2050 sockeye stripped to get eggs for Nanika Hatchery
 1962 5000 " " " "
 1963 4500 " " " "
 1966 Counting fence established on this stream.
 1967 Artificial spawning channel started near mouth.
 1968 New fence, channel, flow control dam.
 1973 Some fish air lifted above falls. 74,75,76.
 1976 Channels not used because they were being worked on.
 20,000 in river.
 30,000 air lifted above falls.
 5,000 near mouth.
 1977 work done to improve migration through falls.
 65,000 in channels.
 20,000 in river below counting weir.
 10,000 below weir and in lake.
 1982 Sockeye airlift 20,000
 River 75,000
 Channels 55,000

Predators: gulls, eagles, piscivorous ducks, coyotes, ravens.



- x - Sockeye Spawning Grounds
- o - Pink Spawning Grounds
- - Coho Spawning Grounds
- () - Counting Fence



Sketch of Pinkut Creek, 1980



kilometres

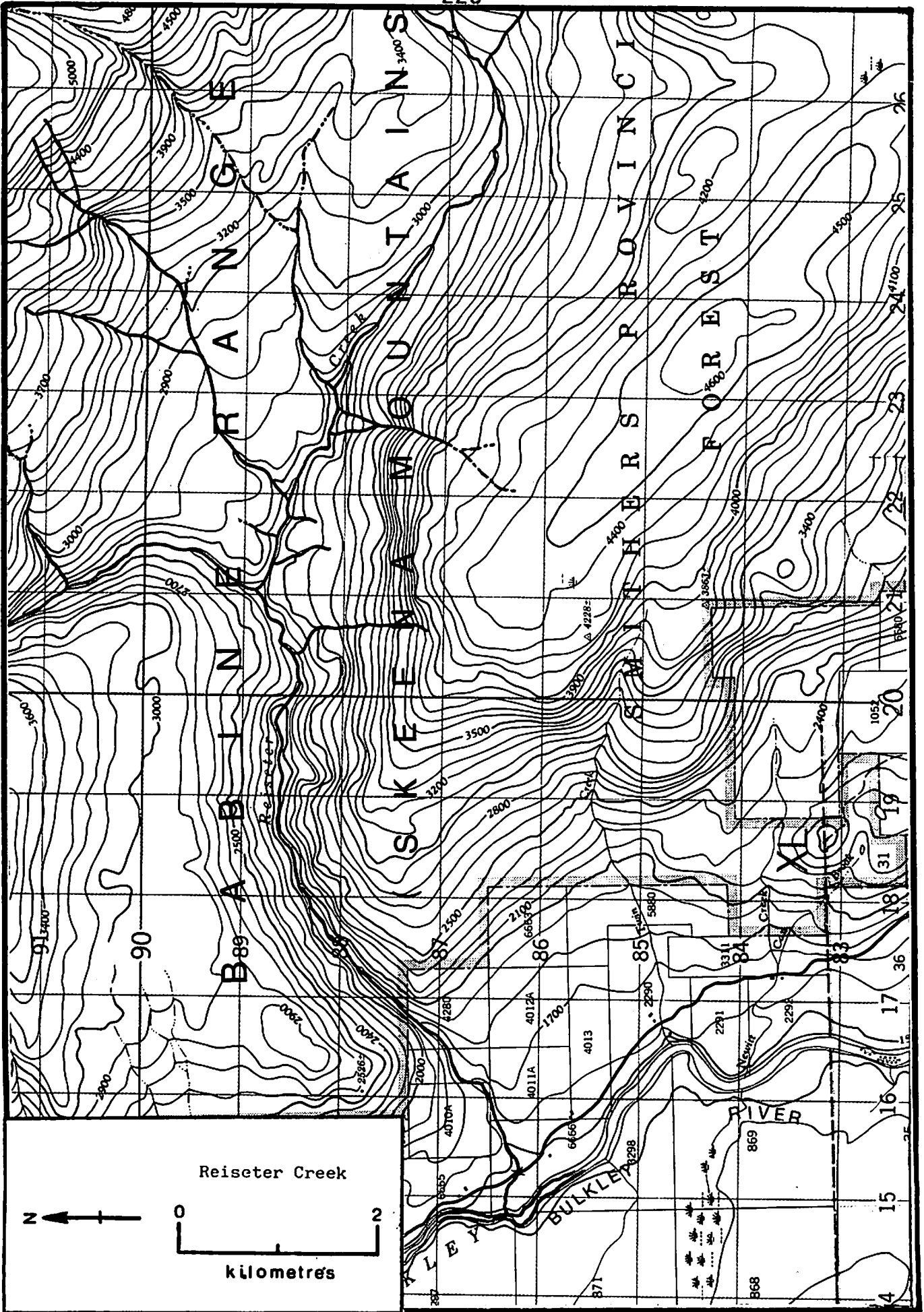
ESCAPEMENT RECORD FOR PINKUT CREEK (15 Mile, Anderson Creek)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947	12,000					
48	18,404		50		-	
49	11,000		300			
50						
51	5,779		123			
52	7,500		200			
53	24,000		200			
54	25,000		400			
55	4,000		300			
56	24,000		40			
57	30,000		20			
58	45,000		800			
59	80,000		300			
60	30,000		100			
61	47,000		200			
62	30,000		150			
63	65,000		30			
64						
65	34,000		250			
66	32,500		50			
67	33,000		200			
68	22,500		200			
69	43,526		10			
70	32,000		100			
71	30,400		N/R			
72	93,000		N/R			
73	100,000					
74	96,197					
75	140,130					
76	55,000					
77	95,000					
78	72,000					
79						
80	56,655					
81	250,000*		100		50	
82	150,000					
83						
84						
85						

TIMING

ARRIVE					
START	July-L Aug		Sept-M Oct		Aug
PEAK	Aug-M Sept		Sept-L Oct		Aug
END	L Sept-E Oct		L Oct-Nov		Sept

REMARK N/R - No Record, *sockeye 60,000 - below fence
25,000 - river
75,000 - channel
90,000 - air lift



NAME OF STREAM REISETER CREEK (Two Bridge Creek)
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows S.W. into Bulkley River, Rge. 5, Coast Dist.
 POSITION 54 127 NE.
 LENGTH 0.8 km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	_____
0.25 - 0.50	_____
0.50 - 0.75	_____
0.75 - 1.00	_____
>1.00	_____

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT Steep entrance prevents salmon from entering stream when water levels are low.

SPAWNING DISTRIBUTION

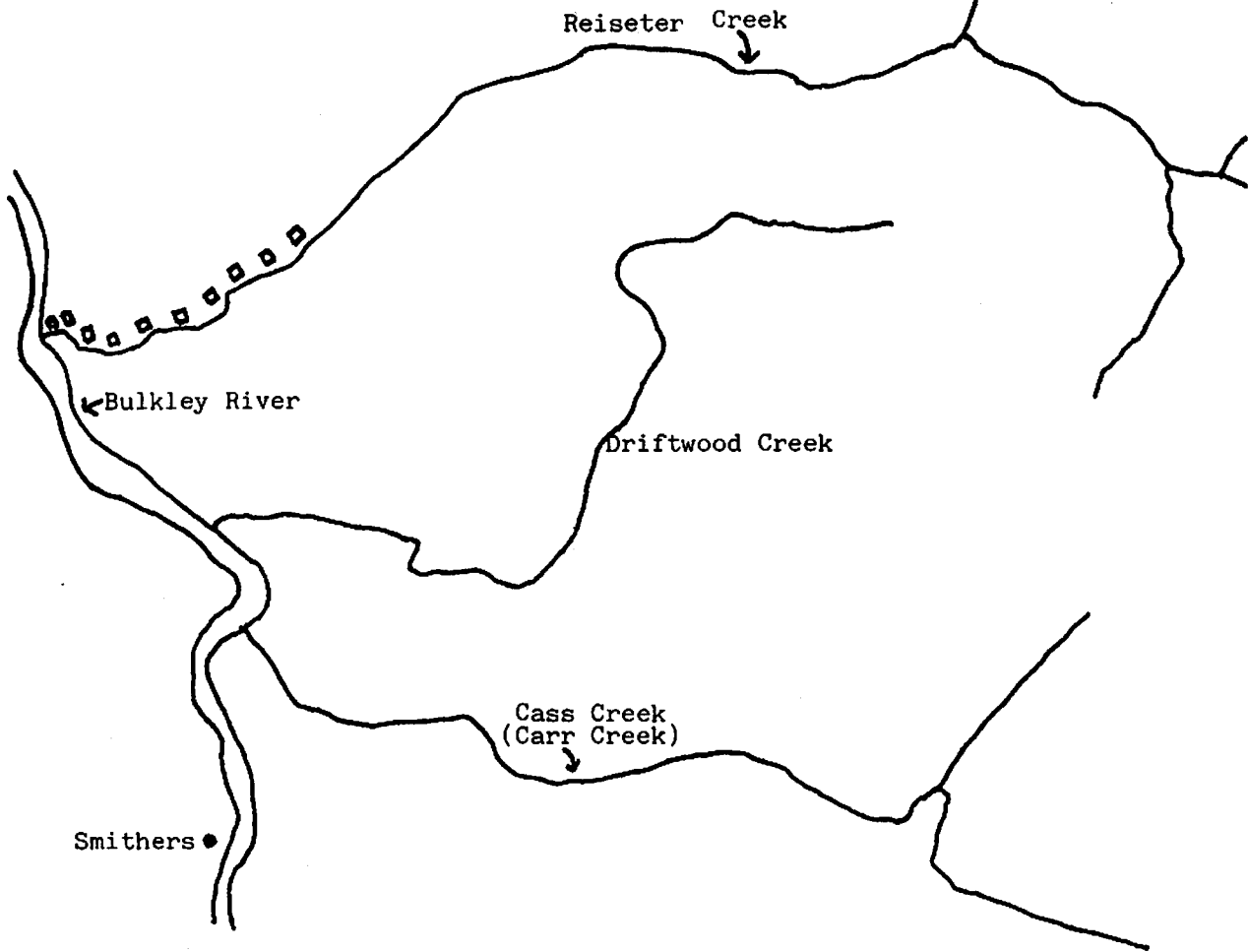
SPECIES	SECTION OF STREAM USED
SOCKEYE	_____
CHINOOK	_____
COHO	<u>-- odd pair on riffles. Well spread out -- some concentration</u>
CHUM	<u>at mouth.</u>
PINK (ODD YEAR)	_____
PINK (EVEN YEAR)	_____
STEELHEAD	_____

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1948 - Local Indians report fair runs of coho and steelhead 49,51.
1952 - Salmon have difficulty entering stream if water levels are low 55/58
1960 - Good water conditions resulted in increased escapement.
1962 - Low water conditions delayed upstream migration.
1982 - Local reports indicate that this creek was used for spawning.

High rising country 0.8km from mouth.

□ - Coho Spawning Grounds



Sketch of Reisetter Creek, 1980



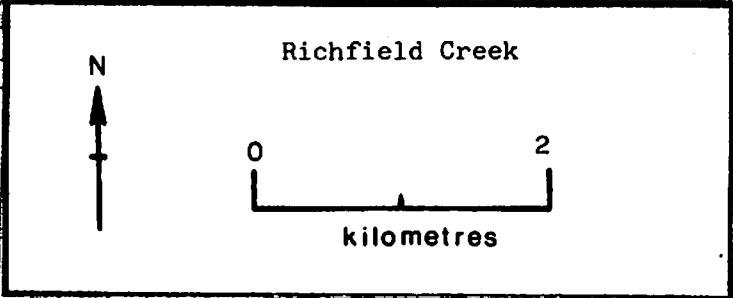
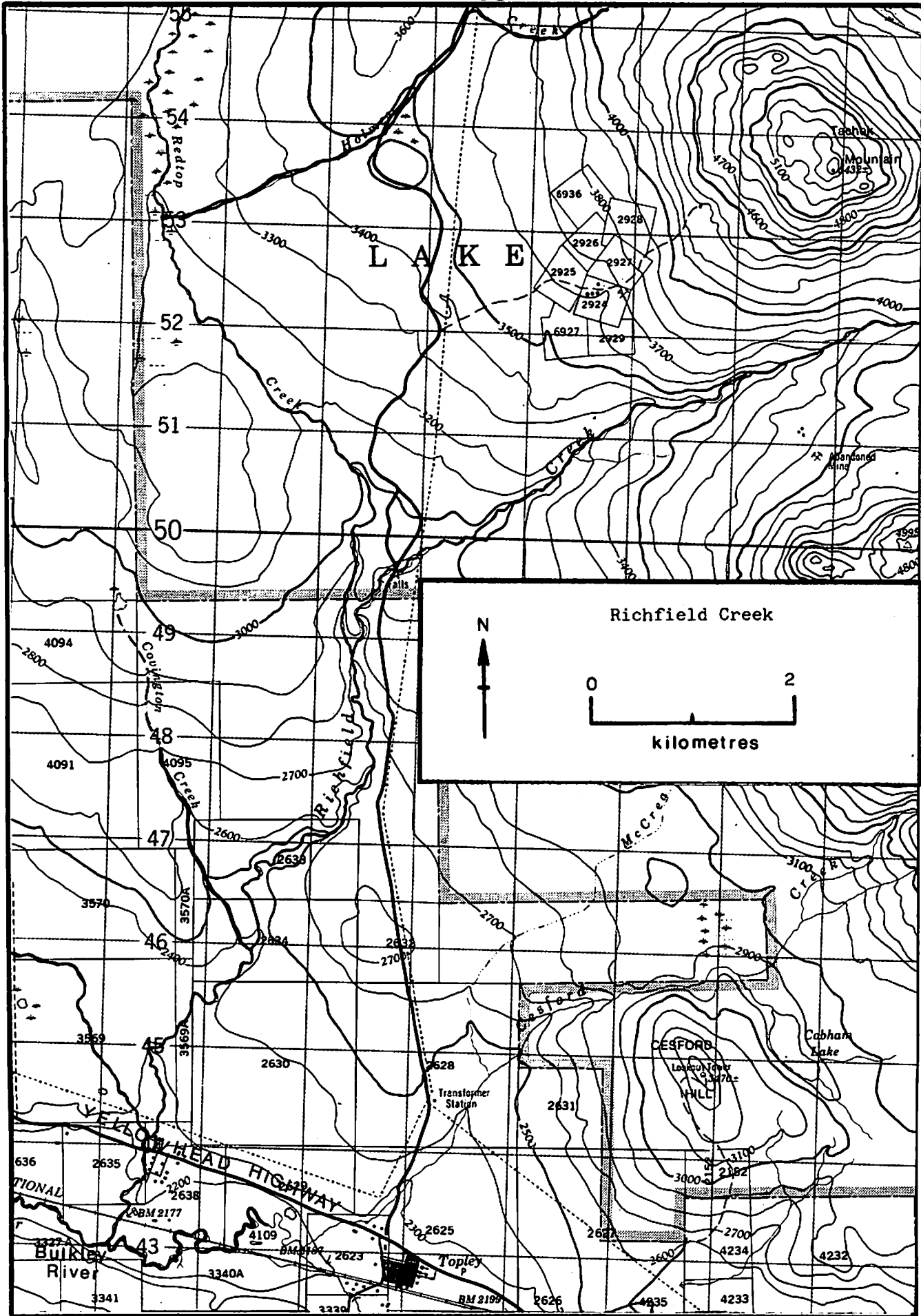
ESCAPEMENT RECORD FOR REISTER CREEK (Two Bridge Creek)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48			OBS			
49			OBS			
50						
51			OBS			OBS
52			N/O			
53			60			
54			OBS			
55			OBS			
56			25			
57			N/O			
58			25			
59			25			
60			400			
61			25			
62			400			
63			400			
64			150			
65			N/O			
66			200			
67			N/O			
68			N/O			
69			100			
70			100			
71			N/O			
72			N/O			
73			N/R			
74			N/O			
75			N/O			
76			N/O			
77			OBS			
78			OBS			
79						
80			OBS			
81			N/I			
82		N/O	N/O			
83						
84						
85						

TIMING

ARRIVE						
START			Sept			
PEAK			Oct			
END			Nov-Dec			

REMARK N/R - No Record, N/I - Not inspected



NAME OF STREAM RICHFIELD CREEK (Findley Creek)
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows S. into Bulkley River, West of Topley, Rge.5, Coast Dist.
 POSITION 54 126 NE
 LENGTH 6.4 km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE - FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

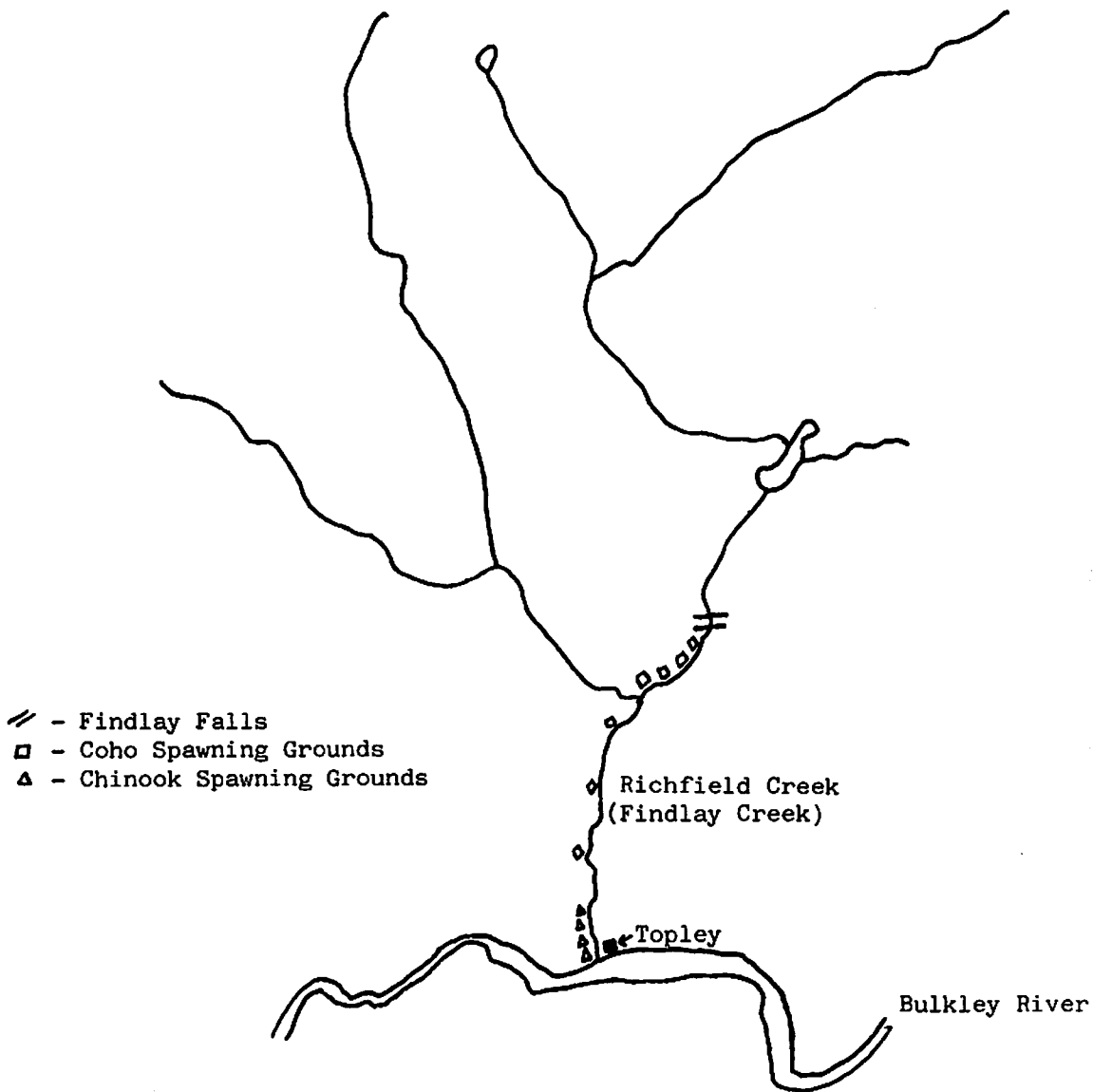
BARRIERS OR POINTS OF DIFFICULT ASCENT 18.2m fall 4.8km from stream mouth.
Only passable at high water levels.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	- in riffles, near spring, close to Findlay-Bulkley confluence
COHO	- primarily in upper reaches near falls
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1948 - Because the stream is difficult to inspect, numbers are from local Indian reports.
1955/57 Only small numbers of fish enter this stream.
1961 Stream dry
1962 It was expected that with the general abundance of Coho throughout the sub-district this year this run would have increased considerably, but such was not the case.
1972 Evidence of silting between Hwy. mouth. Log jams near C.N.R. bridge caused slight scouring.
Inconsistent runs. Good potential to support larger runs because of generally good water conditions. Few predators -- birds.



Sketch of Richfield Creek, (Findley
Creek,
1980)



kilometres

ESCAPEMENT RECORD FOR RICHFIELD CREEK (Findlay Creek)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49		75				
50		75	75			
51		25	25			
52		N/O	N/O			
53			100			
54			N/O			60
55		25	15			
56		N/O	75			
57		N/O	N/O			
58		N/O	75			
59		N/O	N/O			
60			75			
61						
62			50			
63		30	300			
64		100	50			
65		N/R	N/R			
66			100			
67			N/O			
68			N/O			
69			100			
70			N/O			
71			N/O			
72			150			
73			N/R			
74			N/O			
75			N/R			
76			25			
77			200			
78			250			
79						
80			N/O			
81			N/I			
82						
83						
84						
85						

TIMING

ARRIVE						
START		L Aug	L Sept-L Oct			
PEAK			Oct-E Nov			
END		L Oct	N Nov-Dec			

REMARK N/I - Not inspected

'SALIX CREEK'

see

BEAR RIVER AND LAKE p.39

NAME OF STREAM SALIX CREEK
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows S.E. into Bear Lake, Cassiar Dist.
 POSITION 56 126 SW.
 LENGTH 2.0 km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT Fast water 1.6km from mouth
Cascades 0.8km above railroad bridge

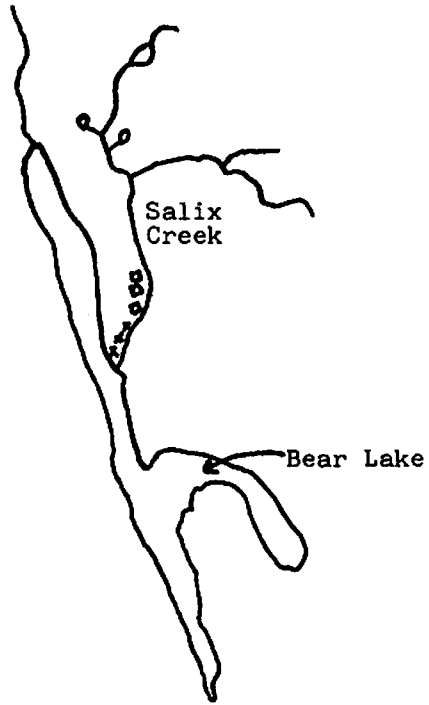
SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- within 1.6km of mouth
CHINOOK	
COHO	- upper reaches
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1958 - In years of low flow coho and sockeye spawn inlake.
1960 Bear may be responsible for poor Sockeye returns. Indians no longer
fish this stream for sockeye.
Very small stream. Many log jams seen but passable -- cleared as required.
1972 Considerable silting in the lower river resulted from B.C.Rail Construction
1972 Heavy siltation during runoff period.
1982 Canada-U.S.tag recovery flight of Sept 15 observed 50+ sockeye
well up near the railway bridge.
Predators: bears and birds.

- - Coho Spawning Grounds
- X - Sockeye Spawning Grounds



Sketch of Salix Creek, 1980



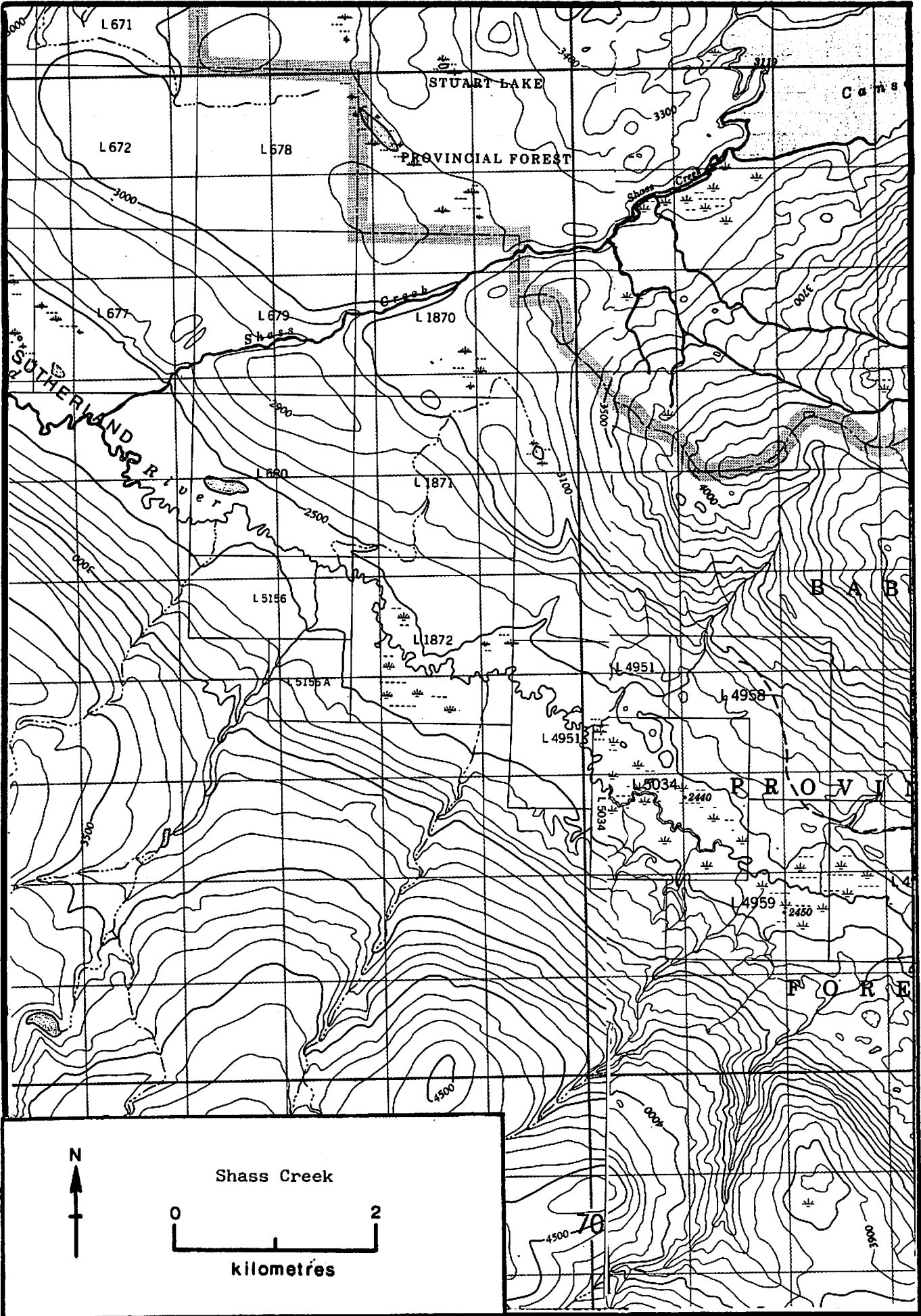
ESCAPEMENT RECORD FOR SALIX CREEK

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49	1,000		OBS			
50						
51	500		OBS			
52	N/O		N/O			
53	300		OBS			
54	200		OBS			
55	N/O					
56	25		OBS			
57	N/O		OBS			
58	N/O		OBS			
59	N/O		N/O			
60	N/O					
61	256					
62			200			
63	200		75			
64	200					
65	300					
66	25					
67	N/O					
68	N/O					
69	N/I					
70	50					
71	N/O					
72	N/R		N/R			
73	N/R		N/R			
74	N/O		N/O			
75	N/R		N/R			
76			N/R			
77	N/R		N/R			
78	200		N/O			
79	150					
80						
81	150					
82	UNK					
83						
84						
85						

TIMING

ARRIVE					
START	Aug-E Sept		Aug-Sept		
PEAK	Aug-M Sept		Sept		
END	L Sept-Oct		Oct		

REMARK N/R - No Record, N/I - Not Inspected



NAME OF STREAM SHASS CREEK (Grizzley Creek)
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows into Sutherland River, (Beaver River)
 POSITION 54 125 SE.
 LENGTH 3.2 km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT 23m falls 3.2km from stream mouth

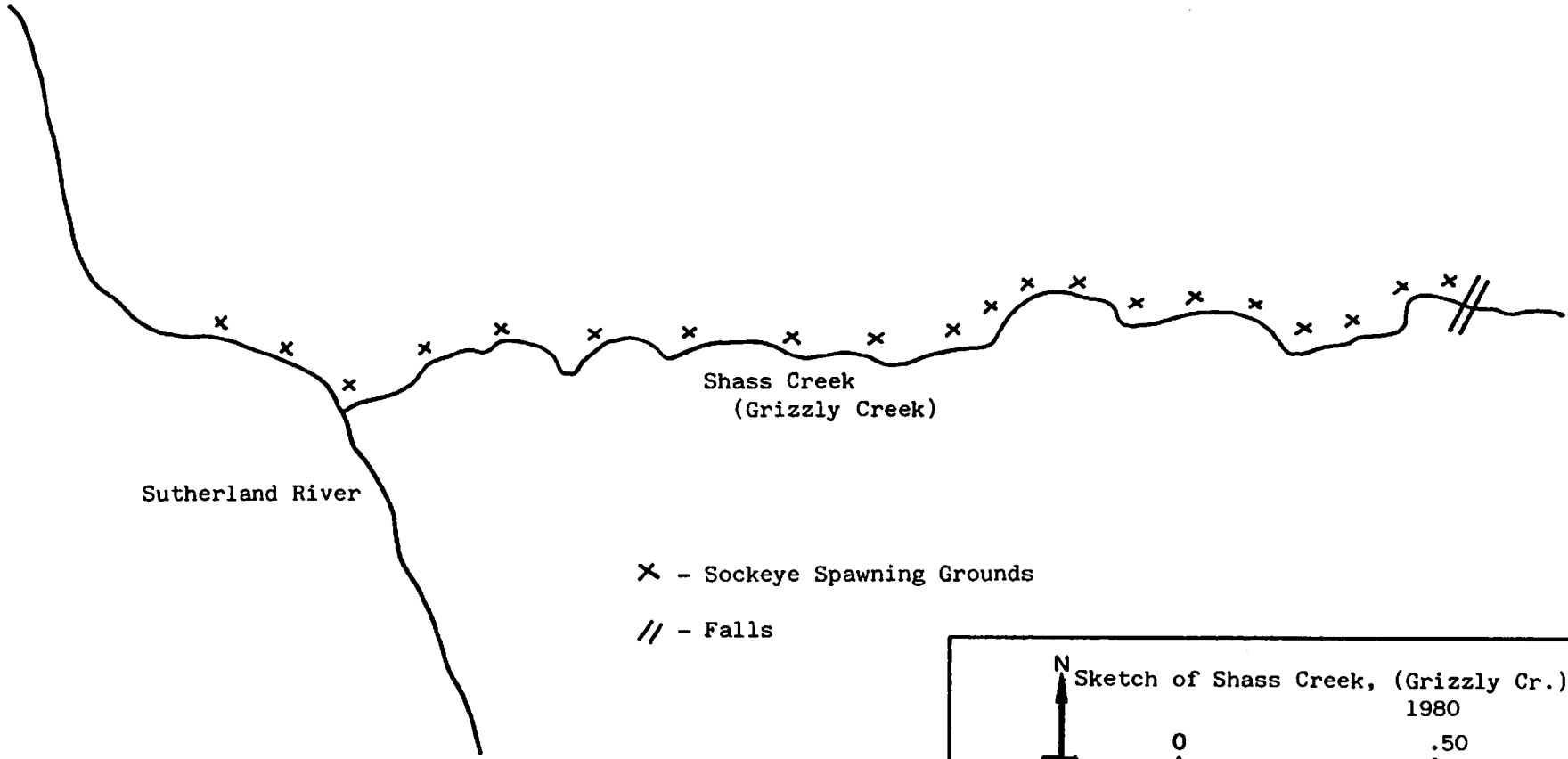
beaver dams and log jams

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	even spawning to falls
CHINOOK	
COHO	upper reaches when present
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1952 - General conditions here were the best of all Babine Runs.
1956/60 Many beaver dams in Sutherland River require removal to allow run upstream.
1961 Some sockeye died unspawned due to high temperatures.
Beaver dams checked and removed as required. 56/58 60/67
1974 Some evidence of egg digging by later spawning fish.
1976 Low returns of early sockeye.
Lake fed stream fairly stable flow.
Some years sockeye runs have uneven sex ratios and a high percentage of jacks.
Predators: eagles ravens, bears and wolves.



Sutherland River

Shass Creek
(Grizzly Creek)

- × - Sockeye Spawning Grounds
- // - Falls

Sketch of Shass Creek, (Grizzly Cr.)
1980

0 .50
kilometres

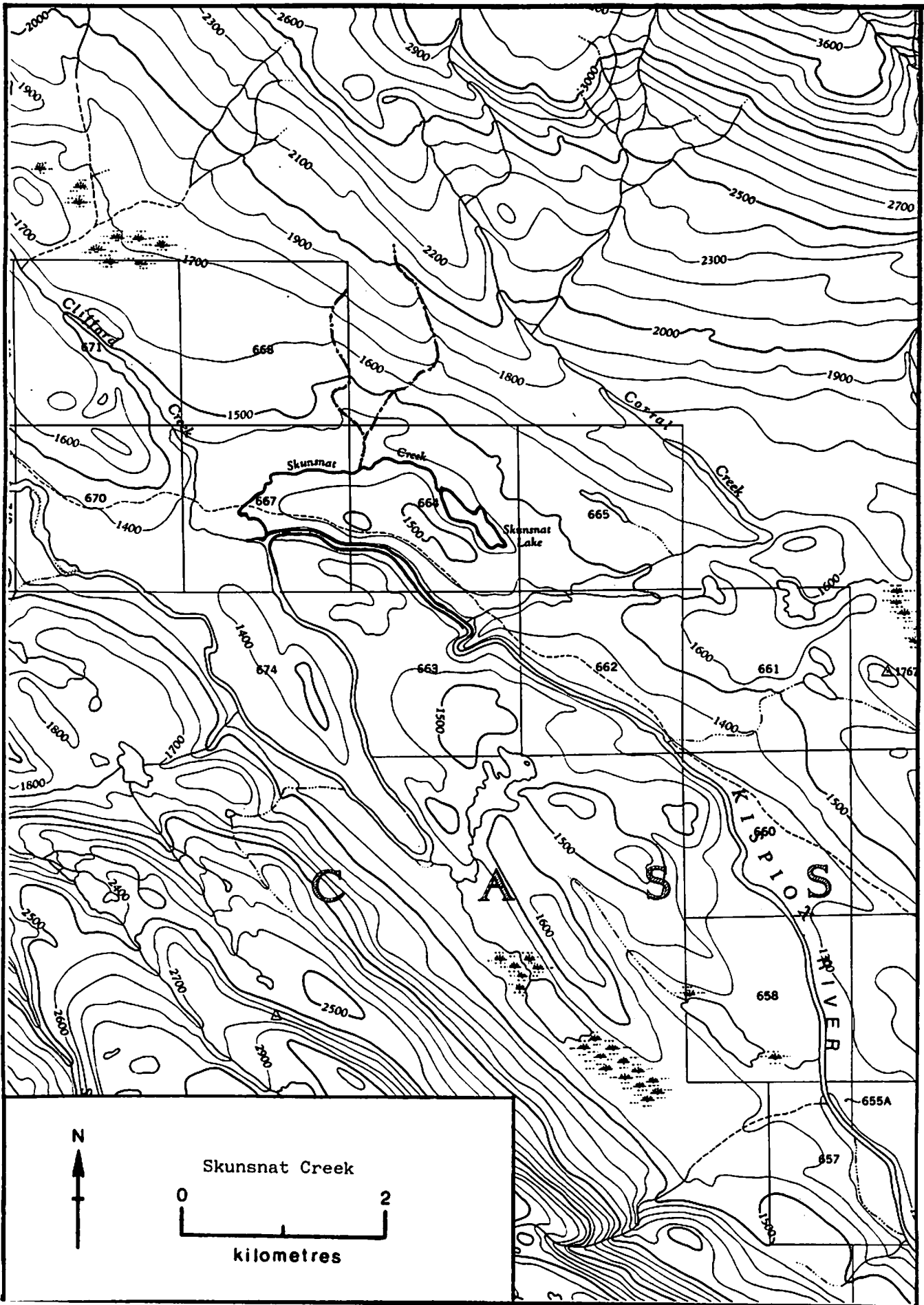
ESCAPEMENT RECORD FOR SHASS CREEK (Grizzly)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947	3,085					
48	5,493	OBS	N/O			
49	1,542		63			
50						
51	2,333		66			
52	3,500		75			
53	6,000		150			
54	3,100					
55	500		100			
56	5,000					
57	7,000					
58	30,000		200			
59	14,000		150			
60	12,000		300			
61	30,000		100			
62	5,000		12			
63	14,760		50			
64	8,000					
65	5,000		100			
66	6,000					
67	3,000		75			
68	7,500		100			
69	9,000		100			
70	5,400		50			
71	2,400		50			
72	750		N/R			
73	13,900		N/R			
74	12,000		N/R			
75	4,500		N/R			
76	1,400		N/R			
77	6,000		N/R			
78	1,200		N/R			
79						
80	3,000					
81	6,000		UNK			
82	4,500		N/O			
83						
84						
85						

TIMING

ARRIVE					
START	M Aug-E Sept		L Sept-E Oct		
PEAK	E Sept-E Oct		M Oct		
END	L Sept-L Oct		L Oct		

REMARK N/R - No Record, Kokanee 1947 - 1,250; 1948 - 400; 1952 - 3,085



NAME OF STREAM SKUNSNAT CREEK

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH Flows W. and S. into Kispiox River, Cassiar Dist.

POSITION 55 128 NE.

LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____

SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

Beaver dams monitored regularly and removed as required.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	
COHO	- scattered to 4.5km from mouth
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1965 - Culvert 4.0km from stream mouth causing problems for migrating salmon. Installation of a bridge was suggested 67.

1966 - Some remedial work undertaken on culvert.

1978 - Fish ladder below Kispiox Road washed out during October flood.

Beaver dams kept flood damage to a minimum.

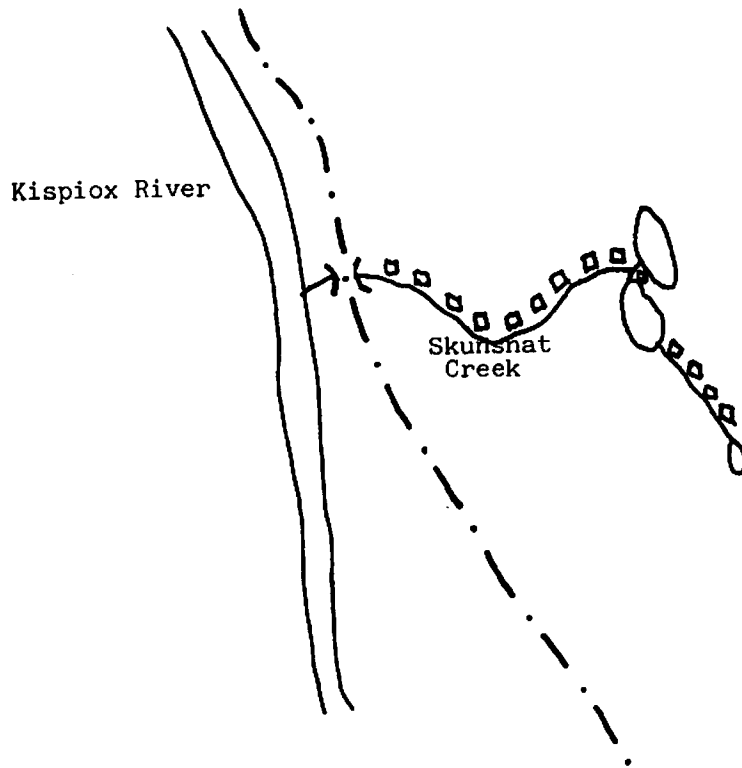
1979 - Stream clearance undertaken throughout fall. Jump pool constructed by Dept. of Highways.

1980 - Donor stock taken from this creek by S.E.P.

1981/82 Baffles in culvert need to be replaced.

Seasonal fluctuations in water levels.

- - Coho Spawning Grounds
- · - - Road (Kispiox Valley Road)
- ≡ - Road Bridge



Sketch of Skunshat Creek, 1971



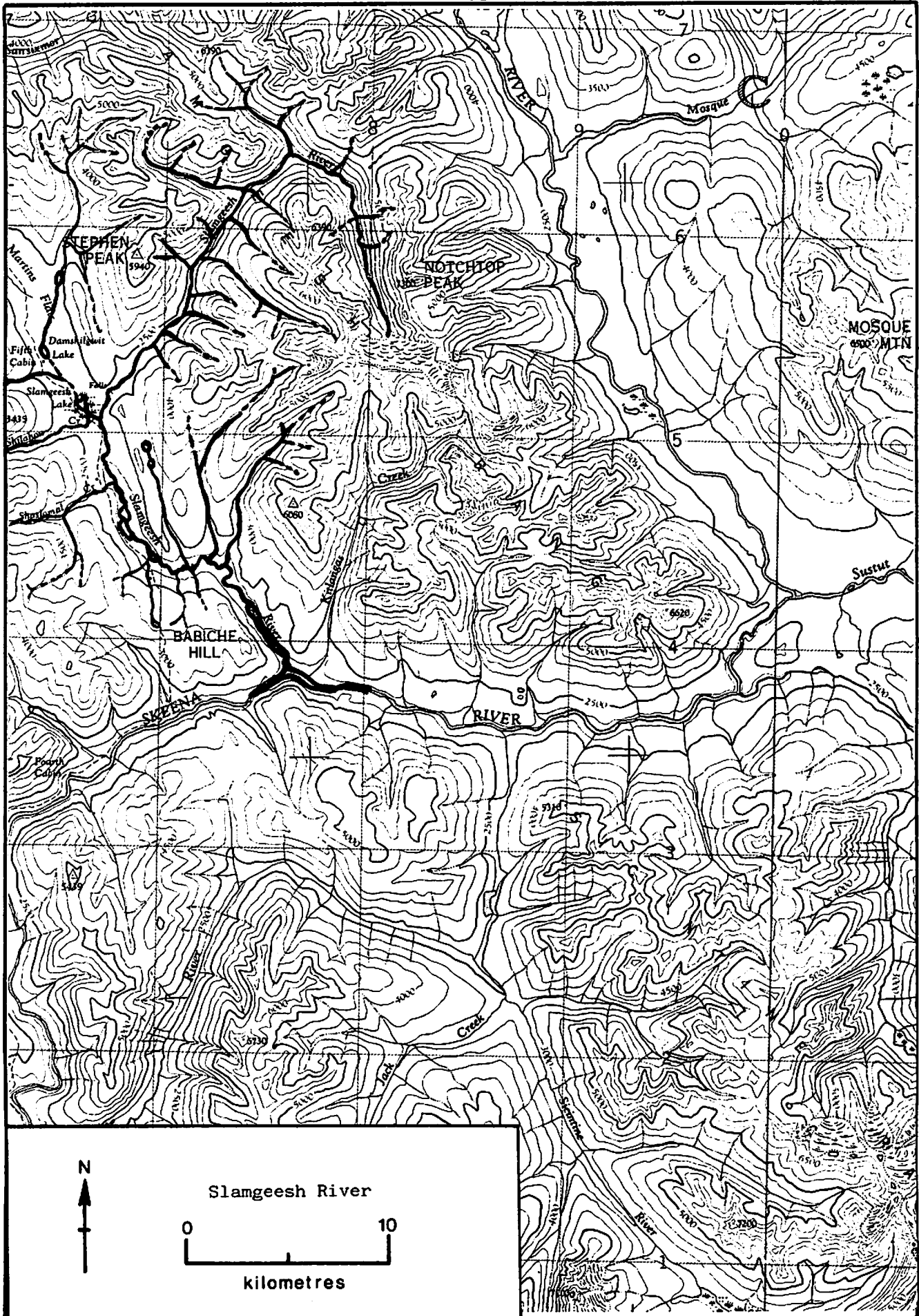
ESCAPEMENT RECORD FOR SKUNSNAT CREEK

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65		First Report		550		
66				25		
67				25		
68				750		
69				25		
70				25		
71				25		
72				25		
73				25		
74				25		
75				25		
76				75		
77				25		
78				25		
79				25		
80				350		
81				200		
82				200		
83						
84						
85						

TIMING

ARRIVE			Sept-Oct			
START			L Sept-M Oct			
PEAK			M Oct-M Nov			
END			Nov - L Dec			

REMARK



NAME OF STREAM SLAMGEESH RIVERCONSERVATION DISTRICT 8 STATISTICAL AREA 4LOCATION OF MOUTH Flows S. into Skeena River, W. of Kitlangas CreekPOSITION 56 127 SW.LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____

SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25

0.25 - 0.50

0.50 - 0.75

0.75 - 1.00

>1.00

WETTED AREA _____ m² SPAWNING AREA _____ m²DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT Impassable in years of heavy beaver activity.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1970 Some silting observed.
Suggest local outfitter by given a contract to keep beaver dams open during
salmon runs and that pressure be exerted on trappers to keep beaver under control.

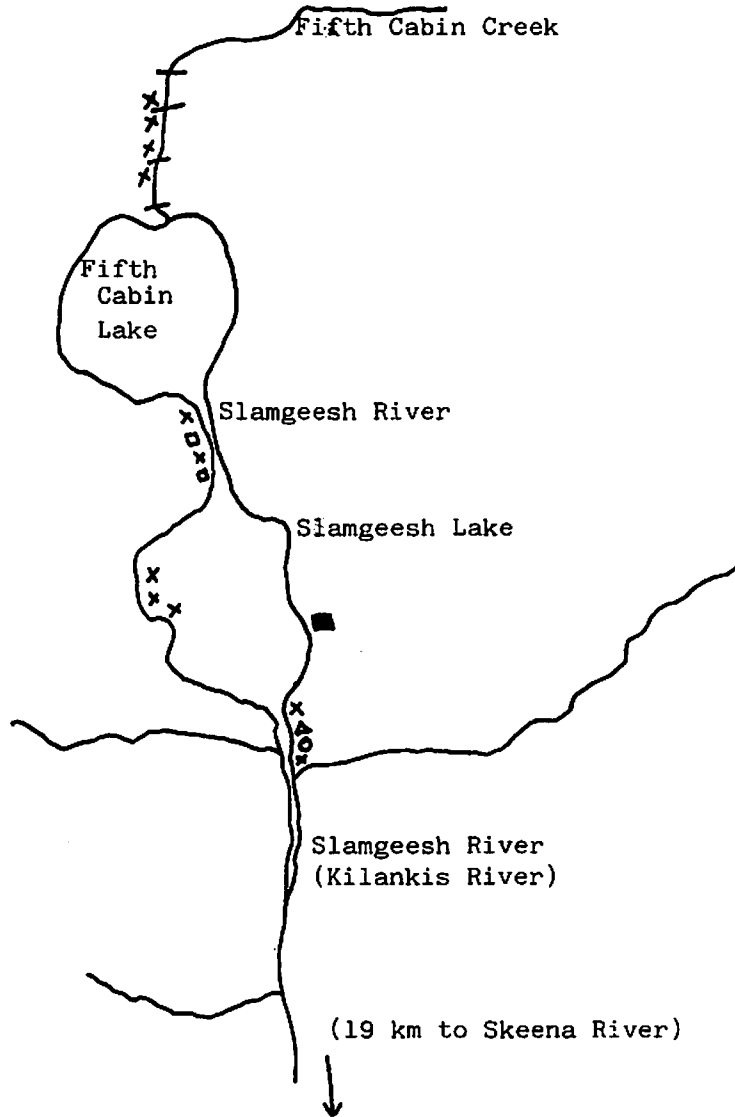
Coho, pinks and sockeye present according to angler and guide reports. Numbers
not known.

1982 Canada-U.S. tag recovery flight on Sept 15 -- few sockeye, pinks coho and
spring -- no estimates. Water coloured below Shilahow and Slamgeesh

River junction.

Predators: birds, bear and wolves.

- △ - Chinook Spawning Grounds
- × - Sockeye Spawning Grounds
- - Coho Spawning Grounds
- - Pink Spawning Grounds
- / - Beaver Dam
- - Camp Cabins



Sketch of Slangeesh River and Lake,
1980



kilometres

not to scale

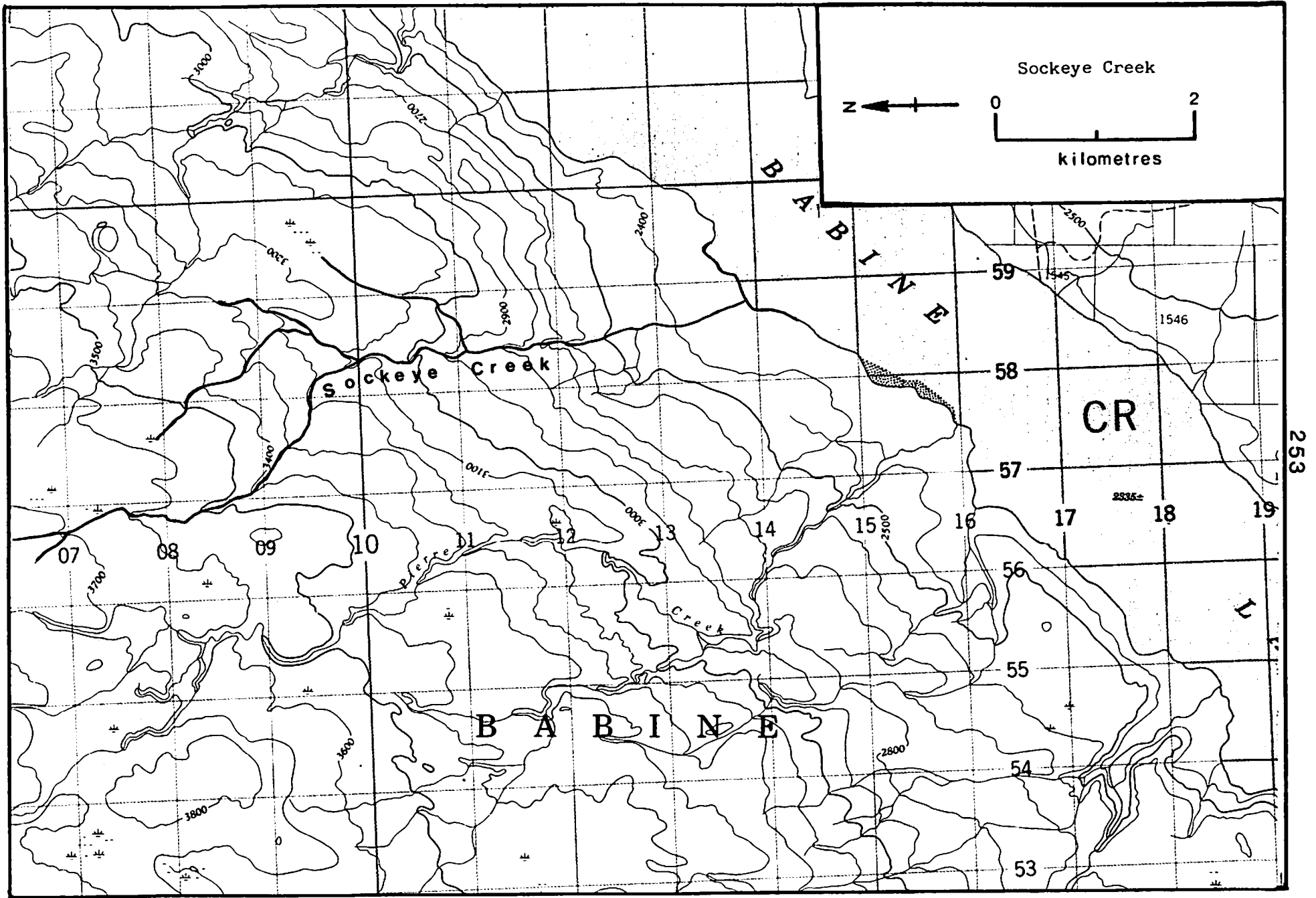
ESCAPEMENT RECORD FOR SLAMGEESH RIVER AND LAKE

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65						
66						
67						
68						
69						
70	50					
71	N/I					
72	500					
73	N/I					
74	N/I					
75	N/I					
76	N/I					
77	N/I					
78	4,800	300	4,800			
79						
80	N/I					
81	2,000	100				
82	UNK	UNK				
83						
84						
85						

TIMING

ARRIVE						
START	Sept	Sept	E Oct			
PEAK	Sept-Oct	Oct	M Oct			
END	Oct	Oct	L Oct			

REMARK N/I - Not Inspected



NAME OF STREAM (Sockeye Creek)
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows^E into Babine Lake, between Tachek Creek and Pierre Creek
 POSITION 54 126NE.
 LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT Cascade falls 3.2 km from mouth

This stream is affected by silting and gravel build-up at mouth causing problems for migrating fish.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	<u>- to canyon, but heaviest in lower end</u>
CHINOOK	
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1958 - about 500 early run sockeye lost due to high temperatures and low flows.

1963 - Mouth changes course due to shifting gravel deposits. Stream covered with windfalls 64-67

1973 - Mouth dry by late August.

1978 - Stream dried for 91m off beach this year and several hundred beach spawners seen.

1981 - 50% of sockeye died unspawned.

Subject to scouring below canyon and at mouth. First 0.8km above mouth muddy bottom.

Sex ratios tend to be uneven in some years.

Predators: bear and birds.

Babine Lake

Sockeye Creek

- x - Sockeye Spawning Grounds
- R - Rapids (Cascade-type)
- ||| - Steep Cliffs

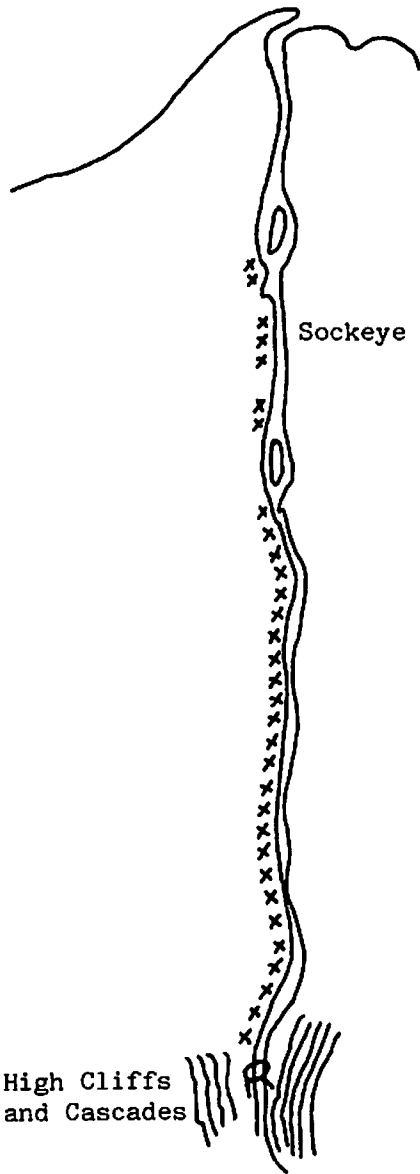
High Cliffs
and Cascades



Sketch of
Sockeye Creek



kilometres



ESCAPEMENT RECORD FOR (Sockeye Creek)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947	551					
48	750					
49	154					
50						
51	786					
52	N/O					
53	600					
54	900					
55	500					
56	N/O					
57	2,500					
58	2,000					
59	4,000					
60	2,000					
61	N/O					
62	1,100					
63	3,075					
64	1,500					
65	50					
66	1,400					
67	700					
68	1,200					
69	2,140					
70	4,800					
71	650					
72	650					
73	600					
74	3,500					
75	2,600					
76	1,300					
77	1,700				12	
78	1,500					
79						
80	3,100					
81	1,500					
82	2,500					
83						
84						
85						

TIMING

ARRIVE						
START	E Aug-E Sept				Aug	
PEAK	L Aug-M Sept				Sept	
END	L Sept				Sept	

REMARK

SPAWNING LAKE (Solo Creek)

see

JOHANSON CREEK AND LAKE p.133

NAME OF STREAM SPAWNING LAKE (Solo Creek)

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH Expansion of Solo Creek, W. of Johanson Lake, Cassiar Dist.

POSITION 56 126 N.E.

LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____

SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT Cascades throughout most of streams length.
Passable with favourable water levels.

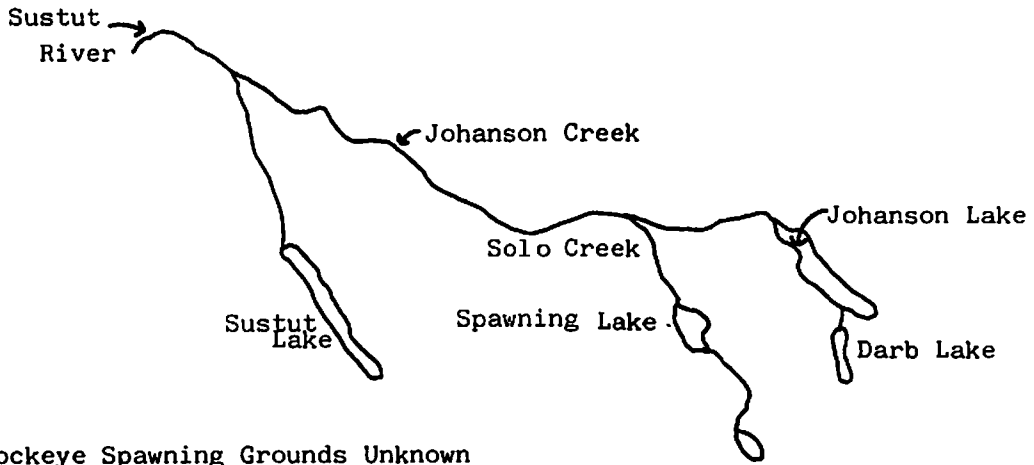
SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	* spawning grounds unknown
CHINOOK	
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS Subject to frequent seasonal fluctuations in water levels.

Predators: birds and bears.



* Note: Sockeye Spawning Grounds Unknown

Sketch of Spawning Lake and Solo Cr.

(1980)



kilometres

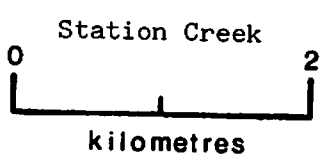
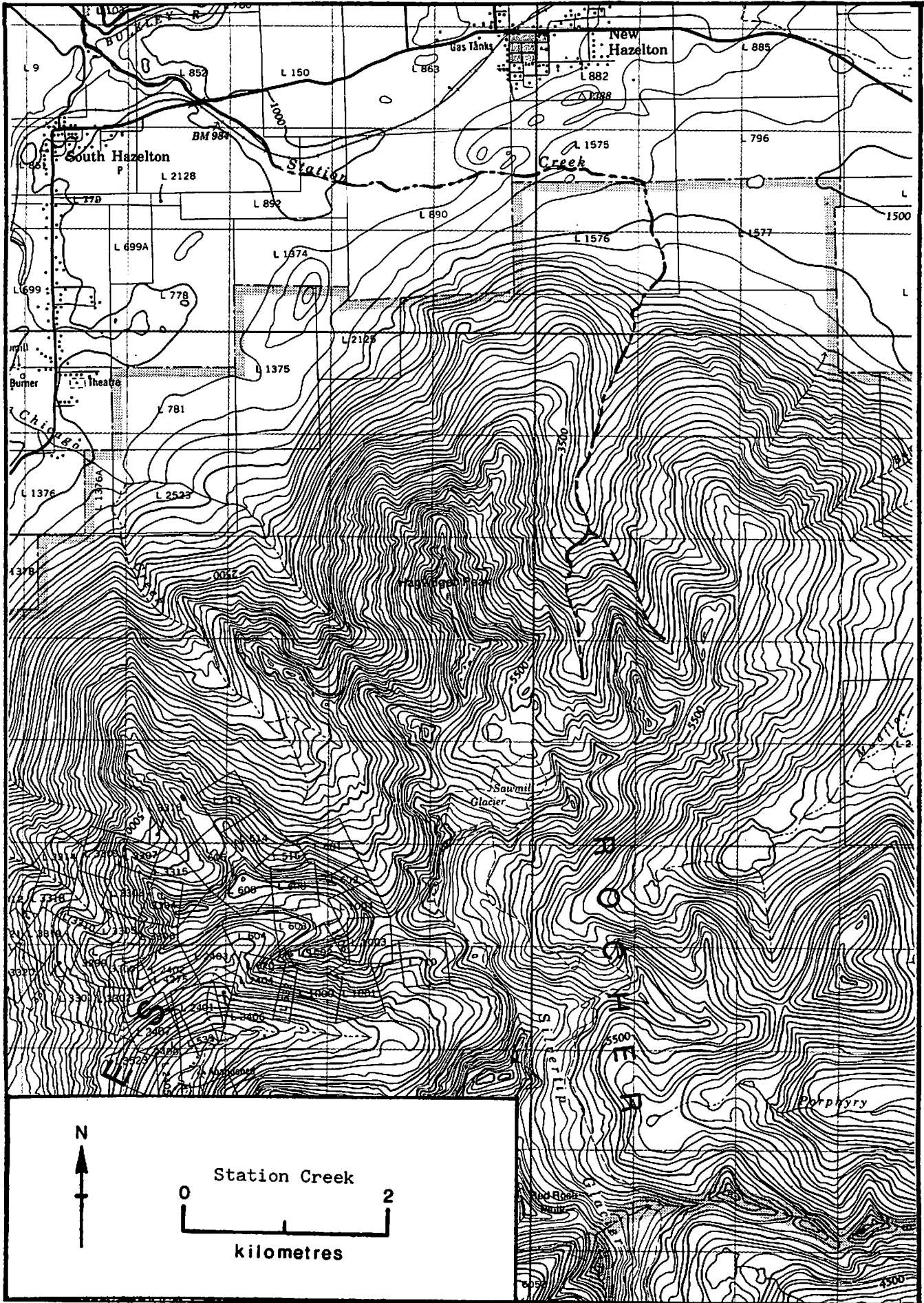
ESCAPEMENT RECORD FOR SPAWNING LAKE (Solo Creek)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65						
66	N/O					
67	200					
68	N/I					
69	N/I					
70	N/O					
71	N/I					
72	N/O					
73	N/R					
74	N/R					
75	N/R					
76	N/I					
77	N/O					
78	N/O					
79						
80	N/O					
81						
82						
83						
84						
85						

TIMING

ARRIVE						
START						
PEAK	M Sept					
END						

REMARK N/R - No Record, N/I - Not Inspected



NAME OF STREAM STATION CREEK
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows N.W. into Bulkley River, E. of Hazelton, Cassiar Dist.
 POSITION 55 127 SW.
 LENGTH 3.2 km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

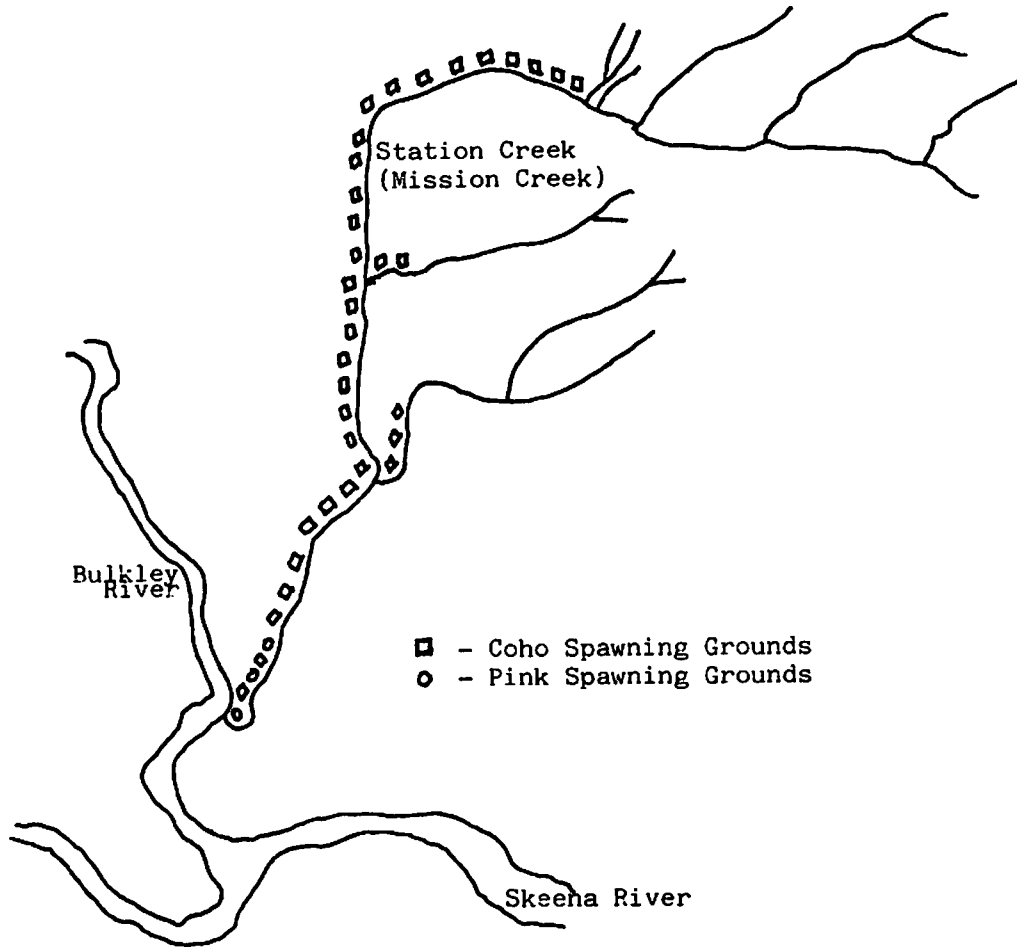
BARRIERS OR POINTS OF DIFFICULT ASCENT Rock falls approx 2.4 km from mouth.
Impassable in most years.
Beaver dams.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	
COHO	- scattered up to 3.2 km from mouth
CHUM	
PINK (ODD YEAR)	- near mouth
PINK (EVEN YEAR)	- " "
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1964 New Hazelton district water supply from Waterfall Creek
overflow diverted into this stream. Adequate supply for spawners, but very
little flow during summer and dark swampy waters may deter pinks unless flushed
during flood periods.
1966 Hazelton water supply intake dam in upper reaches.
1974,78 Moderate silting and erosion during high water in Oct. Some scouring
during October flood.
1979 Stream passage impaired by culvert 2.4km from mouth. Suggest removal or
remedial action . Stream clearance undertaken in October. P.I.P.
Hazelton Boys Club.
Minor producer with sparse gravel.



Sketch of Station Creek (Mission Creek)

1971



kilometres

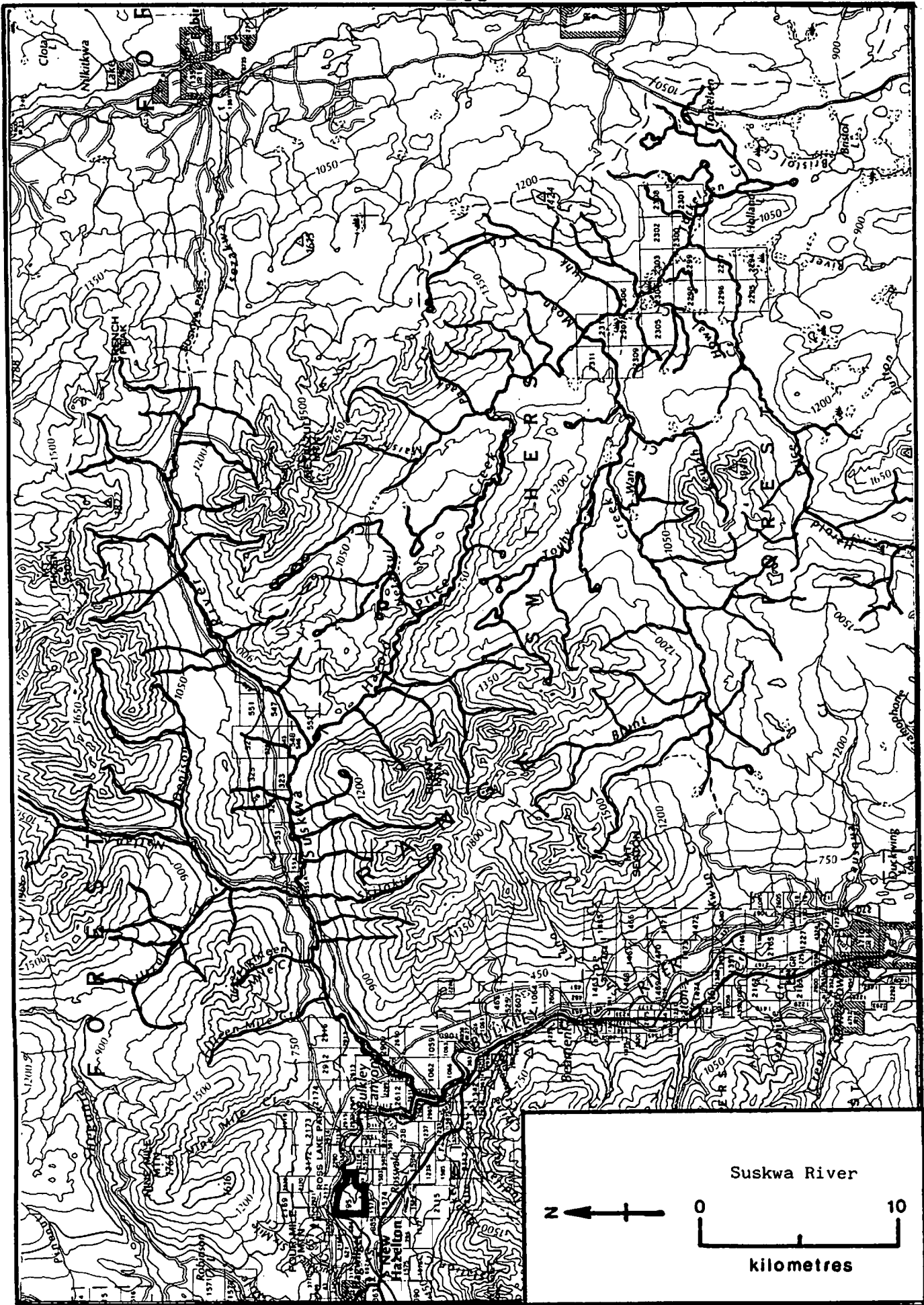
ESCAPEMENT RECORD FOR STATION CREEK

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947					200	
48					200	
49					200	
50					200	
51					400	
52					N/I	
53					N/I	
54					1,500	
55					3,500	
56					400	
57					750	
58					400	
59					750	
60					N/O	
61					N/O	
62					N/O	
63					N/O	
64					N/O	
65			25			
66			25			
67			N/O			
68			N/O			
69			75			
70			75			
71			75			
72			75		400	
73			25		25	
74			25		25	
75			25		25	
76			25		25	
77			25		25	
78			200		25	OBS
79			N/O		25	
80						
81			N/O		400	
82			N/O		250	
83						
84						
85						

TIMING

ARRIVE			Oct		Aug	
START			M Oct		M-L Aug	
PEAK			E Nov		L Aug-M Sept	
END			L Nov		L Sept	

REMARK N/I - Not Inspected



NAME OF STREAM SUSKWA RIVER
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows W. into Bulkley River, E. of New Hazelton, Cassiar Dist.
 POSITION 55 127 SE
 LENGTH 8 km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

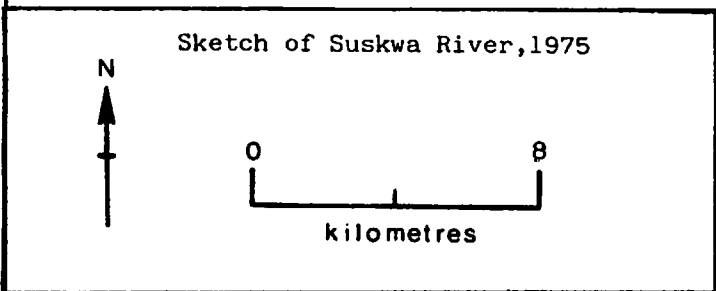
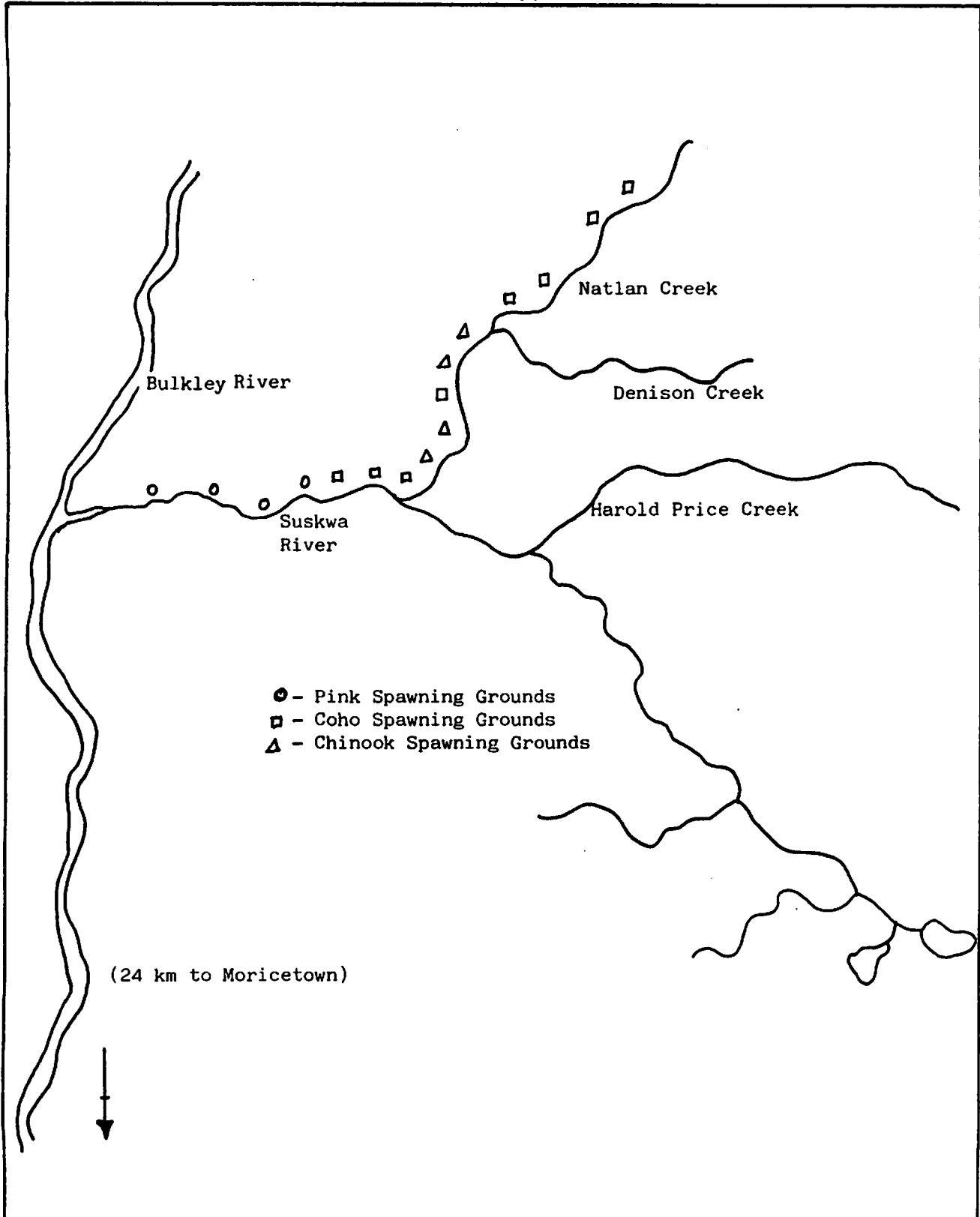
BARRIERS OR POINTS OF DIFFICULT ASCENT _____
Fast water in canyon near Natlan Creek approx 8.0km from mouth.
Passable except in very low flows.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	- upper Suskwa River and Natlan Creek
COHO	- " " "
CHUM	
PINK (ODD YEAR)	- Lower Suskwa River
PINK (EVEN YEAR)	- " "
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS A swift flowing river with steep rocky banks. In 1976 Forest Service installed a bridge across Bulkley River greatly improving access and opening up for sports fishery. 1976 Logging roads up Natlan and Upper Suskwa facilitate better inspections.
1978 Some scouring, silting and erosion near mouth from Oct. flood.
Seasonal fluctuations in water levels.
Predators: Eagles, other birds and bear.



ESCAPEMENT RECORD FOR SUSKWA RIVER

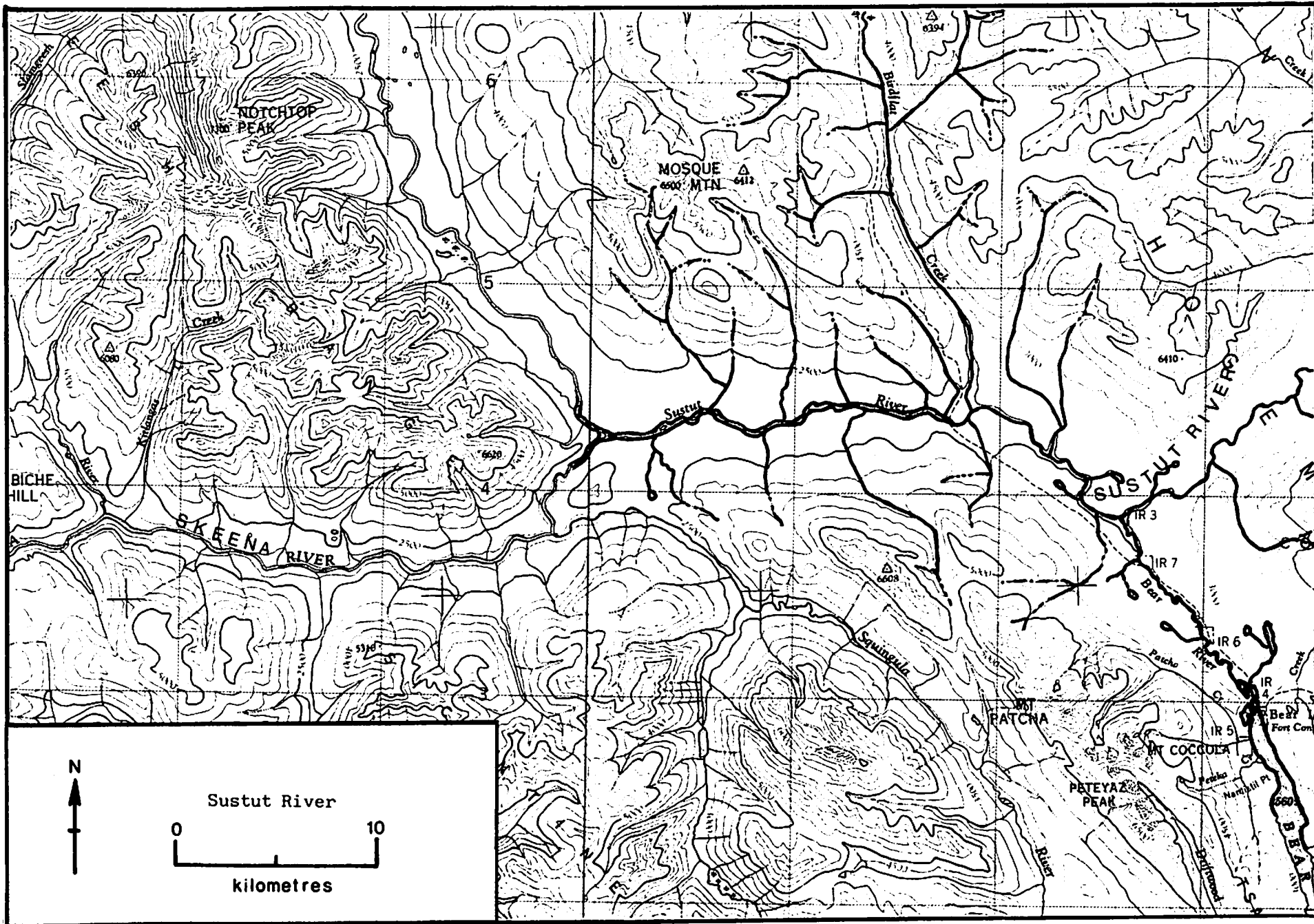
YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58			750			
59						400
60		*400	75			OBS
61			750			
62			2,500			
63			400			
64			1,000			
65			500			25
66			600			200
67		50	500		100	1,000
68		100	500		100	200
69		OBS	500		100	
70		OBS	500		100	
71		N/R	N/R		N/R	
72		N/R	N/R		N/R	
73		N/I	N/I		N/I	
74		N/I	N/I		N/I	
75		N/R	N/R		N/R	
76		N/R	N/R		N/R	
77		N/R	N/R		N/R	
78		N/O	N/O		N/O	
79			25		N/O	
80			150		OBS	OBS
81			UNK		UNK	
82		N/O	25		N/O	
83						
84						
85						

TIMING

ARRIVE	E Aug	Sept	Aug	E Oct
START	M Aug	M Sept-E Oct	M Aug	E Nov
PEAK	E Sept	M-L Oct	L Aug-Sept	Nov
END	L Sept	Nov	Sept	UNK

REMARK N/R - No Record, N/I - Not Inspected

*Sex ratios uneven 40% male, 50% female, 10% jacks





NAME OF STREAM SUSTUT LAKE AND RIVER

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH Head of Sustut River, Cassiar Dist.

POSITION 56 126 NE

LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____

SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION

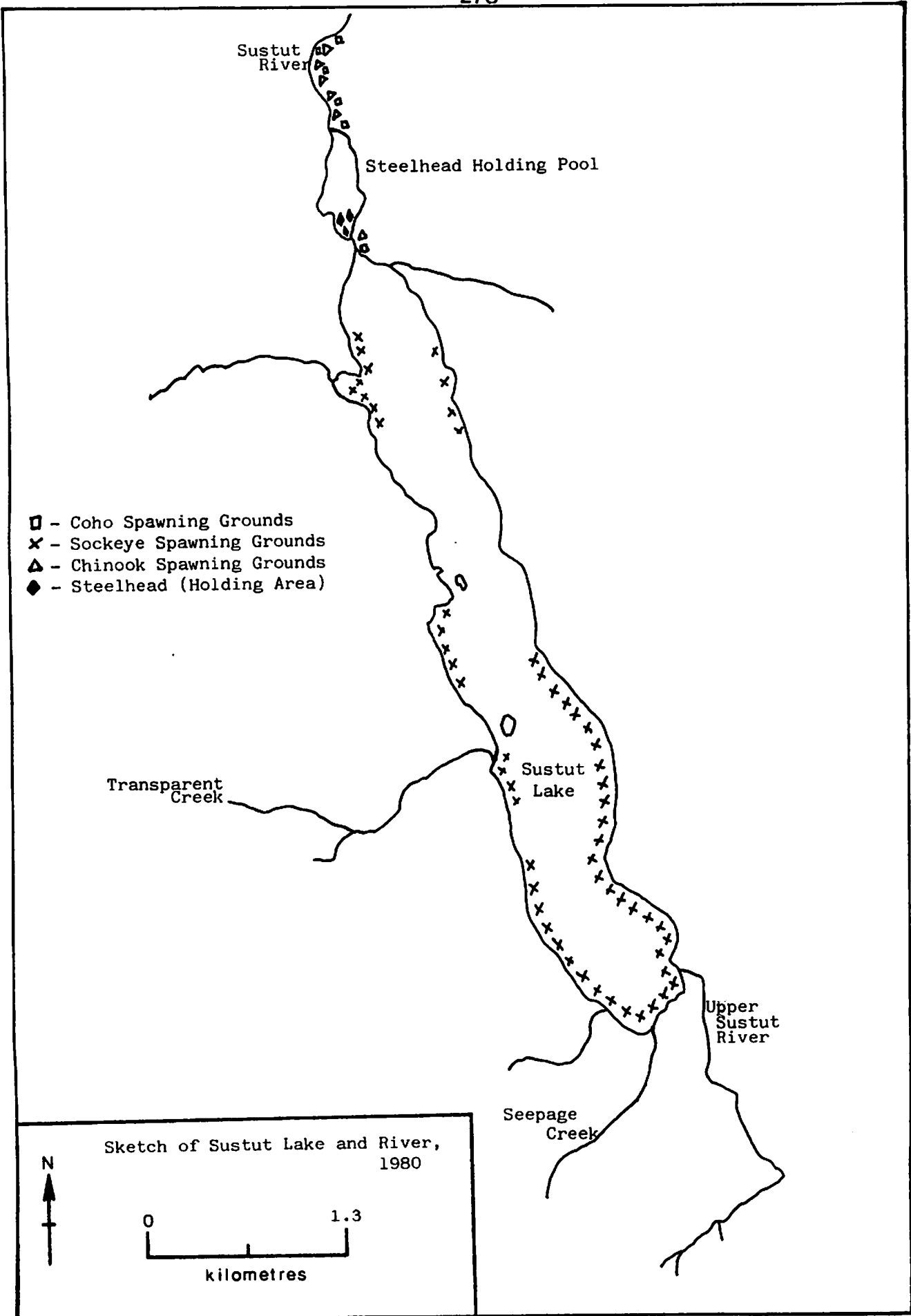
SPECIES	SECTION OF STREAM USED
SOCKEYE	- beach spawning South end of lake--patchy
CHINOOK	- throughout river below lake
COHO	- in river below lake
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	- outlet of Sustut lake

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1959/60 Excellent steelhead fly fishing attracts numerous American
1962 - Light seeding in comparison to spawning area available. Arduous tourists.
migration route -- Lake located at headwaters of Skeena River.

Limited producer -- shallow glacial lake. Limited food supply for smolts.
Many stretches of fast water.

Predators: bear, birds, wolves.



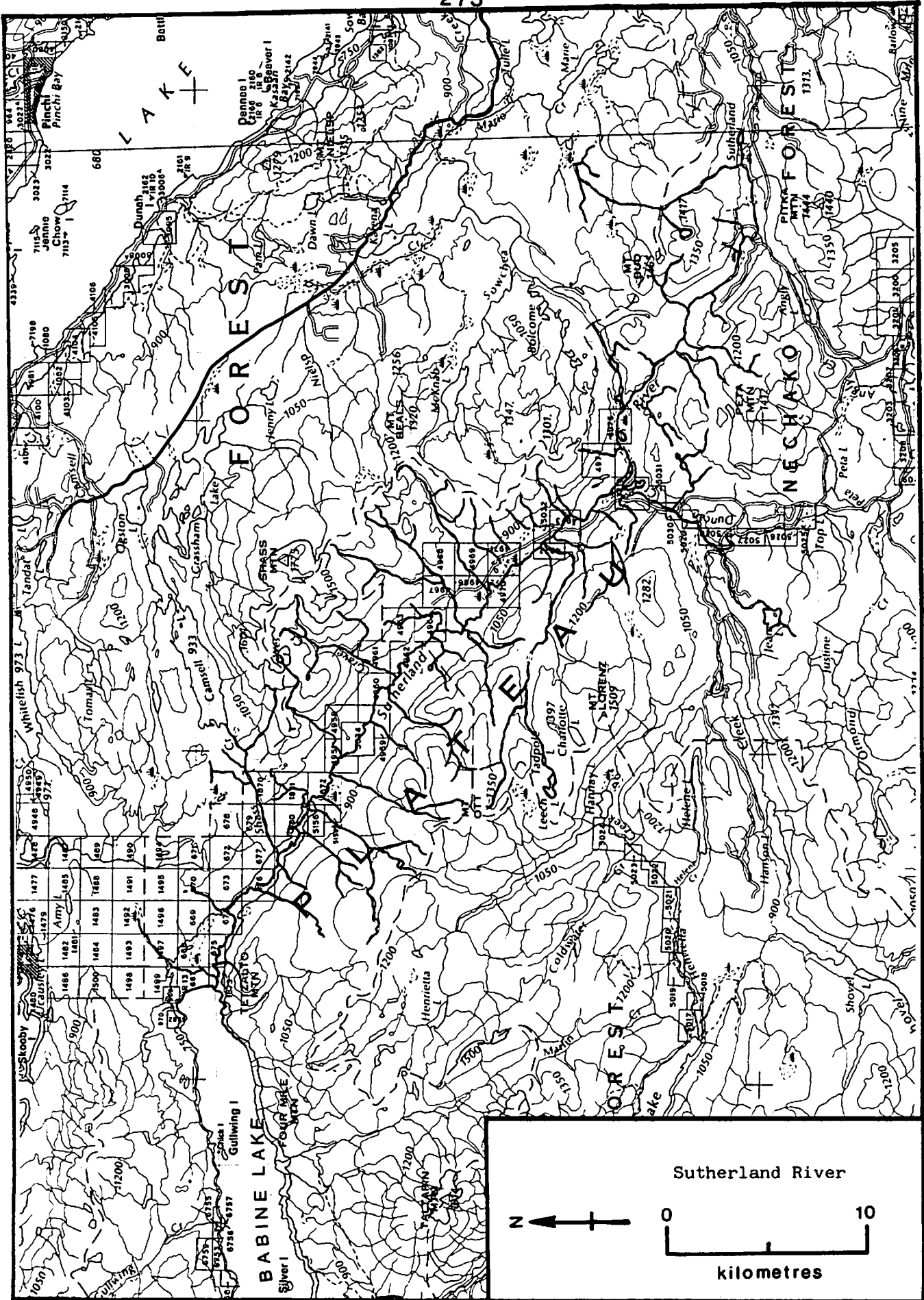
ESCAPEMENT RECORD FOR SUSTUT LAKE AND RIVER

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57	750					400
58	400					400
59	N/O					400
60	75		75			1,500
61	250					
62	250					
63	200					
64	200					
65	2,000					
66	50					
67	50					
68	500					
69	N/I					
70	2,000		300			400
71	500					
72	400					
73	3,000					100
74	25					40
75	12					64
76	N/I					N/I
77	N/O					N/O
78	N/O	150				
79						
80	500	N/O	N/O			
81	300	250				200
82	UNK	UNK	UNK		UNK	
83						
84						
85						

TIMING

ARRIVE					
START	Aug-E Sept	Aug	M Sept-Oct		E Sept-Oct
PEAK	M Sept	Aug	Oct		L Sept-Oct
END	L Sept-Oct	Sept	Nov		Nov

REMARK N/I - Not Inspected



NAME OF STREAM SUTHERLAND RIVER (Beaver River)

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH Flows N.W. into S.E. end of Babine La. Range 5. Coast Dist.

POSITION 54 125 SE

LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____

SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT Canyon 32 km from mouth

SPAWNING DISTRIBUTION

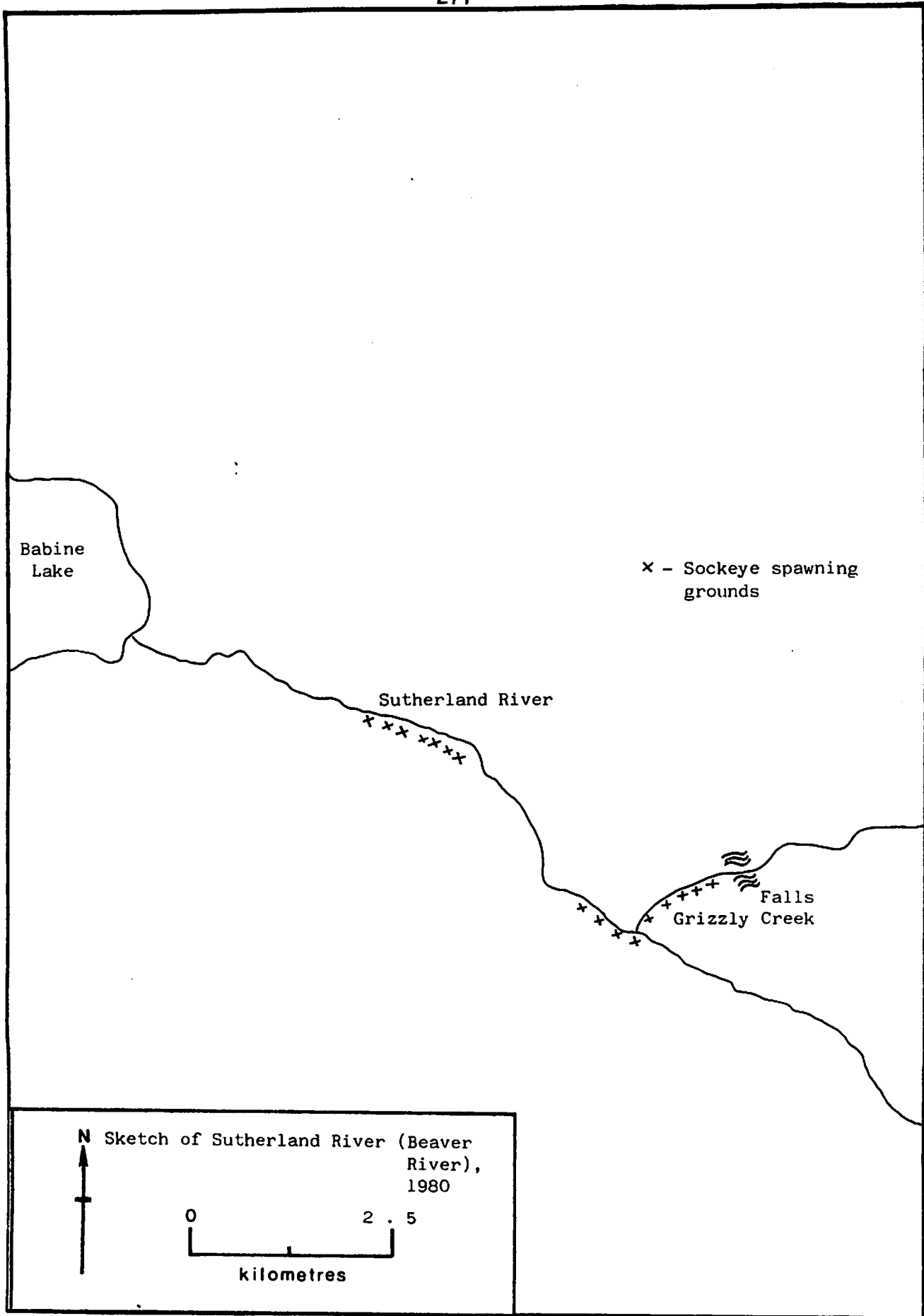
SPECIES	SECTION OF STREAM USED
SOCKEYE	- mid-way between Babine Lake and Grizzly Creek and at confluence
CHINOOK	of Grizzley Cr. for 4-6km up-stream.
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS Some erosion - between 3% and 8%
Water levels low to normal

Predators: birds and bears --heavy

1978 Stream clearance crew cleared log jams from lake to
Grizzly Creek.



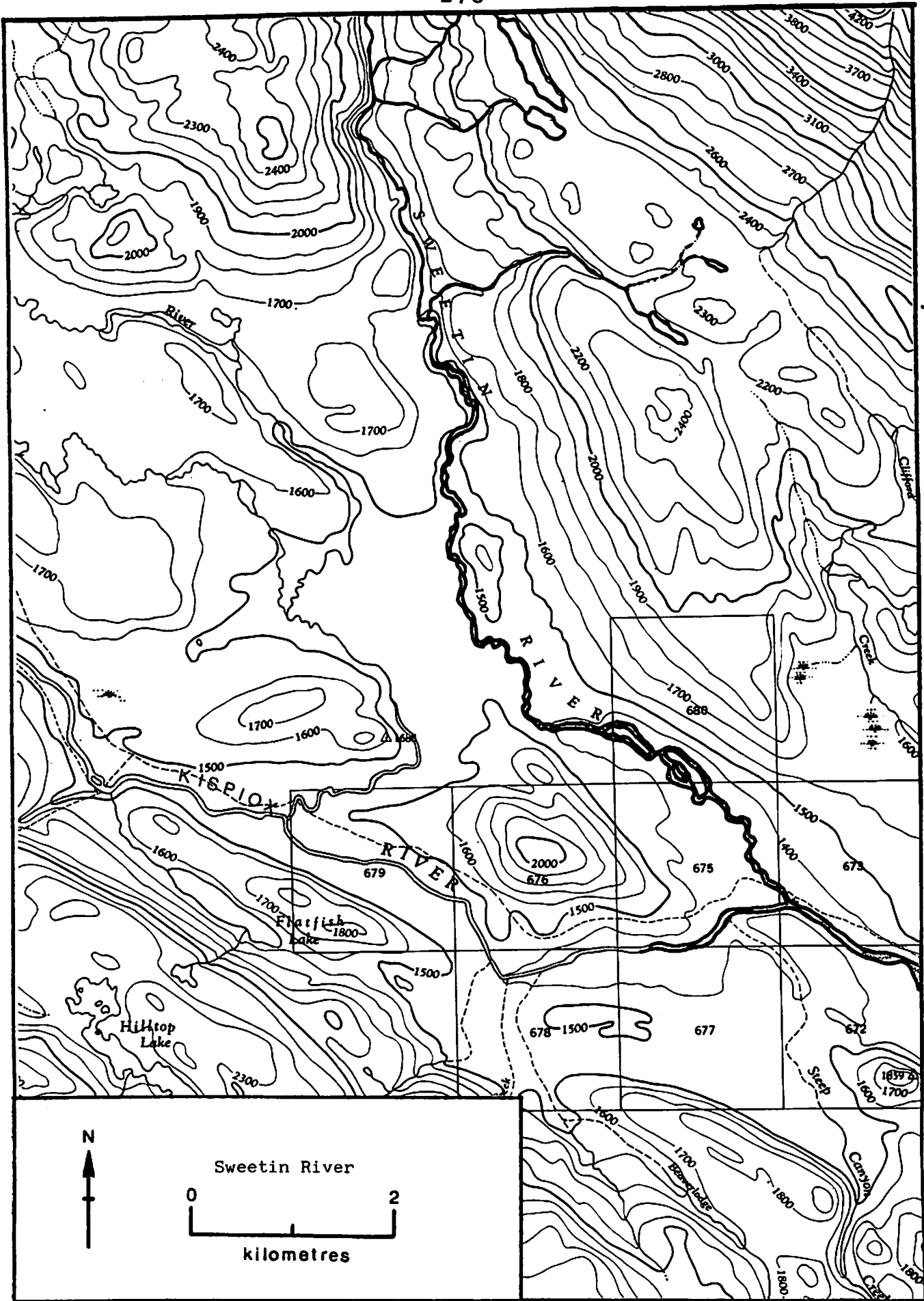
ESCAPEMENT RECORD FOR SUTHERLAND RIVER (Beaver River)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65						
66						
67						
68						
69	N/O					
70	N/R					
71	N/O					
72	N/R					
73	400					
74	400					
75	N/R	N/R				
76	-					
77	N/R	N/R	N/R			
78	400	N/R	N/R			
79	-	-	-			
80	500	-	-			
81	N/R	-	-			
82						
83						
84						
85						

TIMING

ARRIVE						
START						
PEAK						
END						

REMARK N/R - No Record



NAME OF STREAM SWEETIN RIVER

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH Flows S. into Kispiox River, Cassiar Dist.

POSITION 55 128 NE

LENGTH 4.8 km WIDTH m DRAINAGE km²

COMPOSITION: BEDROCK BOULDER COARSE FINE

SILT & SAND UNCLASSIFIED

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA m² SPAWNING AREA m²

DISCHARGE (m³/s)

TEMPERATURE (°C)

BARRIERS OR POINTS OF DIFFICULT ASCENT

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	- above road bridge on bar -- scattered from mouth to 4km upstream.
COHO	- upper section
CHUM	
PINK (ODD YEAR)	- lower .80km
PINK (EVEN YEAR)	- 91m from mouth
STEELHEAD	

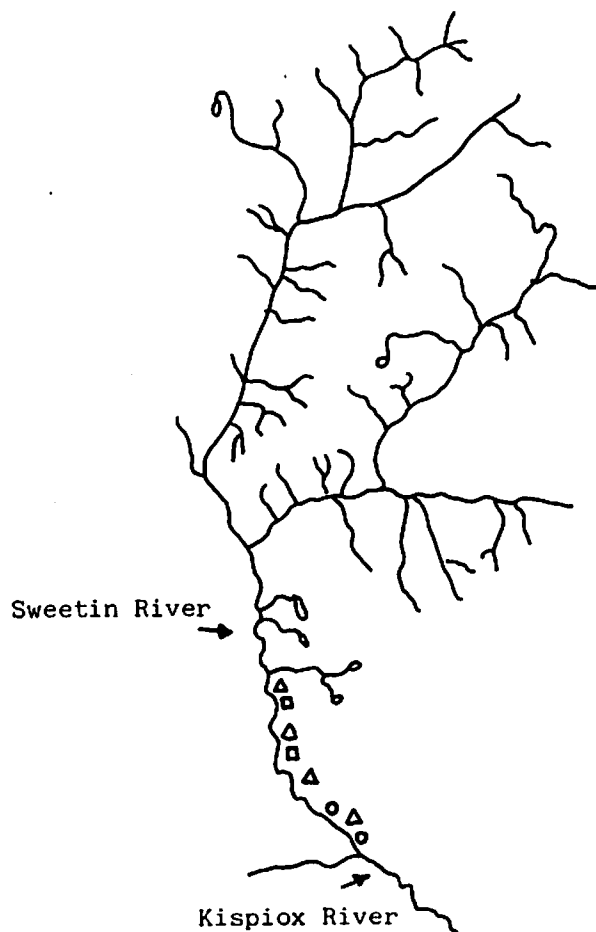
POTENTIAL OF INACCESSIBLE PORTION OF STREAM

GENERAL REMARKS 1966 Turbid, swift river. Silted bars near confluence with Kispiox River. Heavy erosion and silting. Some scouring at lower end during high water in October.

Numerous log jams, debris and windfalls. Passable for 4km. Removal not recommended as moderates flow. Now readily accessible by road. Popular sports fishing area.

Predators: Grizzly bears.

- - Coho spawning grounds
- △ - Spring spawning grounds
- - Pink spawning grounds



Sketch of Sweetin River, 1971



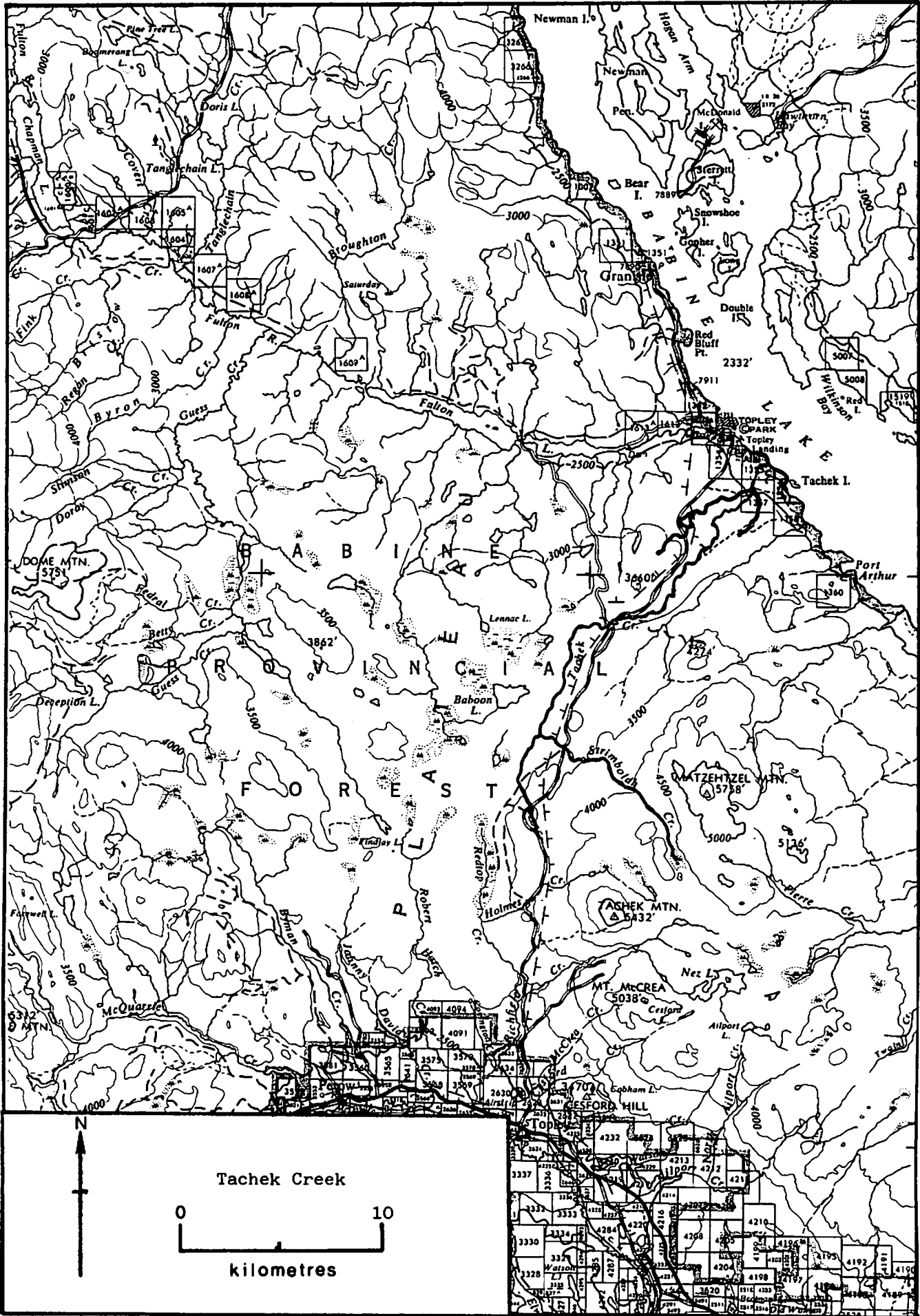
ESCAPEMENT RECORD FOR SWEETIN RIVER 282

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65						
66		25				
67						
68		25				
69		75				
70		75				
71		75				
72		75				
73		400				
74		400				
75		75				
76		75				
77		75				
78		25				
79		N/O				
80		OBS	20		15	
81		N/O	75		200	
82		N/O	N/O		50	
83						
84						
85						

TIMING

ARRIVE		Aug	L Aug-Sept		Aug	
START		L Aug	L Aug-M Sept		L Aug	
PEAK		M Sept	M Sept-E Oct		M Sept	
END		L Sept-E Oct	L Sept- Oct		L Sept	

REMARK



NAME OF STREAM TACHEK CREEK
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH NE. into Babine Lake, East of Fulton Lake, Rge. 5, Coast Dist.
 POSITION 54 126 NE.
 LENGTH 8 km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

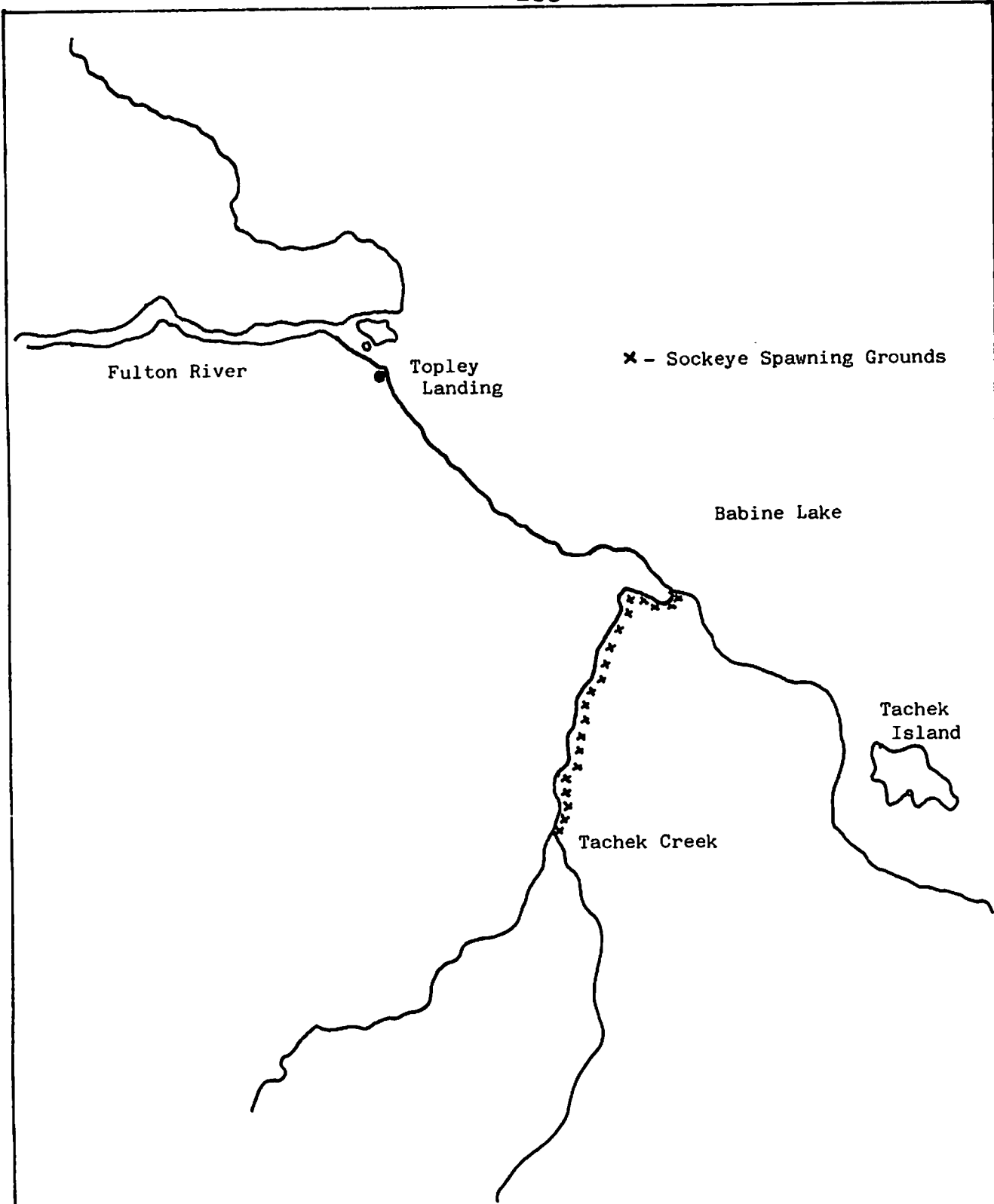
BARRIERS OR POINTS OF DIFFICULT ASCENT Falls 9km from mouth
log jams throughout -- private road, Fast water and large rocks
Gravel Bar at entrance.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	-historically sockeye spawned throughout, now spawning occurs
CHINOOK	in lower 2.0km.
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1951 - Two sawmills and two logging camps are working on this creek.
Large tracts of timber cut.
1952 Changes in stream mouth prevented sockeye from entering, but Kokanee did enter.
1957 Over the past few years the mouth of this stream had barred up with gravel.
This year a new channel was built and jams removed.
1958 Low water levels and high temps. accounted for an estimated loss of 1,200
sockeye spawners.
1969 Beaver dams, debris and road crossing to Lodge block stream at low water --
recommnd removal.
Silting near mouth 55,69,70,71. Predators: bears, birds, ravens and eagles.



x - Sockeye Spawning Grounds

Fulton River

Topley Landing

Babine Lake

Tachek Island

Tachek Creek

Sketch of Tachek Creek, (1980)



kilometres

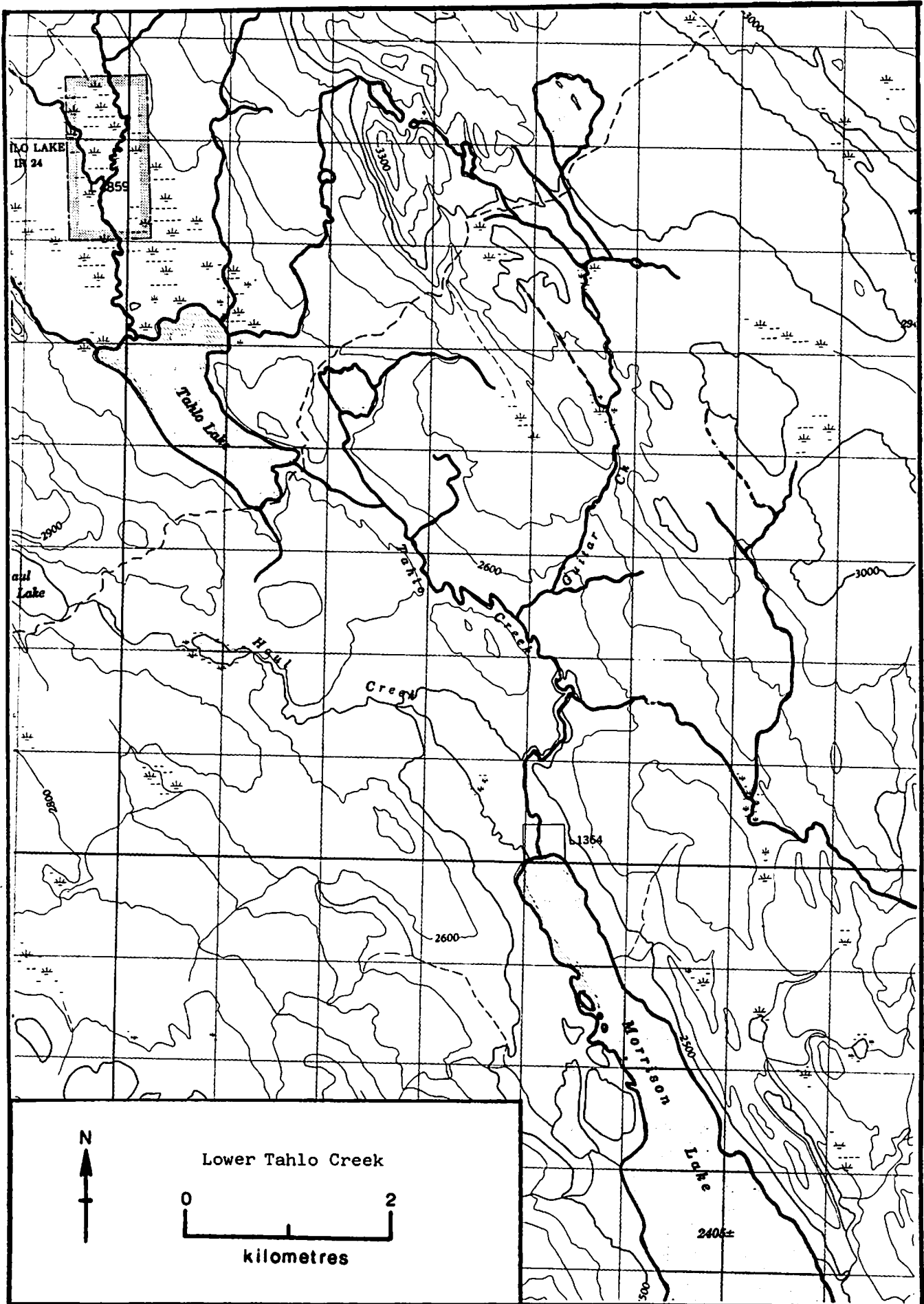
ESCAPEMENT RECORD FOR TACHEK CREEK

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947	2,890					
48	5,080					
49	2,590		11			
50						
51	2,600					
52	-					
53	2,500					
54	1,900					
55	300					
56	N/O					
57	6,770					
58	3,000					
59	6,000					
60	2,000					
61	N/O					
62	600					
63	3,690					
64	3,000					
65	700					
66	300					
67	1,000					
68	500					
69	2,350					
70	2,400					
71	500					
72	1,200					
73	850					
74	2,900					
75	1,150					
76	500	1				
77	3,500					
78	1,500					
79						
80	950					
81	700					
82	4,000					
83						
84						
85						

TIMING

ARRIVE	L July		Sept		
START	E Aug	Aug	E Oct		
PEAK	L Aug	Aug	M Oct-M Nov		
END	E Sept	Sept	Nov		

REMARK



NAME OF STREAM TAHLO CREEK (Lower Salmon Creek)
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows S. into Guitar Creek which flows into Morrison Lake,
Cassiar Dist. POSITION 55 126 SE.
 LENGTH 4 km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT Log jams, fallen trees.
Heavy beaver activity hampers migration in years of low water.

SPAWNING DISTRIBUTION

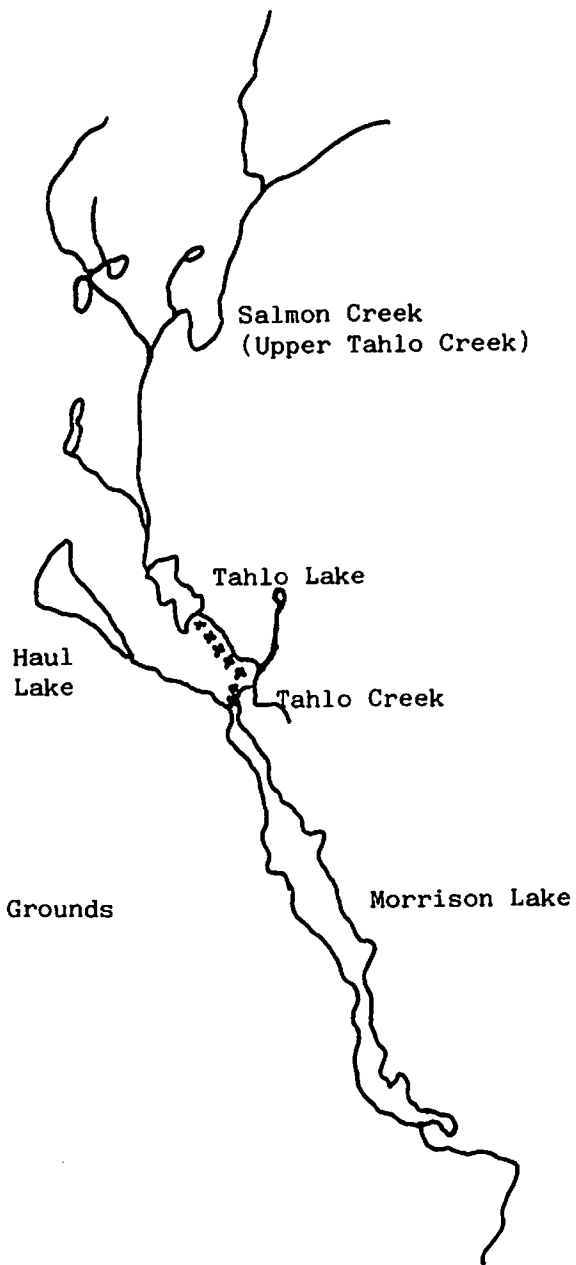
SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS Stream clearance conducted to open log jams and beaver dams 58,
Uneven sex ratios in some years 60/62 65/66

1956	M 40%	F 50%	Jacks 10%
57	45%	55%	
61	46%	52%	2%
63	35%	42%	23%
65	46%	50%	4%

1982 Recommend removal of large beaver dam next year.
Water levels range from low but adequate to very high.
Predators: crows, ravens, eagles, bears, wolves.



Sketch of Tahlo Creek (Lower Salmon Creek), 1980



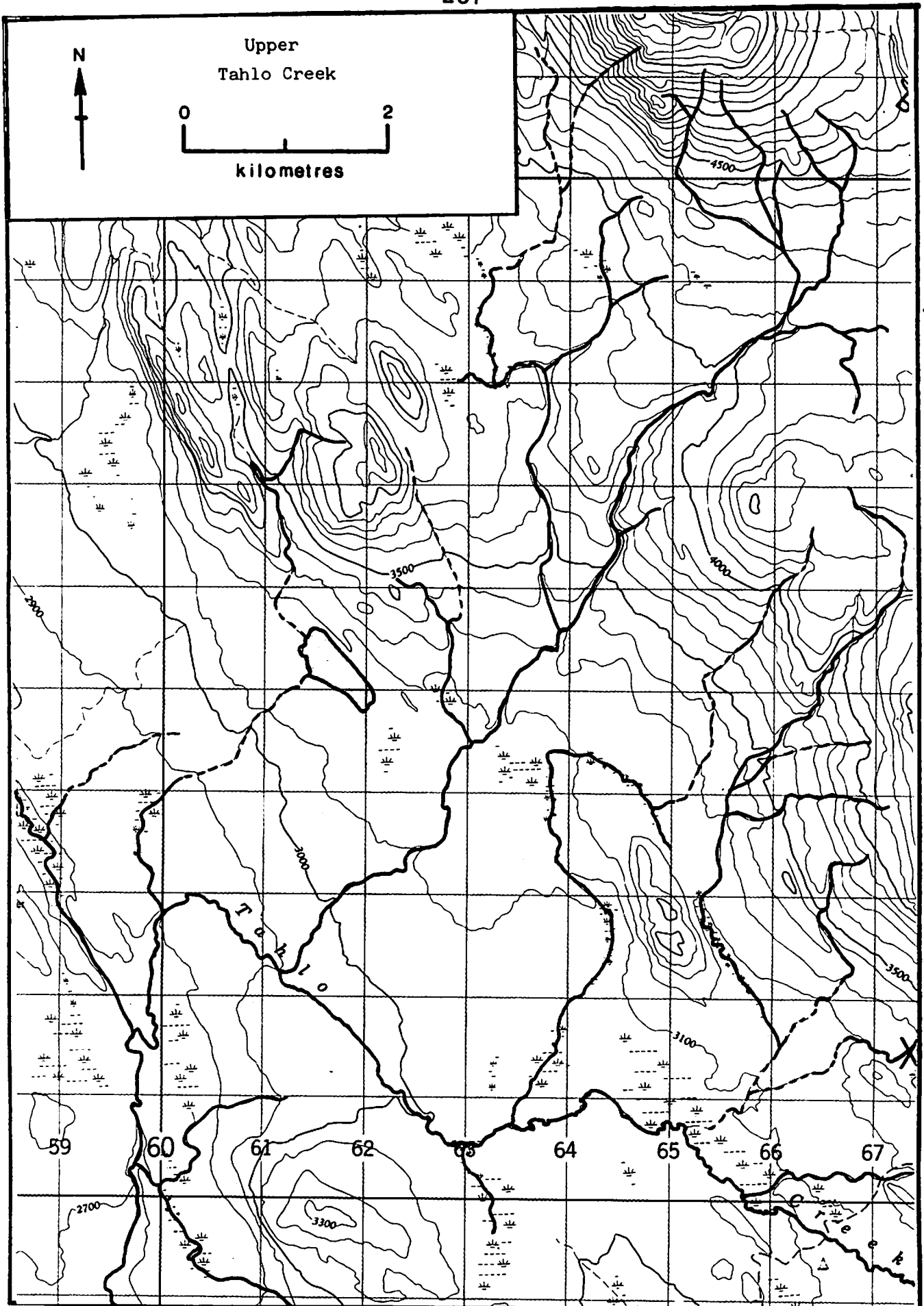
ESCAPEMENT RECORD FOR TAHLO CREEK (Lower Salmon Creek)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947	3,256					
48	10,000		150			
49	100					
50						
51	1,000					
52	400					
53	10,000					
54	12,000					
55	1,200					
56	11,000					
57	9,000					
58	10,000					
59	12,500					
60	5,000					
61	7,000					
62	4,500					
63	24,600					
64	10,000					
65	3,500					
66	2,500					
67	1,500					
68	11,000					
69	10,200					
70	OBS					
71	2,000					
72	600					
73	9,000					
74	17,200					
75	7,000					
76	1,400					
77	3,600					
78	1,500					
79						
80	5,000					
81	700					
82	400					
83						
84						
85						

TIMING

ARRIVE	Aug-Sept					
START	L Aug-Sept					
PEAK	Sept-L Oct					
END						

REMARK



NAME OF STREAM (Tahlo Creek -- Upper) (Salmon Creek)

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH Tahlo Lake

POSITION 55 126 SE

LENGTH 2.6 km WIDTH m DRAINAGE km²

COMPOSITION: BEDROCK BOULDER COARSE FINE SILT & SAND UNCLASSIFIED

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA m² SPAWNING AREA m²

DISCHARGE (m³/s)

TEMPERATURE (°C)

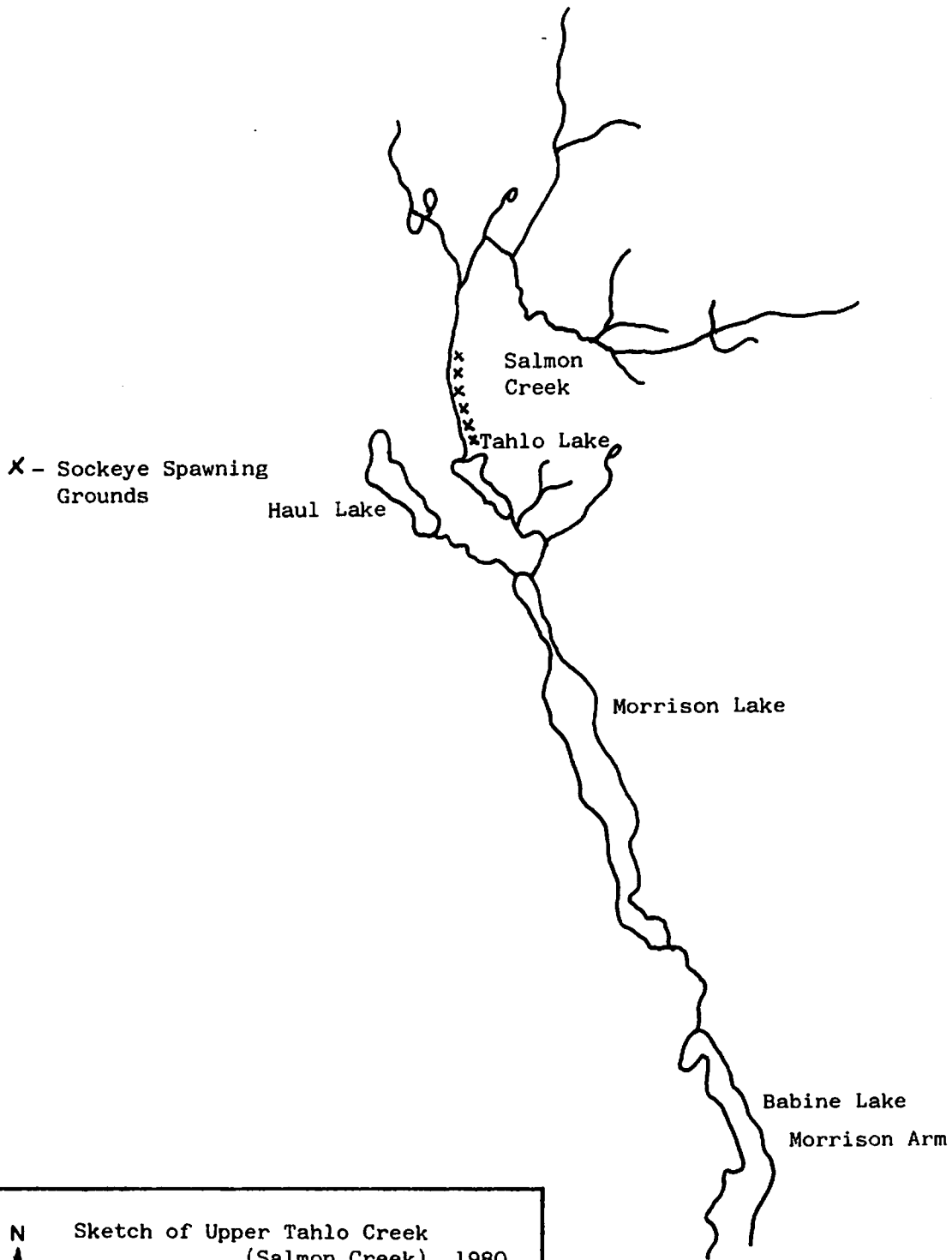
BARRIERS OR POINTS OF DIFFICULT ASCENT

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	lower 1.6km and near mouth
CHINOOK	
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM

GENERAL REMARKS 1972 Old forest burn in upper area and logs and debris prevalent. Some heavy silting and stream change caused by beaver dams. Water levels fluctuate from very low to very high. Inspection is difficult and usually made by aircraft. For a number of years heavy beaver activity has interfered with salmon runs. The beaver population has been monitored and various recommendations have been made for their removal--blasting and trapping. 1982 Beaver dam blocking migration well down on Tahlo Creek. No fish observed.



294

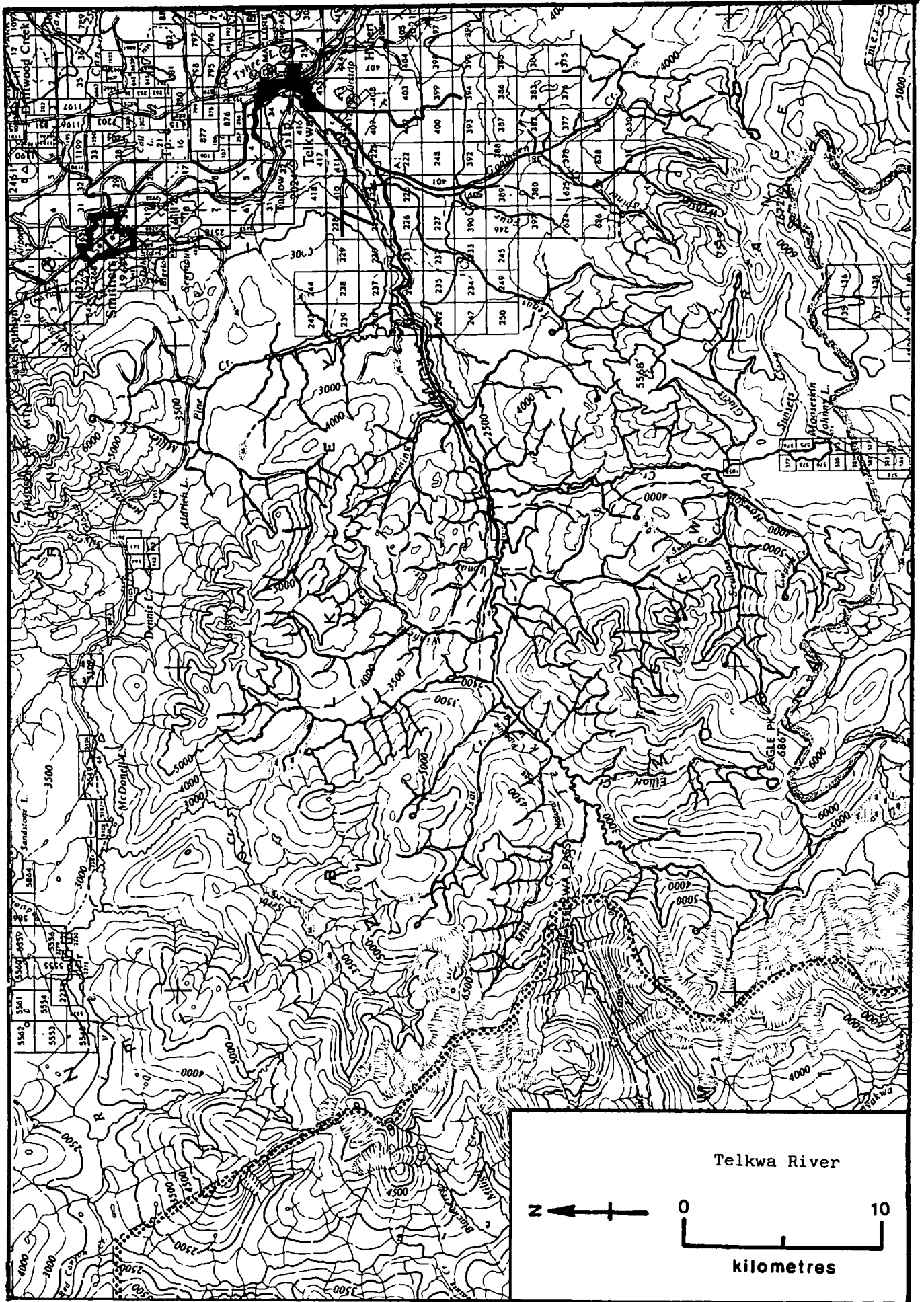
ESCAPEMENT RECORD FOR TAHLO CREEK (Upper Salmon Creek)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51	1,200					
52	400					
53	N/O					
54	N/R					
55	N/O					
56	N/O					
57	1,500					
58	N/O					
59	2,500					
60	N/O					
61	2,000					
62	25					
63	100					
64	1,000					
65	OBS					
66	N/O					
67	N/O					
68	N/O					
69	N/O					
70	N/I					
71	N/I					
72	N/O					
73	100					
74	300					
75	N/O					
76	1,400					
77	N/O					
78	-					
79	-					
80	N/O					
81	N/I					
82	UNK					
83						
84						
85						

TIMING

ARRIVE						
START	Aug-L Aug					
PEAK	M-L Sept					
END	Sept-M Oct					

REMARK N/R - No Record, N/I - Not Inspected



NAME OF STREAM TELKWA RIVER
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows N.E. into Bulkley River, Rge. 5, Coast Dist.
 POSITION 54 127 NE.
 LENGTH _____ km WIDTH 15.2 m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

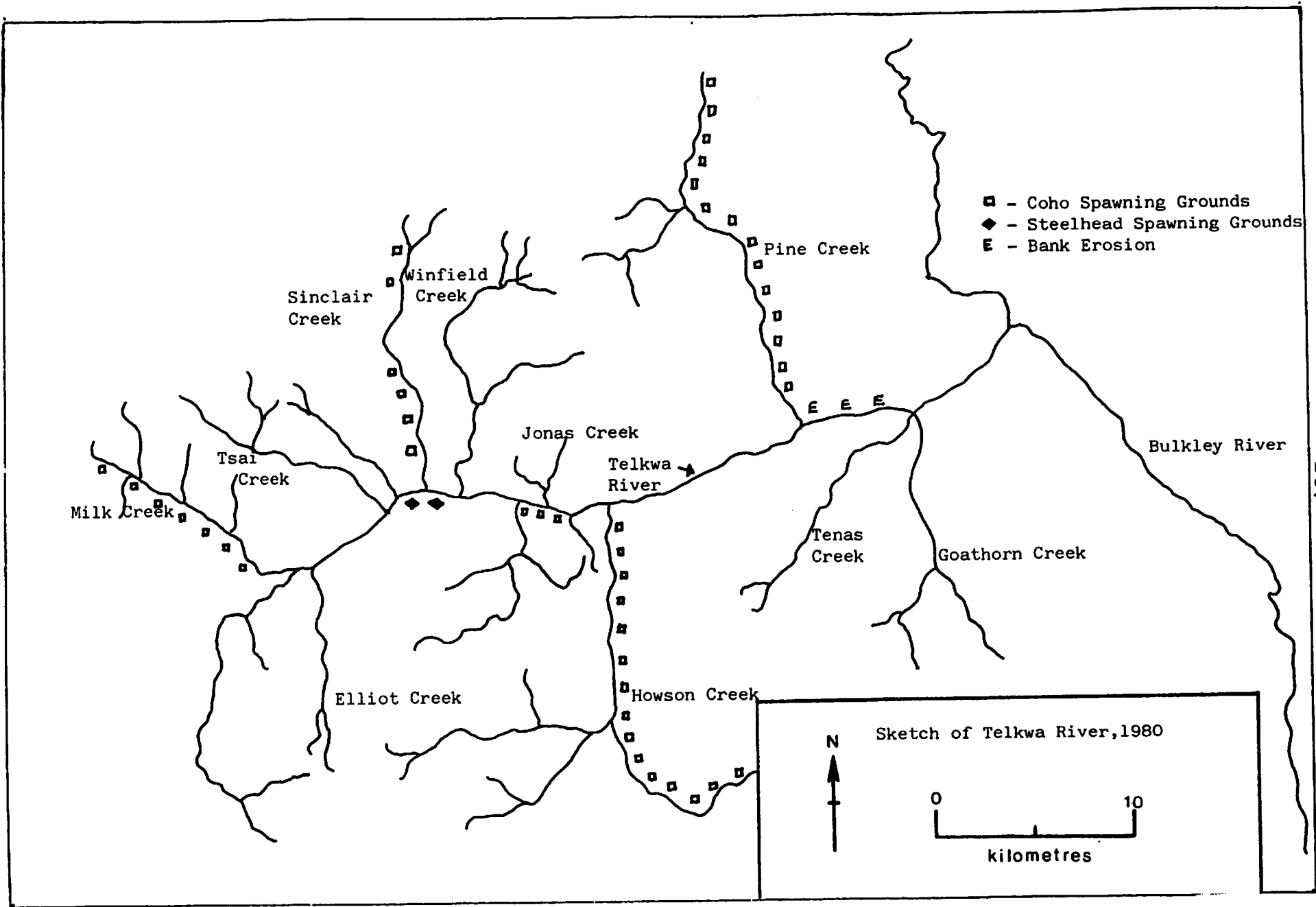
BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	Pine Creek, Howson Creek, Milk Creek, Sinclair Creek and main stem
CHINOOK	near Jonas Creek -- riffles on
COHO	main river.
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	-upper reaches

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1964-90% of stream bed affected by silting. This contributes to fry and egg mortality.
1974 - Flash floods eroded bank in several places changing course of stream and silting Telkwa and Bulkley Rivers.
1982 - Juvenile salmonids sighted in shallows in upper reaches. It is believed that our estimate of 1000 coho could be conservative and that in fact between 1000 - 5000 coho may have utilized Telkwa River for spawning. Although this river has abundant spawning grounds it is subject to flash flooding and heavy silting. This contributes to fry and egg mortalities. Murky water prevents accurate counts.
Predators : bears and birds -- light.



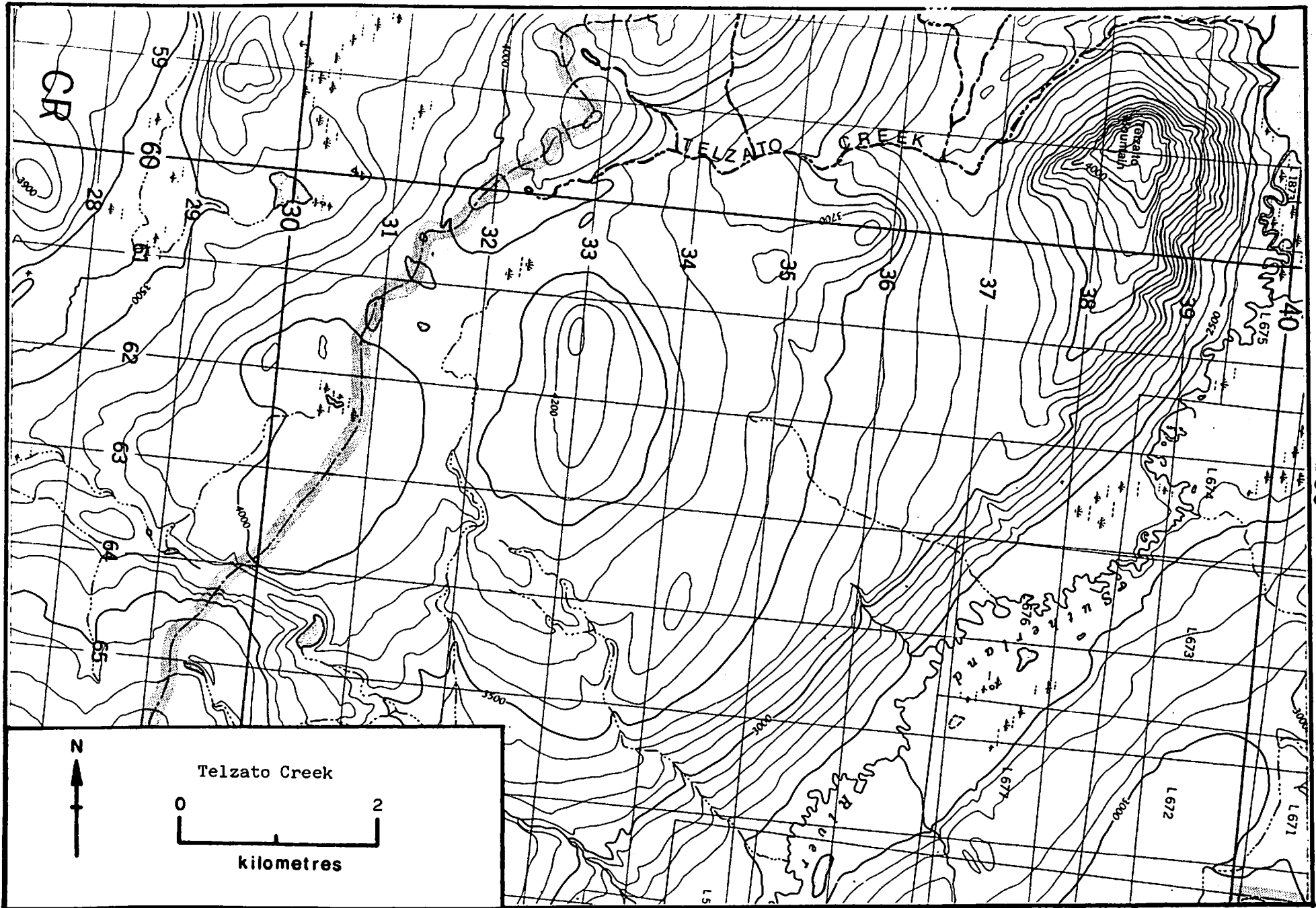
ESCAPEMENT RECORD FOR TELKWA RIVER

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60			400			
61			750			400
62			1,200			
63			N/O			
64			200			
65			200			
66			200			
67			100			
68			100			
69			350			
70			200			
71			N/O			
72			N/O			
73			N/I			
74			N/O			
75			350			
76			300			
77			500			
78			N/O			
79			-			
80			N/O			
81			N/O			
82			1,000			
83						
84						
85						

TIMING

ARRIVE						
START			Aug-E Oct			
PEAK			Sept-L Oct			Nov
END			Oct-E Dec			

REMARK N/I - Not Inspected



NAME OF STREAM (Telzato Creek) (Monica Creek)
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows N. into S.E. end of Babine Lake

POSITION 54 125 SE.
 LENGTH 3.2 km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	_____
0.25 - 0.50	_____
0.50 - 0.75	_____
0.75 - 1.00	_____
>1.00	_____

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT _____
This stream is only passable at high water levels.

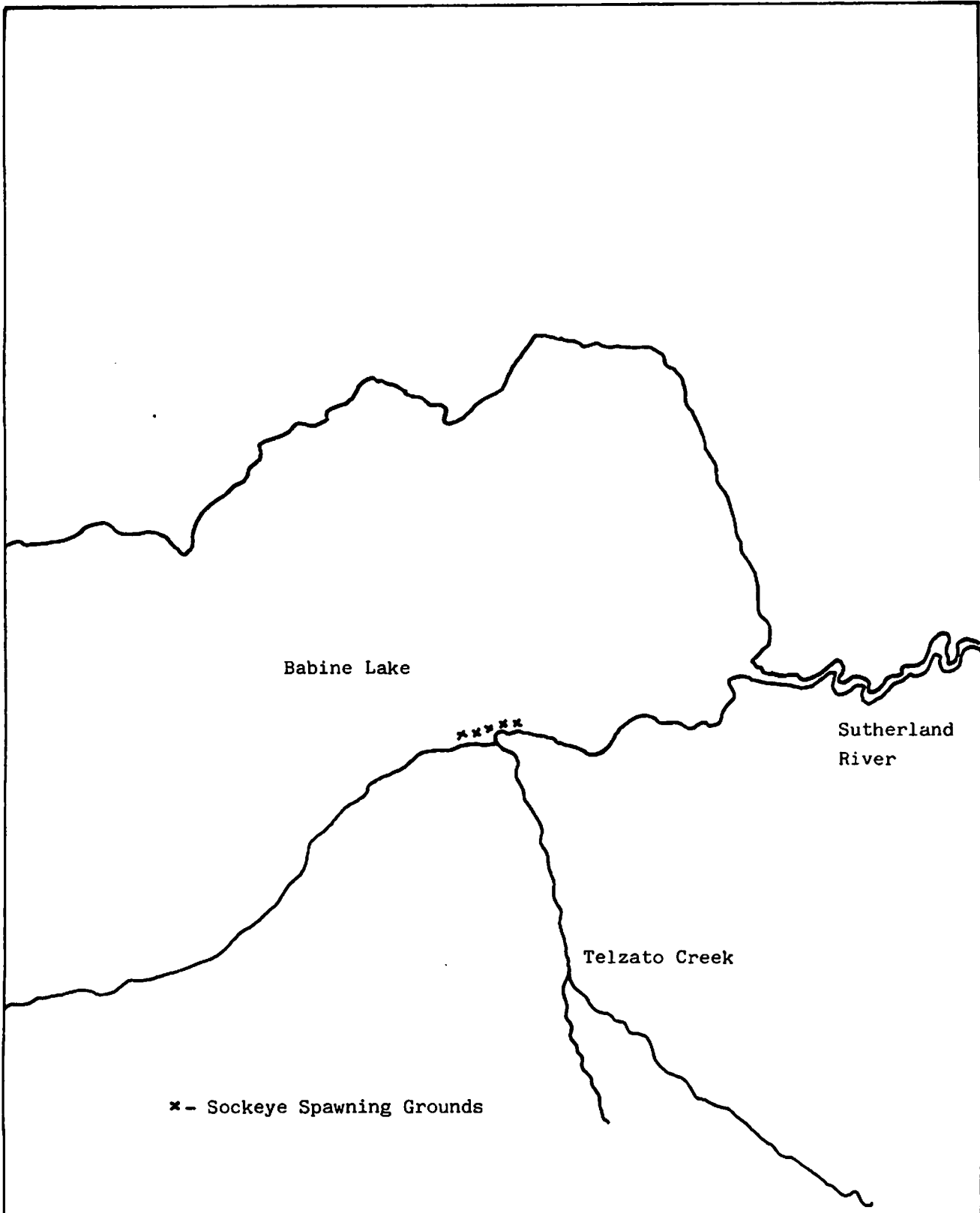
SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	scattered for 2 miles from mouth -- spawning at entrance in
CHINOOK	low water years
COHO	_____
CHUM	_____
PINK (ODD YEAR)	_____
PINK (EVEN YEAR)	_____
STEELHEAD	_____

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS This stream is only productive in high water years. At low water stream disappears into gravel bar at mouth. Stream reported dry most year since 1960. Sockeye spawn at entrance.

Predators: bears and birds -- light



* - Sockeye Spawning Grounds



Sketch of Telzalto Creek, 1980



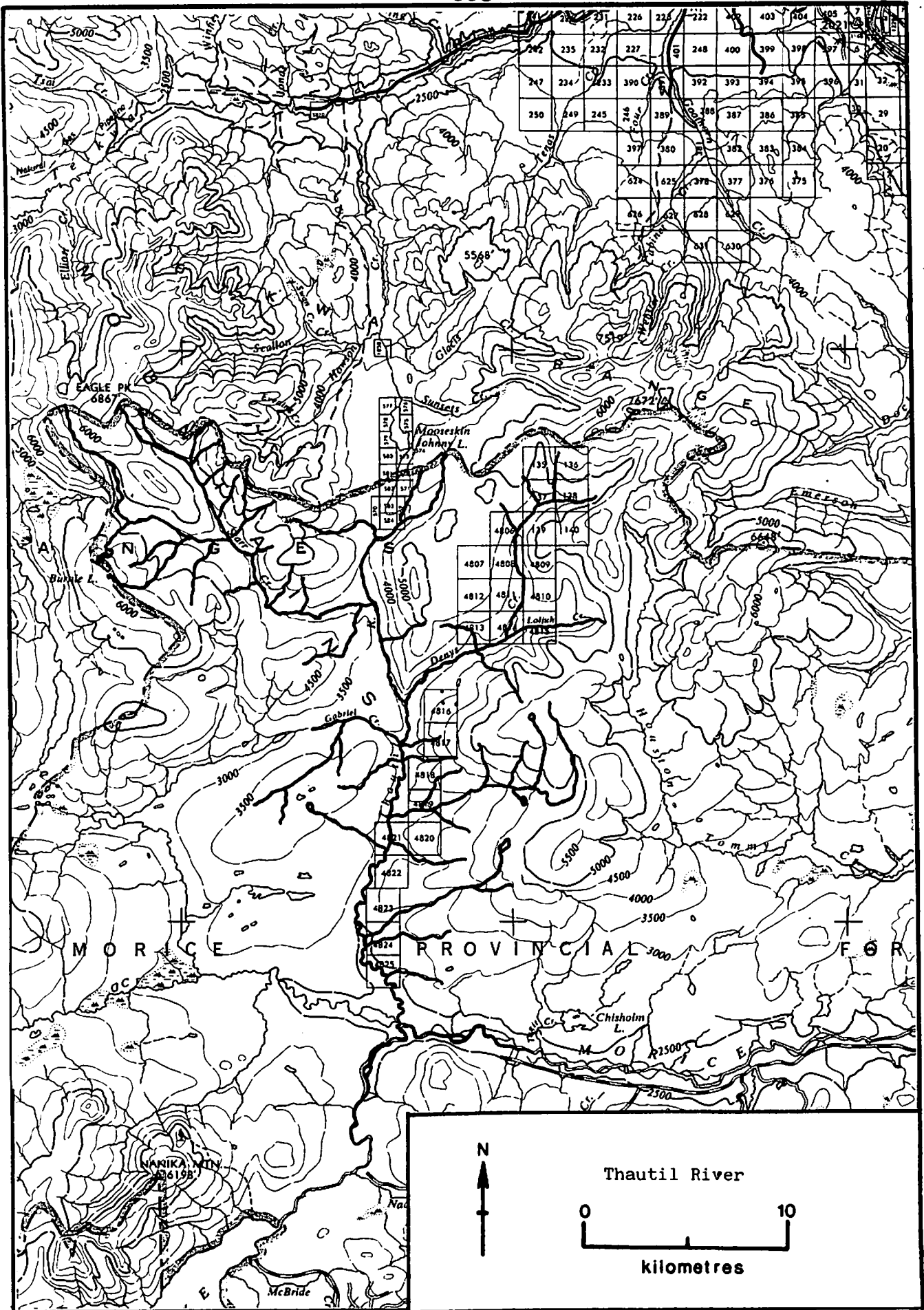
ESCAPEMENT RECORD FOR (Telzato Creek) (Monica Creek)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59	900					
60	N/O					
61	N/O					
62	N/O					
63	-					
64	350					
65	N/O					
66	N/O					
67	N/O					
68	N/O					
69	100					
70	100					
71	N/I					
72	N/I					
73	N/O					
74	N/O					
75	N/O					
76	N/O					
77	N/O					
78	N/O					
79	-					
80	N/I					
81	N/I					
82	UNK					
83						
84						
85						

TIMING

ARRIVE	Aug					
START	Aug					
PEAK	Sept					
END	Sept					

REMARK N/I - Not Inspected



NAME OF STREAM THAUTIL RIVER

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH Flows S. into Morice River, N.E. of Morice L., Rge. 5, Coast
POSITION 54 127 SE. Dist.

LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

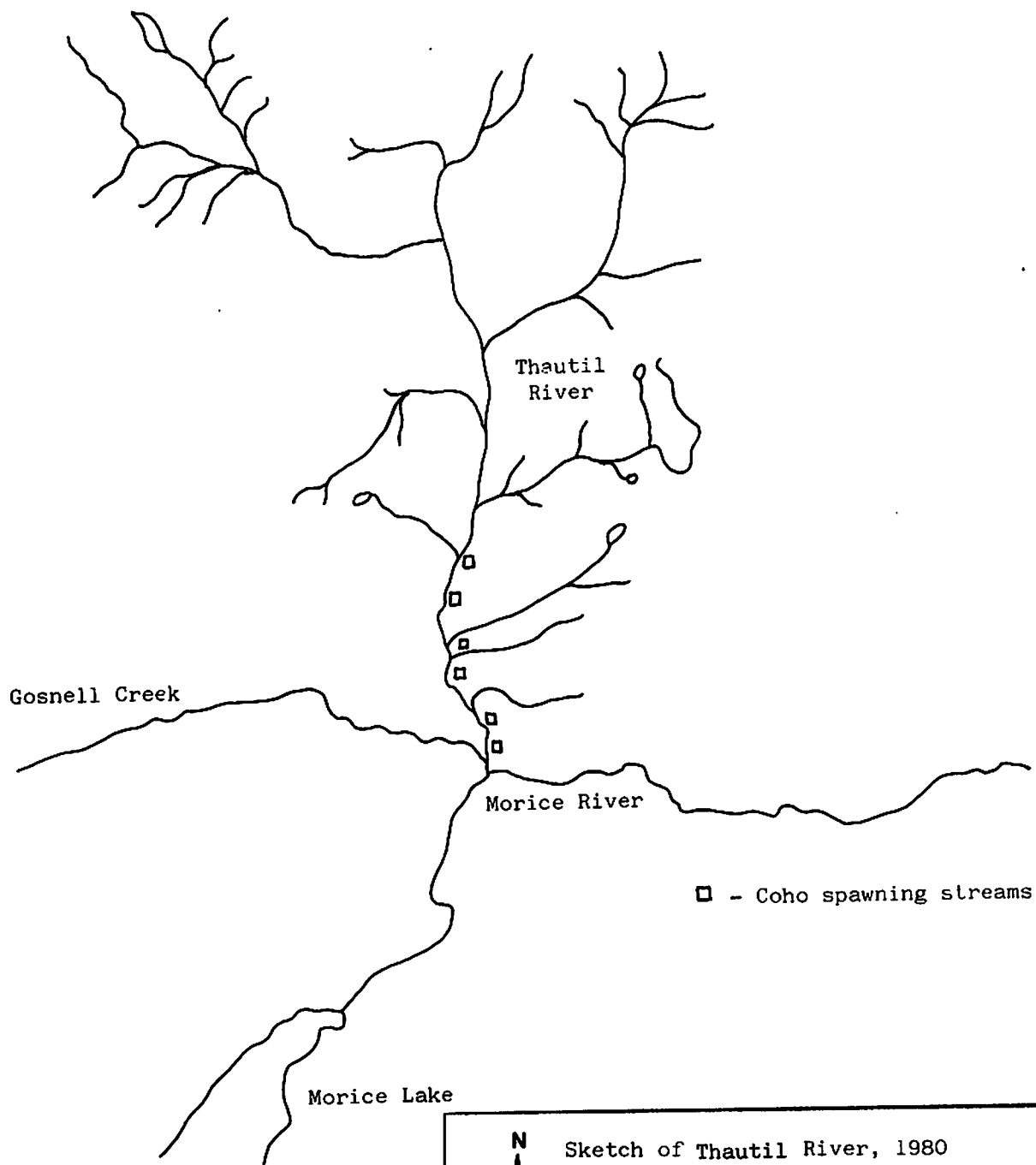
BARRIERS OR POINTS OF DIFFICULT ASCENT High canyon and fast water
approx. 8km from mouth

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	
COHO	<u>- mostly on lower stream riffles and for 400m above junction</u>
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS This stream has difficult access by foot but has been inspected
several times by aircraft, 1969,78. In 1980 eagles were observed in upper
river indicating that coho may be present.
1981 - not inspected.



Sketch of Thautil River, 1980



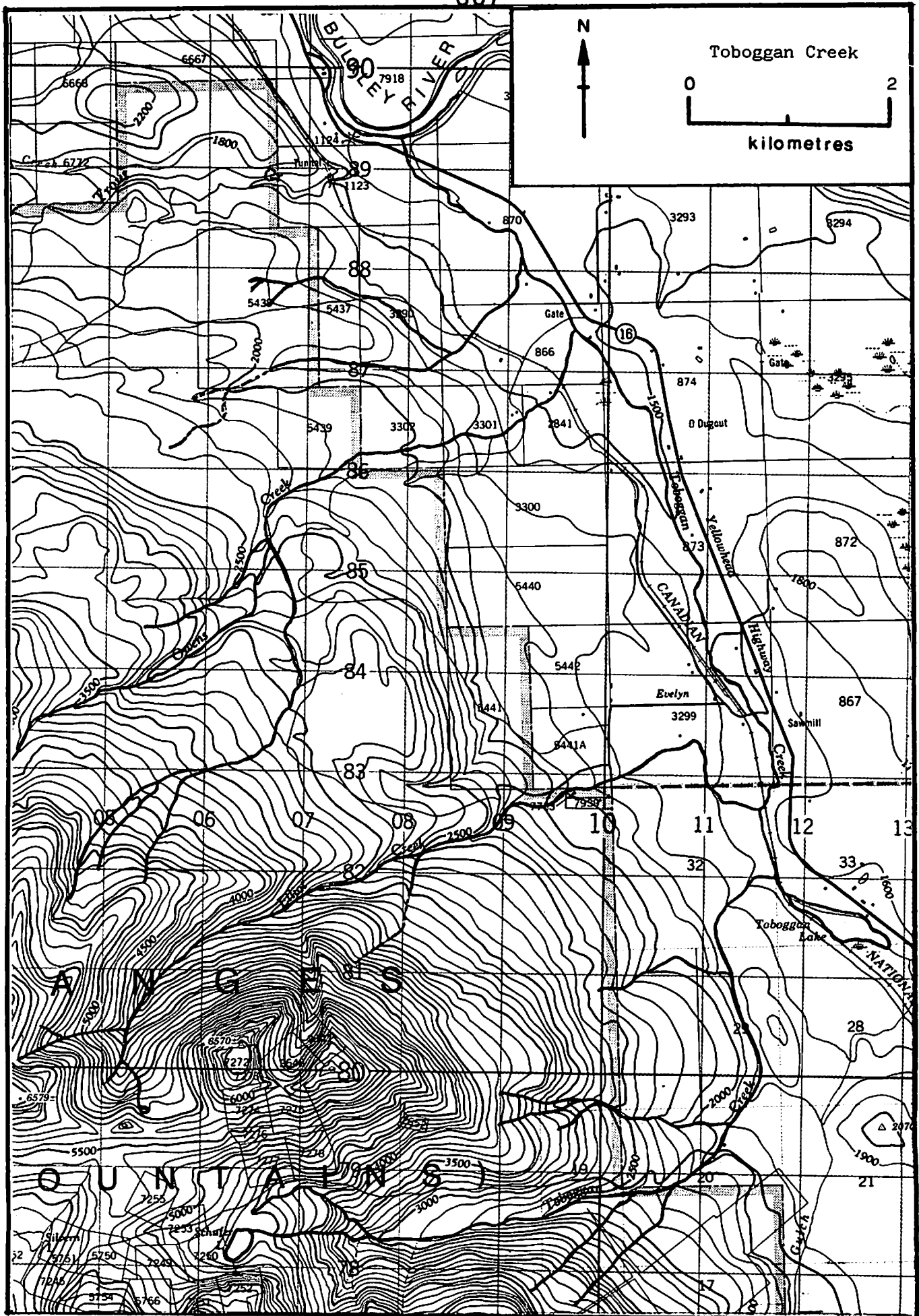
ESCAPEMENT RECORD FOR THAUTIL RIVER

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65						
66			300			
67			200			
68			300			
69			300			
70			300			
71			N/R			
72			N/R			
73	N/R		-			
74	N/R		N/R			
75	N/R		N/R			
76	N/R					
77			N/R			
78			N/R			
79	-		-			
80			N/O			
81			N/R			
82			UNK			
83						
84						
85						

TIMING

ARRIVE						
START			Aug-M Oct			
PEAK			Sept-L Oct			
END			Sept-M Nov			

REMARK N/R - No Record



NAME OF STREAM TOBOGGAN CREEK
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows N.W. into Bulkley R., S.E. of Doughty, Rge. 5, Coast Dist.
16 miles N. of Smithers POSITION 54 127 NE.
 LENGTH 12.8 km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25
0.25 - 0.50
0.50 - 0.75
0.75 - 1.00
>1.00

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT Many windfalls and small jams throughout
passable with normal water levels. Large culvert under high-
way 16 impedes fish at low water levels.

SPAWNING DISTRIBUTION

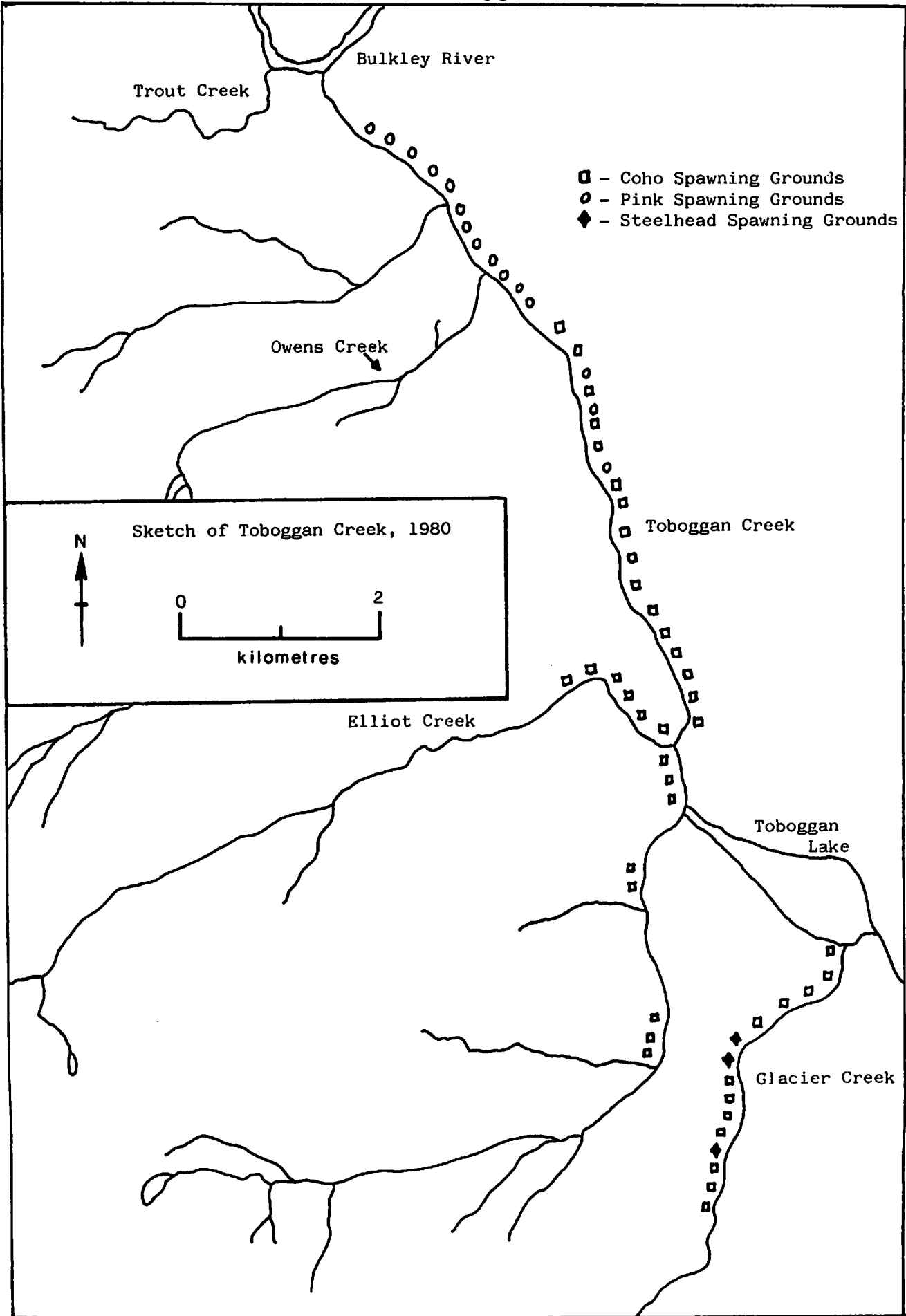
SPECIES

SECTION OF STREAM USED

SOCKEYE	
CHINOOK	
COHO	- scattered above and below Toboggan Cr. and in Glacier Cr.
CHUM	
PINK (ODD YEAR)	- even distribution near stream mouth
PINK (EVEN YEAR)	- " " "
STEELHEAD	- upper end of creek in small streams

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS Medium beaver activity -- dams removed before coho migration.
1963 - Sports fishermen decimated total population of coho.
Redd samplings 1951/54 Adequate flow. Alevins strong and well.
Lush riparian growth provides excellent cover for fish
Highway culvert on Hwy. 16 estuary requires work annually as it
impedes migrating fish at low water levels.
This is a small stream with limited capacity. Water levels low-normal.
Predators: bears, birds, beaver -- light. Otter -- medium.



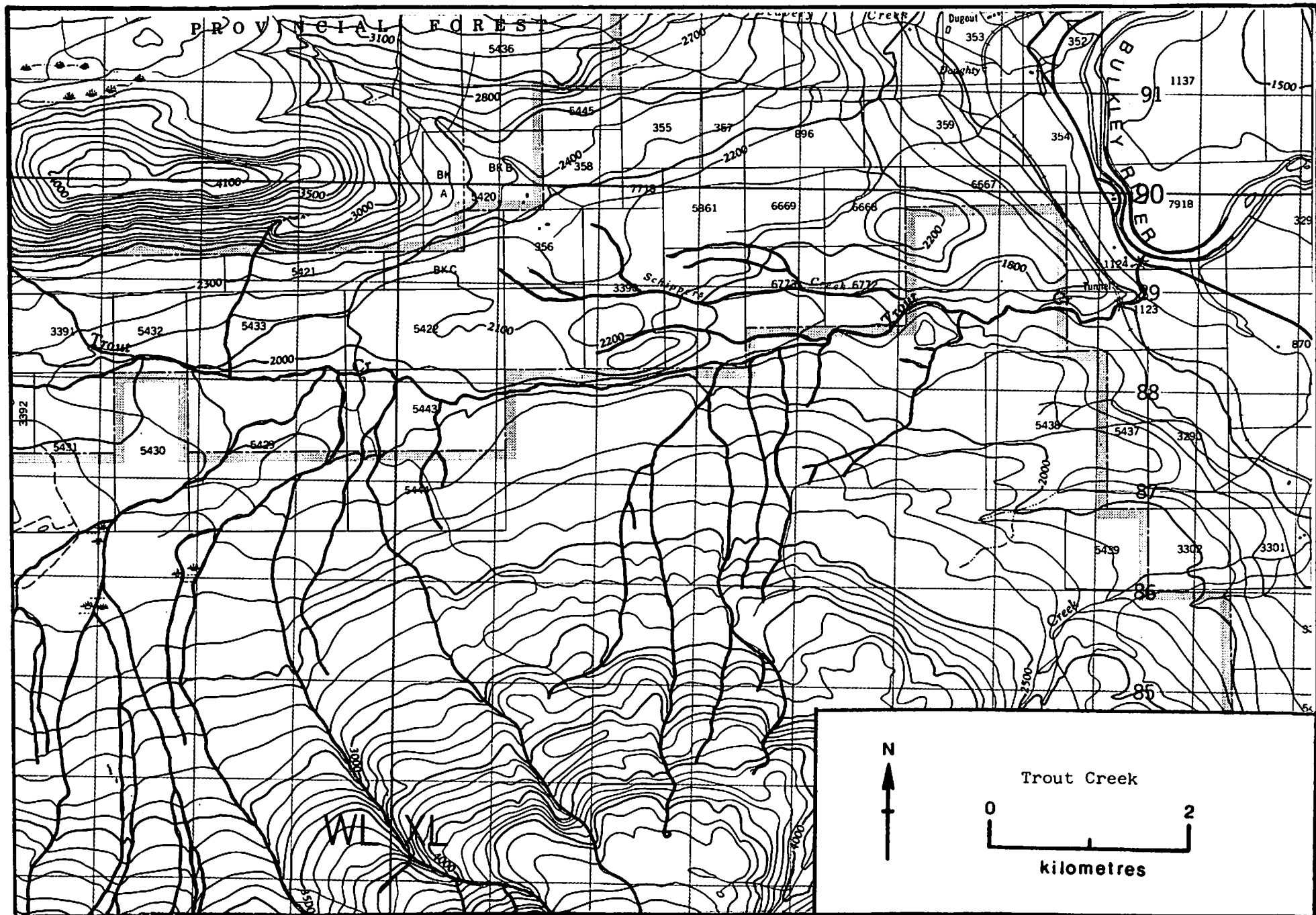
ESCAPEMENT RECORD FOR TOBOGGAN CREEK

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947			75			OBS
48			OBS			OBS
49			600			OBS
50						
51			1,100			
52			750			
53			650			
54			600			OBS
55			700			50
56			750			25
57			200			25
58			400			25
59			25		750	
60			200			
61			200			
62			1,500		400	
63			450		1,000	
64			250		300	
65			500			
66			200			
67			150			
68			200			
69			400			
70			1,000			
71			1,700		1,000	
72			2,000		100	
73			2,000		1,800	
74			500			
75			100			
76			300			
77			1,010			
78			817		164	
79						
80			2,000		N/O	
81			75			
82			1,200		UNK	
83						
84						
85						

TIMING

ARRIVE			M Sept			
START			Sept		M Aug-E Sept	L Oct
PEAK			L Oct-E Nov		E-L Sept	Nov
END			Nov-M Dec		E Oct	UNK

REMARK 1948 - Medium run of coho and steelheads. A great number of small Jack Coho present.



NAME OF STREAM TROUT CREEK (Sheddy Creek)CONSERVATION DISTRICT 8 STATISTICAL AREA 4LOCATION OF MOUTH Flows E. into Bulkley River, Rge. 5, Coast Dist.POSITION 54 127 NELENGTH _____ km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____

SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
>1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

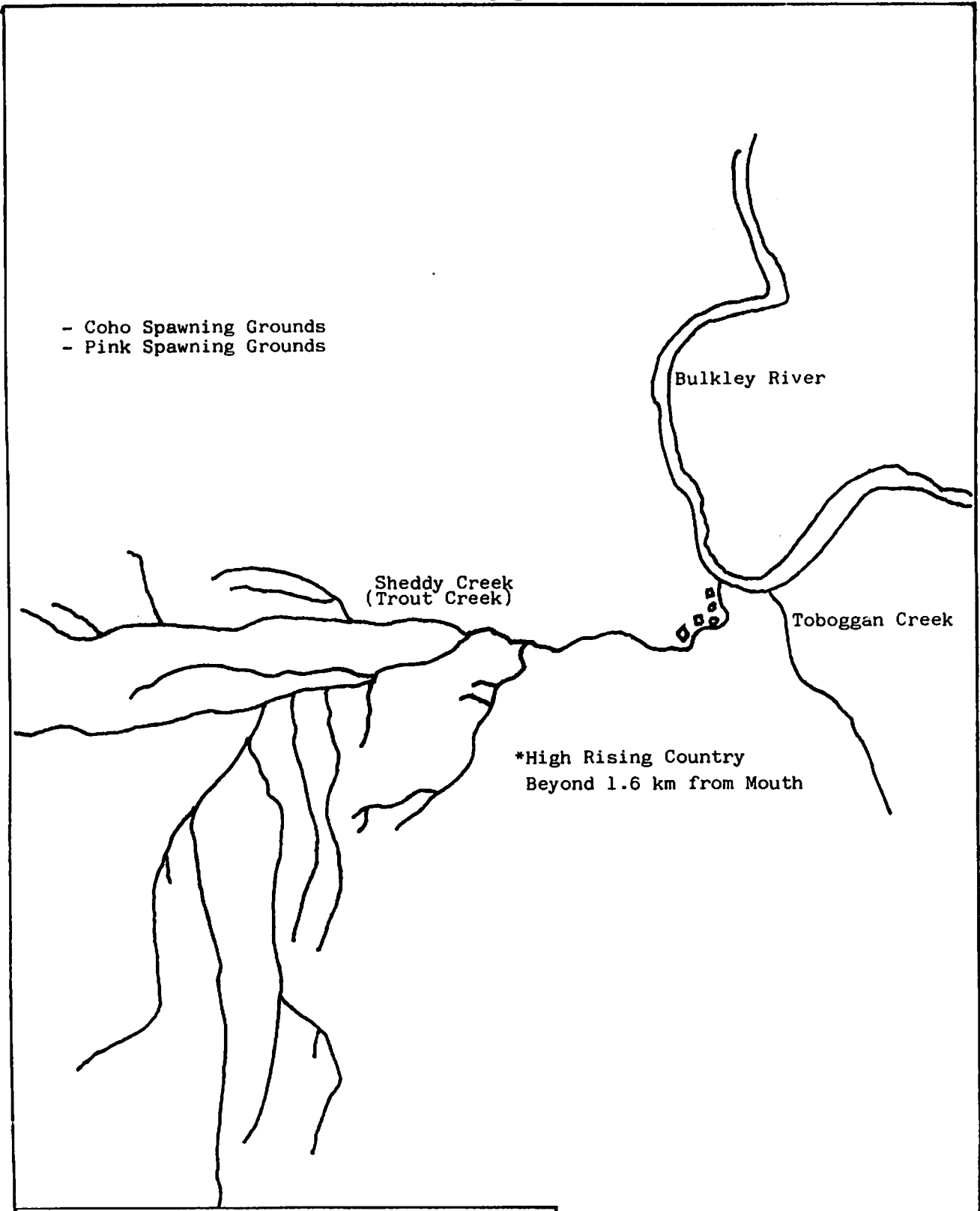
BARRIERS OR POINTS OF DIFFICULT ASCENT Falls 1.6 km from mouth -- lower end passable depending on water levels.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	
COHO	- near stream mouth
CHUM	
PINK (ODD YEAR)	- near stream mouth
PINK (EVEN YEAR)	- " "
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1949 - Heavy use by sports fishermen 63.69/751956 - Low water made it impossible for salmon to enter stream.1959 - Good water conditions.1962 - Easy access to stream makes fish prone to harassment by juveniles.1964 - High water prevented accurate coho count.1971 - Good steelhead sportsfishery.Short, rocky stream. Only lightly used for spawning.Predators: birds and bear.



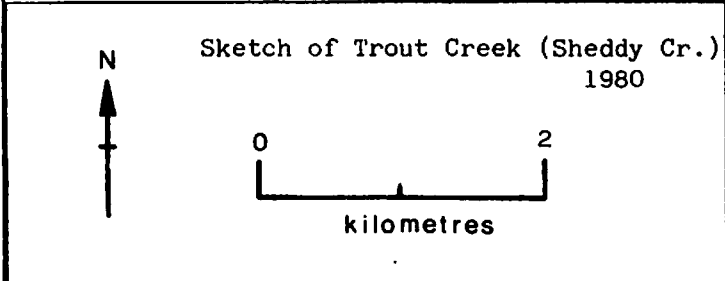
- Coho Spawning Grounds
- Pink Spawning Grounds

Bulkley River

Sheddy Creek
(Trout Creek)

Toboggan Creek

*High Rising Country
Beyond 1.6 km from Mouth



Sketch of Trout Creek (Sheddy Cr.)
1980

0 2
kilometres

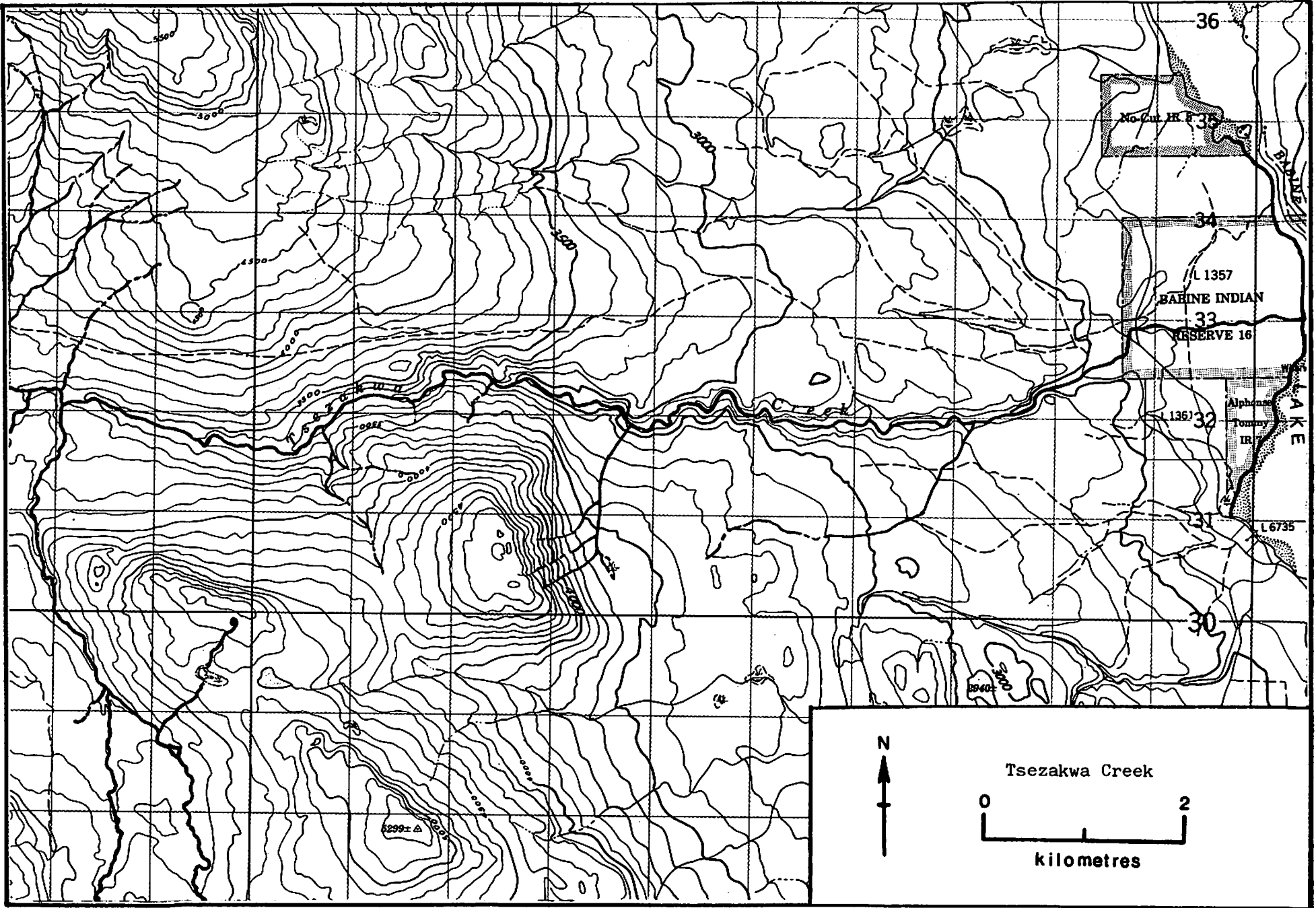
ESCAPEMENT RECORD FOR TROUT CREEK (Sheddy Creek)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49			75			
50						OBS
51			25			
52			25			
53			60			
54			N/O			
55			N/O			
56			N/O			
57			N/O			
58			25			
59			N/O			
60			25			
61			N/O			
62					3,000	
63					1,500	
64			250		600	
65			300			
66			100			
67			N/O			
68			N/O			
69			150			
70			200			
71			N/O			
72			N/O			
73			N/O			
74			N/R			
75			N/O			
76			N/O			
77			N/O			
78			N/O			
79						
80			N/O			
81			N/I			
82			UNK			
83						
84						
85						

TIMING

ARRIVE					
START			Aug-Sept		L Aug-E Sept
PEAK			Sept-Oct		M Sept
END			Oct-Nov		L Sept

REMARK N/O - No Record, N/I - Not Inspected



NAME OF STREAM TSEZAKAWA CREEK (Trail Creek)

CONSERVATION DISTRICT 8 STATISTICAL AREA 4

LOCATION OF MOUTH Flows E. into N. end of Babine Lake.

POSITION _____

LENGTH _____ km WIDTH _____ m DRAINAGE _____ km²

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____

SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

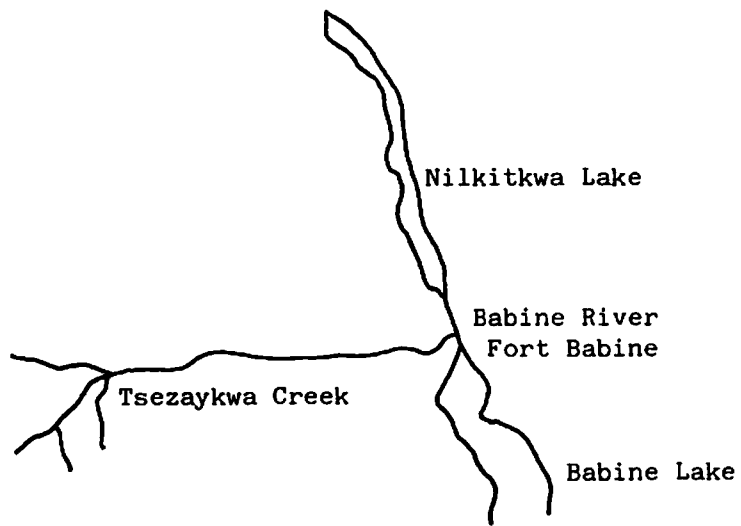
BARRIERS OR POINTS OF DIFFICULT ASCENT Passable only at high water levels.
Windfalls and log jams from .8 km.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- scattered over lower 8 - 1.6km at good water levels
CHINOOK	
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1948 - After spring run-off there was a shortage of water --
no fish going up to spawn.
1949 - Extremely high water in 1948 diverted the lower part of stream
into several channels making it difficult for salmon to ascend.
1952 - No fish observed -- possibly because of swamp acid or condition
1959 - Acidic water conditions noted. _____ of water.
1979 - Beaver dams scattered over lower .8km -- recommend removal
_____ during runs.
Stream poorly utilized. Usually too low or dry to permit spawning.
No significant runs since 1961.
Predators: Birds and bears -- med to heavy.



Sketch of Tsezakawa Creek (Trail Creek), 1980



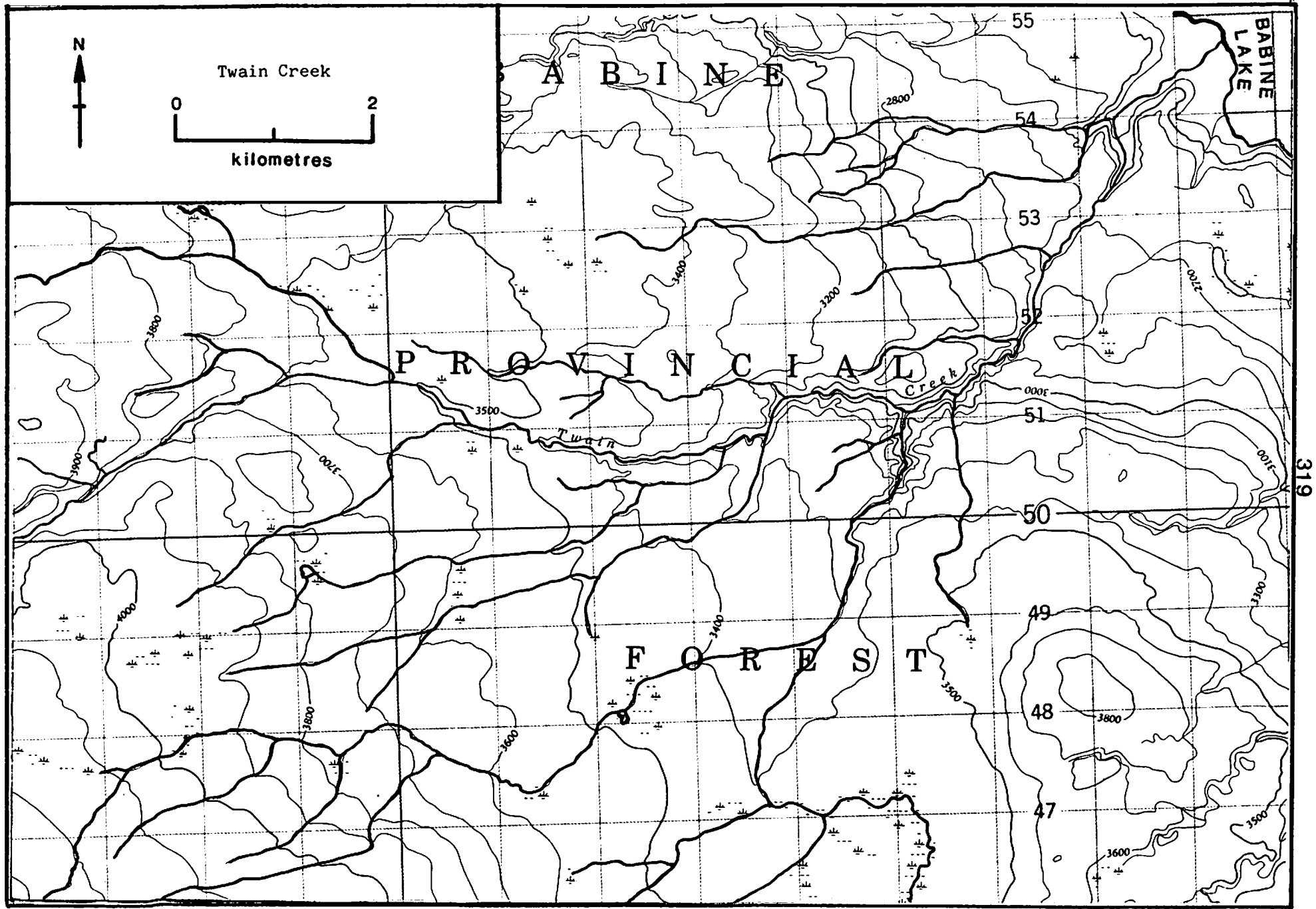
ESCAPEMENT RECORD FOR TSEZAKAWA CREEK (Trail Creek)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947	57					
48						
49	N/O					
50	N/O					
51	N/O					
52	N/O					
53	N/O					
54						
55						
56	N/R for					
57	period					
58	1953-58					
59	400					
60	N/O					
61	200					
62	N/O					
63	N/O					
64	N/O					
65	N/O					
66	N/O					
67	N/O					
68	N/O					
69	N/O					
70	N/O					
71	N/I					
72	N/O					
73			50			
74	OBS		OBS			
75	OBS		OBS			
76	N/O		N/O			
77	200		80		825	
78	10		50		1	
79	20		-		8	
80	UNK		12			
81	N/I		N/I		N/I	
82			UNK			
83						
84						
85						

TIMING

ARRIVE					
START	M Aug-Sept		Sept		E Sept
PEAK	Aug-Oct		Sept-Oct		M Sept
END	Sept-Nov		Oct-Nov		L Sept

REMARK N/R - No Record, N/I - Not Inspected
 1947 Scokeye 57 fish 60% female
 1961 Sex ratio M 46% F 59% J 2%



NAME OF STREAM TWAIN CREEK
 CONSERVATION DISTRICT 8 STATISTICAL AREA 4
 LOCATION OF MOUTH Flows E. into Babine Lake, Range 5, Coast Dist.
 POSITION 54 125 NW.
 LENGTH 4.0 km WIDTH _____ m DRAINAGE _____ km²
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

PERCENT GRADIENT

0.00 - 0.25	
0.25 - 0.50	
0.50 - 0.75	
0.75 - 1.00	
> 1.00	

WETTED AREA _____ m² SPAWNING AREA _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT 10m falls approx 4.8km from mouth
moderate beaver activity -- stream monitored and
dams removed during migration.

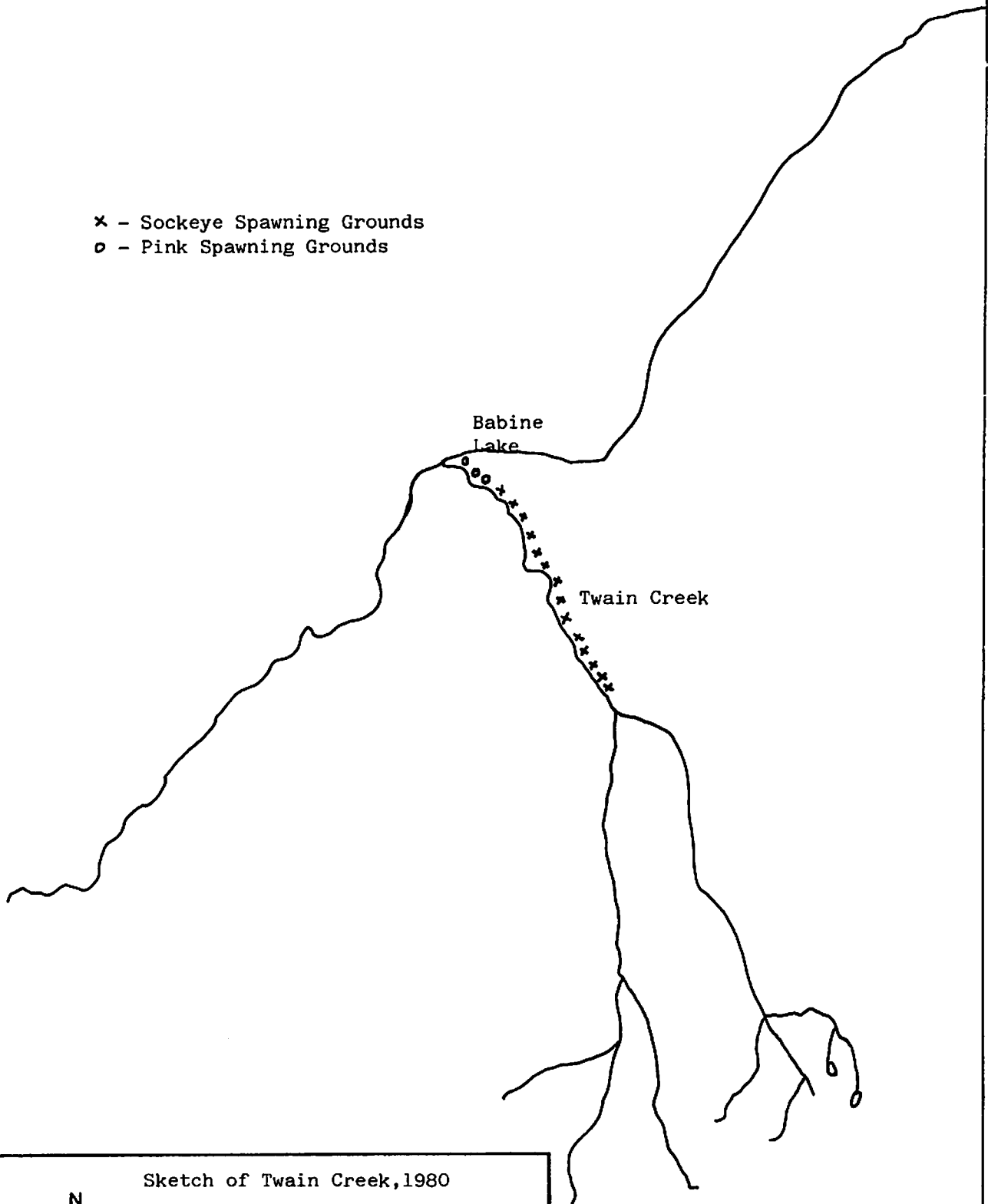
SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- used throughout except in low water years (as far as falls)
CHINOOK	
COHO	
CHUM	
PINK (ODD YEAR)	- near mouth
PINK (EVEN YEAR)	- near mouth
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS 1948 Usual good water diverted because of slide 4.8km up.
clearance activities planned.
1951 - Stream clearance work done. Salmon passed slides with small losses
even in low water.
1958 - Due to low water, high temperatures and overcrowding an estimated
8000 sockeye spawners were lost.
1959 - Slides and log jams noted.
1978 - Babine Forest Prods. completed bridge crossing above canyon on Twain Cr.
in late November.
In the years 1948/50 there was evidence of erosion and scouring. Approx.
366m of channel affected by clay and gravel slides 3.2km from mouth.
Predators: eagles, crows, ravens, merganzers, bears.

- × - Sockeye Spawning Grounds
- - Pink Spawning Grounds



Sketch of Twain Creek, 1980



ESCAPEMENT RECORD FOR TWAIN CREEK

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947	6,618					
48	7,500					
49	2,272		50			
50	8,881		28			
51	5,020					
52	400					
53	10,000					
54	14,000					
55	2,500					
56	5,000					
57	6,000					
58	20,000					
59	9,000					
60	6,000					
61	15,000					
62	1,400					
63	14,760					
64	9,000					
65	3,000					
66	2,500					
67	10,000					
68	12,000					
69	16,600					
70	18,000					
71	7,000					
72	6,800					
73	21,000					
74	18,500					
75	17,800					
76	1,800					
77	9,000				12	
78	9,000					
79	9,000					
80	7,500					
81	10,000					
82						
83						
84						
85						

TIMING

ARRIVE						
START	L Jul-E Sept		L Oct		Aug	
PEAK	M Aug-E Oct		E Nov		Aug	
END	E Sept-L Oct		M Nov		Sept	

REMARK 1947 50% lge., 30% med., 15% sm., 5% runts

METRIC EQUIVALENTS

<u>Length</u>		<u>Area</u>	
centimeter (cm)	= 0.394 in	square centimeter (in ²)	= 0.155 in ²
meter (m)	= 3.280 ft	square meter (m ²)	= 10.760 ft ²
meter (m)	= 1.094 yd	square meter (m ²)	= 1.196 yd ²
kilometer (km)	= 0.621 mi	square kilometer (km ²)	= 0.386 mi ²
		hectare (ha)	= 2.470 a
inch (in)	= 2.540 cm	square inch (in ²)	= 6.451 cm ²
foot (ft)	= 0.305 m	square foot (ft ²)	= 0.093 m ²
yard (yd)	= 0.914 m	square yard (yd ²)	= 0.836 m ²
mile (mi)	= 1.609 km	square mile (mi ²)	= 2.590 km ²
		acre (a)	= 0.405 ha

<u>Volume</u>		<u>Weight</u>	
cubic centimeter (cm ³)	= 0.061 in ³	gram (gm)	= 0.035 oz
liter (L)	= 61.023 in ³	kilogram (kg)	= 2.205 lb
liter (L)	= 0.035 ft ³	kilogram (kg)	= 0.001 ton (short)
liter (L)	= 0.264 U.S. gal	tonne (t)	= 1.103 ton (short)
	= 0.220 Imp. gal		
cubic meter (m ³)	= 35.315 ft ³	ounce (oz)	= 31.103 gm
cubic meter (m ³)	= 1.308 yd ³	pound (lb)	= 0.373 kg
		ton (short)	= 907.180 kg
cubic inch (in ³)	= 16.387 cm ³	ton (short)	= 0.907 t
cubic inch (in ³)	= 0.016 L		
cubic foot (ft ³)	= 0.028 m ³		
cubic foot (ft ³)	= 28.320 L		
cubic yard (yd ³)	= 0.765 m ³		
U.S. gallon (gal)	= 3.785 L		
Imp. gallon (gal)	= 4.546 L		

Velocity

meter per second (m/s)	= 3.280 ft/s
feet per second (ft/s)	= 0.305 m/s

Discharge

cubic meter per second (m ³ /s)	= 35.315 ft ³ /s
cubic foot per second (ft ³ /s)	= 0.028 m ³ /s
cubic meter per second (m ³ /s)	= 15350.879 U.S. gal/min
	= 13198.628 Imp. gal/min

Temperature

Degrees Centigrade (°C)	= 5/9 (Degrees Fahrenheit - 32)
Degrees Fahrenheit (°F)	= 9/5 (Degrees Centigrade) + 32