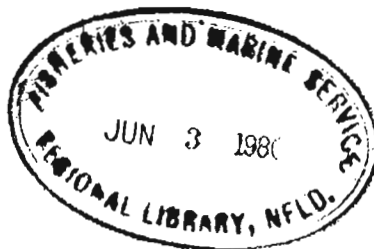


Catalogue of Salmon Streams and Spawning Escapements of Prince George Subdistrict

D.E. Marshall and C.I. Manzon

Department of Fisheries & Oceans
Enhancement Services Branch
1090 West Pender St.
Vancouver, B.C.



February 1980

Fisheries & Marine Service Data Report No. 79



Fisheries and Environment
Canada

Pêches et Environnement
Canada

Fisheries
and Marine Service

Service des pêches
et de la mer

Fisheries and Marine Service

Data Reports

These reports provide a medium for filing and archiving data compilations where little or no analysis is included. Such compilations commonly will have been prepared in support of other journal publications or reports. The subject matter of Data Reports reflects the broad interests and policies of the Fisheries and Marine Service, namely, fisheries management, technology and development, ocean sciences and aquatic environments relevant to Canada.

Numbers 1-25 in this series were issued as Fisheries and Marine Service Data Records by the Pacific Biological Station, Nanaimo, B.C. The series name was changed with report number 26.

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Service des pêches et des sciences de la mer

Rapports statistiques

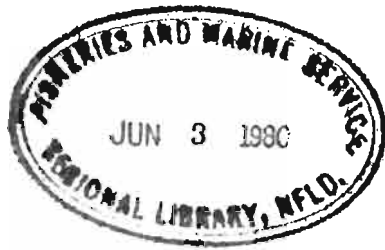
Ces rapports servent de base à la compilation des données de classement et d'archives pour lesquelles il y a peu ou point d'analyse. Cette compilation aura d'ordinaire été préparée pour appuyer d'autres publications ou rapports. Les sujets des Rapports statistiques reflètent la vaste gamme des intérêts et politiques du Service des pêches et de la mer, notamment gestion des pêches, techniques et développement, sciences océaniques et environnements aquatiques, au Canada.

Les numéros 1-25 de cette série ont été publiés à titre de Records statistiques, Service des pêches et de la mer, par la Station biologique du Pacifique, Nanaimo (C.-B.). Le nom de la série a été modifié à partir du numéro 26.

Les Rapports statistiques ne sont pas préparés pour une vaste distribution et leur contenu ne doit pas être mentionné dans une publication sans autorisation écrite préalable de l'établissement auteur. Le titre exact paraît au haut du résumé de chaque rapport.

Fisheries and Marine Service
Data Report No. 79

February 1980



CATALOGUE OF SALMON STREAMS AND SPAWNING ESCAPEMENTS OF
PRINCE GEORGE SUBDISTRICT

by

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Cat. no. Fs 97-13/79

ISSN 0706-6465

ABSTRACT

Marshall, D.E. and C.I. Manzon. 1980. Catalogue of salmon streams and spawning escapements of Prince George Subdistrict. Fisheries and Marine Service Data Report No. 79. 252 pp.

This catalogue contains 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.

Key Words: British Columbia, Prince George, salmon streams, spawning escapements.

RÉSUMÉ

Marshall, D.E. and C.I. Manzon. 1980. Catalogue of salmon streams and spawning escapements of Prince George Subdistrict. Fisheries and Marine Service Data Report No. 79. 252 pp.

Le catalogue présente, pour chaque cours d'eau, l'emplacement, la distribution des frayères, les barrières et les points où le passage est difficile, des données sur la remonte et d'autres renseignements généraux. Il comporte aussi une carte topographique de l'emplacement du cours d'eau et, dans certains cas, un croquis plus détaillé de la région environnante.

Mots Clés: Colombie-Britannique, Prince-George, cours d'eau à saumon, remonte.

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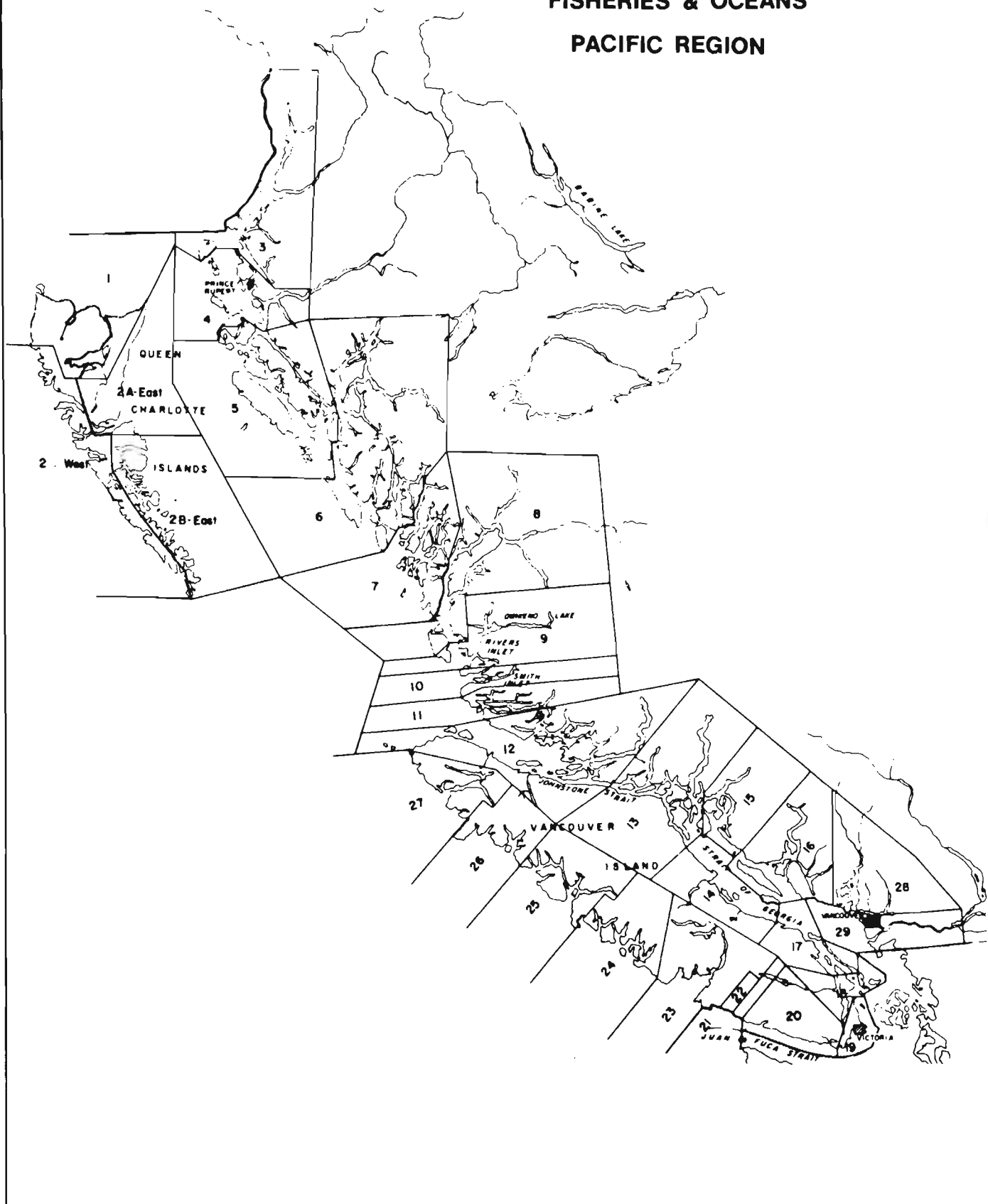
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FERRIER CREEK	(see Fleming Creek)
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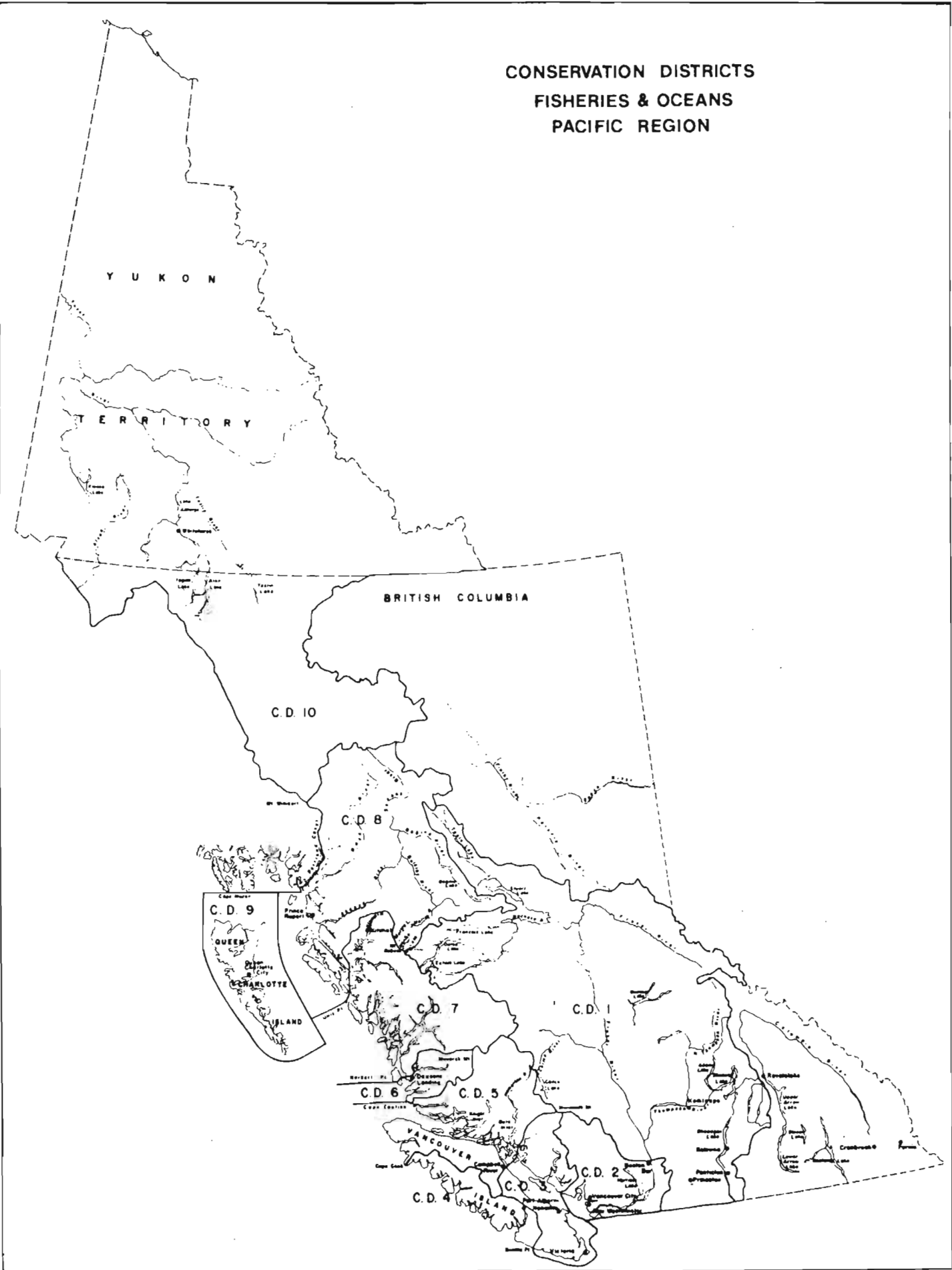
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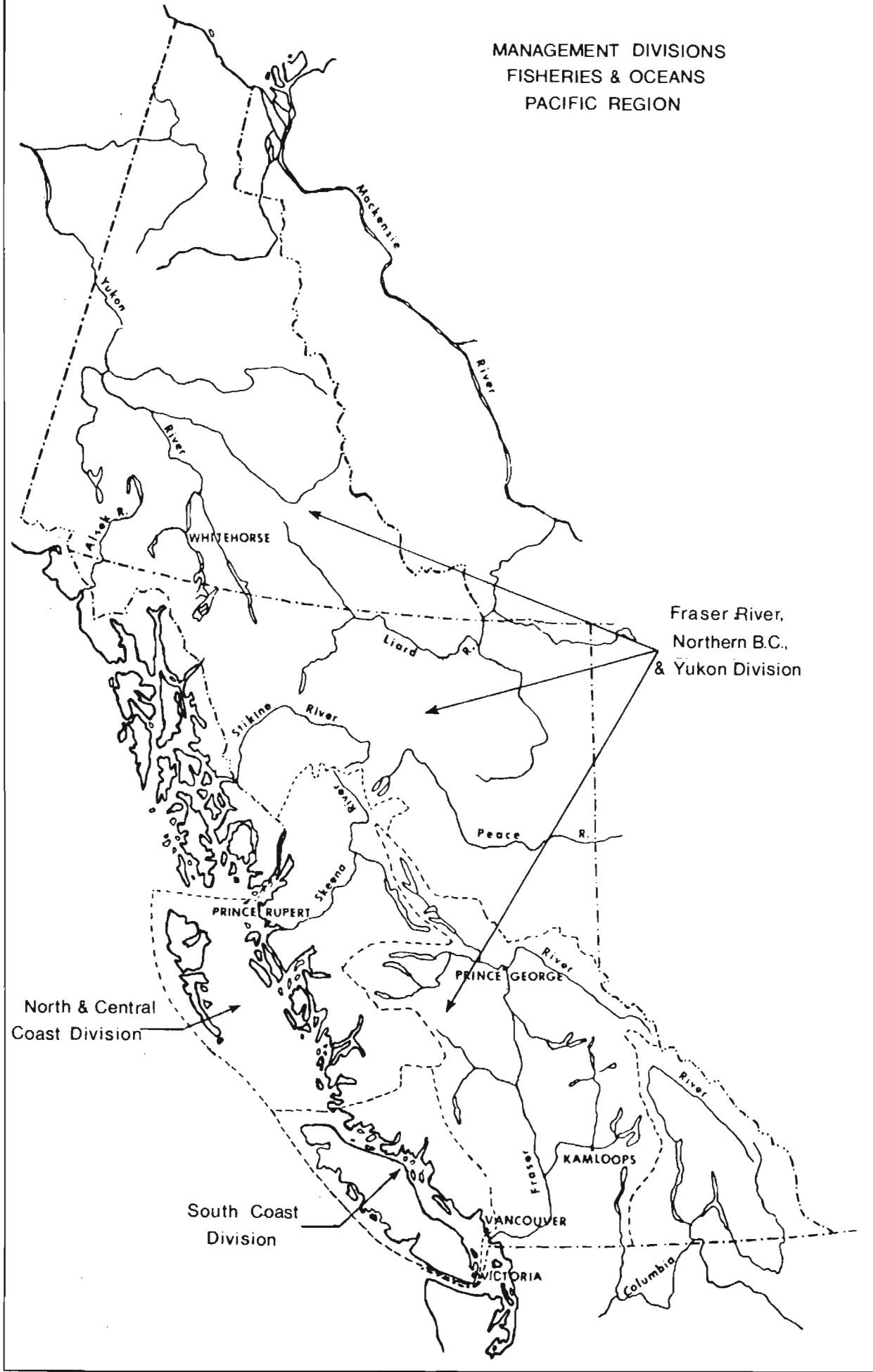
**STATISTICAL AREAS
FISHERIES & OCEANS
PACIFIC REGION**



CONSERVATION DISTRICTS
FISHERIES & OCEANS
PACIFIC REGION



MANAGEMENT DIVISIONS
FISHERIES & OCEANS
PACIFIC REGION



STANDARDS USED ON STREAM DATA PAGE

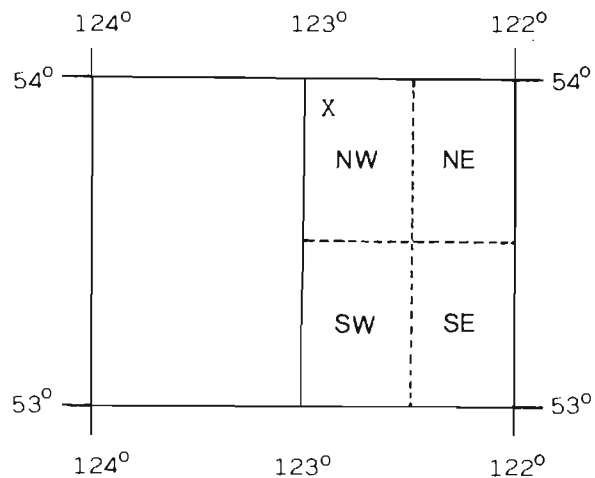
Name of Stream: Name as given in Gazetteer of Canada, British Columbia 1966 edition; local or non-gazetted names are added in lower case type.

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.

MAP REFERENCES

Roads:	
hard surface, all weather	more than 2 lanes
hard surface, all weather	2 lanes less than 2 lanes
loose surface, all weather	2 lanes wide or more
" less than 2 lanes	all weather dry weather
Private Road, Trail	Private Road Trail
Railways:	
normal gauge, multiple track	Station
normal gauge, single track	Stop Siding
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, trunk route	
Horizontal Control Point	
Boundary Marker	
Bench Mark	BM
Spot Elevation, (in feet)	5752
Mine or Pit	X

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	2584 6312
Intermittent Stream	
Swamp or Marsh	
Dam	
Spring	
Navigation Light	
Mine	
Glacier	
Customs Office	

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

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 S 66
Building	
School	
Non-perennial stream	
Marsh or Swamp	
Glacier	
Foreshore flats	
Contours, elevation	
Contours, depression	
Forest	

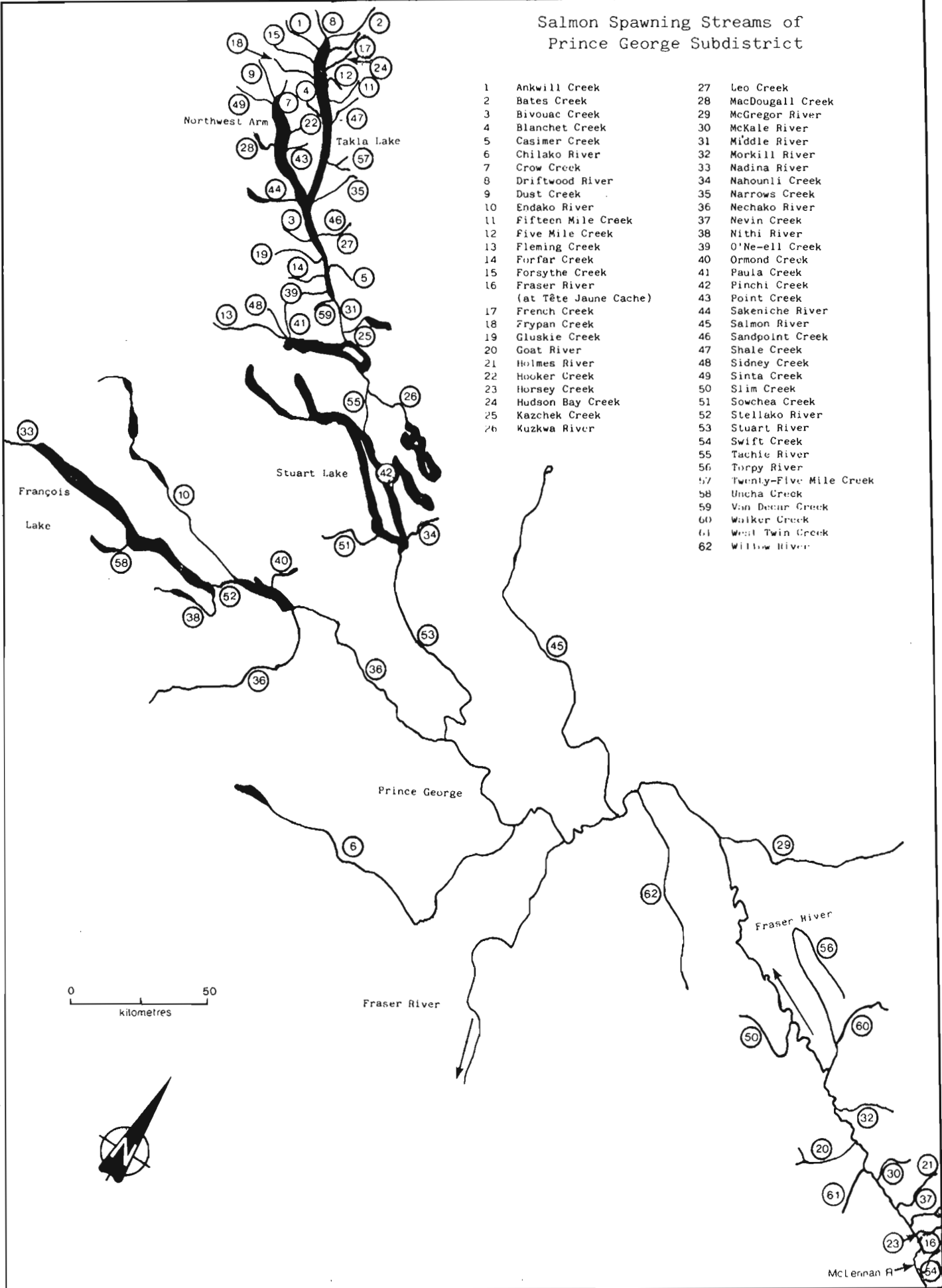
City or large town	
Town	
Village or settlement	
Streams:	
intermittent or dry	
indefinite	
Irrigation canal or ditch	
Rapids, falls	
Aerodrome	
Landing ground	

Post office	P
School	S
Church	
Intermittent lake	
Marsh or swamp	
Sand, gravel or mud	
Wooded areas	
Seaplane base	
Seaplane anchorage	

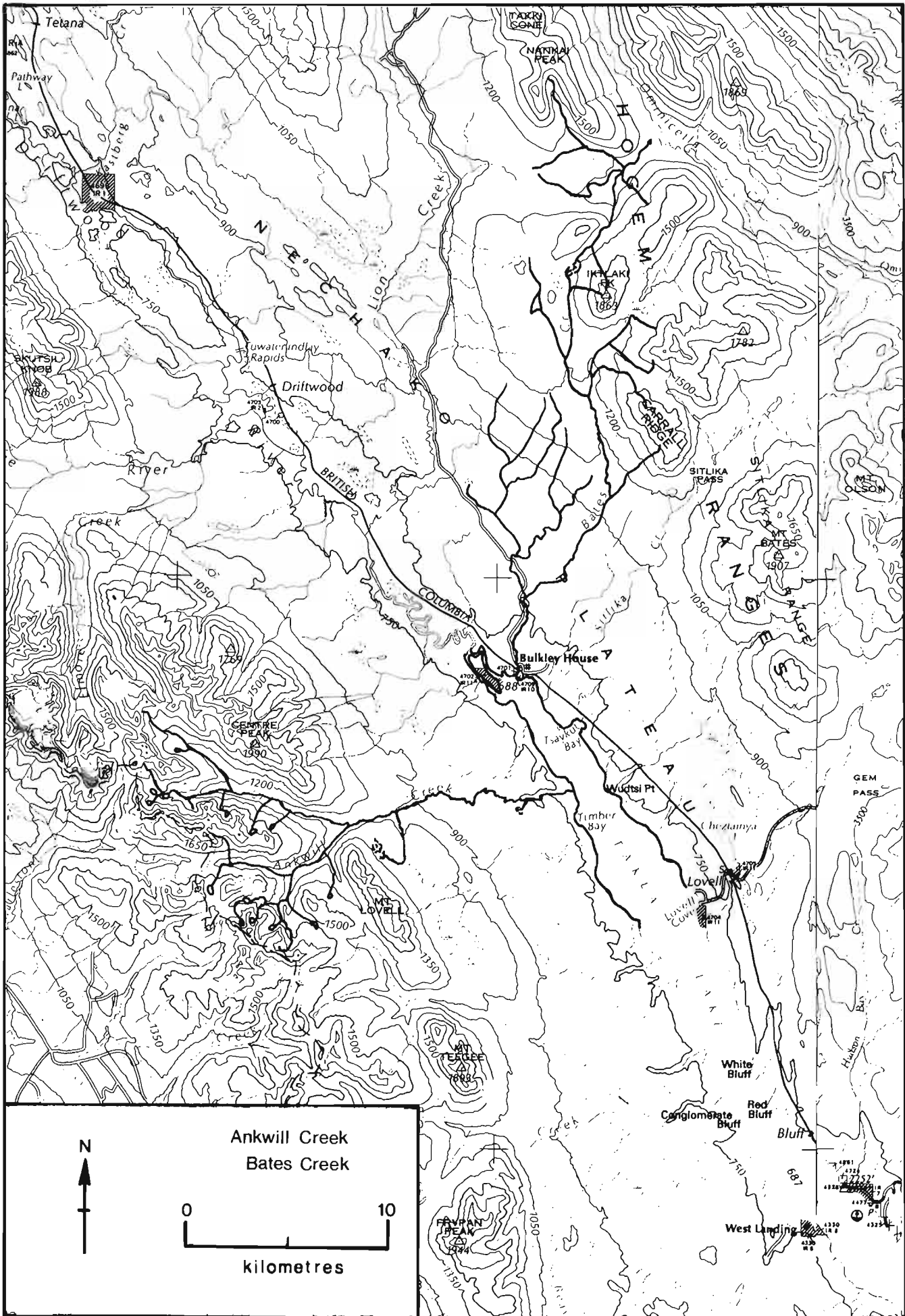
Streams		Dam	
Highways		Log Jams	
Roads		Log	
Trails		Power Line	
Houses		Coho	CO
Railroad		Chum	CM
Falls		Pink	P
Rapids		Chinook	CK
Rip-Rap		Sockeye	S
Bridges			

Salmon Spawning Streams of Prince George Subdistrict

- | | | | |
|----|---------------------------------------|----|------------------------|
| 1 | Ankwill Creek | 27 | Leo Creek |
| 2 | Bates Creek | 28 | MacDougall Creek |
| 3 | Bivouac Creek | 29 | McGregor River |
| 4 | Blanchet Creek | 30 | McKale River |
| 5 | Casimer Creek | 31 | Middle River |
| 6 | Chilako River | 32 | Morkill River |
| 7 | Crow Creek | 33 | Nadina River |
| 8 | Driftwood River | 34 | Nahounli Creek |
| 9 | Dust Creek | 35 | Narrows Creek |
| 10 | Endako River | 36 | Nechako River |
| 11 | Fifteen Mile Creek | 37 | Nevin Creek |
| 12 | Five Mile Creek | 38 | Nithi River |
| 13 | Fleming Creek | 39 | O'Ne-ell Creek |
| 14 | Forfar Creek | 40 | Ormond Creek |
| 15 | Forsythe Creek | 41 | Paula Creek |
| 16 | Fraser River
(at Tête Jaune Cache) | 42 | Pinchi Creek |
| 17 | French Creek | 43 | Point Creek |
| 18 | Frypan Creek | 44 | Sakeniche River |
| 19 | Gluskie Creek | 45 | Salmon River |
| 20 | Goat River | 46 | Sandpoint Creek |
| 21 | Holmes River | 47 | Shale Creek |
| 22 | Hooker Creek | 48 | Sidney Creek |
| 23 | Horsey Creek | 49 | Sinta Creek |
| 24 | Hudson Bay Creek | 50 | Slim Creek |
| 25 | Kazchek Creek | 51 | Sowchea Creek |
| 26 | Kuzkwa River | 52 | Stellako River |
| | | 53 | Stuart River |
| | | 54 | Swift Creek |
| | | 55 | Tachie River |
| | | 56 | Torpy River |
| | | 57 | Twenty-Five Mile Creek |
| | | 58 | Uncha Creek |
| | | 59 | Van Decar Creek |
| | | 60 | Walker Creek |
| | | 61 | West Twin Creek |
| | | 62 | Willow River |



STREAM DATA
PRINCE GEORGE SUBDISTRICT



NAME OF STREAM ANKWILL CREEK

CONSERVATION DISTRICT 1 SUBDISTRICT Prince George

LOCATION OF MOUTH Flows E. into N. end of Takla L., Cassiar Dist.

POSITION 55 126 NE.

LENGTH _____ km WIDTH _____ m DRAINAGE 121.75 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) 10° C (65/08/07)

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

- Passable log jams in various places.

SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- 1971. Blowing of log jams helped to locate a more definite channel.

ESCAPEMENT RECORD FOR ANKWILL CREEK

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49	750					
50	25					
51	25					
52	200					
53	7500					
54	75					
55	N/O					
56	200					
57	7500					
58	750					
59	25					
60	42					
61	15000					
62	200					
63	4					
64	25					
65	3500					
66	75					
67	25					
68	N/O					
69	15000					
70	200					
71	200					
72	35*					
73	35000					
74	750					
75	75					
76	25					
77	7500					
78	1500					
79	200					
80						
81						
82						
83						
84						
85						

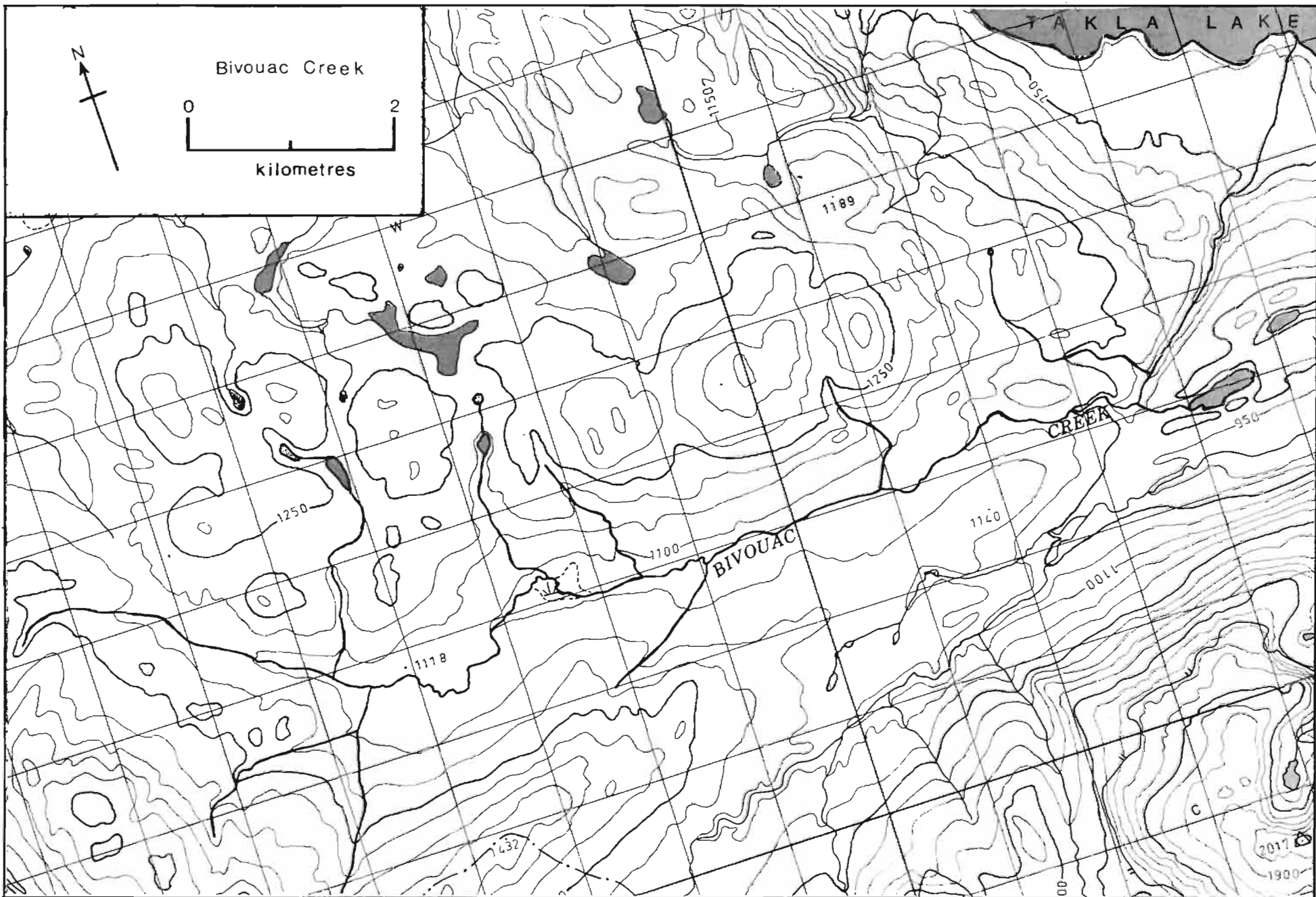
TIMING

ARRIVE	E. AUG					
START						
PEAK	E. AUG					
END						

REMARKS

* 100% of this run was composed of jacks.

BATES CREEK - for topographical map refer to Ankwill Creek,
page 1.



NAME OF STREAM BIVOUAC CREEK
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows NE. to S. end of Takla L., Cassiar Dist.
 POSITION 55 125 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 _____

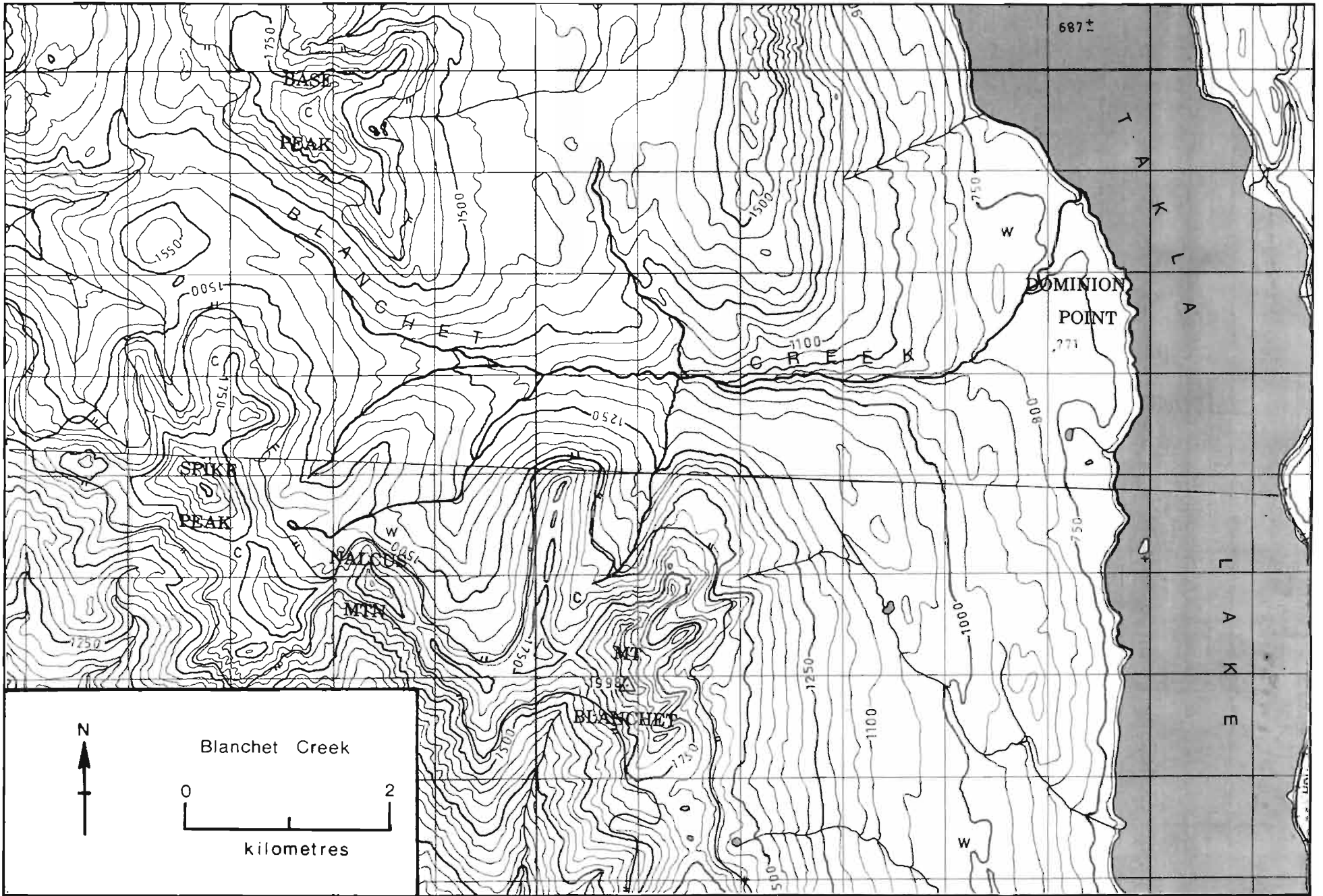
SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- 1972. Heavy run-off of water in June has brought down an above average deposit of gravel.
 - 1978. Only 60% successful egg deposition.



Blanchet Creek



kilometres

NAME OF STREAM _____ (Blanchet Creek)

CONSERVATION DISTRICT 1 SUBDISTRICT Prince George

LOCATION OF MOUTH Flows E. into Takla L., 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 _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

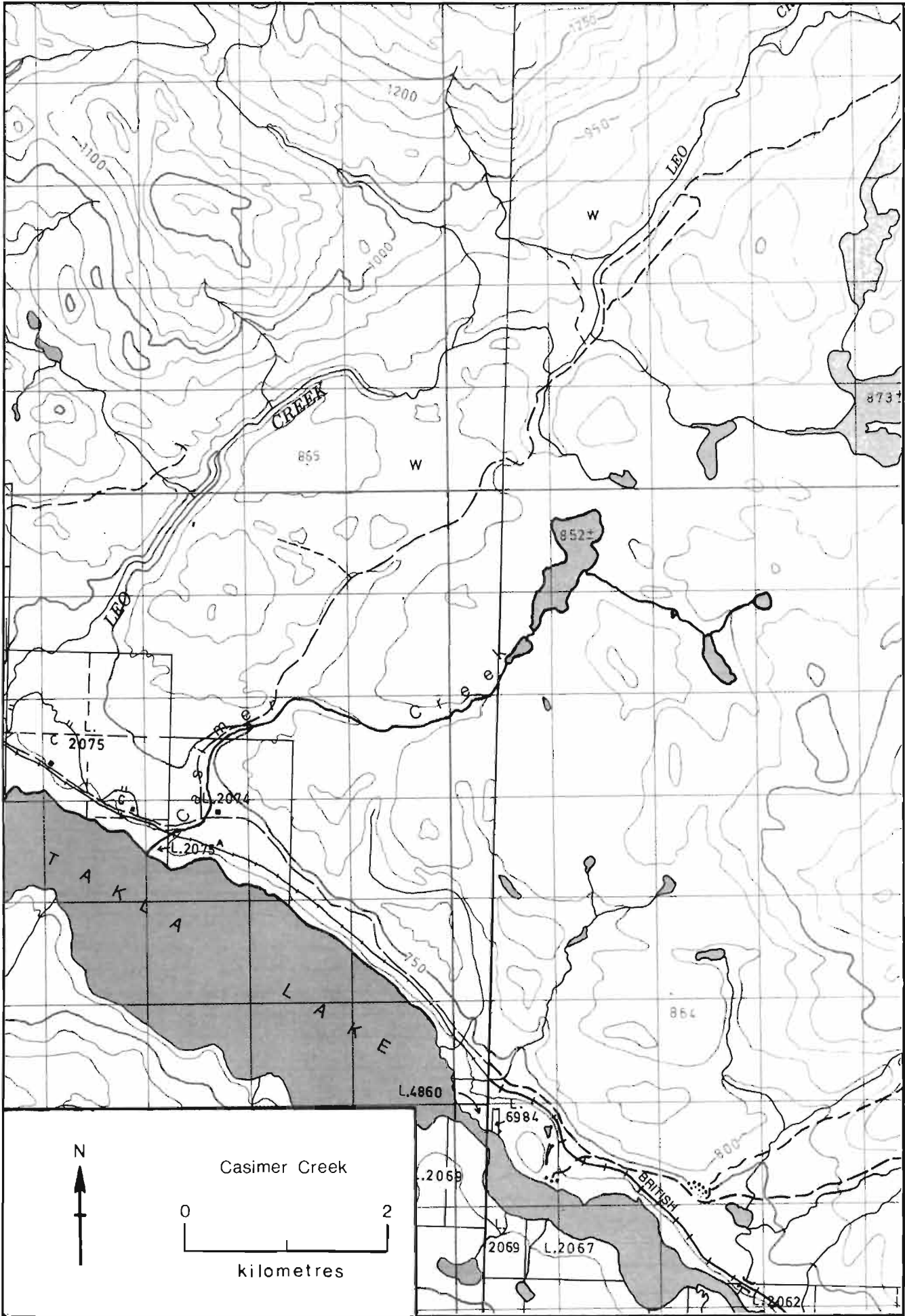
SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- Very limited spawning grounds (250 ft.).
- Sockeye spawning on cycle year only.
- 1972. Much gravel was brought down due to heavier than normal water discharges in June.



NAME OF STREAM _____ (Casimer Creek)
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows SW. into Takla L., Cassiar Dist.
 _____ POSITION 55 125 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 _____

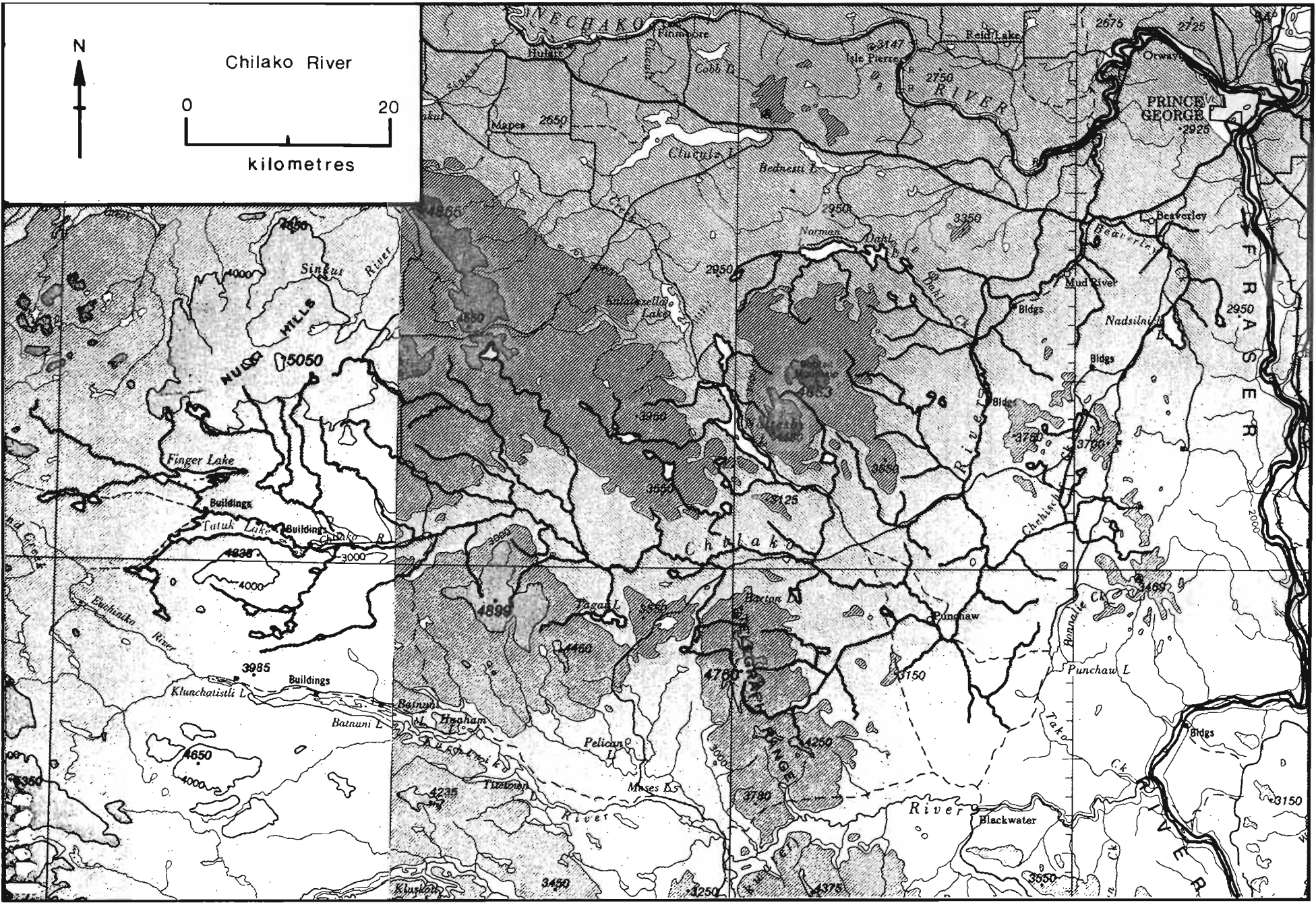
SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- Very limited spawning areas.
- This stream does not carry much water.
- Cycle year spawning stream.



NAME OF STREAM CHILAKO RIVER (Mud River)
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows NE. into Fraser R., Cariboo Dist.
 POSITION 53 122 NW.
 LENGTH _____ km WIDTH 7.0 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 _____

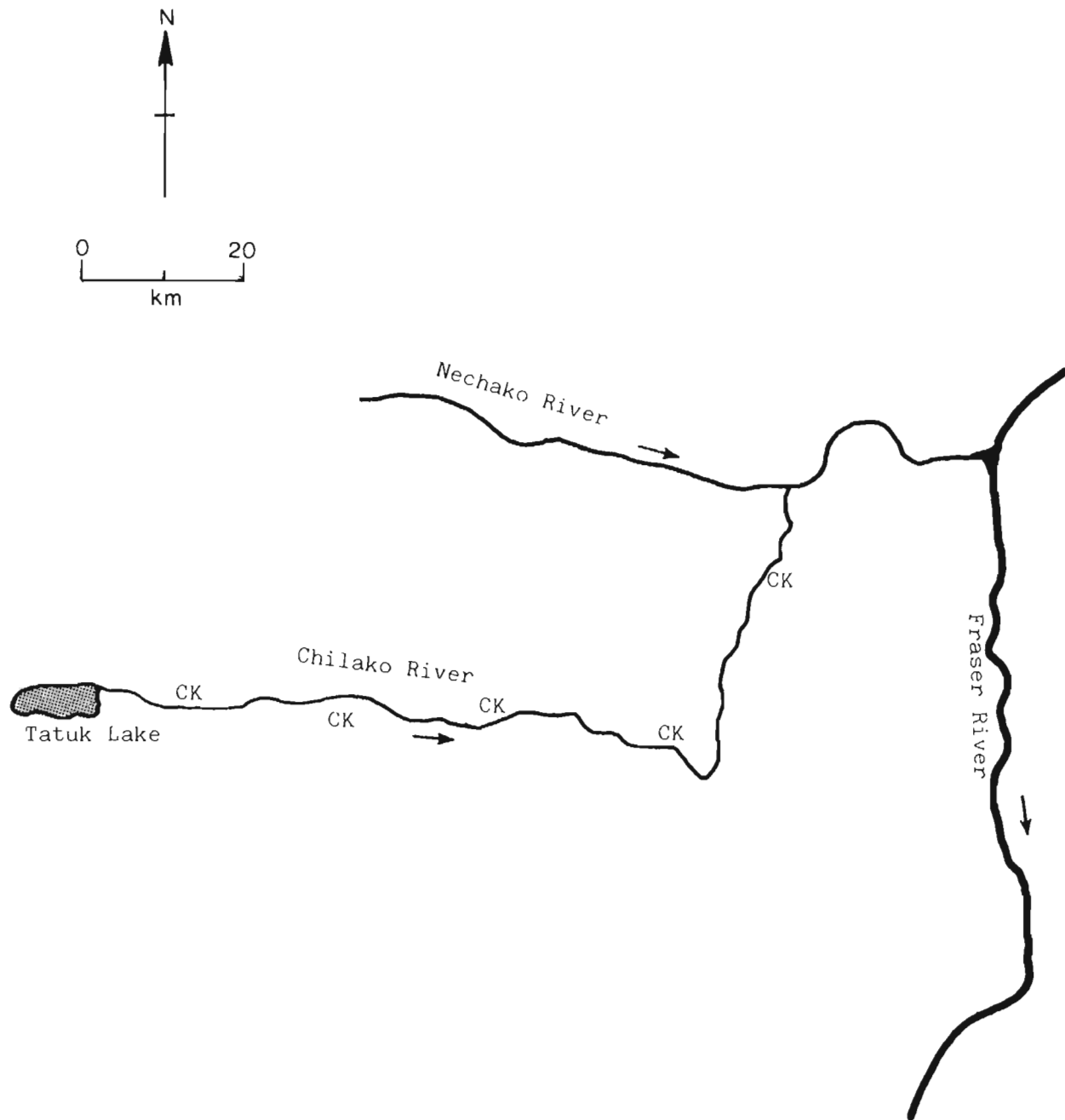
SPAWNING DISTRIBUTION

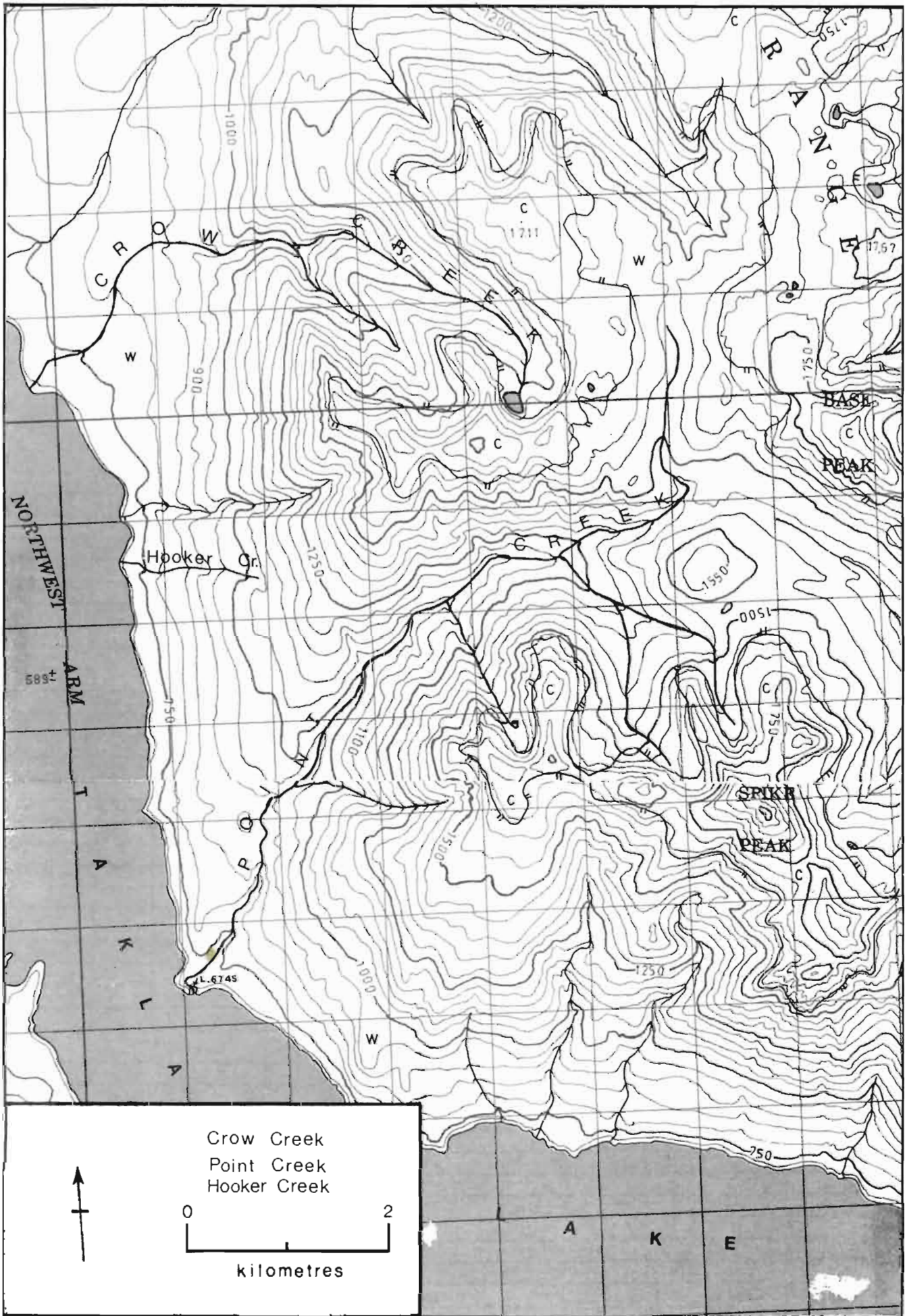
SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	- mainly upper portion
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS - From 1928 to 1934, chinook noted were of red variety only.
- Farmland along most of its length.
- Accessible by aircraft only.
- Water levels and temperatures are good.
- Slow and winding stream in its lower reaches with few good spawning areas.
- 1961. A large sawmill in operation near Dahl Creek.

Sketch of
Chilako River, 1967





NAME OF STREAM _____ (Crow Creek)

CONSERVATION DISTRICT 1 SUBDISTRICT Prince George

LOCATION OF MOUTH Flows W. into Northwest Arm, Takla L., 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 _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- This stream has excellent spawning grounds.
- Some erosion and silting near mouth.
- 1972. The mouth of this creek was changed by some 150 feet away from its original location due to very high water conditions in Takla Lake in mid-June that caused a heavy deposition of gravel.
- 1978. Some channelization was done at the mouth of this creek in order to make it stable.

ESCAPEMENT RECORD FOR

(Crow Creek)

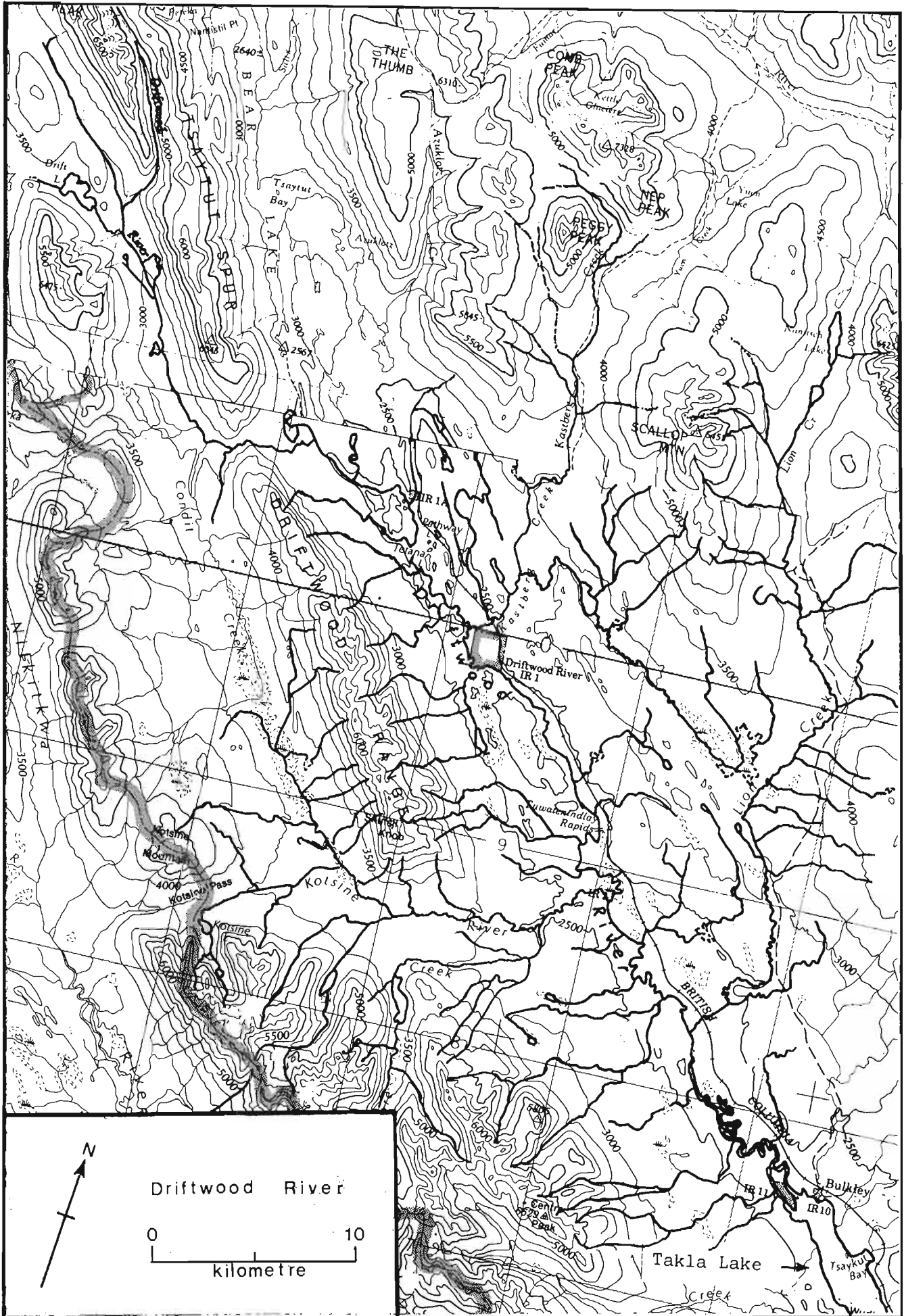
YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52	75					
53	750					
54						
55						
56						
57	1500					
58	N/O					
59	N/O					
60	147					
61	750					
62	200					
63	N/O					
64	25					
65	400					
66	200					
67	25					
68	N/O					
69	750					
70	400					
71	400					
72	14*					
73	3500					
74	750					
75	200					
76	N/O					
77	750					
78	400					
79	200					
80						
81						
82						
83						
84						
85						

TIMING:

ARRIVE	L. JULY					
START						
PEAK	E. AUG					
END						

REMARKS

* 100% of this run was composed of jacks.



NAME OF STREAM DRIFTWOOD RIVER
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows SE. into Takla L., Cassiar Dist.
 POSITION 55 126 NE.
 LENGTH 80.5 km WIDTH _____ m DRAINAGE 1870 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
CHINOOK	- throughout
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

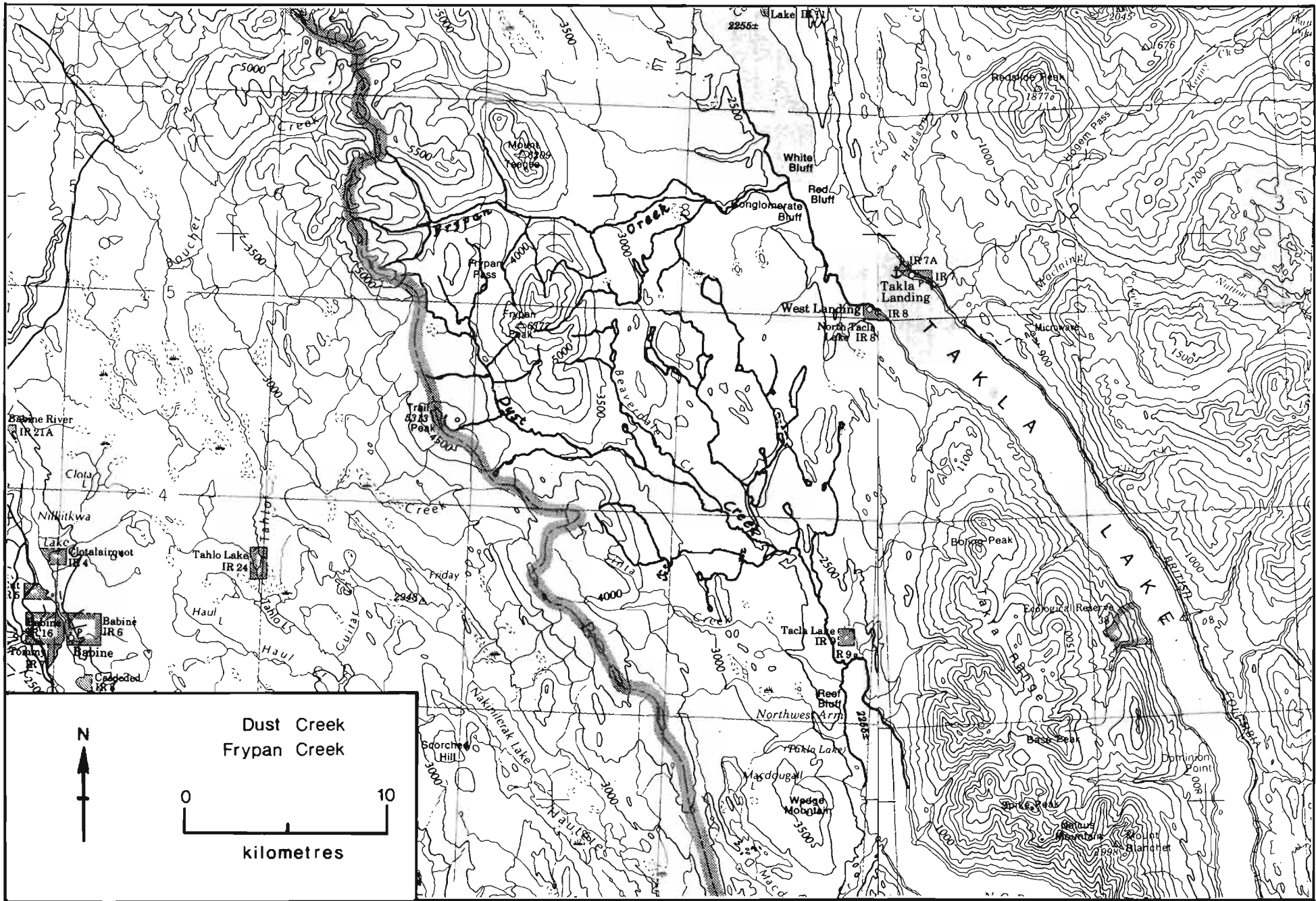
POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- 1961. Low flow situations in creeks flowing into Takla Lake diverted spawners from those creeks into Driftwood River, which had a sufficient flow of cool water
- 1977. 30% of the females did not spawn out completely. This year's run is only 40% compared to the brood year (1973). The biggest loss is noted for the Kotsine River from 34,000 in 1973 to 500 in 1977.
- 1978. The spawning area below Kotsine River was only 50% effective. The spawning area from upstream Tetana Lake was very effective.
- This stream is accessible by canoe only. Location is at extreme Northwest end of Takla Lake.
- This is a large stream with good spawning gravel beds estimated at being capable of accomodating up to a million spawners.

GENERAL REMARKS (cont'd.) - Driftwood River

- There are two indian reservations located on the system. One is at the mouth of the river on the left bank and the other is also on the left bank 32 km. upstream.
- There is extensive logging on the west side valley of the Kotsine River.
- Tributaries to Driftwood River are Kotsine River, Kastberg Creek, Porter Creek, Lion Creek, Blackwater and Main River.



NAME OF STREAM DUST CREEK
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows SE. into Northwest Arm, Takla L., 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 _____

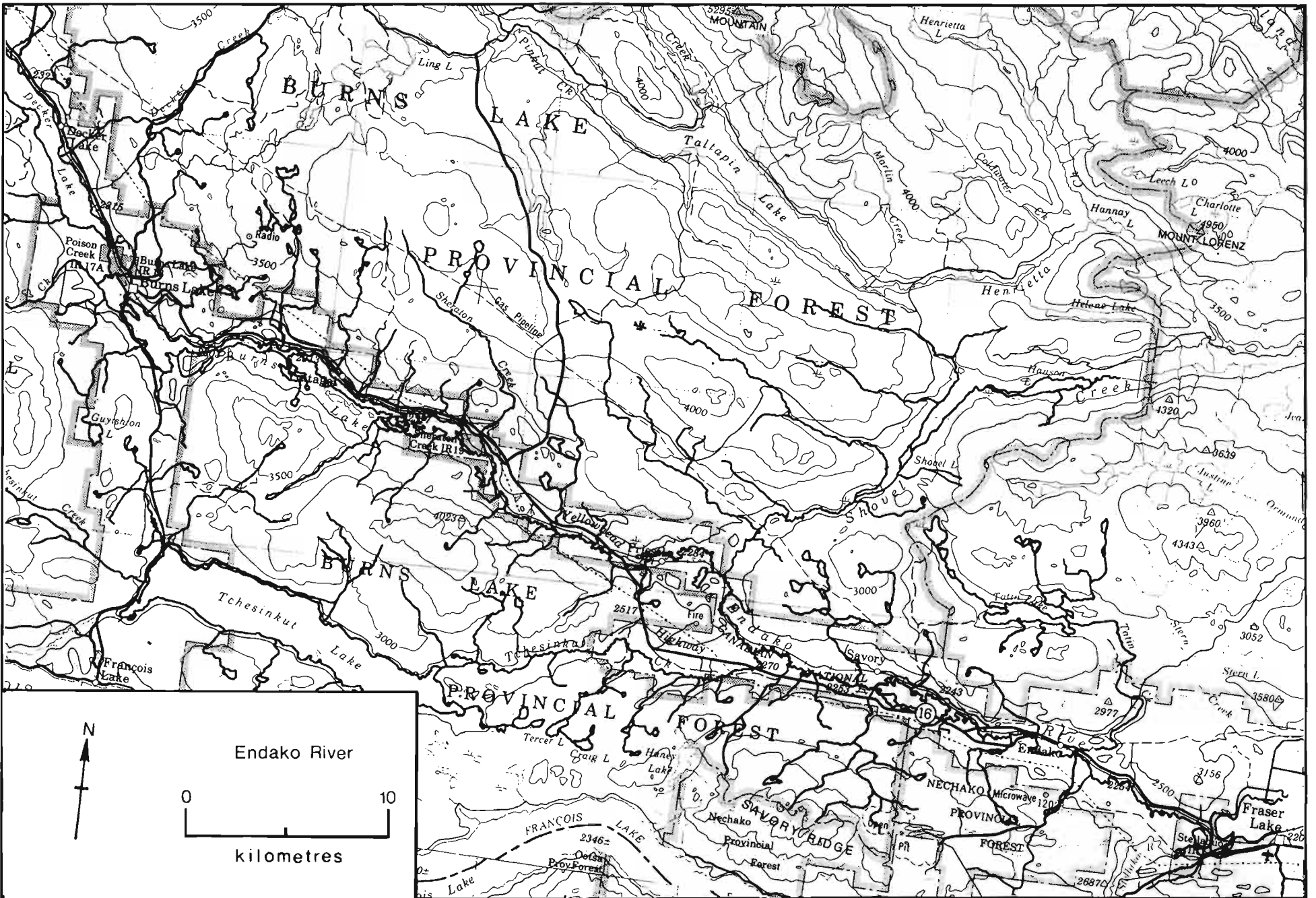
SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- This stream has a potential of accomodating several thousand spawning sockeye annually.
 - High water level on the Fraser River delayed the arrival of sockeye in 1972 and 1974 to 1977 inclusively.
 - 1978. Spawning was considered to be only 60% effective.
- _____



NAME OF STREAM ENDAKO RIVER
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows SE. into Stellako R., Rge. 5, Coast Dist.
 POSITION 54 124 SW.
 LENGTH 65 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 _____

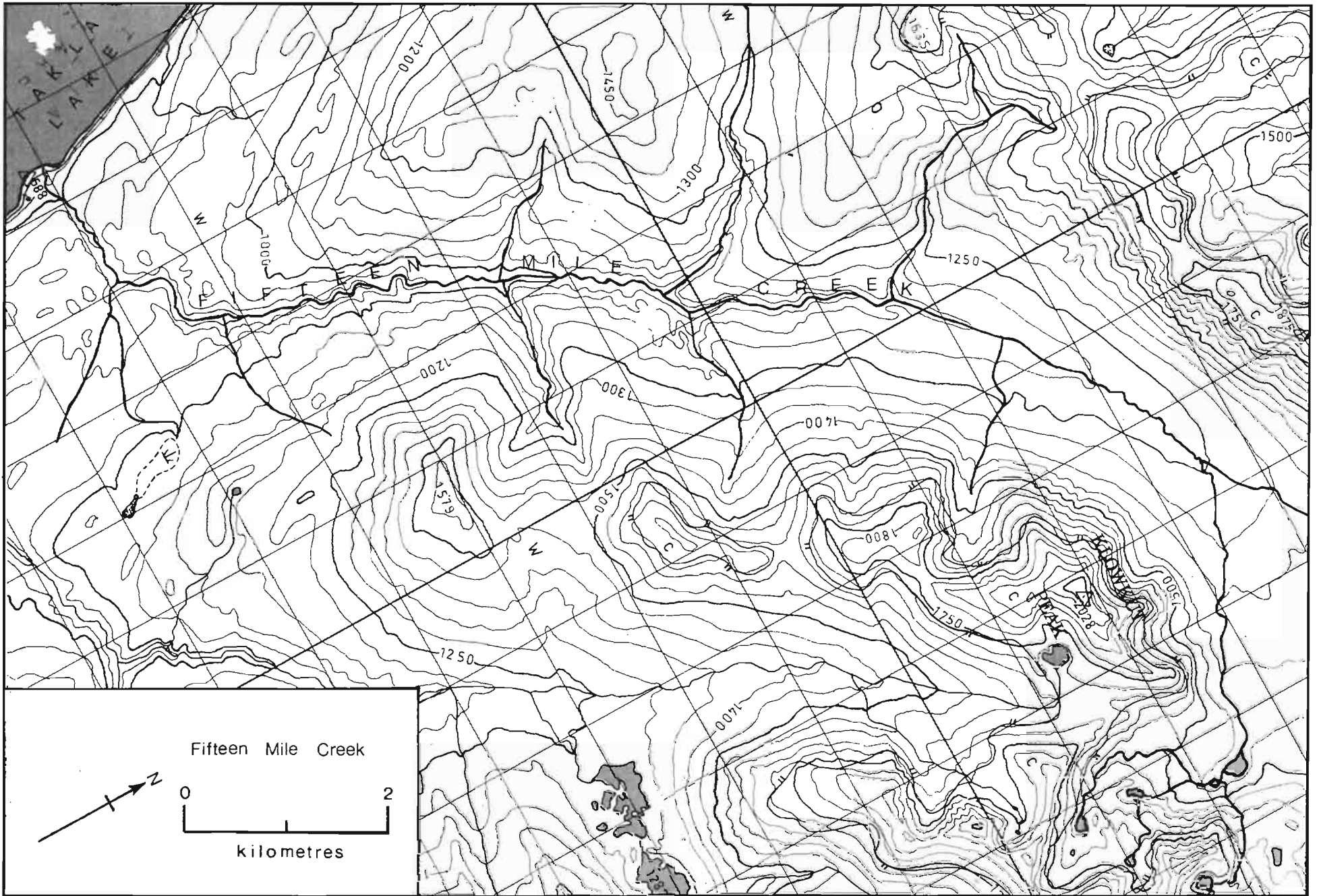
SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- throughout; mainly 1.6 km. below Shovel Creek
CHINOOK	- throughout; mainly 1.6 km. below Shovel Creek
COHO	_____
CHUM	_____
PINK (ODD YEAR)	_____
PINK (EVEN YEAR)	_____
STEELHEAD	_____

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- Slow, sluggish stream with few good spawning areas.
 - 1961. Water very low and very warm.
 - 1963. Only 40% spawning success.
 - 1970. Condemned highway bridge at Savory on the East River was burned on August 5, and channel blown through debris.
 - 1977. No sockeye for three cycles now.
 Many small log jams piled up against bridge at Hwy. 16 and Endako in June caused by high water. Dept. of Highways crew pulled all log debris materials.



NAME OF STREAM _____ (Fifteen Mile Creek)
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows SW. into Takla L., Cassiar Dist.
 _____ POSITION 55 125 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 _____

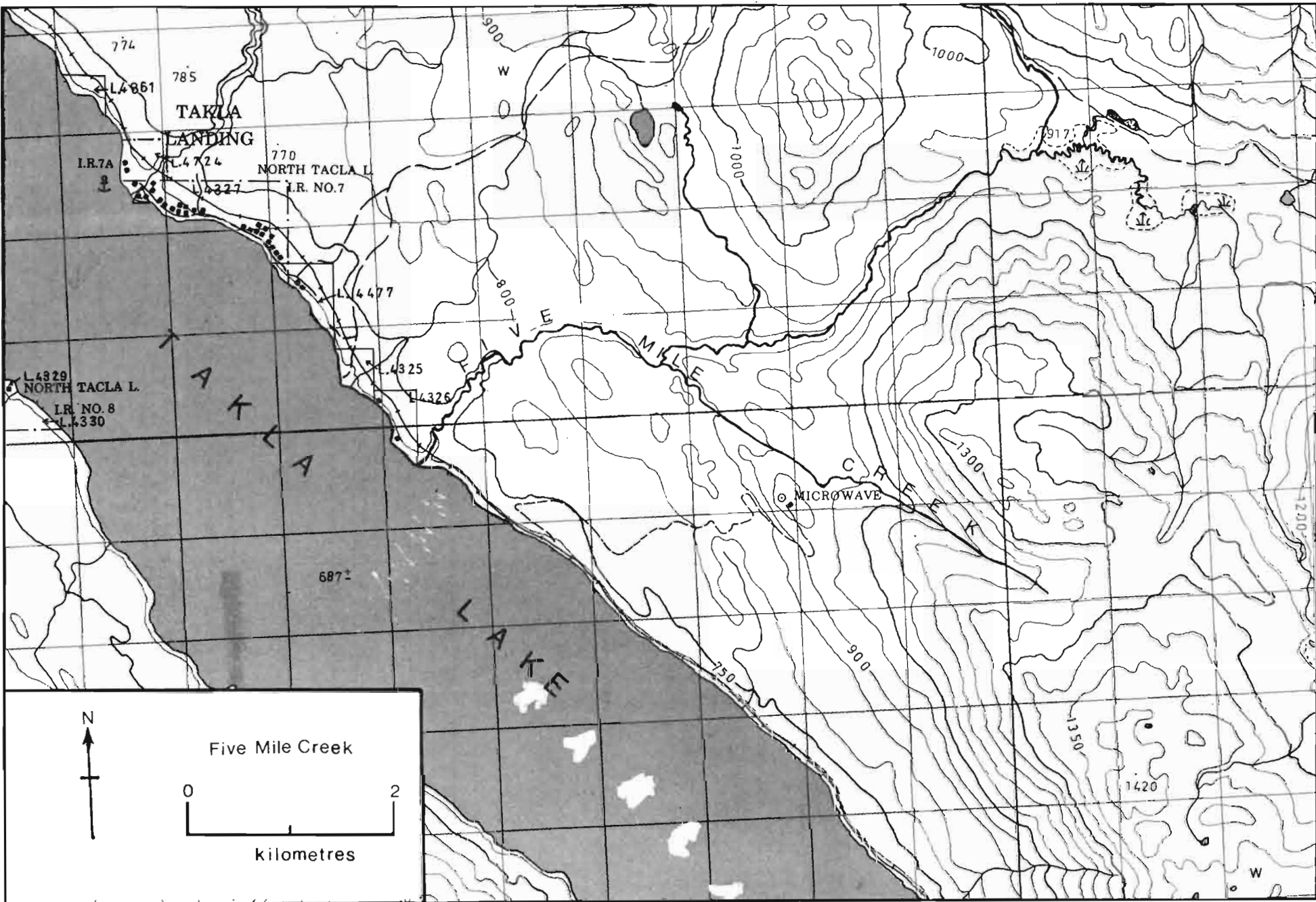
SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- Very good water temperatures.
 - 1972. B.C.R. completed a creosoted glu-lam bridge over this creek in October.



NAME OF STREAM _____ (Five Mile Creek)
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows W. into Takla L., Cassiar Dist.
 _____ POSITION 55 125 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 _____

SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- High water level in the Fraser River delayed the arrival of sockeye causing the females not to spawn out completely in 1975 and 1976.
- 1961. Low water made this stream undesirable to many sockeye.
- 1972. B.C.R. completed rail bridge in October.

ESCAPEMENT RECORD FOR

(Five Mile Creek)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49	750					
50	75					
51						
52	25					
53	3500					
54	25					
55	25					
56	25					
57	3500					
58	200					
59	N/O					
60	N/O					
61	730					
62	25					
63	N/O					
64	N/O					
65	25					
66	N/O					
67	N/O					
68	N/O					
69	750					
70	75					
71	N/O					
72	2					
73	3500					
74	400					
75	75					
76	25					
77	750					
78	121					
79	N/O					
80						
81						
82						
83						
84						
85						

TIMING:

ARRIVE	E. AUG					
START						
PEAK	E. AUG					
END						

REMARKS

FLEMING CREEK - for topographical map refer to Middle River,
page 123.

NAME OF STREAM FLEMING CREEK (Ferrier Creek)
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows E. into Trembleur L., Rge. 5, Coast Dist.
 POSITION 54 125 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 _____

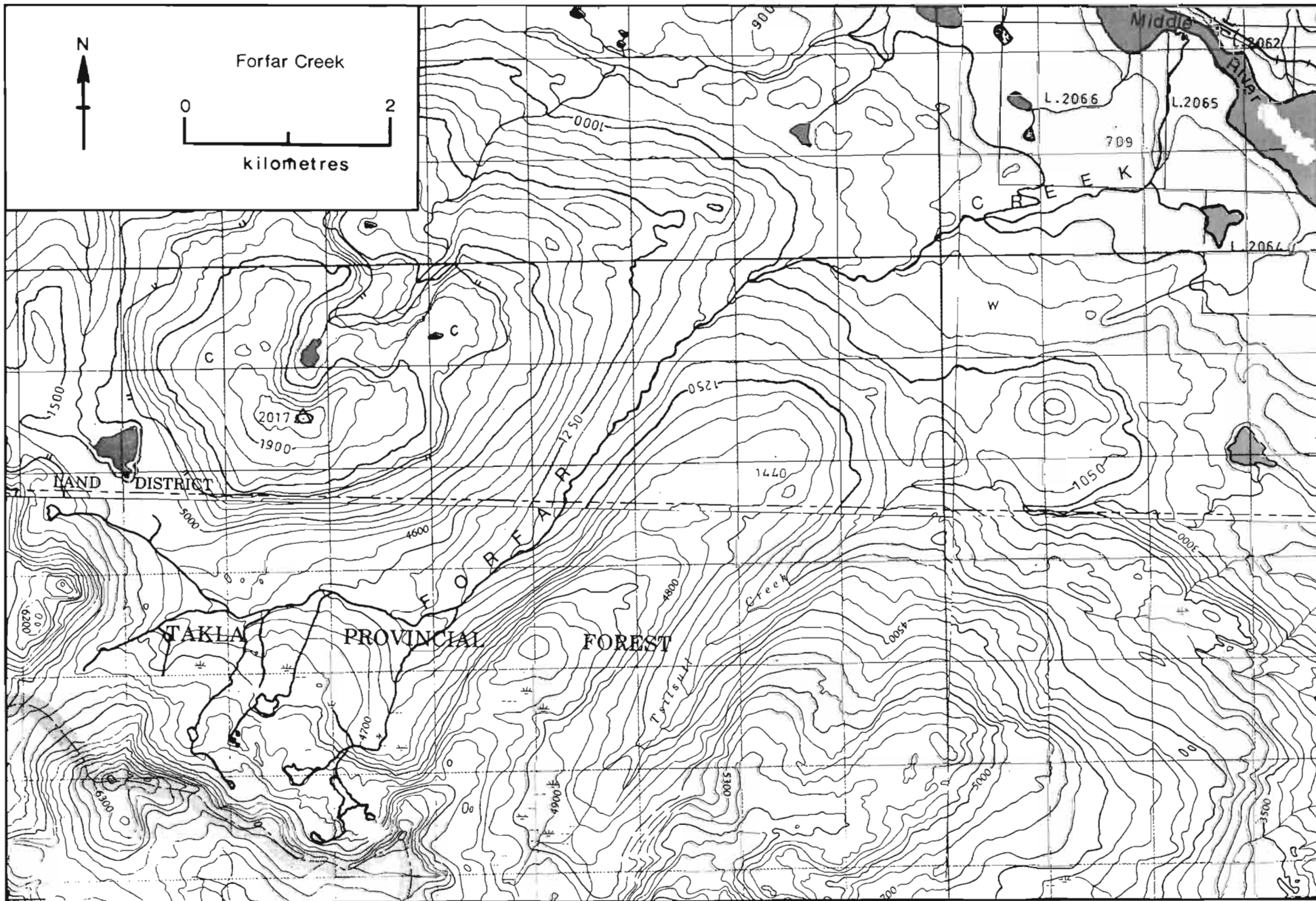
SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- Cycle year spawning stream only.
- 1975. Good water flow and temperature made this stream attractive to fish bound for Takla Lake streams.
- 1977. Only 50% of the females spawned out successfully due to high water temperature.
- 1979. This is a direct result of the stray migrants to this stream in 1975.



NAME OF STREAM _____ (Forfar Creek)
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows NE. into Middle R., 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 _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

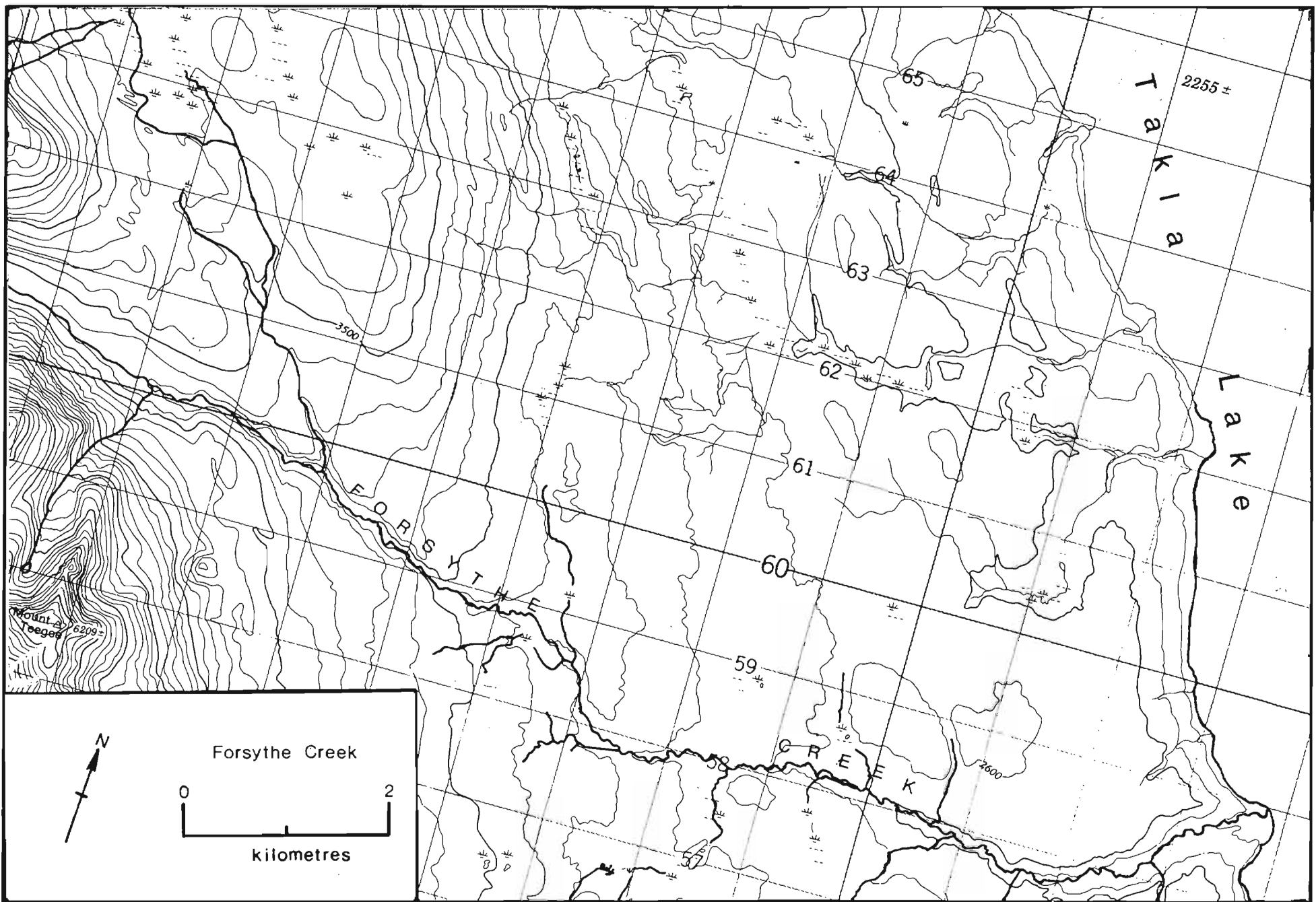
SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- This stream was first discovered in 1930.
 - 1972. Very high water in mid-June caused bank erosion but did not do much damage to the stream in general.



NAME OF STREAM _____ (Forsythe Creek)
 CONSERVATION DISTRICT _____ 1 _____ SUBDISTRICT _____ Prince George
 LOCATION OF MOUTH _____ Flows E. into Takla L., Cassiar Dist.
 _____ POSITION _____ 55 126 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) _____ 14.5°C (65/08/07)

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

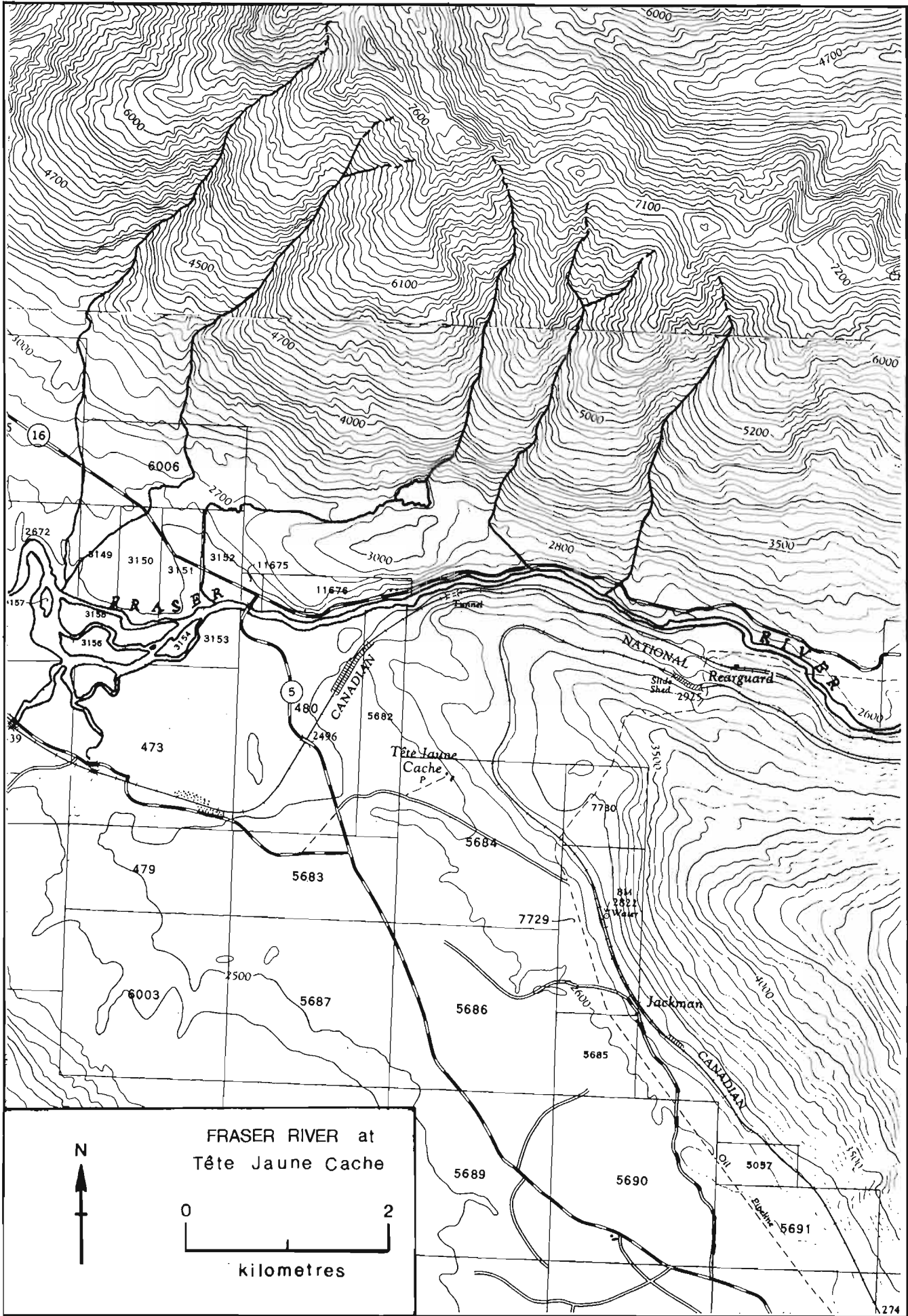
SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- 1974. Three log jams in the lower end were blasted in July. The upper jam was causing the river to go into a new channel.
 - This stream only carries sockeye two years out of four.



NAME OF STREAM FRASER RIVER (at Tête Jaune Cache)
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows NW. from Rocky Mtns., S. from Prince George and W. from Hope, into Strait of Georgia, New Westminster Dist. POSITION 49 123 SE.
 LENGTH 4.5 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 247,188 m² SPAWNING AREA 185,391 m²

DISCHARGE (m³/s) _____TEMPERATURE (°C) 14°C (73/08/21)

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

- Rearguard Falls, at 5 km. above Tête Jaune Cache, is passable with low water levels.

SPAWNING DISTRIBUTION

SPECIES

SECTION OF STREAM USED

SOCKEYE	
CHINOOK	- around islands below old highway bridge; around the outlet of Swift Current Creek
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

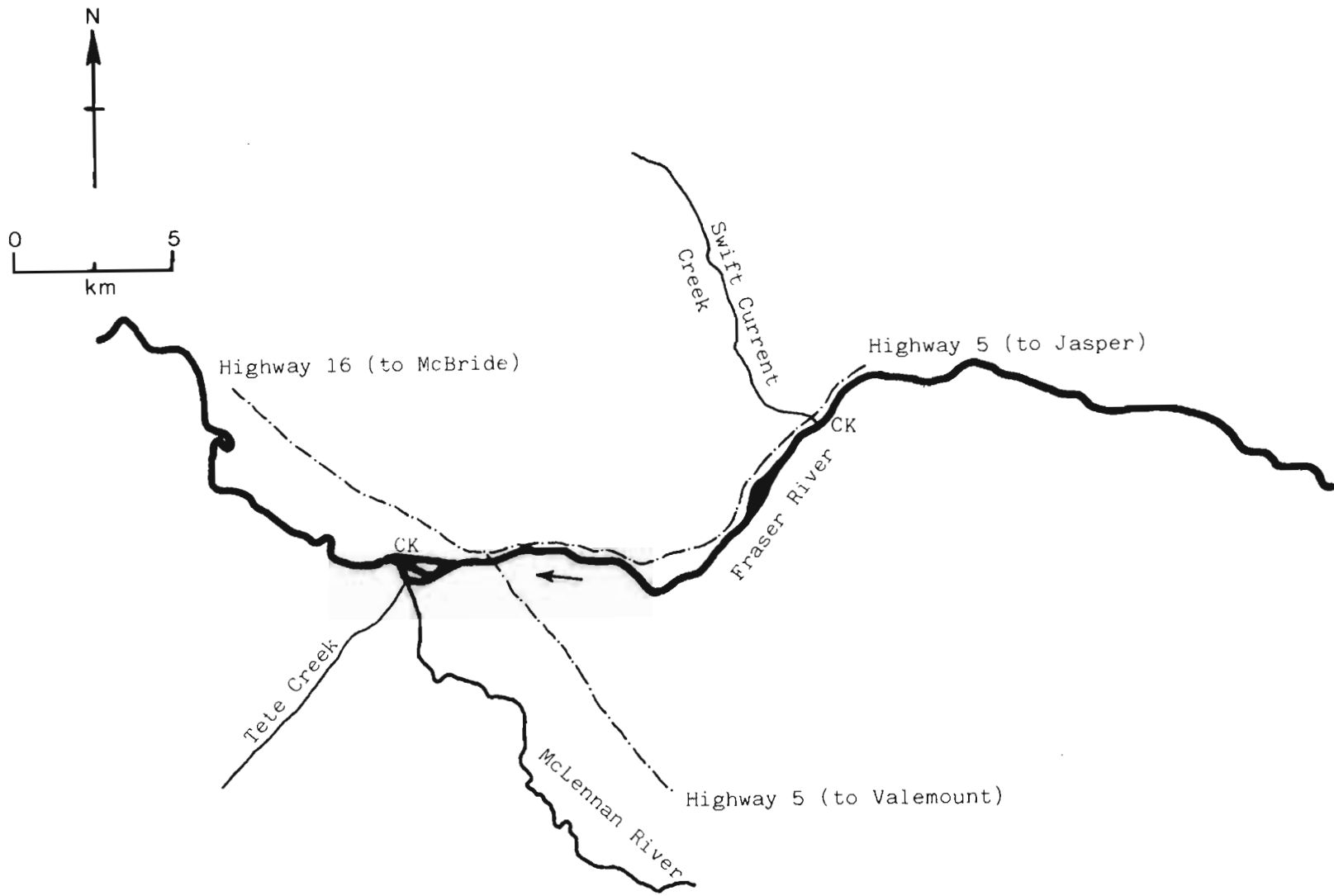
POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

- Spawning potential could be increased by the installation of a fishway at Rearguard Falls providing access to spawning areas in the creeks above Moose Lake.

GENERAL REMARKS

- Considerable glacial silt present in this watershed.
 - Water is very turbid in the summer.
 - Very heavy sports fishing and some illegal fishing necessitated a closure above McBride.
 - The river divides into three channels at Tête Jaune.
 - 1965. Trans Mountain Pipeline broke a pipe in May that allowed several hundred barrels of oil to flow into Fraser, above Tête Jaune. What effect this had on juvenile salmon residents remain unseen.
 - 1968. A kilometer of spawning area was lost as a result of a new channel created on Swift Creek.

Sketch of
Fraser River at Tête Jaune
1974



ESCAPEMENT RECORD FOR FRASER RIVER (at Tête Jaune Cache)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48		UNK*				
49		UNK*				
50		UNK				
51		7500				
52		7000				
53		9000				
54		6500				
55		4500				
56		4500				
57		5500				
58		5500				
59		1500				
60		475				
61		200*				
62		1400*				
63		1500*				
64		1500*				
65		400				
66		1000*				
67		750				
68		1350				
69		1300				
70		1800				
71		1200				
72		1800				
73		1000				
74		1200				
75		1500				
76		1500				
77		2000				
78		3500				
79		1800				
80						
81						
82						
83						
84						
85						

TIMING:

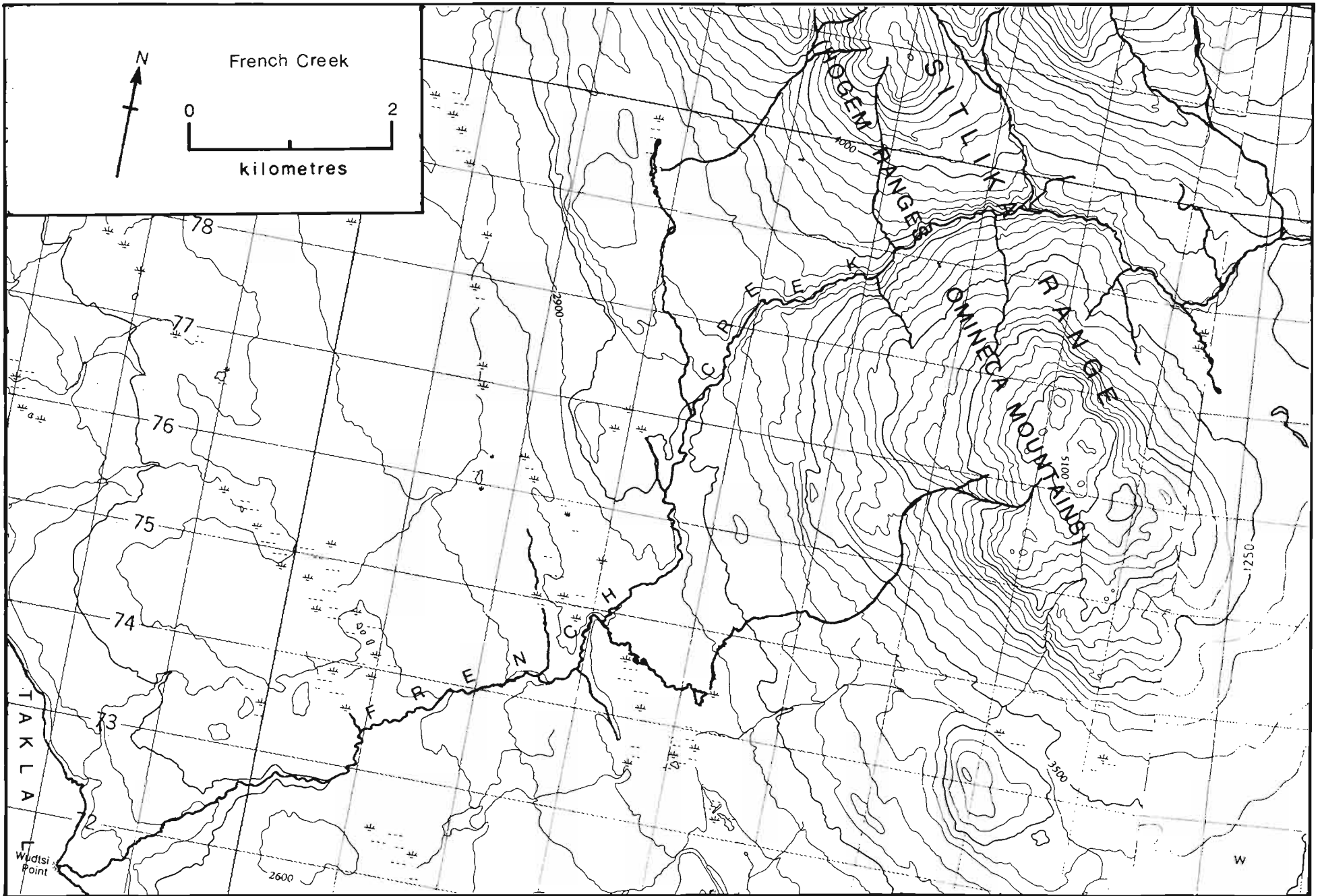
ARRIVE		E. AUG				
START		M. AUG				
PEAK		E. SEPT				
END		M. SEPT				

REMARKS

* Estimate includes escapement to Beaver Creek, King Creek, Horse Creek and Goat River.

- 1950. CNR strike hampered inspection of river.

- Separate escapement for Nevin and Horsey Creeks since 1971 and Goat River since 1967.



NAME OF STREAM _____ (French Creek)

CONSERVATION DISTRICT 1 SUBDISTRICT Prince George

LOCATION OF MOUTH Flows W. into N. end of Takla L., Cassiar Dist.

POSITION 55 126 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	- throughout
CHINOOK	
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- This stream carries sockeye on cycle years only.
- Stream could be subjected to "frazil" ice.
- 1972. B.C.R. bridge completed in October.
- 1977. 100% of the females did not spawn out completely.

FRYPAN CREEK - for topographical map refer to Dust Creek,
page 33.

NAME OF STREAM FRYPAN CREEK

CONSERVATION DISTRICT 1 SUBDISTRICT Prince George

LOCATION OF MOUTH Flows E. into Takla L., 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	- throughout
CHINOOK	
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- Some evidence of erosion and silting at 0.8 km. below the canyon.
- 1972. The above normal water run-off in June caused some changes to the lower reaches of this stream.

ESCAPEMENT RECORD FOR FRYPAN CREEK

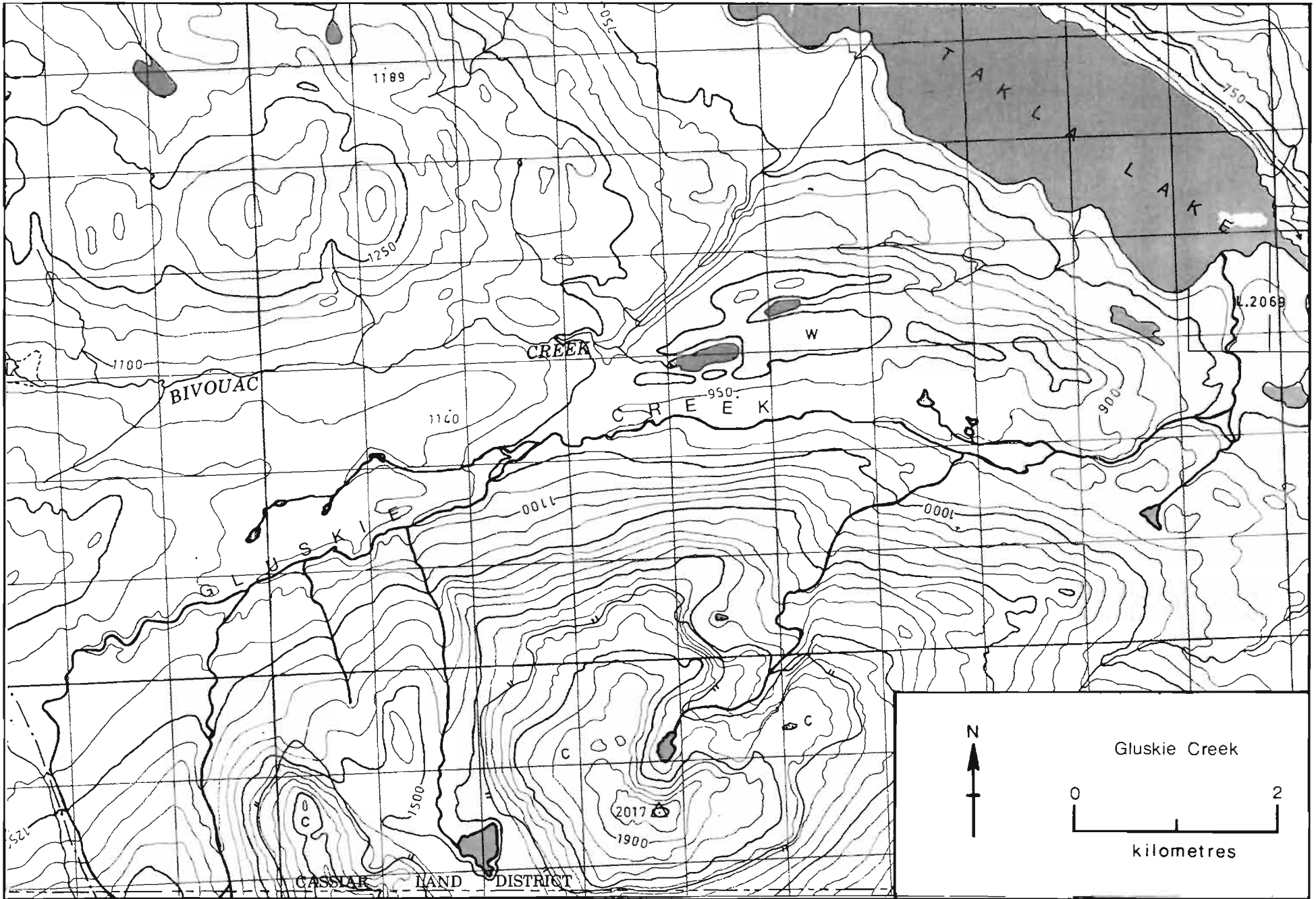
YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49	750					
50	25					
51	25					
52	75					
53	3500					
54	200					
55						
56	75					
57	3500					
58	75					
59	25					
60	17					
61	10600					
62	200					
63	25					
64	N/O					
65	200					
66	75					
67	25					
68	N/O					
69	3500					
70	200					
71	200					
72	4*					
73	7500					
74	400					
75	75					
76	25					
77	3500					
78	406					
79	200					
80						
81						
82						
83						
84						
85						

TIMING:

ARRIVE	E. AUG					
START						
PEAK	E. AUG					
END						

REMARKS

* 100% of this run was composed of jacks.



NAME OF STREAM _____ (Gluskie Creek)
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows NE. into Takla L., 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 _____ m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) 14°C (65/08/08)

BARRIERS OR POINTS OF DIFFICULT ASCENT _____
 - Impassable falls at 3 km.

SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- Beaver problems were solved by extensive beaver trapping by indians.
- Stream appears to be more stable after the removal of log jams over the last three years (1970-1972).
- 1972. The very high run-off conditions in mid-June caused some movement of gravel especially in the lower portion of the stream.
- 1978. Spawning was only 60% effective.

NAME OF STREAM GOAT RIVER
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows NE. into Fraser R., between Goat River sta. and Rider,
Cariboo Dist. POSITION 53 120 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) 9.4°C (73/08/20)

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS _____

ESCAPEMENT RECORD FOR GOAT RIVER

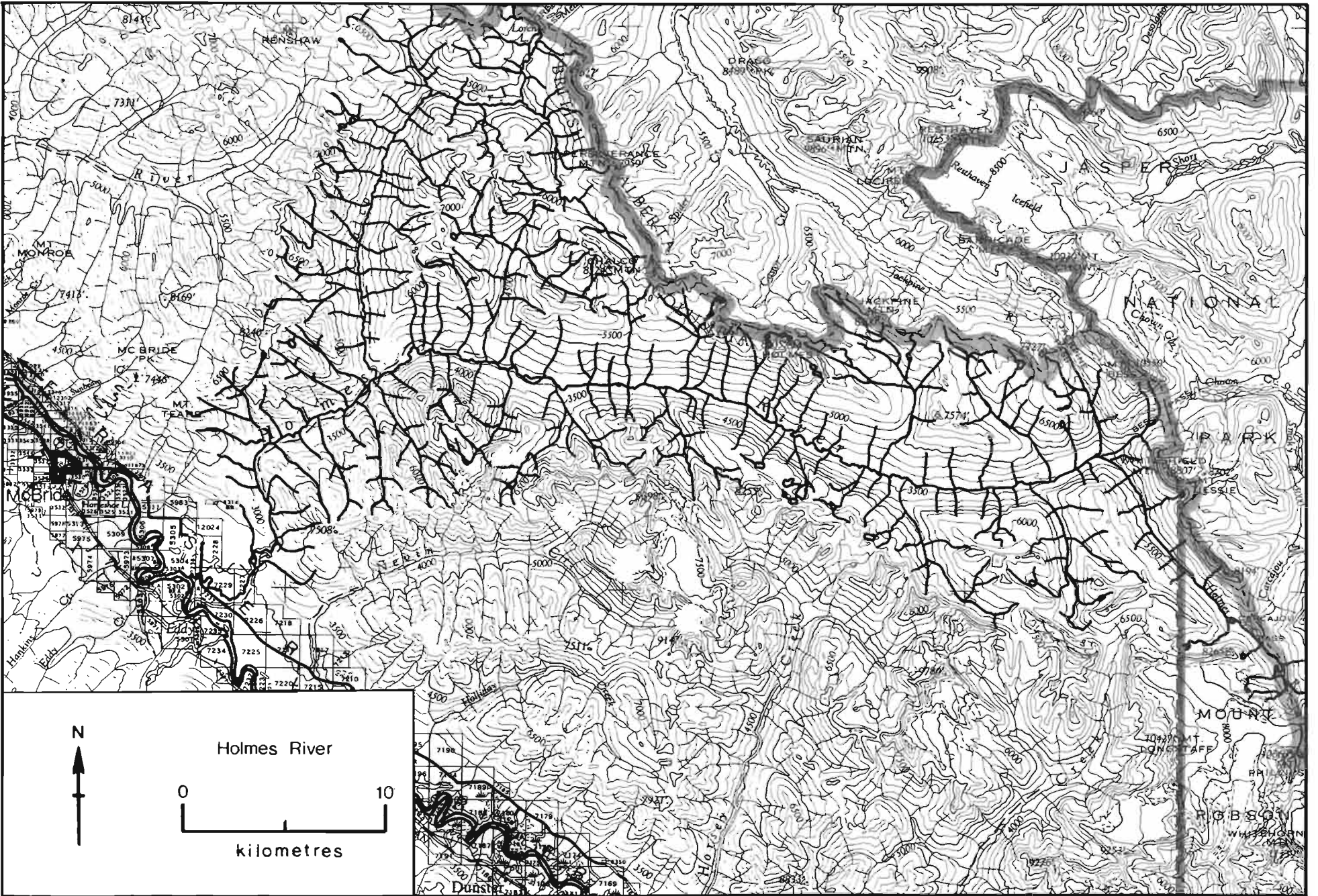
YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65						
66						
67		25				
68		25				
69		25				
70		25				
71		UNK				
72		25				
73		16				
74		75				
75		25				
76		25				
77		20				
78		70				
79		15				
80						
81						
82						
83						
84						
85						

TIMING

ARRIVE		E. AUG				
START		M. AUG				
PEAK		L. AUG				
END		E. SEPT				

REMARKS

- 1967 to 1972 estimate include escapements to Milk River and West Twin Creek.



NAME OF STREAM HOLMES RIVER (Beaver River)
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows SW. into Fraser R., SE. of McBride, Cariboo Dist.
 POSITION 53 120 SE.
 LENGTH 71.0 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 887,670 m² SPAWNING AREA 131,890 m²

DISCHARGE (m³/s) _____TEMPERATURE (°C) 13.5^oC (72/08/22)

BARRIERS OR POINTS OF DIFFICULT ASCENT

- Passable 2 m. falls at 5.0 km. and two 1 m. falls at 7.0 km.

SPAWNING DISTRIBUTION

SPECIES SECTION OF STREAM USED

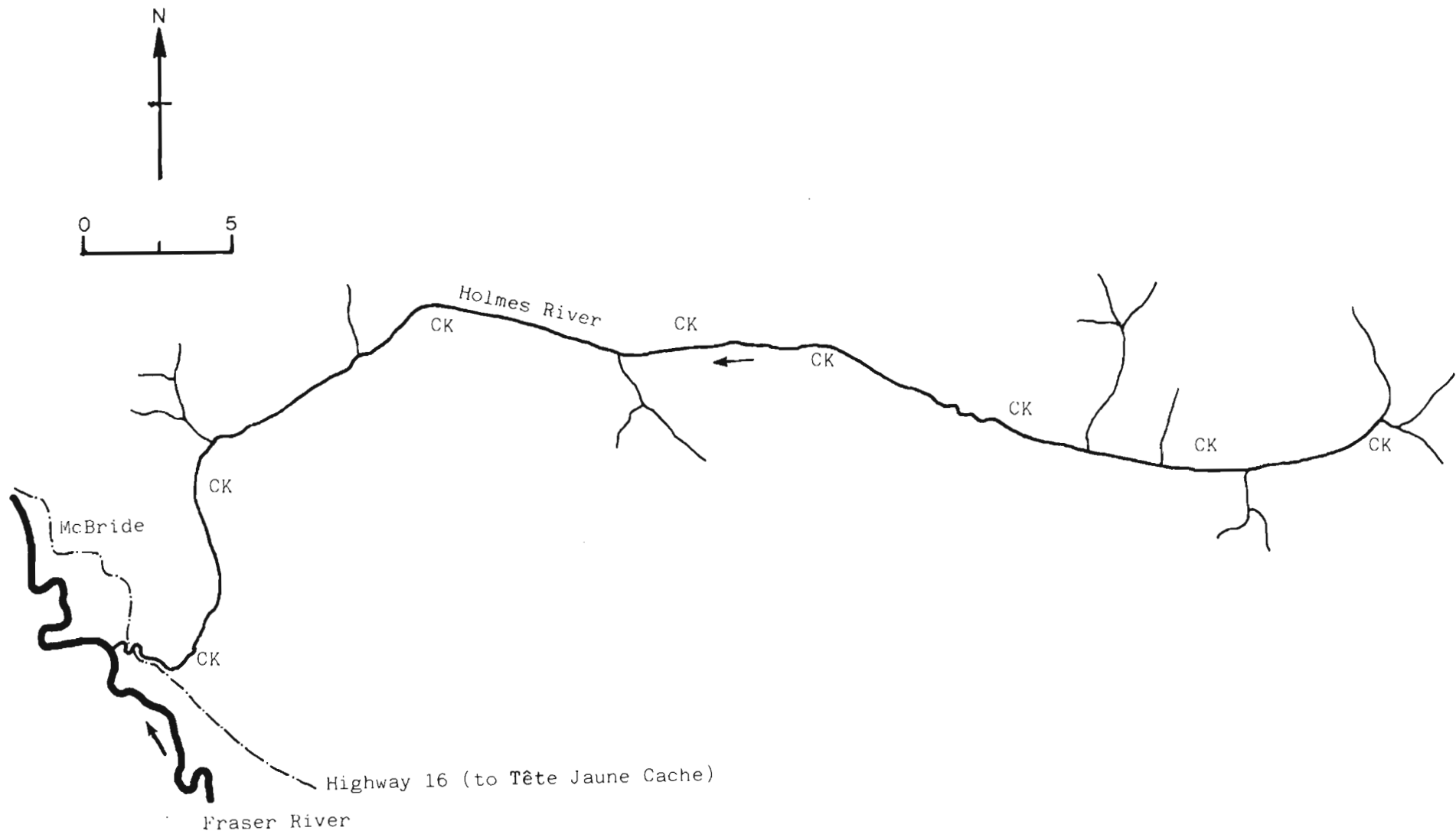
SOCKEYE	
CHINOOK	- throughout; heaviest at 4 km. upstream from Hwy. 16 bridge
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- The watershed's forest cover was removed by forest fire and logging resulting in extreme run-off flows and unstable conditions. Good gravel still available.
 - Upper portion is inaccessible by road.
 - Temporary bridge erected in 1971.
 - The streambed in the lower portion is composed of mud and sand; above the falls, the streambed is composed of large rock and boulders.
 - This stream is very susceptible to silting.

Sketch of
Holmes River, 1974



ESCAPEMENT RECORD FOR HOLMES 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		NO RECORDS PRIOR TO 1966					
66							
67		400 *					
68		400 *					
69		25 *					
70		75 *					
71		275					
72		200					
73		100					
74		750					
75		200					
76		75					
77		150					
78		675					
79		450					
80							
81							
82							
83							
84							
85							

TIMING:

ARRIVE		E. AUG				
START		M. AUG				
PEAK		L. AUG				
END		M. SEPT				

REMARKS

* Include escapements to Nevin and Horsey Creeks.

HOOKER CREEK - for topographical map refer to Crow Creek,
page 25.

NAME OF STREAM _____ (Hooker Creek)
 CONSERVATION DISTRICT 1 SUB-DISTRICT Prince George
 LOCATION OF MOUTH Between Point and Crow Crs., 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 _____ m²
 DISCHARGE (m³/s) _____
 TEMPERATURE (°C) _____
 BARRIERS OR POINTS OF DIFFICULT ASCENT _____

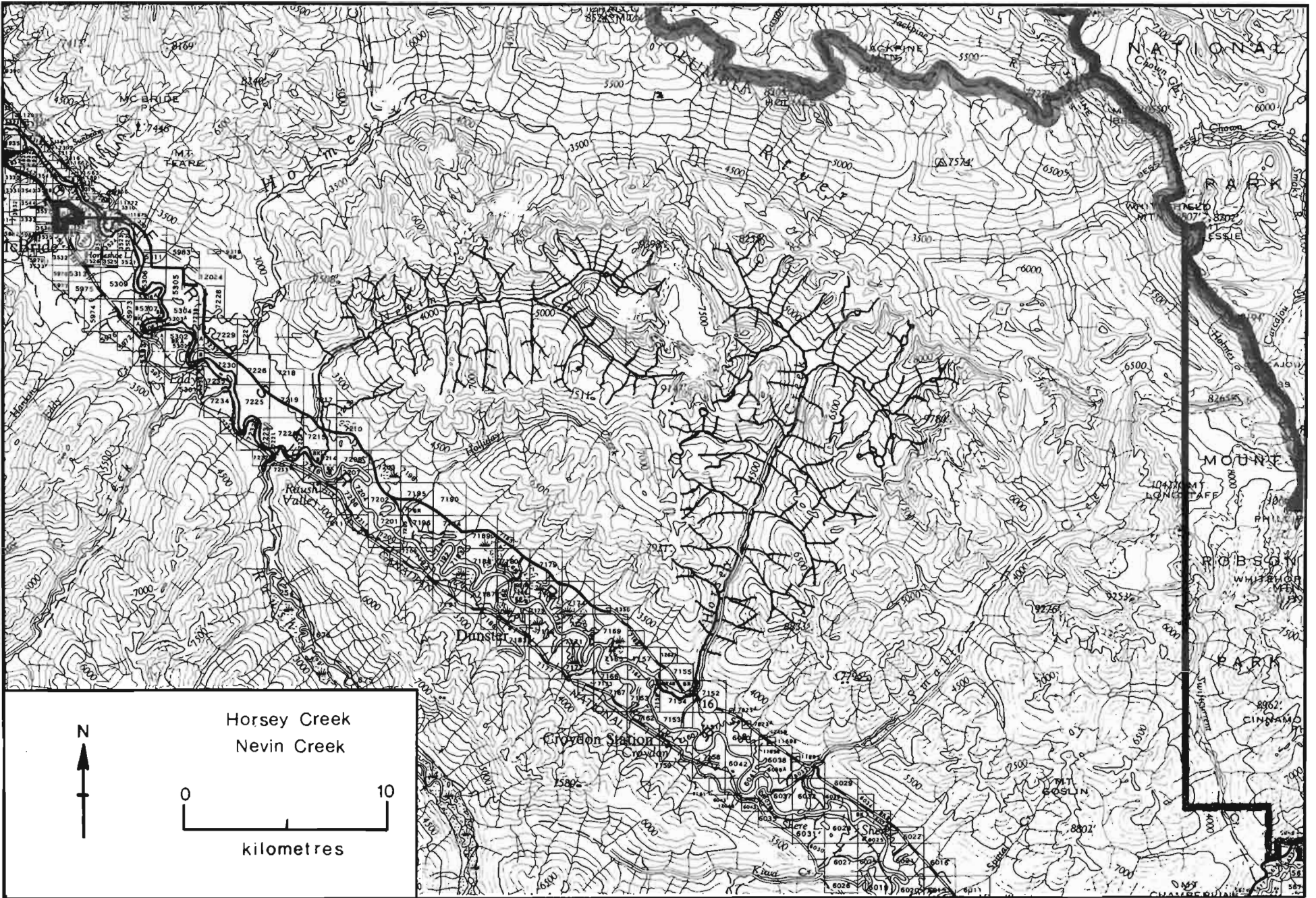
SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- Cycle year spawning stream.
 - Formerly "NO-Name" Creek.
 - 1973. Prior to the flood water conditions in June 1972, sockeye could not get into this creek. After the flood, much gravel and rock extended the fan at the mouth of the creek which provided access to the creek and limited spawning gravel.



NAME OF STREAM HORSEY CREEK (Horse Creek)
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows SW. into Fraser R., N. of Croydon, Cariboo Dist.
 POSITION 53 119 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	- to 1.8 km.
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- Glacial silt present at all times.
- 1973. A new diversion channel was built by the B. C. Highways to facilitate a new Hwy. 16 bridge.
- 1974. Work on new channel by Dept. of Highways appears to have increased velocity of stream and sluiced most of the spawning gravel.
- 1975. Heavy erosion and stream scouring throughout lower 2 km. Gravel in spawning area is 1-4 inches but packed in sediment. Above highway, boulders.

ESCAPEMENT RECORD FOR HORSEY CREEK (Horse Creek)

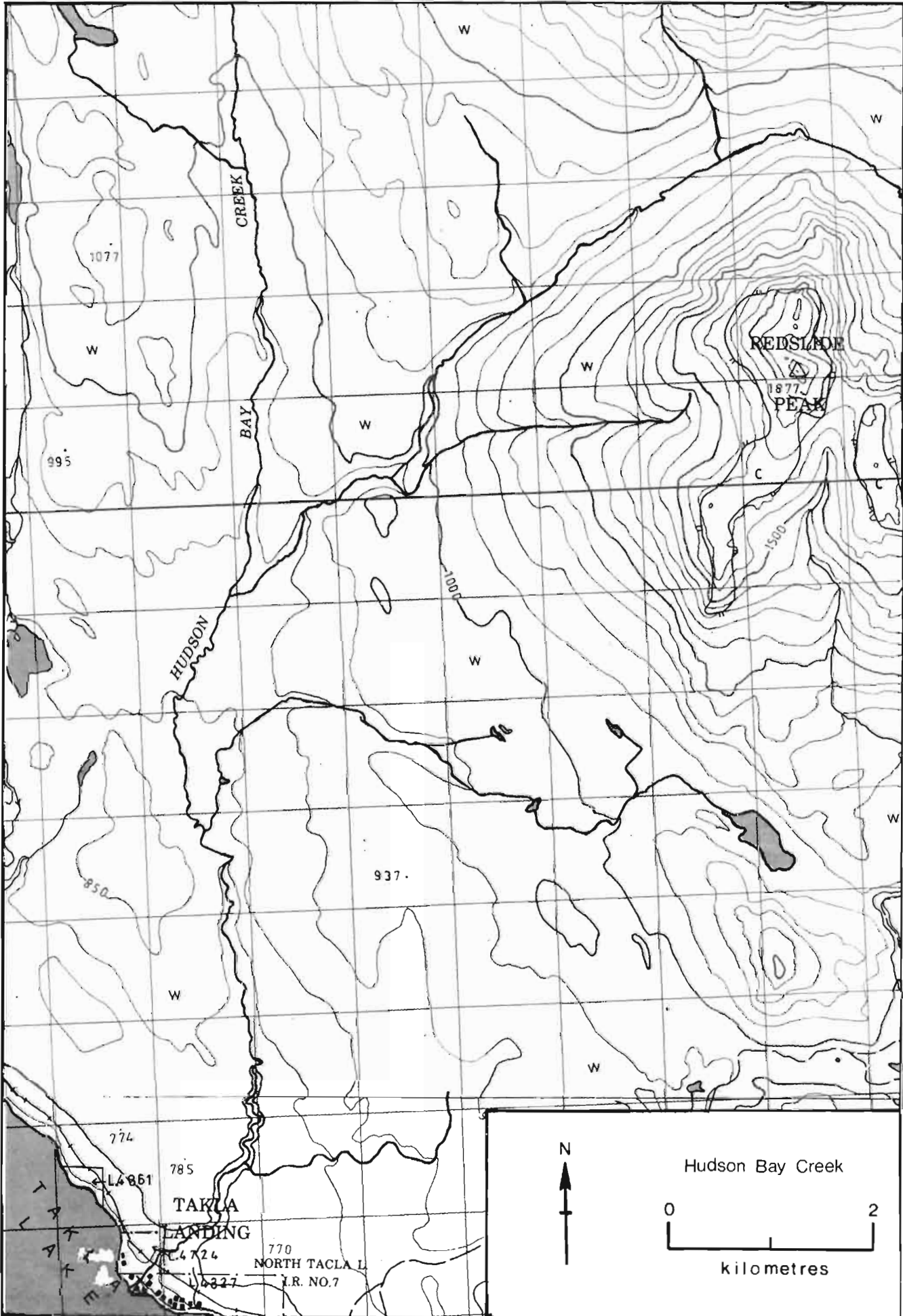
YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65						
66						
67						
68						
69						
70						
71		UNK				
72		25				
73		25				
74		25				
75		25				
76		25				
77		N/O				
78		40				
79		25				
80						
81						
82						
83						
84						
85						

TIMING

ARRIVE		E. AUG				
START		M. AUG				
PEAK		L. AUG				
END		E. SEPT				

REMARKS

- Escapement prior to 1967 included with Fraser River at Tête Jaune.
 - Escapement from 1967 to 1970 included with Holmes River.



NAME OF STREAM HUDSON BAY CREEK
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows S. into Takla L., Cassiar Dist.

POSITION 55 125 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	

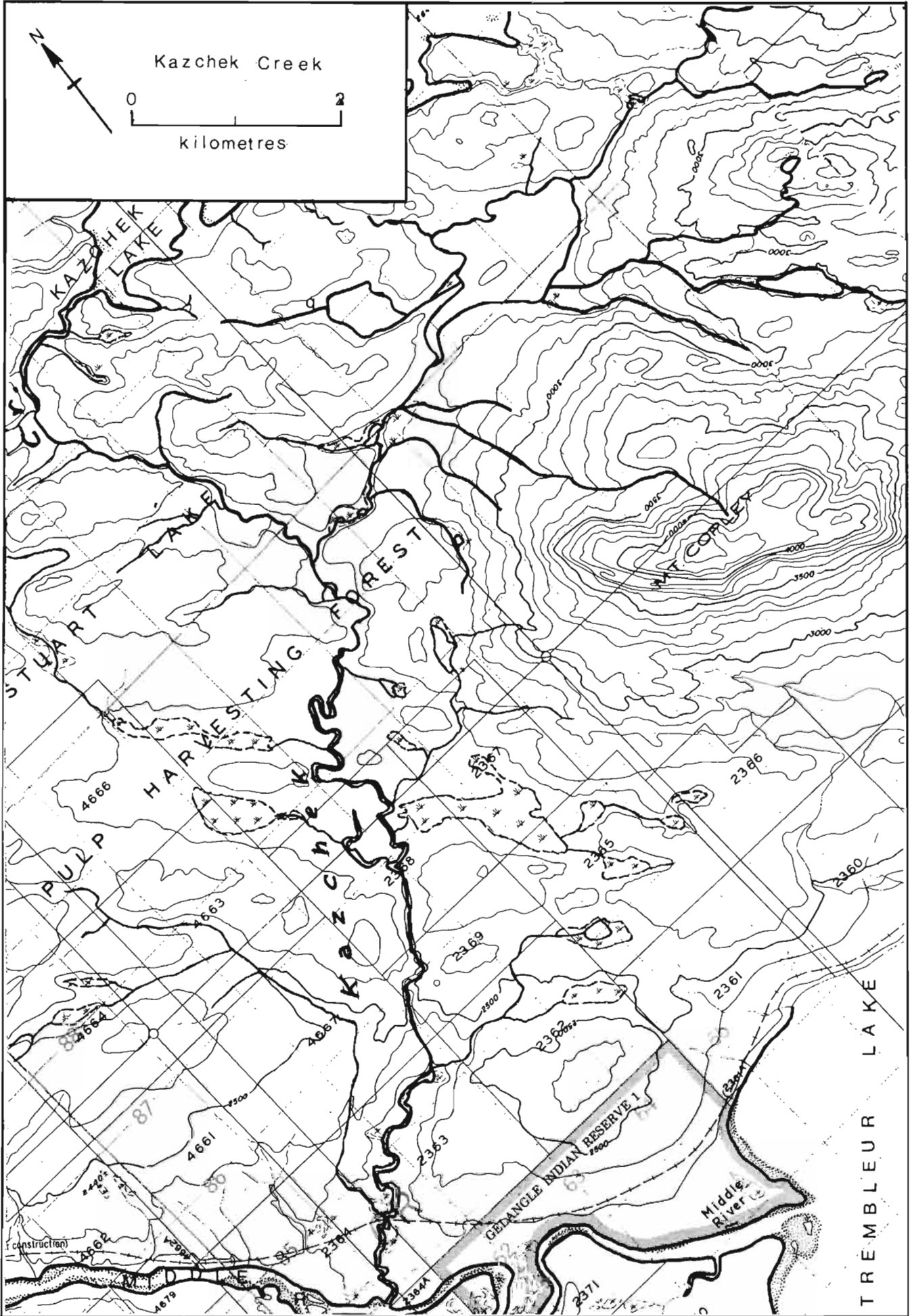
WETTED AREA _____ m² SPAWNING AREA _____ m²
 DISCHARGE (m³/s) _____
 TEMPERATURE (°C) _____
 BARRIERS OR POINTS OF DIFFICULT ASCENT _____

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
 - This stream is used only on cycle year spawning.
 - Water levels are too low for sockeye to enter this stream.
 - Stream runs through Takla Indian Reserve.
 - 1972. B.C.R. completed a rail bridge over this creek in November.



NAME OF STREAM KAZCHEK CREEK (Hoy Creek)
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows SW. into Middle R., N. of Trembleur L., Rge. 5,
Coast Dist. POSITION 54 125 NE.
 LENGTH _____ km WIDTH _____ m DRAINAGE 285 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 falls at 3.0 km.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- throughout; heavy just below the canyon
CHINOOK	- throughout; heavy just below the canyon
COHO	_____
CHUM	_____
PINK (ODD YEAR)	_____
PINK (EVEN YEAR)	_____
STEELHEAD	_____

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- This stream receives stray migrants from Middle River.
- 1963. Early run died off practically unspawned.
- 1970. New channel was finished in Aug. and the "loop" filled by the road-bed. Mid-West Construction Ltd. (Ginter) placed a log-cribbed center pier for a temporary crossing over this creek.
- 1972, '75, '76, '78, '79. Very large run of kokanee.
- This stream receives stray migrants from Middle River.

ESCAPEMENT RECORD FOR KAZCHEK CREEK (Hoy Creek)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48	N/0					
49	1500					
50	75					
51	200					
52	295*					
53	7500	75				
54	75	25				
55	25					
56	200					
57	15000	75				
58	200	25				
59	25	25				
60	N/0	N/0				
61	15670	25				
62	75					
63	400					
64	N/0					
65	3500					
66	200					
67	75					
68	25	25				
69	75	25				
70	70					
71	100					
72	75	25				
73	3500	25				
74	200	25				
75	475					
76	25	25				
77	750	25				
78	200	25				
79	275	25				
80						
81						
82						
83						
84						
85						

TIMING:

ARRIVE	L. AUG	E. SEPT				
START						
PEAK	M. SEPT	M. SEPT				
END						

REMARKS

The escapements for sockeye include two separate runs. Timing for the late run is as follows: Arrive: E. SEPT
 Start:
 Peak: M. SEPT
 End:

* Most of this run were jacks.

- 1961. This run composed of 65% female and 35% male.

KUZKWA RIVER - for topographical map refer to Tachie River,
page 219.

NAME OF STREAM KUZKWA RIVER
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows W. into Tachie R., between Tezzeron and Trembleur Ls.,
Rge. 5, Coast Dist. POSITION 54 124 NW.
 LENGTH 25.0 km WIDTH _____ m DRAINAGE 485 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) 11^oC (77/09/21 at 1200 hrs.), 10.8^oC (79/09/24)

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- throughout; mostly upper end
CHINOOK	- throughout; mostly upper end
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS - This stream has excellent spawning grounds..
- Sockeye run on brood year only.
- Banks in the lower reaches of the system are steep and are composed of clay and silt.
- Limited logging operations. Takla Logging Co. Ltd. constructed a logging road into the watershed as well as a bridge in 1978 across the river 20 km. upstream from its mouth.
- 1967. Large number of kokanee present.
- 1969. Any silting will affect the spawning grounds in the Tachie River. Special note should be taken when roadbed is laid to the bridge which will cross this creek.
- 1971. 32 m. Glulam bridge for P.G.E. was completed during summer and the tracks

GENERAL REMARKS (cont'd.) - KUZKWA RIVER

- laid.
- 1975. Increase in sockeye run due to fishermen's strike.

ESCAPEMENT RECORD FOR KUZKWA RIVER

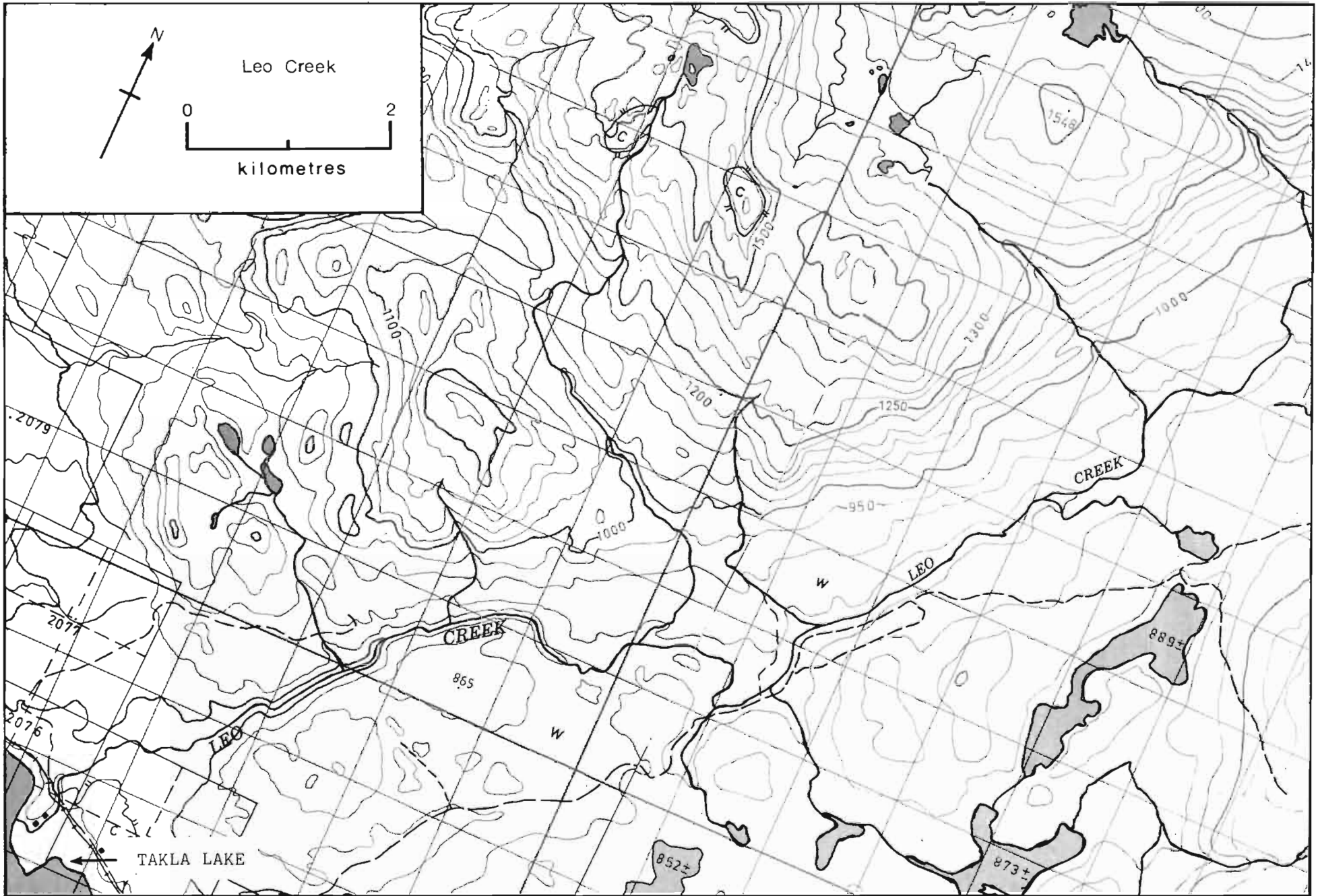
YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53	3500	75				
54						
55						
56						
57	35000	75				
58	N/O	25				
59	N/O	25				
60	N/O	N/O				
61	24500	75				
62	25	75				
63	N/O	25				
64	N/O	25				
65	7500	25				
66	200	25				
67	200	75				
68	25	25				
69	7500	75				
70	75	75				
71	200	25				
72	75	75				
73	15000	200				
74	750	200				
75	750	75				
76	NOT	INSPECTED				
77	7500	200				
78	750	200				
79	1990	75				
80						
81						
82						
83						
84						
85						

TIMING:

ARRIVE	L. AUG	L. AUG				
START						
PEAK	M. SEPT	M. SEPT				
END						

REMARKS

- 1976. Area was not inspected due to lack of funds.



NAME OF STREAM LEO CREEK
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows SW. into E. end of Takla L., Cassiar Dist.

POSITION 55 125 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	

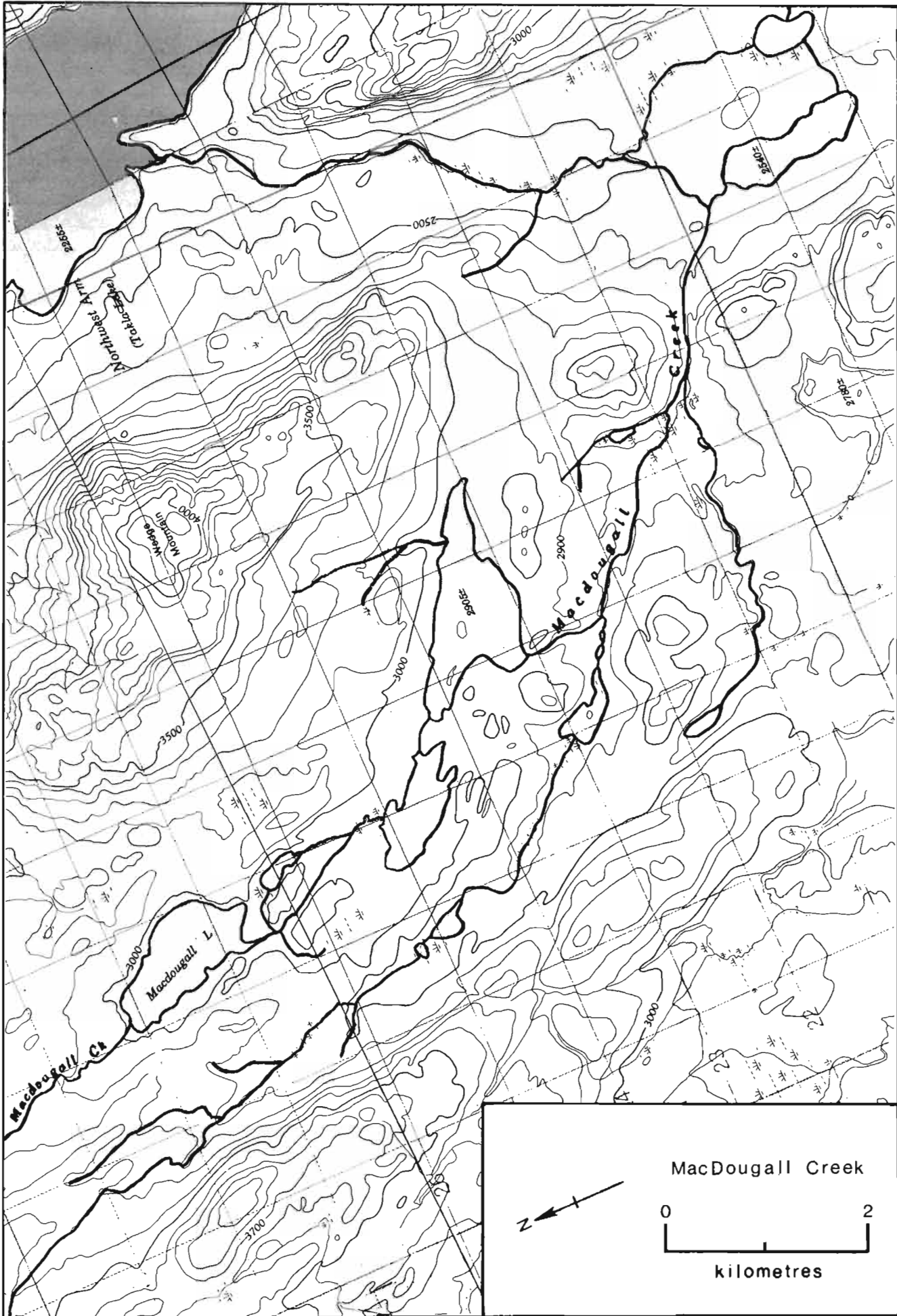
WETTED AREA _____ m² SPAWNING AREA _____ m²
 DISCHARGE (m³/s) _____
 TEMPERATURE (°C) _____
 BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- throughout; mainly lower end
CHINOOK	
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STPEAM _____

GENERAL REMARKS
 - Some erosion and silting due to bad logging practices which were corrected.
 - Cycle year spawning stream.
 - 1972. B.C.R. completed rail bridge over this creek in September.



NAME OF STREAM MACDOUGALL CREEK

CONSERVATION DISTRICT 1 SUBDISTRICT Prince George

LOCATION OF MOUTH Flows NE. into Northwest Arm, Takla L., 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 _____

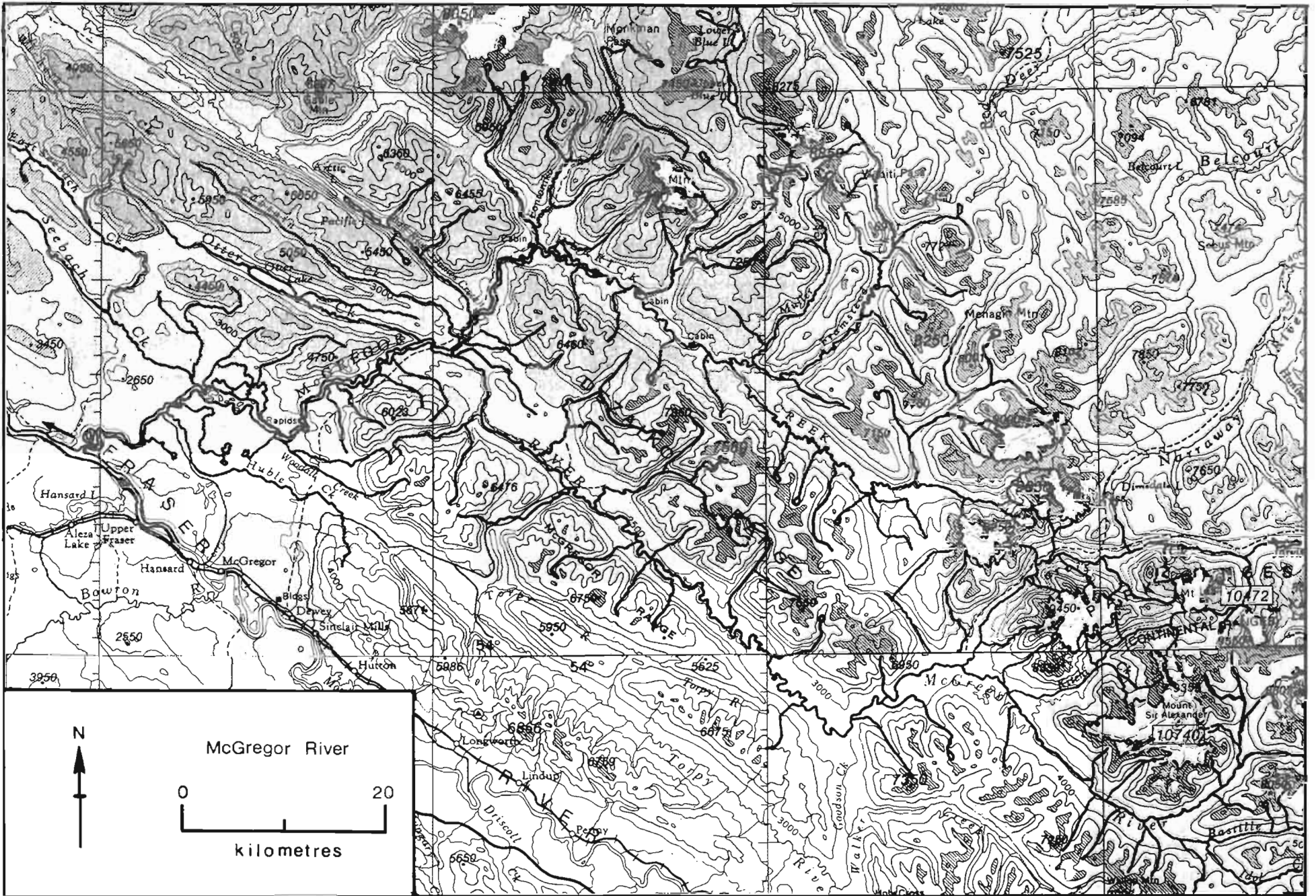
SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS _____

- Cycle year spawning stream.



NAME OF STREAM McGREGOR RIVER
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows W. into Fraser R., N. of Hansard L., Cariboo Dist.
 POSITION 54 122 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 _____
 - Impassable falls at 6.5 km. from Otter Creek confluence.
 - Impassable 18.2 m. falls (Herrick River Falls) at 8.0 km. above Glacier Creek.

SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- No actual spawning occurs in the McGregor. All spawning takes place in the tributary streams. Fontoniko and James (Bad) Creeks carry most of the spawning fish.
- This stream is the largest tributary of the upper Fraser River.
- Minor tributaries are unnavigable to river boats. Patrol made by fixed wing aircraft or helicopter.
- Activities practiced within the McGregor watershed (logging, angling, guiding, hunting & trail-riding) have had little effect on the fisheries resource to date.
- Flash flood damaged the spawning grounds at the end of Sept. 1958.
- The banks are composed of 3.7 m. of gravel with glacial silt and clay.
- The rate of water flow is 2.68 m/s.

GENERAL REMARKS (cont'd.) - McGregor River

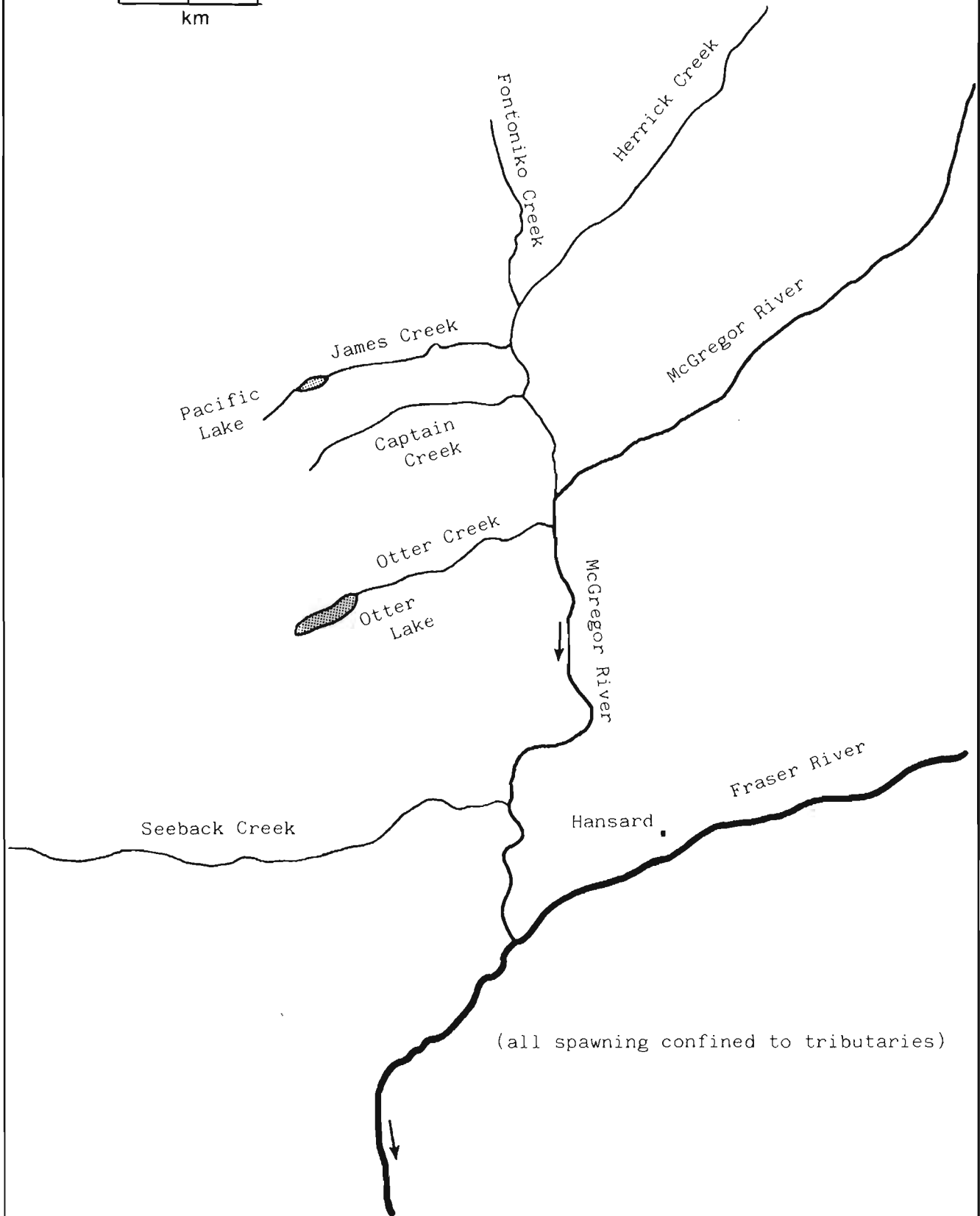
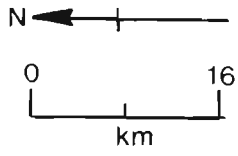
Tributaries:

1. Fontoniko Creek - Flows SW. into Herrick Cr., Cariboo Dist.
 - Position - 54 151 SE.
 - Length - 13.8 km.
 - Width - 13.7 m.
 - Wetted Area - 563,530 square meters
 - Spawning Area - 212,980 square meters
 - Spawning distribution is from the east fork junction to the falls.
 - Six separate falls ranging in height from 1.8-12 m.
 - West branch is poor due to glacial turbidity.
 - Fine to coarse gravel bars to 0.8 km.
 - After 0.8 km. gravel becomes very coarse with some boulders 20.3-25.4 cm. wash.
2. James Creek (Bad R.) - Flows SE. into Herrick Cr., E. of Otter L., Cariboo Dist.
 - Position - 54 121 SE.
 - Length - 13.2 km.
 - Width - 7.3 m.
 - Wetted Area - 91,371 square meters
 - Spawning Area - 35,467 square meters
 - Spawning distribution is up to and above Pacific Lake.
3. Captain Creek - - Flows SE. into Herrick Cr., SE. of Otter L., Cariboo Dist.
 - Position - 54 121 SW.
 - Length - 24.7 km.
 - Width - 7.1 m
 - Wetted Area - 149,343 square meters
 - Spawning Area - 25,046 square meters
 - Spawning distribution is up to 1.5 km.
 - Series of 1.5 m. passable falls at 7.5, 11, 15 and at 17.2 km.
4. Otter Creek - - - Flows SE. into McGregor R., SE. of Otter L., Cariboo Dist.
 - Position - 54 121 SW.
 - Length - 6.5 km.
 - Width - 7.6 m.
 - Wetted Area - 272,422 square meters
 - Spawning Area - 3,035 square meters
 - Spawning distribution is up to 1.5 km
 - Passable 3m. falls at 3.5 km.
 - Impassable falls at 6.5 km.
 - Good potential at 7.5-8.5 km. and 19-21 km. from impassable falls.
5. Seeback Creek - - Flows SE. into McGregor R., SW. of Otter L., Cariboo Dist.
 - Position - 54 121 SW.
 - Spawning distribution is throughout along 40 km. of main stem and 8 km. up to east fork.
 - This stream is favourable to chinook spawning.
 - The gravel is covered for the most part with algae and slime and having undisturbed appearance.
 - The stream gravel is coarse up to 15.2 cm.
 - The current is light except over the riffles.
6. Herrick Creek - - Flows SW. into McGregor R., SE. of Otter L., Cariboo Dist.
 - Position - 54 121 SE.
 - This stream serves as the north fork of McGregor River.
 - South forks of McGregor River has extremely dense glacial turbidity.
 - Impassable 18.2 m. falls (Herrick River Falls) at 8.0 km. above Glacier Creek.

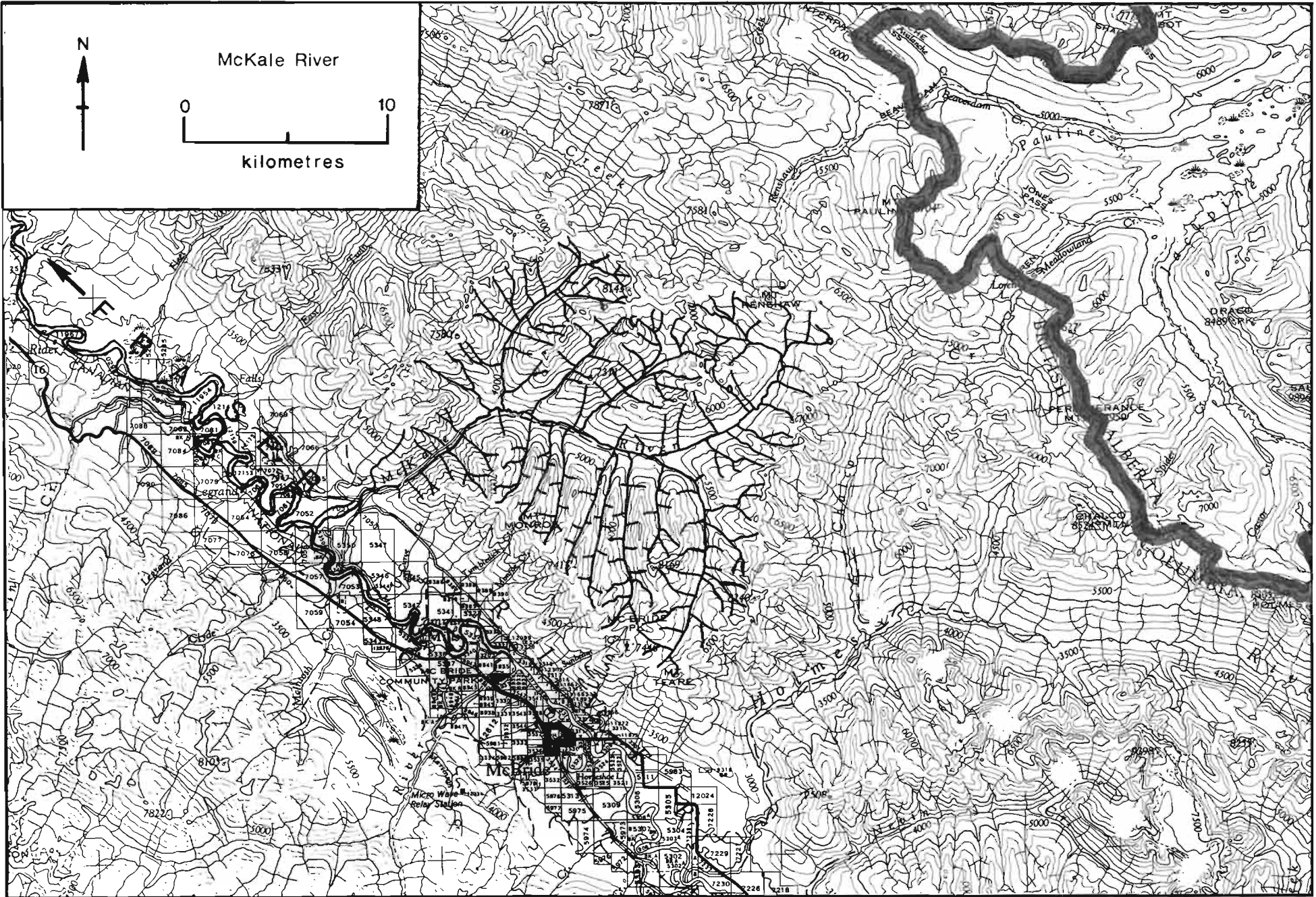
GENERAL REMARKS (cont'd.) - McGregor River

- Navigation above falls is limited to light dug-out canoes.
- Glacial turbidity present but water is fairly clear during low water periods.

Sketch of
McGregor River, 1967



(all spawning confined to tributaries)



NAME OF STREAM McKALE RIVER
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows SW. into Fraser R., NW. of McBride, Cariboo Dist.
 POSITION 53 120 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	
CHINOOK	- from access bridge to 3.2 km. upstream
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____
 - Not much potential.

GENERAL REMARKS

- Access is impossible except to a short wheel base 4 x 4 or aircraft.

ESCAPEMENT RECORD FOR McKALE RIVER

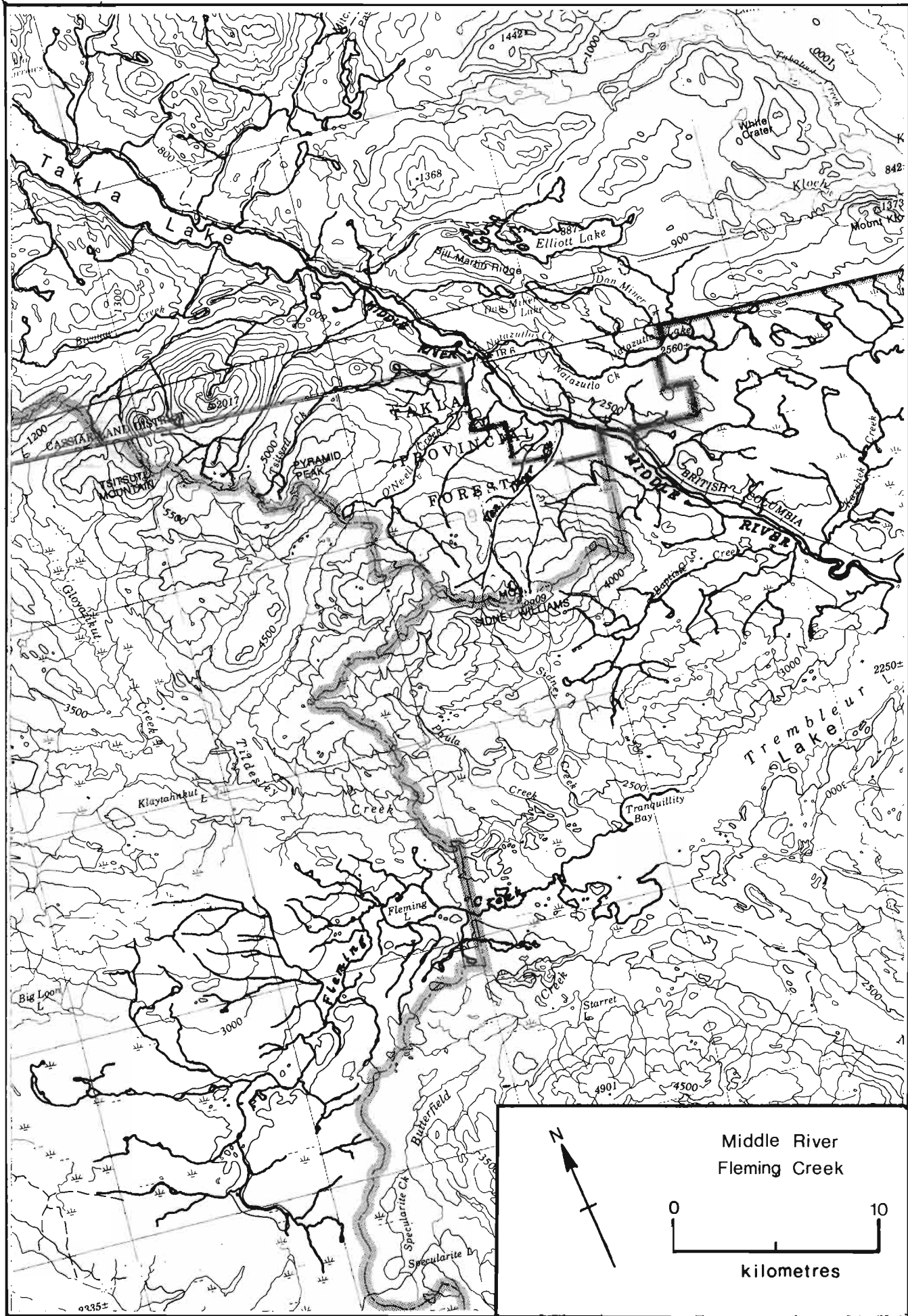
YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65						
66						
67						
68						
69						
70						
71						
72						
73						
74		75				
75		NOT INSPECTED				
76		N/O				
77		5				
78		20				
79		10				
80						
81						
82						
83						
84						
85						

TIMING

ARRIVE						
START						
PEAK						
END						

REMARKS

- 1975. Funds not available for helicopter inspection.



NAME OF STREAM MIDDLE RIVER

CONSERVATION DISTRICT 1 SUBDISTRICT Prince George

LOCATION OF MOUTH Flows SE. into Trembleur L., Rge. 5, Coast Dist.

POSITION 54 125 NE.

LENGTH _____ km WIDTH 30 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 end and on Rossette and Forfar bars
CHINOOK	- lower end and on Rossette and Forfar bars
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- This stream serves as the connecting river between Takla and Trembleur Lakes.
- Streambed consists of fine gravel, sand and silt with weedy sections.
- There is an indian reservation on the left bank of the river where it discharges into Trembleur Lake.
- Extensive logging operations.
- 1940. This run of 150 fish was composed of 2% female and 98% male.
- 1953. Due to high water temperature 28% of the salmon died unspawned during the period of Sept. 2-6.
- 1963. Columnaris affected 20% of this run.
- 1968. A very late run composed of less than a hundred sockeye appeared in mid-October.

GENERAL REMARKS (cont'd.) - Middle River

- 1971. Very silty due to run-off from P.G.E. grade being constructed along the north side of the river.
- 1972. Heavy rain caused B.C.R. roadbed to slip away and much silt deposited into this river.
- 1973. The arrival of steel for B.C.R. has caused a very heavy barge traffic.

ESCAPEMENT RECORD FOR MIDDLE RIVER

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48	UNK					
49	100000+					
50	1500					
51	1500					
52	400					
53	217000					
54	3500					
55	3500					
56	750					
57	330000					
58	7500					
59	3500					
60	750	25				
61	175000	25				
62	15000	25				
63	1500	25				
64	750	25				
65	135000	25				
66	3500					
67	750	25				
68	200	25				
69	111320	25				
70	3500	25				
71	485					
72	1500					
73	150000	12				
74	7500	25				
75	5700					
76	750					
77	80000					
78	7500	25				
79	15000					
80						
81						
82						
83						
84						
85						

TIMING:

ARRIVE	L. AUG	L. AUG				
START	E. SEPT	E. SEPT				
PEAK	M. SEPT	M. SEPT				
END	L. SEPT	L. SEPT				

REMARKS

1975 sockeye increase from brood year 1971 is due to the fishermen's strike.



NAME OF STREAM MORKILL RIVER
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows SW. into Fraser R. near Loos, Cariboo Dist.
 POSITION 53 120 NE.
 LENGTH 30 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 76,290 m² SPAWNING AREA 54,220 m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT

- A 15 m. falls is passable to salmon at 30 km.
 - A second falls of the same height at 32.5 km.
 - Series of falls begins at 34.5 km.

SPAWNING DISTRIBUTION

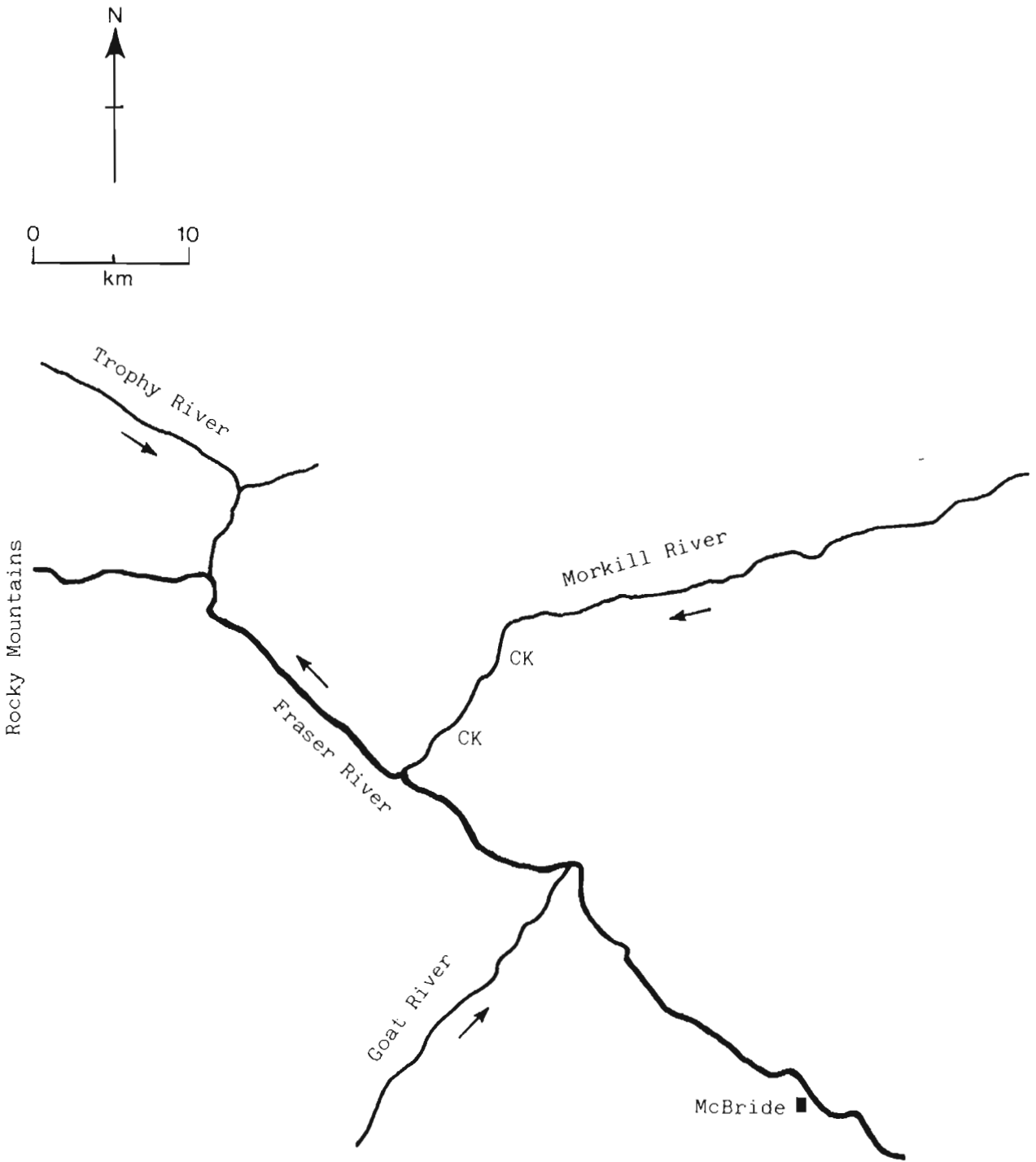
SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	- scattered throughout the lower 16 km.
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

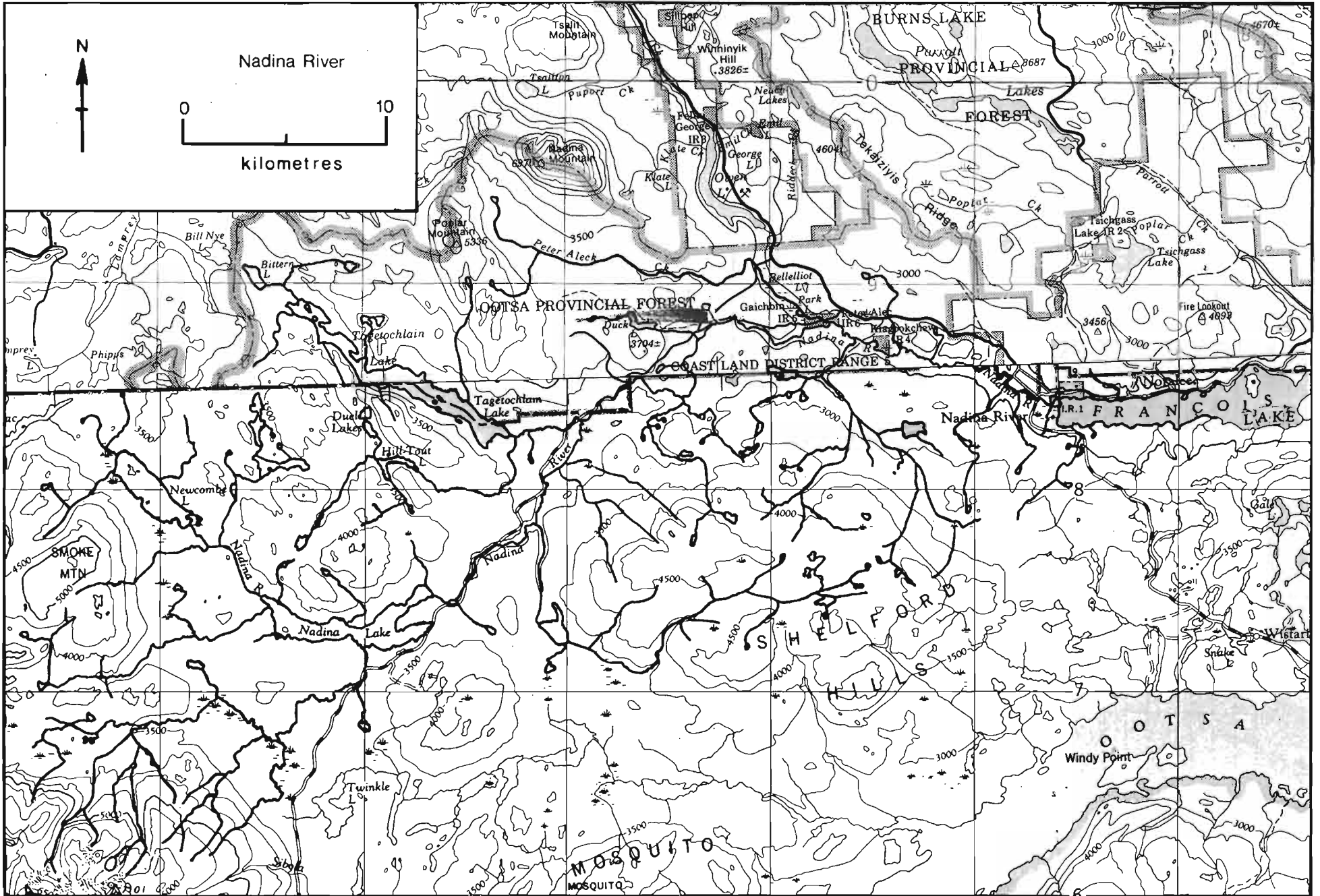
POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- Inspection done by using aircraft or saddle horse.
 - This stream is glacially fed and carries a fair amount of silt.
 - Visibility is very poor usually 1 m. or less in the water.
 - Escapement estimates on this river are made by local guide-trappers using "rollers".
 - 1971. One fish weighed over 16 kg.

Sketch of
Morkill River, 1967





NAME OF STREAM NADINA RIVER
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows E. into François L., Rge. 4, Coast Dist.
 POSITION 53 126 NW.
 LENGTH _____ km WIDTH _____ m DRAINAGE 1020 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 falls at the outlet of Nadina L. at 80 km.

SPAWNING DISTRIBUTION

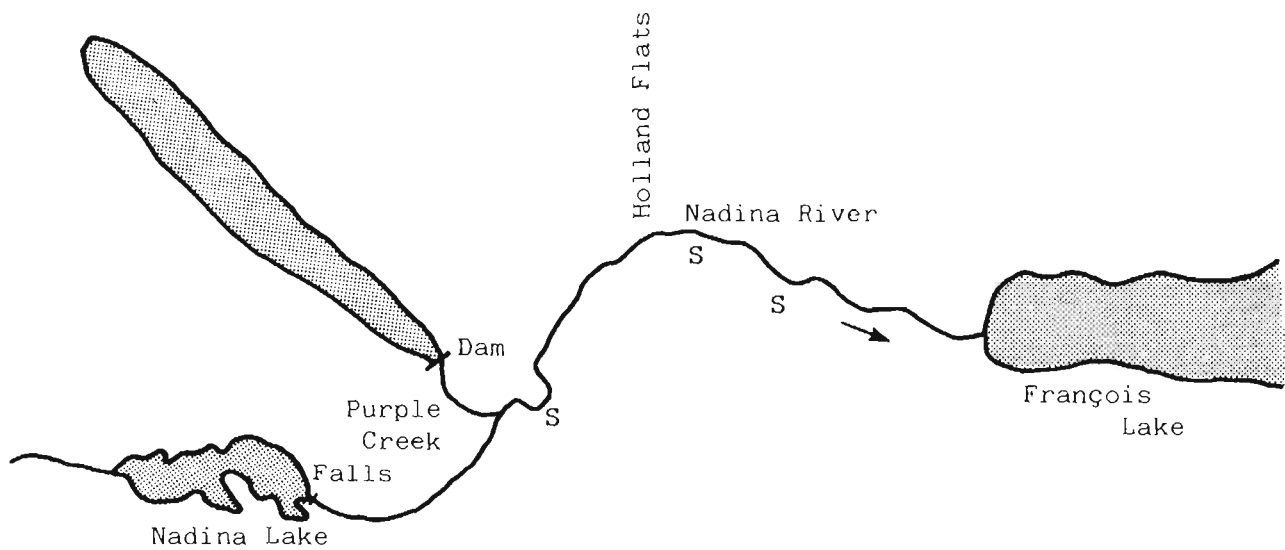
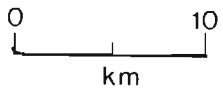
SPECIES	SECTION OF STREAM USED
SOCKEYE	E. run - lower end; L. run - spawning channel & area opposite channel
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- 1953. There was evidence that few sockeye got over the falls.
- 1956. No spawning took place in the Holland Flats area due to a large ice jam.
- 1957. The late run was overcrowded. Many redds had been re-dug and eggs could be seen along the river bottom.
- 1961. 50% of the early run died off unspawned due to warm water.
- 1973. Artificial spawning channel below the falls was opened in Sept. to take the late run.
- 1975. I.P.S.F.C. did a gravel cleaning operation in the Holland Flats area.
- 1976. This run was commercially overfished.
- This watershed is extensively logged.

Sketch of
Nadina River, 1965



ESCAPEMENT RECORD FOR NADINA RIVER

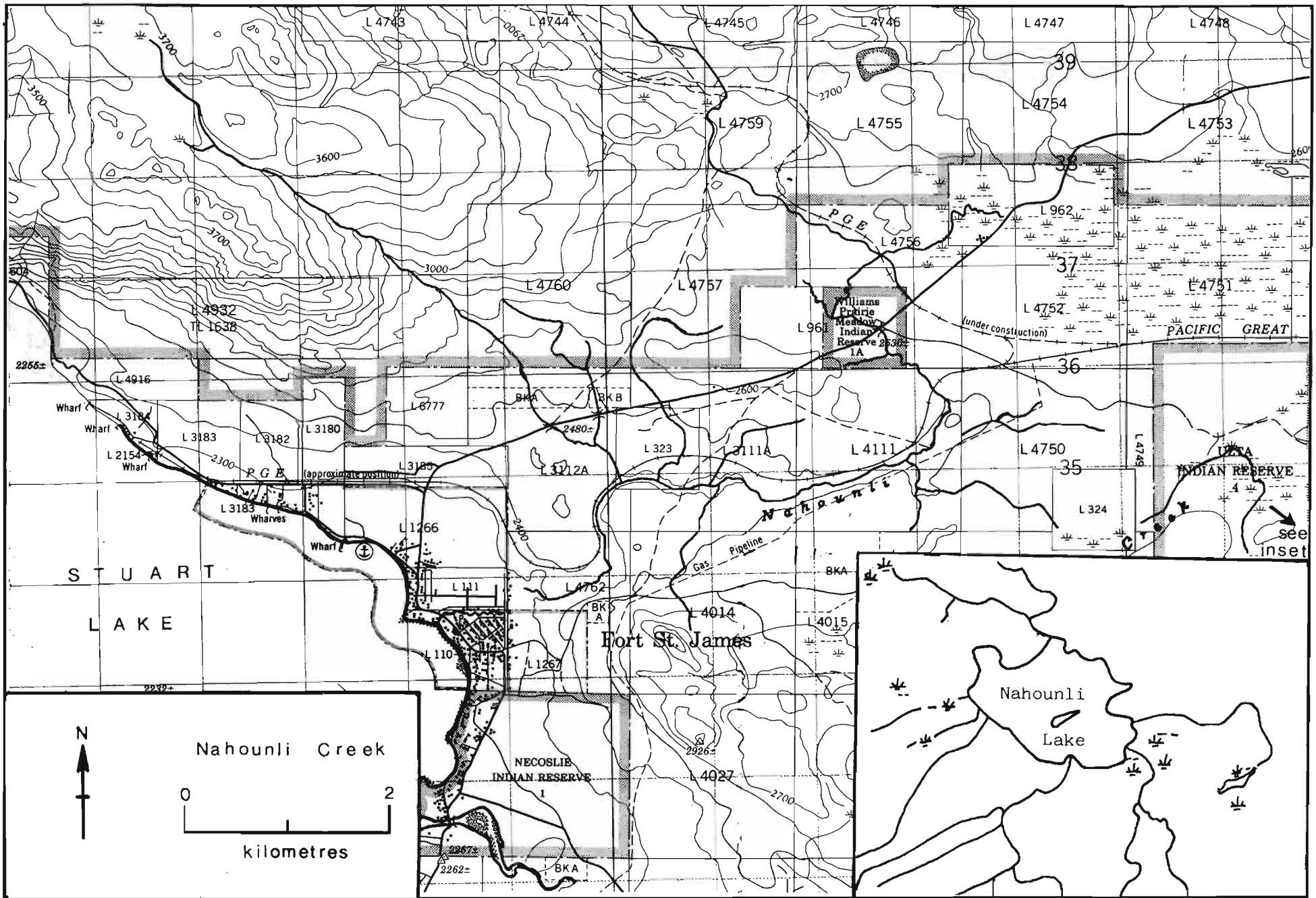
YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48	25					
49	15000					
50	1500					
51	200					
52	1500					
53	35000					
54	3500					
55	200					
56	1500					
57	58000					
58	804	25				
59	1500					
60	1300					
61	29000					
62	2130	25				
63	8300					
64	1629					
65	15170					
66	1867					
67	9390					
68	2400					
69	42500					
70	3575					
71	16500					
72	4250					
73	18700					
74	3500					
75	14000					
76	1700					
77	15750					
78	2800					
79	69500					
80						
81						
82						
83						
84						
85						

TIMING:

ARRIVE	M. AUG					
START						
PEAK	L. AUG					
END						

REMARKS

The escapements for sockeye include two separate runs. Timing for the late run is as follows: Arrive: L. AUG
 Start:
 Peak: M. SEPT
 End:



NAME OF STREAM NAHOUNLI CREEK

CONSERVATION DISTRICT 1 SUB-DISTRICT Prince George

LOCATION OF MOUTH Flows W. into S. end of Stuart L., Rge. 5, Coast Dist.

POSITION 54 124 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 _____

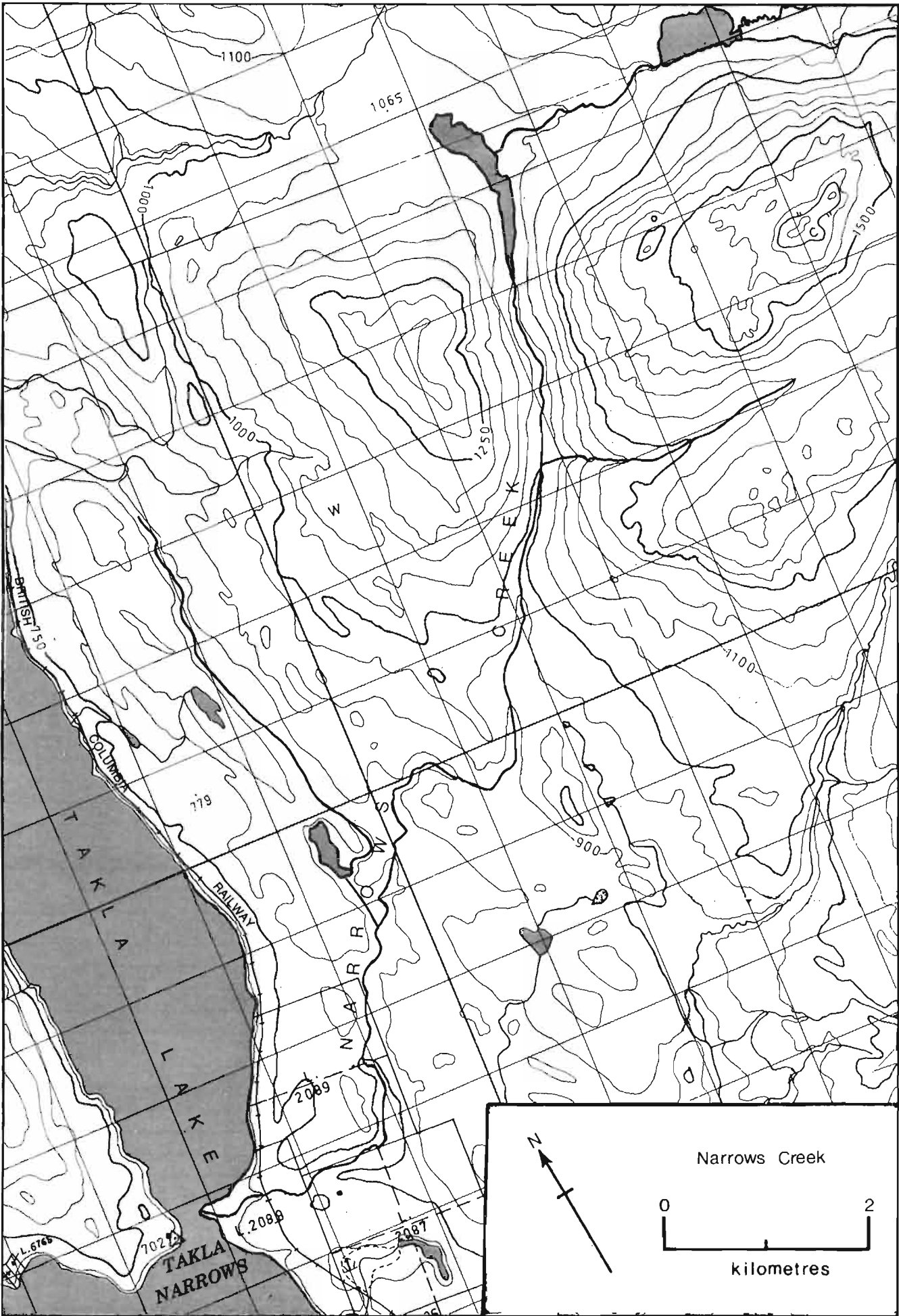
SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- This stream was first reported in 1951 and was discontinued in 1953.



NAME OF STREAM _____ (Narrows Creek)

CONSERVATION DISTRICT 1 SUBDISTRICT Prince George

LOCATION OF MOUTH Flows SW. into Takla L., at Takla Narrows, Cassiar Dist.

POSITION 55 125 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 _____

SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STPEAM _____

GENERAL REMARKS

- This is an excellent spawning stream for salmon.
- Some windfalls help control the velocity of water.
- 1946. Tourist fishing camp was built at the mouth.
- 1949. Stray sockeye from the heavy Middle River run spawned in this creek.
- 1953. Carried largest number of early Stuart run.
- 1972. B.C.R. completed rail bridge in September.

ESCAPEMENT RECORD FOR

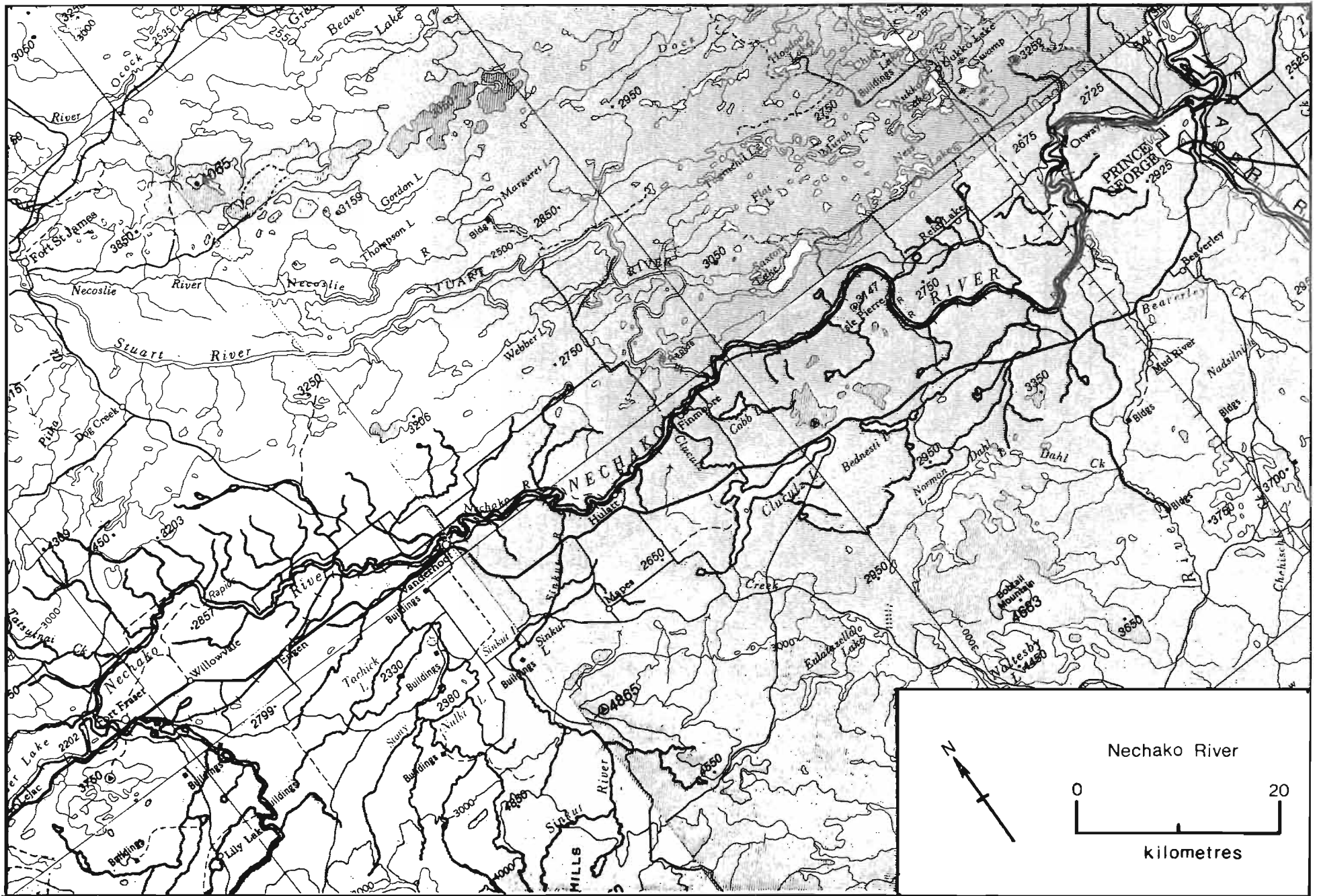
(Narrows Creek)

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48	N/O					
49	15000					
50	1500					
51	400					
52	1500					
53	35000					
54	3500					
55	25					
56	750					
57	16000					
58	1500					
59	200					
60	465					
61	7900					
62	750					
63	75					
64	25					
65	1500					
66	400					
67	400					
68	25					
69	7500					
70	200					
71	3500					
72	200					
73	7500					
74	750					
75	1500					
76	400					
77	3500					
78	750					
79	1500					
80						
81						
82						
83						
84						
85						

TIMING:

ARRIVE	L. JULY					
START						
PEAK	E. AUG					
END						

REMARKS



NAME OF STREAM NECHAKO RIVER
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows SE. into Fraser R., at Prince George, Cariboo Dist.
 POSITION 53 122 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) 34 m³/s (79/09)

TEMPERATURE (°C) 12.7°C (53/09/21 at 1300 hrs.)

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION

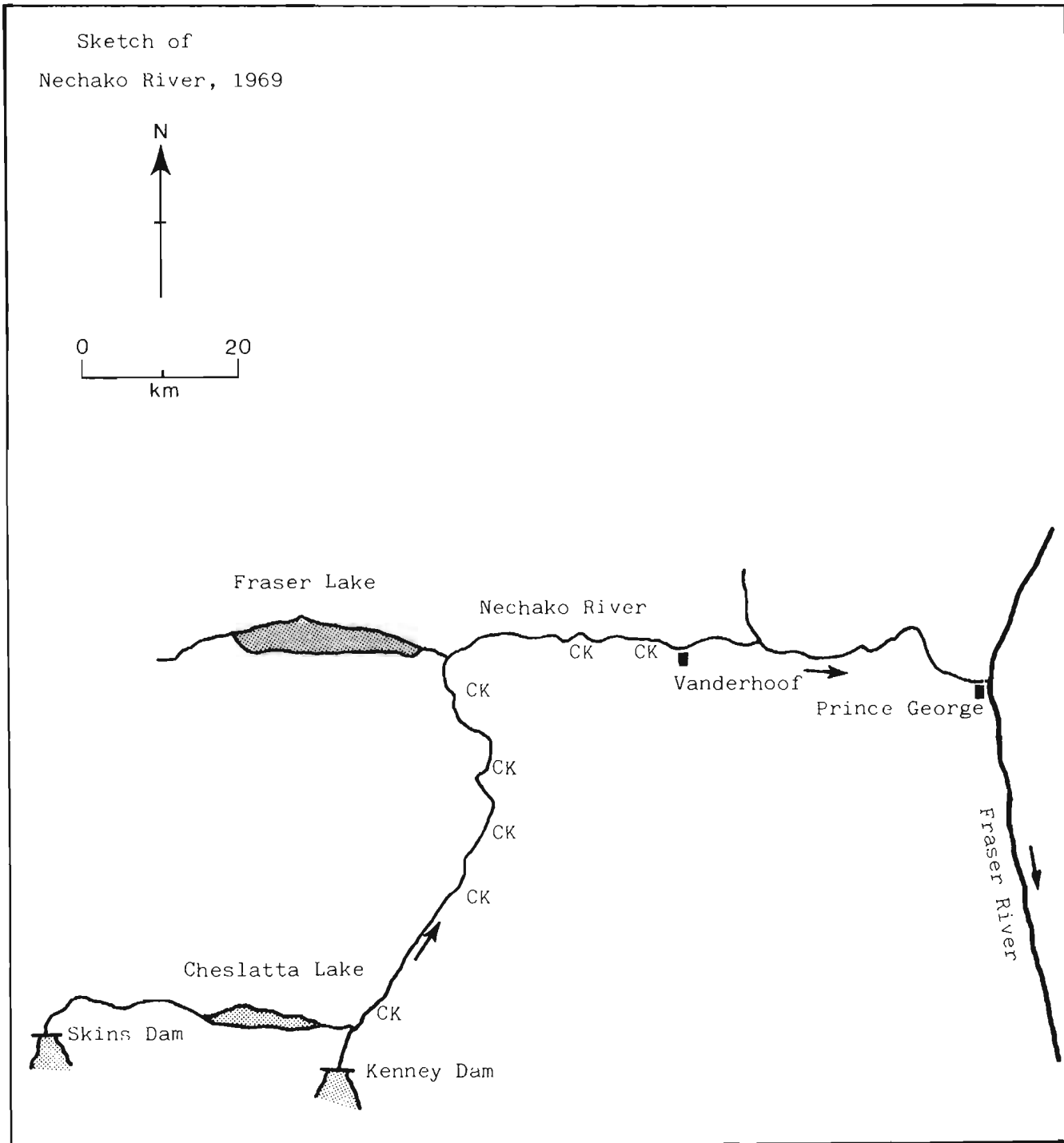
SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	- from Cheslatta Falls to 2 km. above Greer Creek
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____
 - Excellent.

GENERAL REMARKS - Aluminum Co. of Canada controls the waterflow at Skins Lake dam.
 - 1952. Streambed was practically dry as a result of water cut-off at Kenney Dam on Oct. 8. 95% of Chinook salmon eggs perished.
 - 1957. One gate of Skins Lake dam broke open and flooded the Nechako, cutting new channel, causing bank slumpage and widening the river. 4 cm. of mud and other materials were deposited into the Nechako ruining much of the spawning ground and reducing the egg-to-fry survival.
 - 1958,59. Due to high, very brown and silty water, chinooks pulled out of Nechako and spawned in the Stellako River.
 - 1965. First year since 1957 that a spawning count was done during the peak of spawning. Visibility was 0.9 m.
 - 1972. 10% of redds were affected by frost due to reduction of water discharge.

GENERAL REMARKS (cont'd.) - Nechako River

- 1973. Saddle dam built.
- 1974. Only 43%, out of the regular 65%, of the run spawned above Fort Fraser due to low water conditions and higher than normal water temperature.
- 1975. Due to fishermen's strike, this run had a 200% increase from brood year 1971.
- 1976. Flood at Vanderhoof due to an above average snowfall in the Knewstubb L. area.
- 1977. Alcan reduced the waterflow to 42 cubic meter per second causing a loss of 400,000-500,000 eggs due to winter frost.
- 1978. SEP conducted biological and engineering studies toward a hatchery-rearing pond complex. A drilling rig, situated upstream from Cheslatta Falls, is presently drilling for groundwater.



NEVIN CREEK - for topographical map refer to Horsey Creek,
page 89.

NAME OF STREAM NEVIN CREEK (King Creek)
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows SW. into Fraser R., near Raush Valley sta., Cariboo
 Dist. _____ POSITION 53 119 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) 11.6°C (72/08/23)

BARRIERS OR POINTS OF DIFFICULT ASCENT _____
 - Impassable natural falls at 13 km.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	- at mouth and below highway bridge
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- 1971. The course of this stream was changed by B. C. Dept. of Highways to facilitate a new highway. The course change did not affect the spawning.

ESCAPEMENT RECORD FOR NEVIN CREEK (King 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		25				
72		25				
73		25				
74		25				
75		25				
76		25				
77		N/O				
78		25				
79		20				
80						
81						
82						
83						
84						
85						

TIMING

ARRIVE		E. AUG				
START		M. AUG				
PEAK		L. AUG				
END		SEPT				

REMARKS

- Escapement prior to 1967 is included with Fraser River at Tête Jaune.
- Escapement from 1967 to 1970 is included with Holmes River.

NITHI RIVER - for topographical map refer to Ormond Creek,
page 159.

NAME OF STREAM NITHI RIVER
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows NW. into Francois L., NW. of Tahultzu L., Rge. 4,
Coast Dist. POSITION 53 124 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 _____

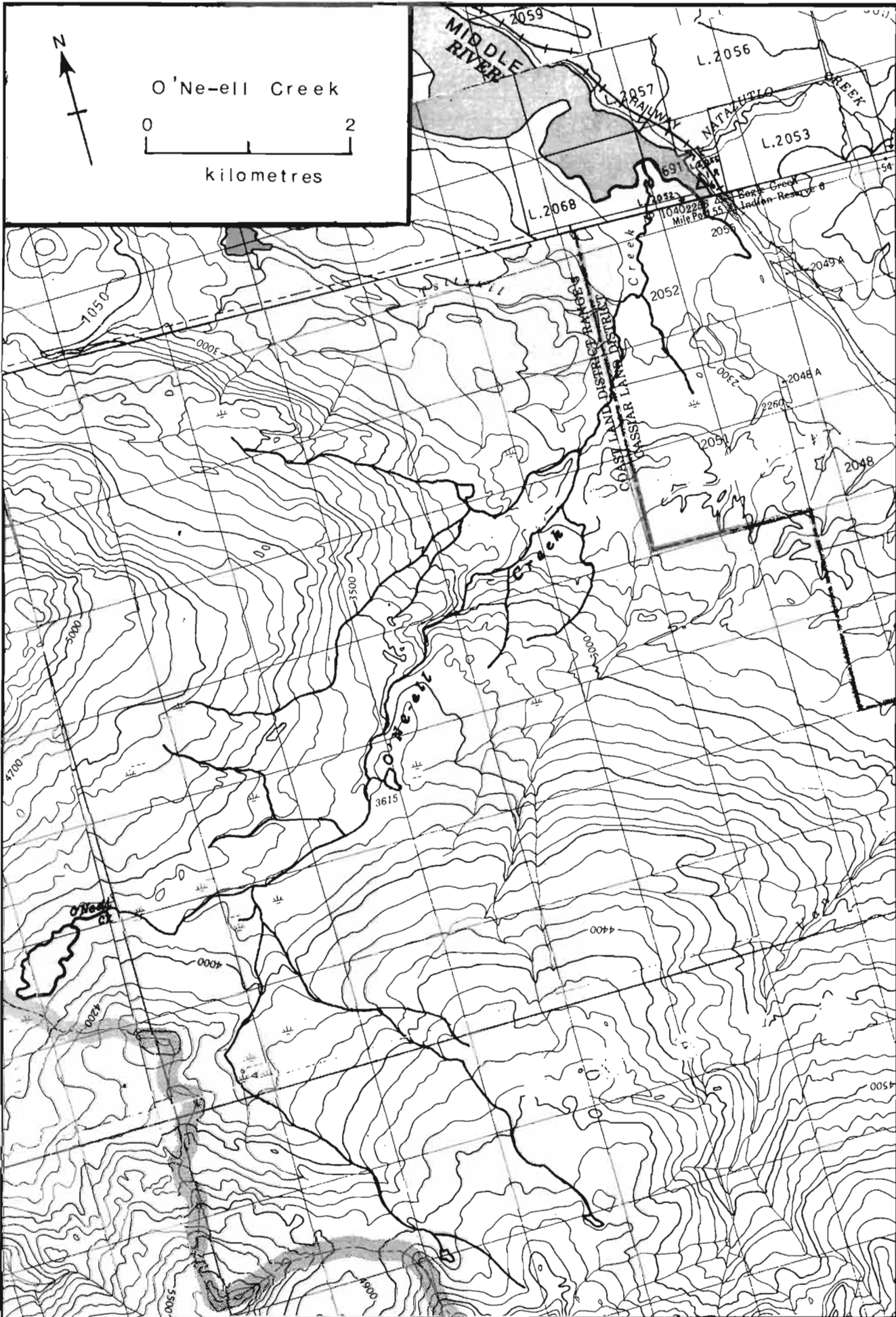
SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- Limited spawning areas.
- 1976. Run was commercially overfished.
- On May 10th and 11th, high water in Nithi went over its banks opposite the Reed Farm and soon diverted across farm fields. On June 1-10th, a large "cat" was hired to put the river back into its channel.



NAME OF STREAM O'NE-ELL CREEK (Kynock Creek)

CONSERVATION DISTRICT 1 SUBDISTRICT Prince George

LOCATION OF MOUTH Flows NE. into Middle R., Rge. 5, Coast Dist.

POSITION 54 125 NE.

LENGTH _____ km WIDTH 8.0 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 _____

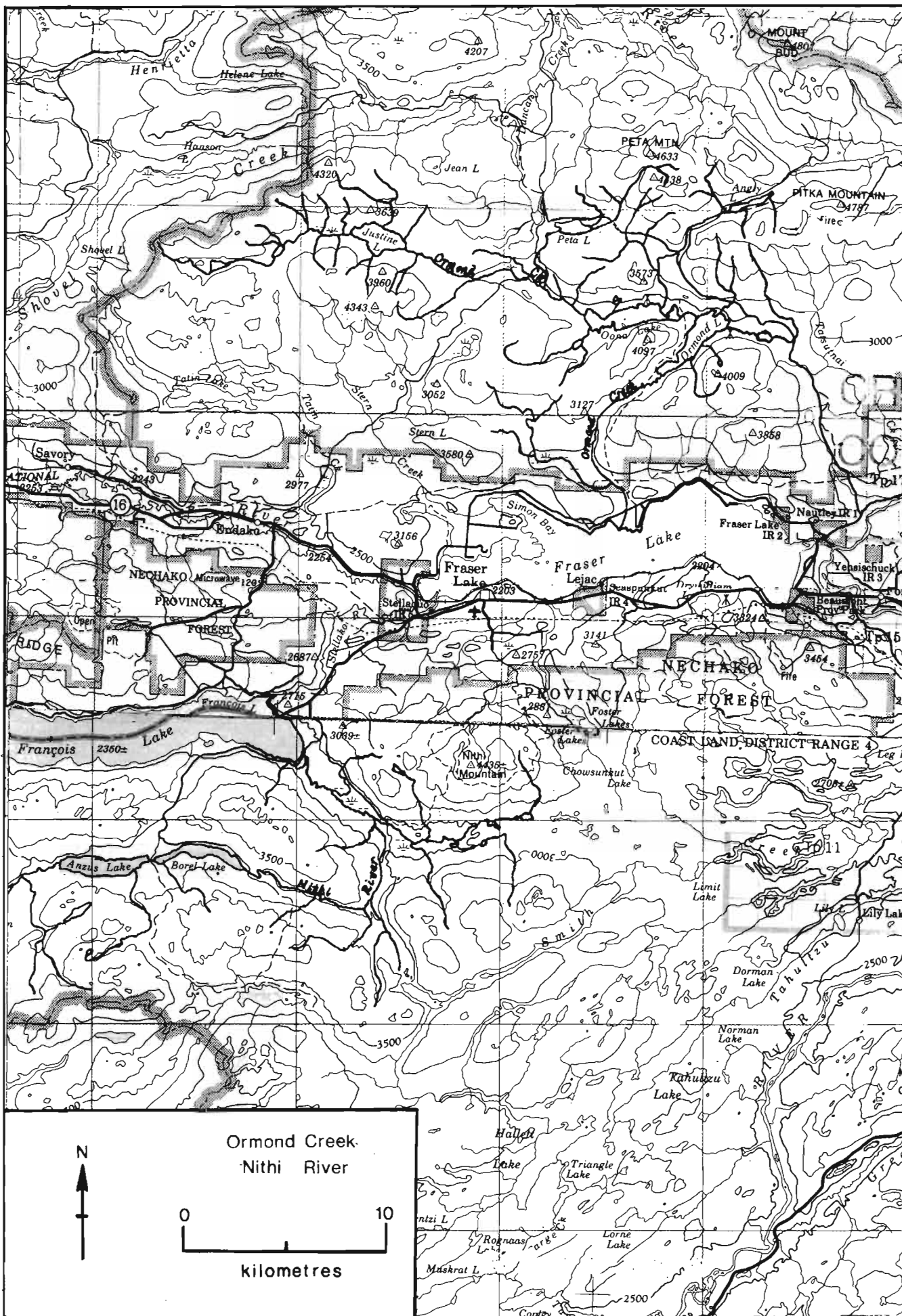
SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- Stream clearance done each year has helped stabilized this creek.
- 1961. Sockeye eggs were taken from this stream for transplant to Tezzeron Lake.
- 1969. A jade mine is in operation at the upper section of the creek.
- 1970. The slide which came into this creek at the lower end of the canyon deposited much new material. This caused the creek to "whip-lash" in its upper portions and also to deposit much heavy debris mainly large rock.



NAME OF STREAM ORMOND CREEK

CONSERVATION DISTRICT 1 SUBDISTRICT Prince George

LOCATION OF MOUTH Flows S. into Fraser L., Rge. 5, Coast Dist.

POSITION 54 124 SW.

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 _____

- Impassable falls at 4 km.

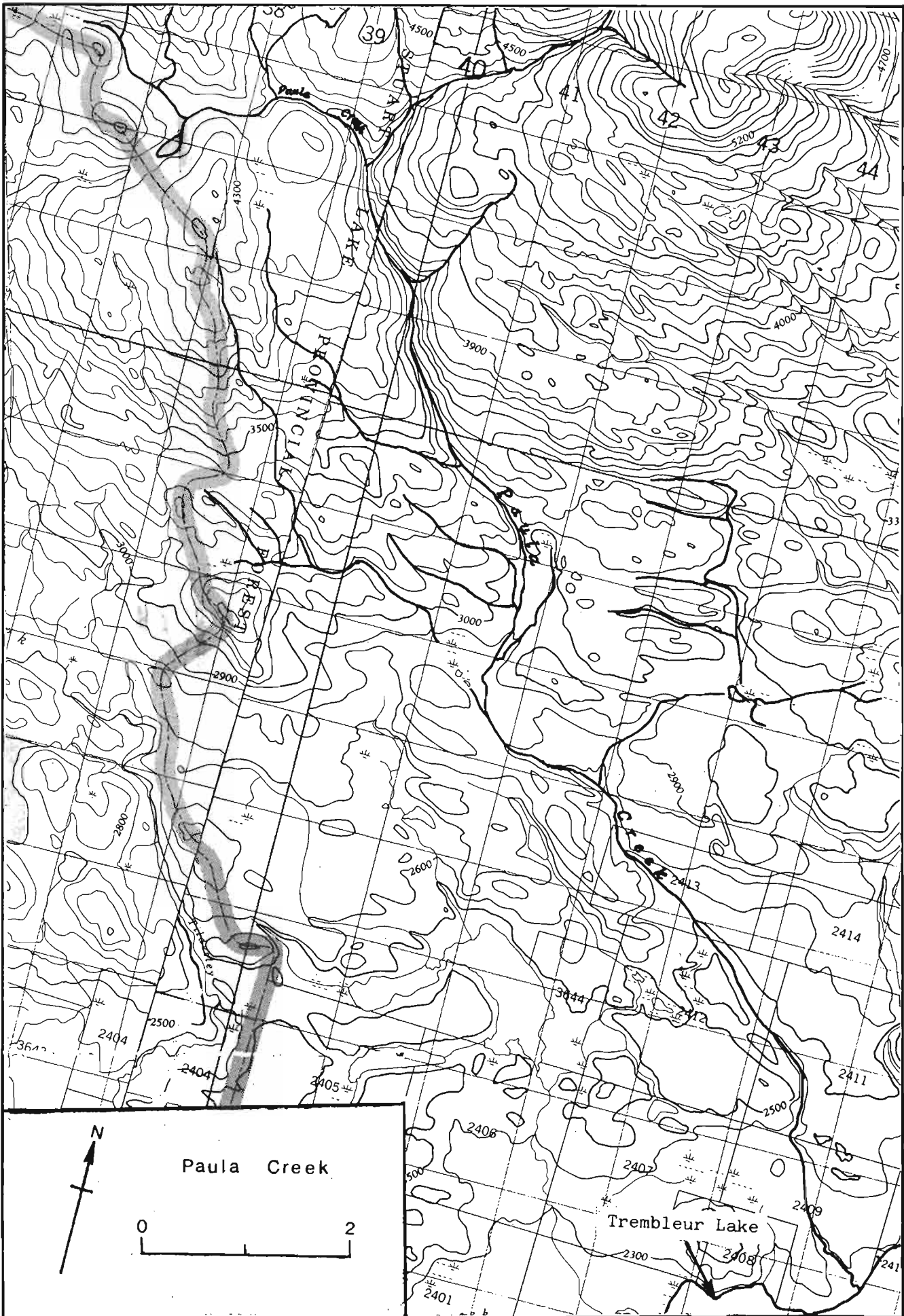
SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	- lower 1220 m.
CHINOOK	- lower 1220 m.
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS _____

- 1976. Run was commercially overfished.



NAME OF STREAM PAULA CREEK
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows SE. into Trembleur L. at W. end, Rge. 5, Coast Dist.
 POSITION 54 125 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	- throughout
CHINOOK	
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STPEAM _____

GENERAL REMARKS _____

NAME OF STREAM PINCHI CREEK

CONSERVATION DISTRICT 1 SUBDISTRICT Prince George

LOCATION OF MOUTH Flows S. into Stuart L., Rge. 5, Coast Dist.

POSITION 54 124 NE.

LENGTH 6.5 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 12 m. falls at the outlet of Pinchi Lake.

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. P.G.E. railroad bridge was completed in October.
- 1971. Railroad tracks were laid early in the year.
- 1973-1977. Large run of kokanee.

POINT CREEK - for topographical map refer to Crow Creek,
page 25.

NAME OF STREAM _____ (Point Creek)
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows W. into Northwest Arm, Takla L., 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 _____ m²
 DISCHARGE (m³/s) _____
 TEMPERATURE (°C) 12° C (65/08/09)
 BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- Sockeye on dominant and sub-dominant years only.
 - 1972. Extensive gravel bar deposited at the mouth due to very high run-off in mid-June.

ESCAPEMENT RECORD FOR

(Point Creek)

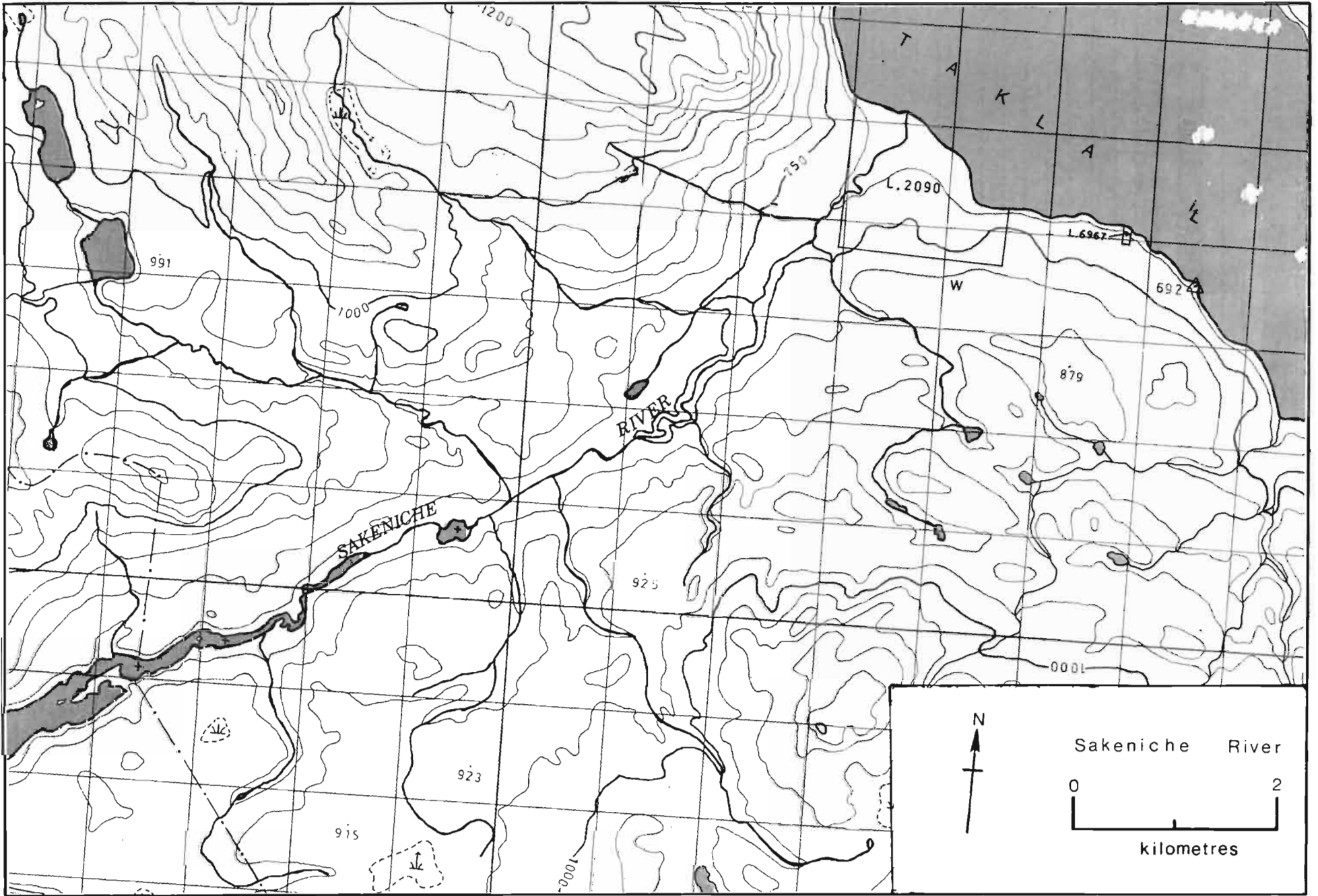
YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49	75					
50	25					
51						
52						
53	200					
54						
55						
56	75					
57	750					
58	200					
59	N/O					
60	N/O					
61	660					
62	25					
63	N/O					
64	N/O					
65	270					
66	N/O					
67	N/O					
68	N/O					
69	600*					
70	N/O					
71	200					
72	N/O					
73	3500					
74	25					
75	25					
76	N/O					
77	750					
78	N/O					
79	75					
80						
81						
82						
83						
84						
85						

TIMING:

ARRIVE	E. AUG					
START						
PEAK	E. AUG					
END						

REMARKS

* Escapement includes 200 sockeyes to No-Name Creek.



NAME OF STREAM SAKENICHE RIVER
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows NE. into Takla L. at Takla Narrows, Cassiar Dist.
 POSITION 55 125 SW.
 LENGTH _____ km WIDTH _____ m DRAINAGE 1036 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) 1.4°C (78/02/21)
 BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- Dominant and sub-dominant year spawning stream.
- Extensive logging.
- Excessive algal growth.
- 1953. Flash flood in mid-August stranded or destroyed 45% of this run.
- 1958. This stream is interesting as spawning is usually under way when the surface water temperature is 15.5°C.
- 1975. No sockeye reported in this cycle. However, because of good water flows & temperatures some "tired" sockeye went in and tried to spawn. Spawning is less than 50% effective.
- 1979. Warm water during August diverted the small run to this stream elsewhere.

ESCAPEMENT RECORD FOR SAKENICHE RIVER

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49	200					
50	200					
51						
52	75					
53	3500	75				
54						
55						
56	200					
57	7040					
58	750	75				
59	N/0					
60	N/0					
61	6400					
62	25	N/0				
63	N/0					
64	N/0					
65	15					
66	25					
67	N/0					
68	N/0					
69	750					
70	N/0					
71	N/0					
72	N/0					
73	3700					
74	75					
75	41					
76	N/0					
77	600					
78	75					
79	N/0					
80						
81						
82						
83						
84						
85						

TIMING:

ARRIVE	E. AUG					
START		SEPT				
PEAK	E. AUG	SEPT				
END		SEPT				

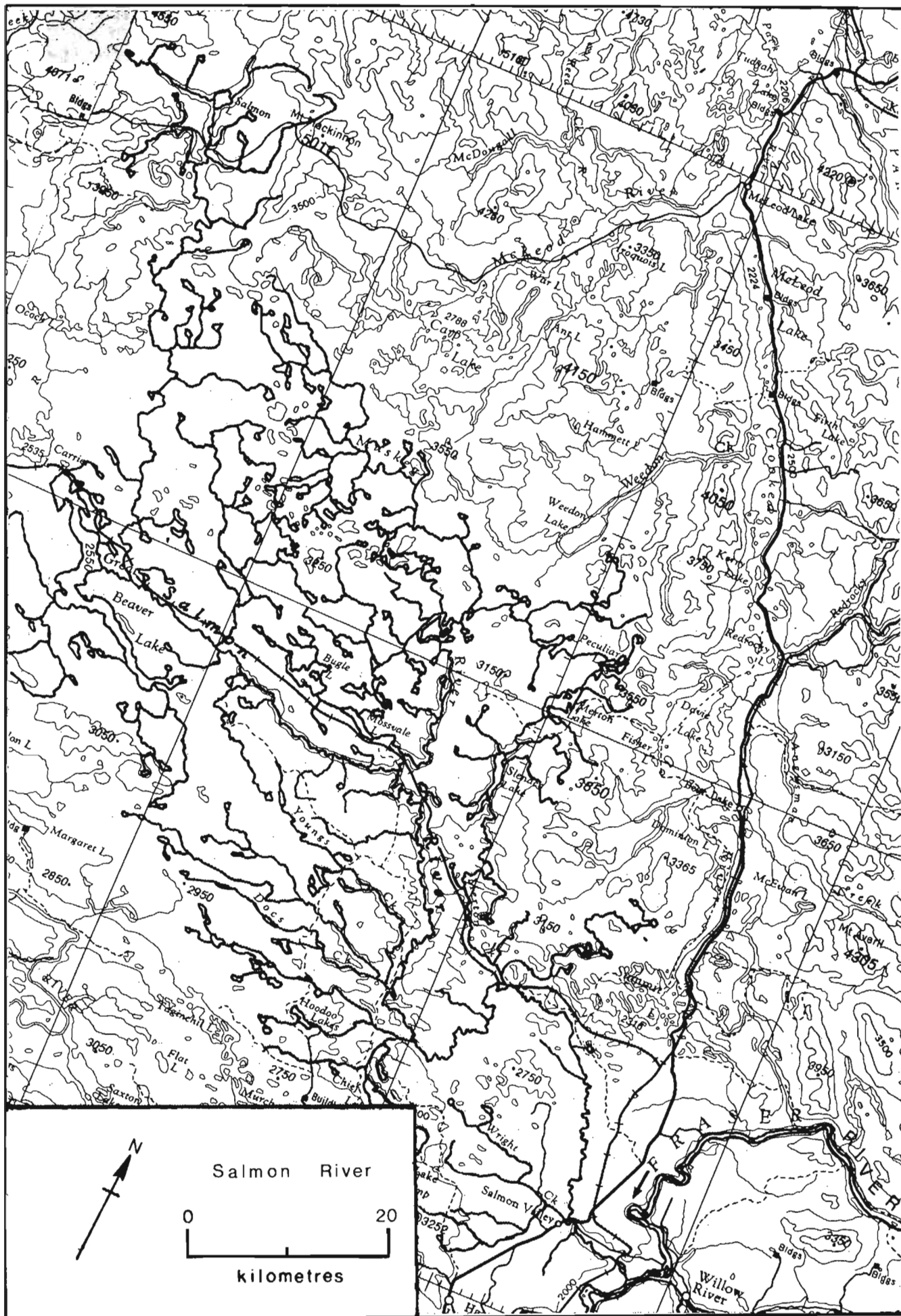
REMARKS

The escapements for sockeye include two separate runs. Timing for the late run is as follows: Arrive: E. AUG

Start:

Peak: M. SEPT

End:



NAME OF STREAM SALMON RIVER
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows SE. into Fraser R., W. of Eaglet L., Cariboo Dist.
 POSITION 54 122 SW.
 LENGTH 195 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 _____

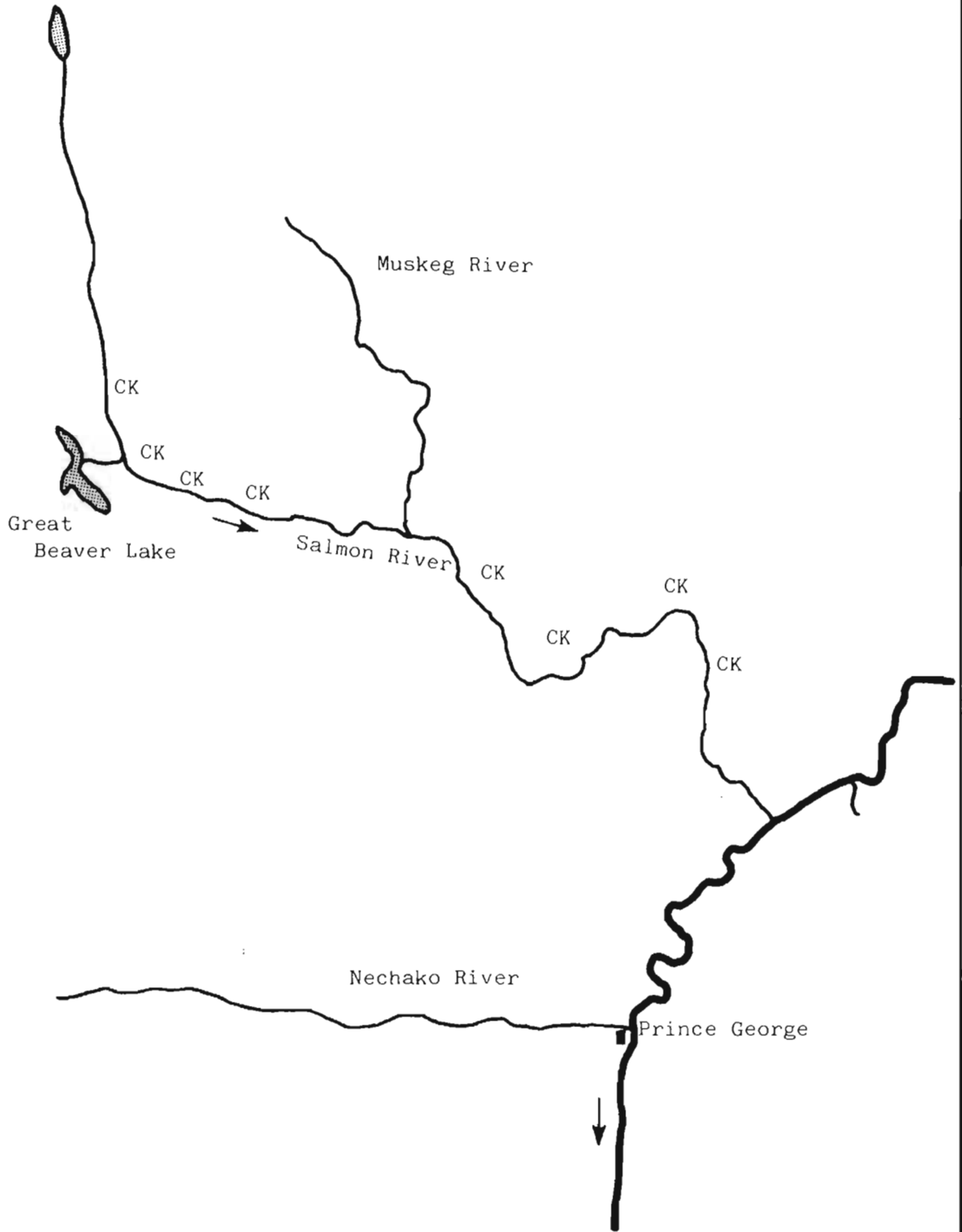
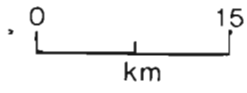
SPAWNING DISTRIBUTION

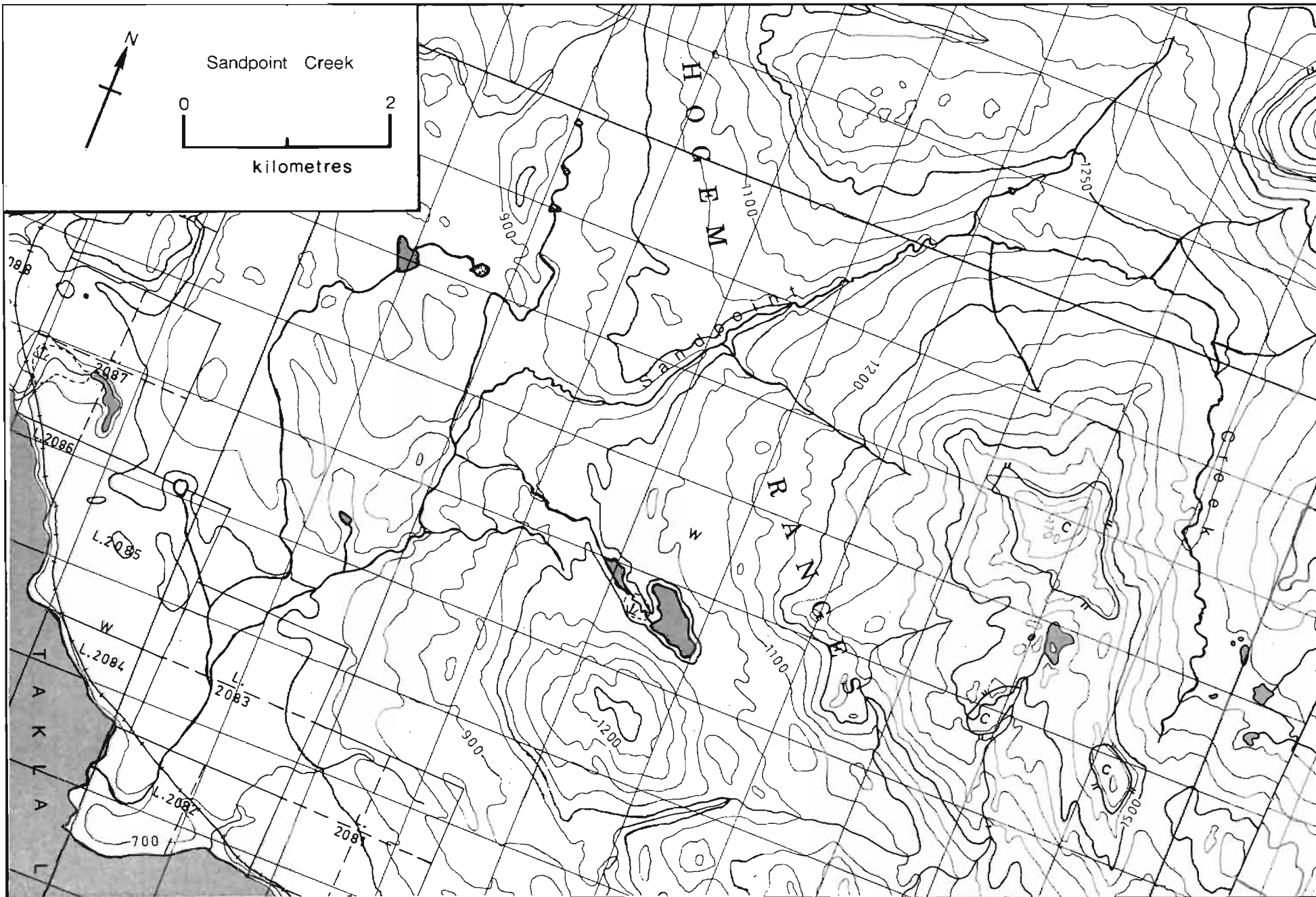
SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	- throughout to Salmon Lake; heaviest at 6.4 km. below Muskeg R. confluence
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS - Carries both red and white variety of chinook.
 - Upper river where actual spawning takes place is inaccessible except by aircraft.
 - Unusual river in that it disappears underground over a distance of 13 km. of its course beginning at 60 km.
 - Maximum depth is 1.2 m.
 - Surface velocity is 0.325 meter per second.
 - 1969. 20% of this run were taken by sports fishermen when fish stayed for 3 weeks near the lower end of river due to low and warm water.
 - 1970. River was closed to any sport fishery for chinook.
 - 1974. Oil line breakage and subsequent repairs did not affect fish.

Sketch of
Salmon River, 1967





NAME OF STREAM (Sandpoint Creek)
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows SW. into E. end of Takla L., Cassiar Dist.
 POSITION 55 125 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 _____

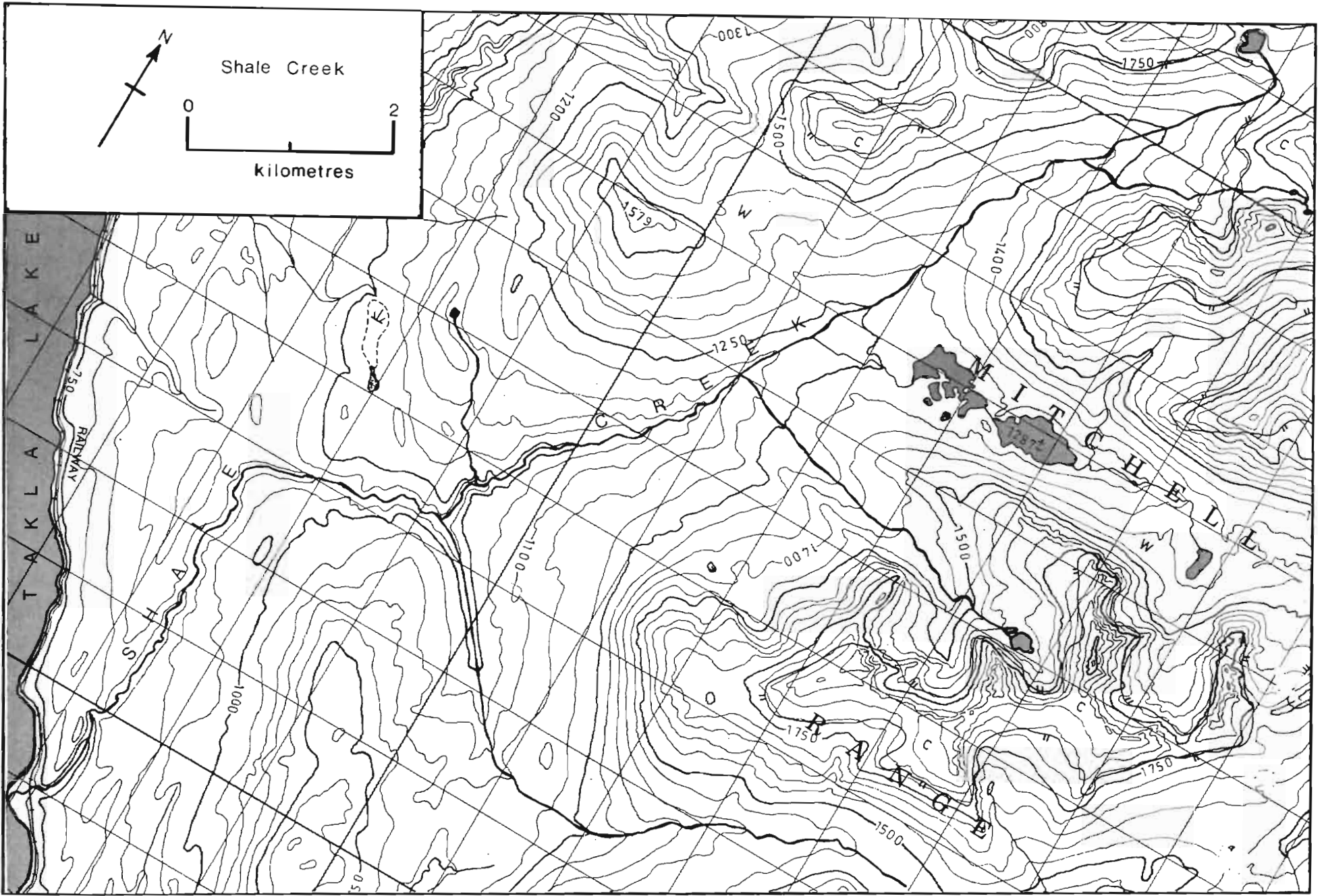
SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- Cycle year spawning stream.
- Heavy beaver trapping done each year.
- Some erosion and silting near the mouth.
- 1971. Catre Construction placed a temporary bridge across the creek in July on the P.G.E. right-of-way.
- 1974. The debris jam below the B.C.R. bridge was the result of railroad construction and normal movement of windfall debris.



NAME OF STREAM _____ (Shale Creek)

CONSERVATION DISTRICT 1 SUBDISTRICT Prince George

LOCATION OF MOUTH Flows SW. into Takla L., Cassiar Dist.

POSITION 55 125 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 _____

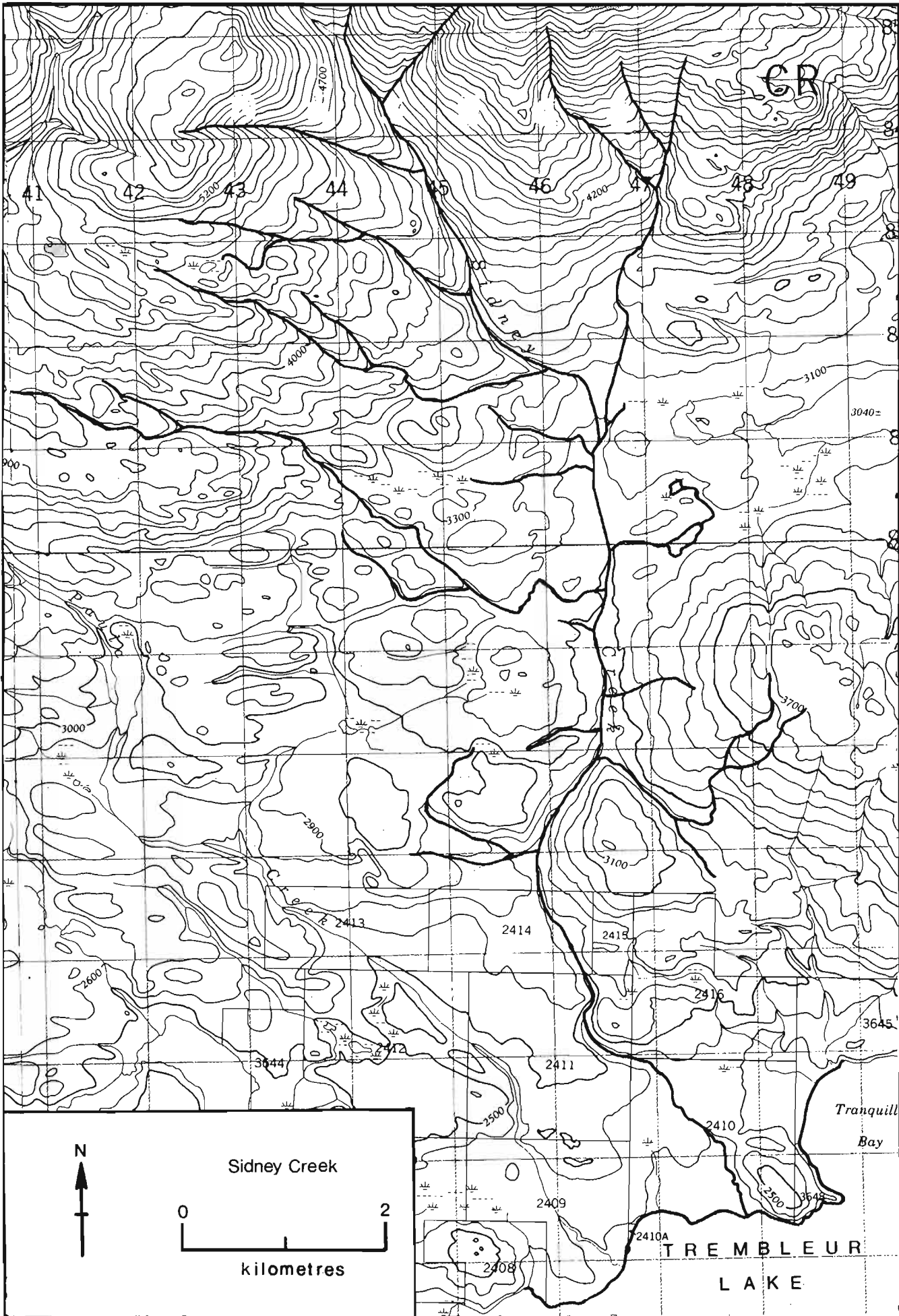
SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- 1972. B.C.R. bridge was completed in Sept. and the steel for tracks arrived during November.



NAME OF STREAM SIDNEY CREEK (Felix Creek)
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows S. into W. end of Trembleur L., Rge. 5, Coast Dist.
 POSITION 54 125 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) _____

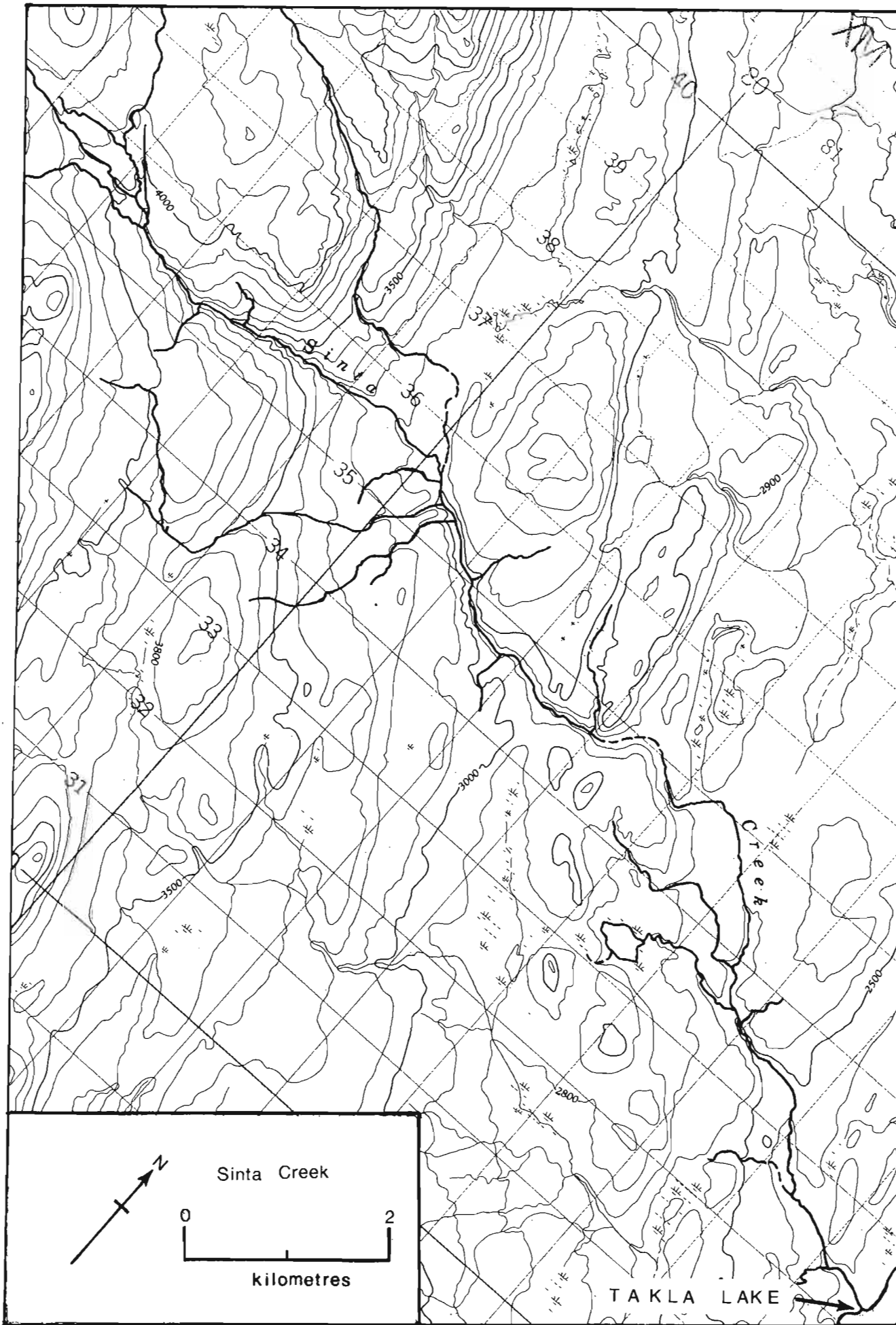
BARRIERS OR POINTS OF DIFFICULT ASCENT _____
 - 1977. Impassable beaver dams. One was 3 m. high and was a total block near
 mouth of creek.

SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS _____



NAME OF STREAM SINTA CREEK
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows SE. into Northwest Arm, Takla L., 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

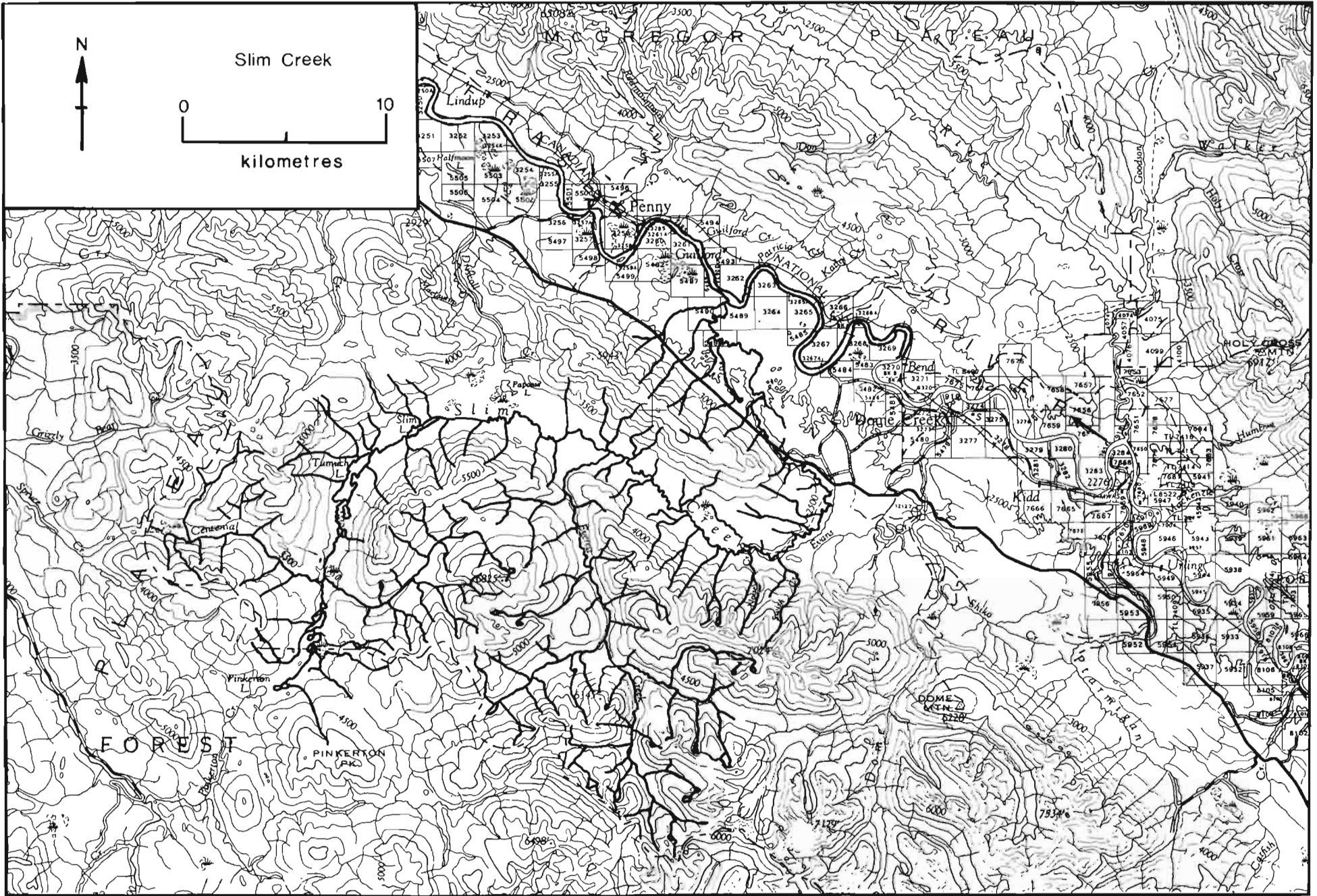
SPECIES	SECTION OF STREAM USED
SOCKEYE	- throughout
CHINOOK	
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- Cycle year spawning stream.
 - Stream plagued by beaver activity.
 - 1961. Due to very low water level sockeye could not get in.
 - 1975. Due to the delay of run, fish bound for this stream could not make it and are presumed to have spawned in Trembleur Lake streams.
- _____

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NAME OF STREAM SLIM CREEK
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows NE. into Fraser R., near Guilford, Cariboo Dist.
 POSITION 53 121 NE.
 LENGTH 50 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 703,310 m² SPAWNING AREA 152,337 m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) 10.5°C (77/09/02 at 1120 hrs.), 12.8°C (78/09/01 at 1230 hrs.)

BARRIERS OR POINTS OF DIFFICULT ASCENT _____
 - Passable log jams in various areas.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	- mainly between Everett and Slim Lakes
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

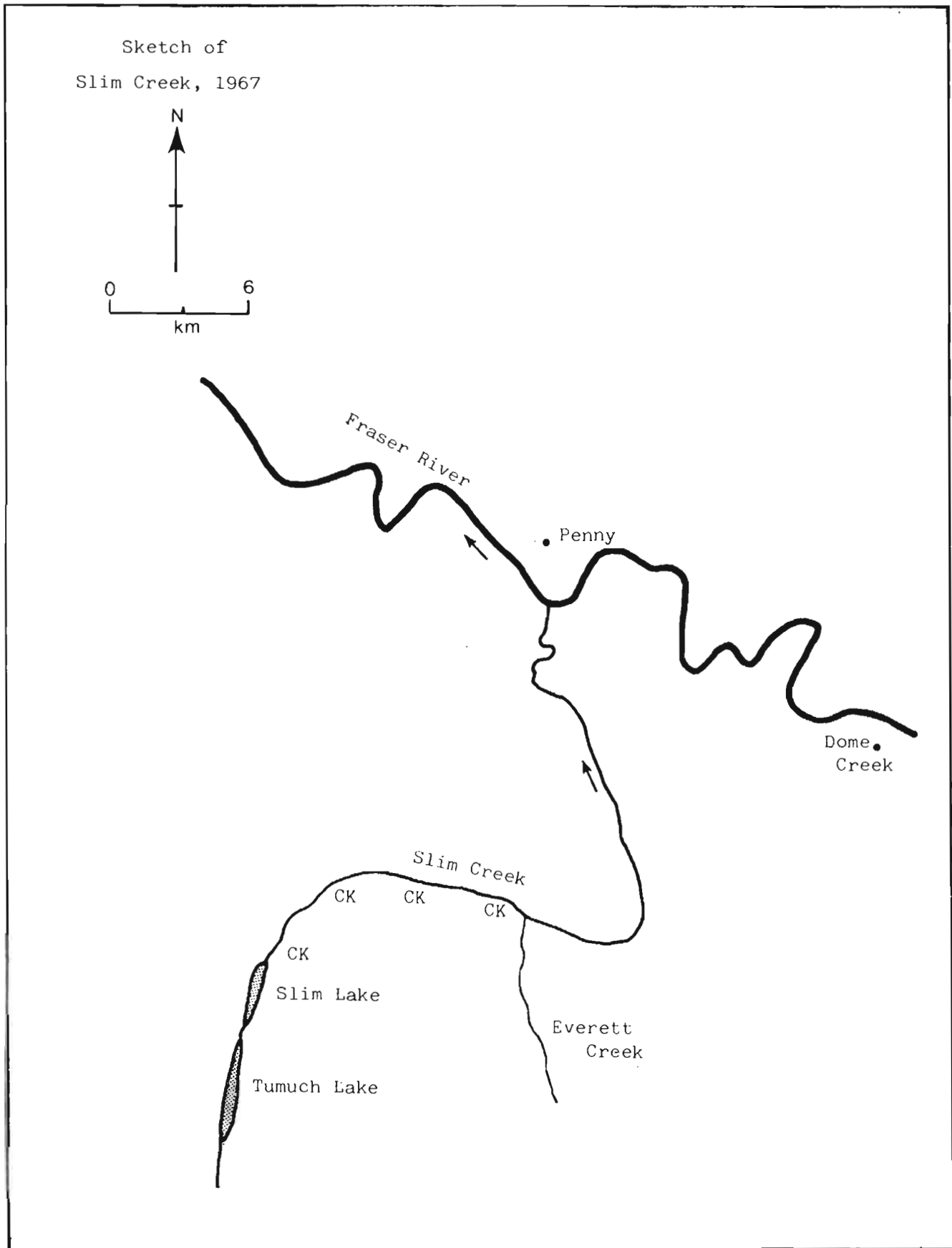
POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

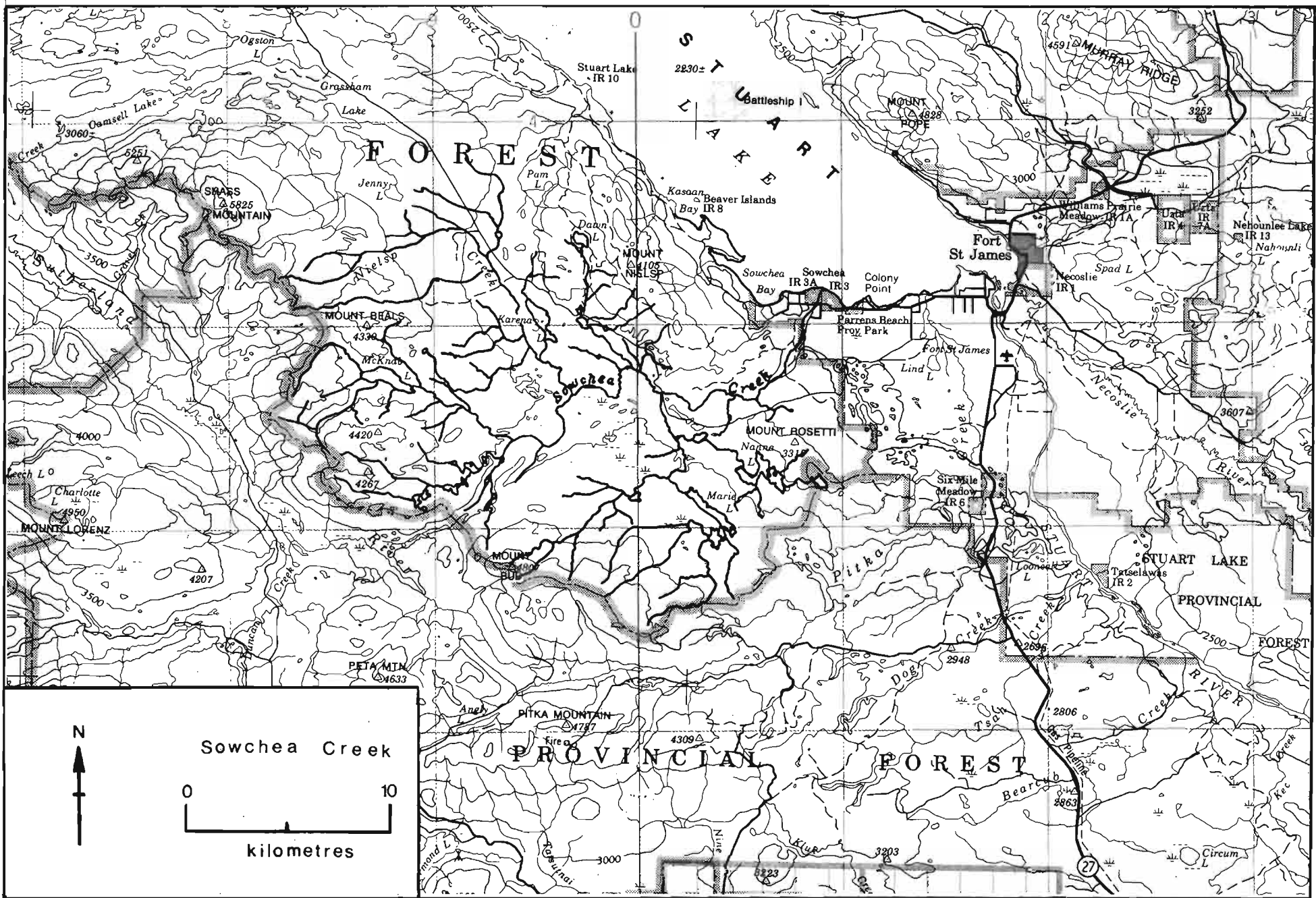
GENERAL REMARKS

- Excellent rearing stream because of many pools, abundant streamside vegetation, logs and hiding areas.
- Stream gradient to 16 km. is fairly steep, and the bottom of reach is composed of coarse gravel and boulders except for small section near the mouth.
- Inspection by helicopter or fixed wing aircraft only.
- 1972-1976. Area under a joint study carried out by the Dept. of Fisheries and Oceans, Fish and Wildlife Branch and Northwest Pulp to assess the impact of logging practices on fish habitat and production. The introduction of debris, increase in suspended sediment and increase in summer water temperatures were among the changes documented in the logged watershed area. A significant increase in the amount of in-gravel silt (<.07 mm) was also noted in streams that

GENERAL REMARKS (cont'd.) - Slim Creek

had been logged. It is thought that these fines form a hard pan layer which poses a barrier to fry emergence. It also smother eggs and alevins.





NAME OF STREAM SOWCHEA CREEK (Souchi Creek)
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows E. into S. end of Stuart L., Rge. 5, Coast Dist.

POSITION 54 124 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	
CHINOOK	
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- 1924. Light run of pink salmon.
- 1972, 1974, 1978. Very large number of kokanee present.
- 1975. Fisheries Officer counted exactly six redds.
- 1979. Two placer leases became active this year on this creek. Both leases are above the spawning grounds. Effluent waters from these operations will have to be monitored in future years.

ESCAPEMENT RECORD FOR SOWCHEA CREEK (Souchi Creek)

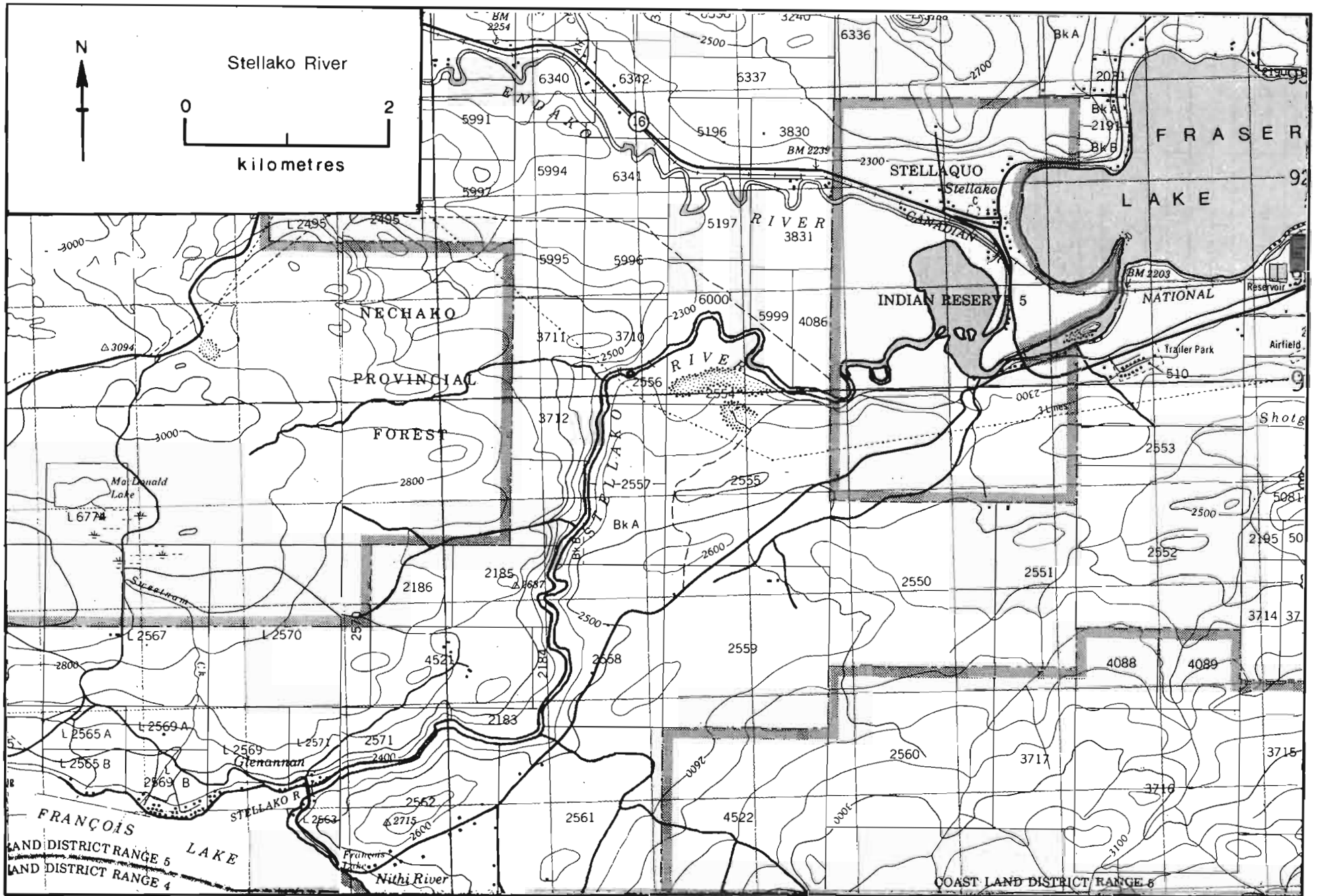
YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48	UNK					
49	25					
50	25					
51	25					
52						
53	200					
54	75					
55	25					
56	25					
57	200					
58	25					
59	25					
60	30					
61	70					
62	25					
63	N/O					
64	N/O					
65	25					
66	N/O					
67	N/O					
68	N/O					
69	75					
70	75					
71	N/O	10				
72	75					
73	158					
74	N/O					
75	47					
76	N/O					
77	47					
78	25					
79	75					
80						
81						
82						
83						
84						
85						

TIMING:

ARRIVE	E. SEPT					
START						
PEAK	M. SEPT					
END						

REMARKS

The escapements for sockeye include two separate runs. Timing for the late run is as follows: Arrive: L. SEPT
 Start:
 Peak: E. OCT
 End:



NAME OF STREAM STELLAKO RIVER
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Between François and Fraser Ls., Rge. 5, Coast Dist.
 POSITION 54 124 SW.
 LENGTH 13 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) 13.8°C (52/09/09)

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION

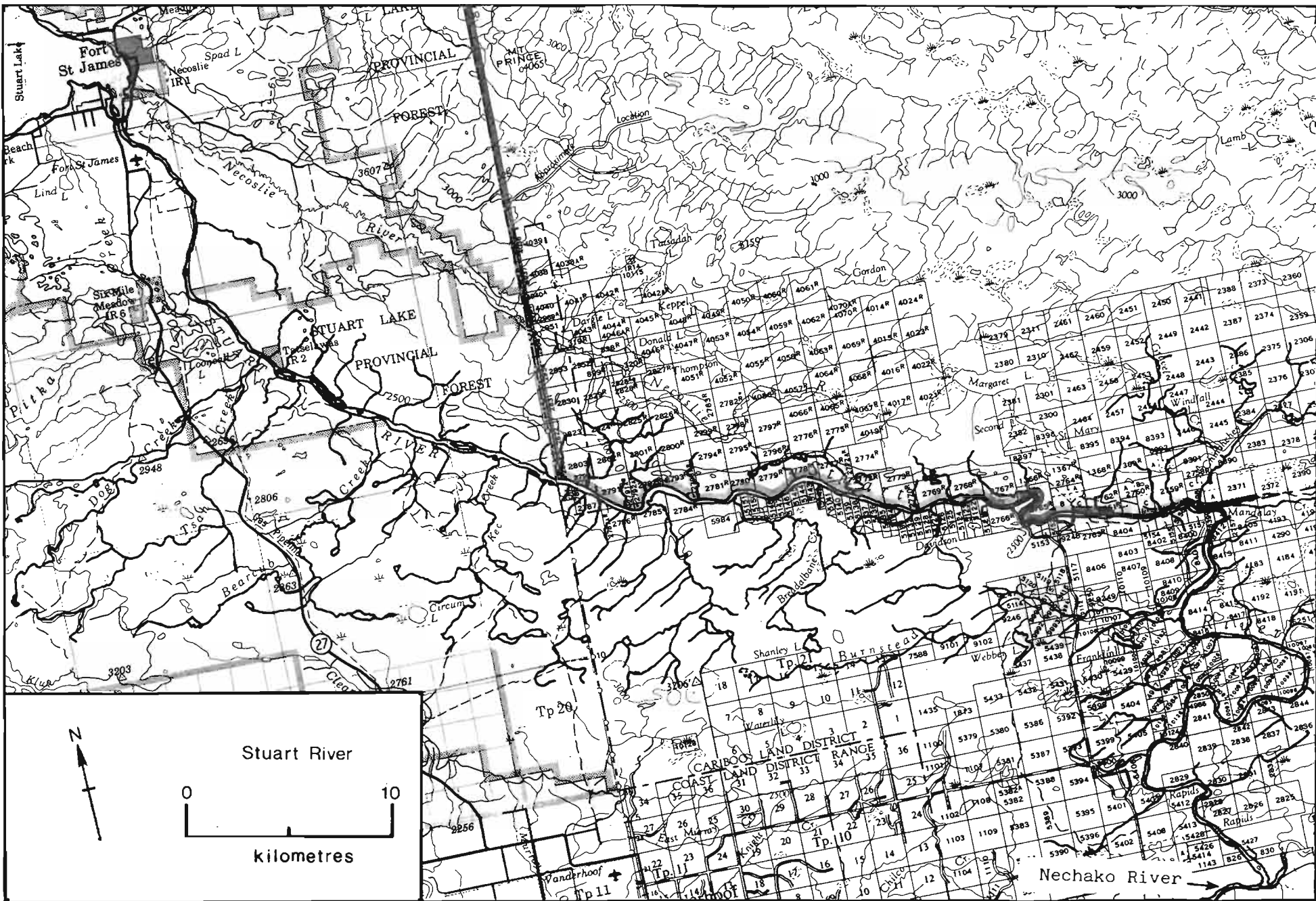
SPECIES	SECTION OF STREAM USED
SOCKEYE	- throughout
CHINOOK	- middle section and upper portion
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS - There is a large trout population in this river.
 - 1946. First time in 37 years that this river accomodated more than 100,000 spawners.
 - 1958. Because of very muddy water conditions, chinooks pulled out of Nechako River and spawned in this river.
 - 1959. Due to siltiness, chinooks from Nechako spawned in this river.
 - 1963. 55% of sockeye died of columnaris and other unknown causes. Most chinooks with columnaris managed to spawn successfully.
 - 1965. Log drive by Fraser Lake Sawmill.
 - 1967. Only 60% of sockeye spawned successfully. The remaining 40% died of columnaris.
 - 1975. Overpopulation of sockeye is due to fishermen's strike.

GENERAL REMARKS (cont'd.) - Stellako River

- 1976. Most of the 3% of sockeye that died unspawned have gill lesions.
- 1979. Overcrowded. Some digging up of eggs noted in the lower portion of the river. There was also some lake shore spawning in the outlet of François Lake.



NAME OF STREAM STUART RIVER

CONSERVATION DISTRICT 1 SUBDISTRICT Prince George

LOCATION OF MOUTH Flows S. into Nechako R., N. of Finmoore, Cariboo Dist.

POSITION 53 123 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	- mainly upper portion
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS _____

ESCAPEMENT RECORD FOR STUART RIVER

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48		UNK				
49		750				
50		400				
51		400				
52		750				
53		1500				
54		75				
55		400				
56	200	200				
57		200				
58	200	750				
59		200				
60		75				
61		48				
62		200				
63		350				
64		400				
65		60				
66		55				
67		200				
68		200				
69		400				
70		750				
71		750				
72		75				
73		200				
74		400				
75		750				
76		225				
77		225				
78		1000				
79		750				
80						
81						
82						
83						
84						
85						

TIMING

ARRIVE		L. AUG				
START						
PEAK		M. SEPT				
END						

REMARKS

NAME OF STREAM SWIFT CREEK
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows NW. into McLennan R. at Valemount, Cariboo Dist.
 POSITION 52 119 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) 8.6°C (71/08/26)

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

- Impassable water diversion dam of Valemount Village at 4.0 km.

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	- from 0.8 km. above mouth to C.N.R. bridge in Valemount
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- This stream has an erratic behaviour of water flows and silting.
- Illegal fishing and molesting a constant problem carried out by juveniles from Valemount and tourists from local campsite.
- 1972. 100% silt in lower reaches.
- 1977. Poaching and molesting of salmon reduced drastically by temporary angling closure and more frequent patrols by local conservation officer and patrolman.

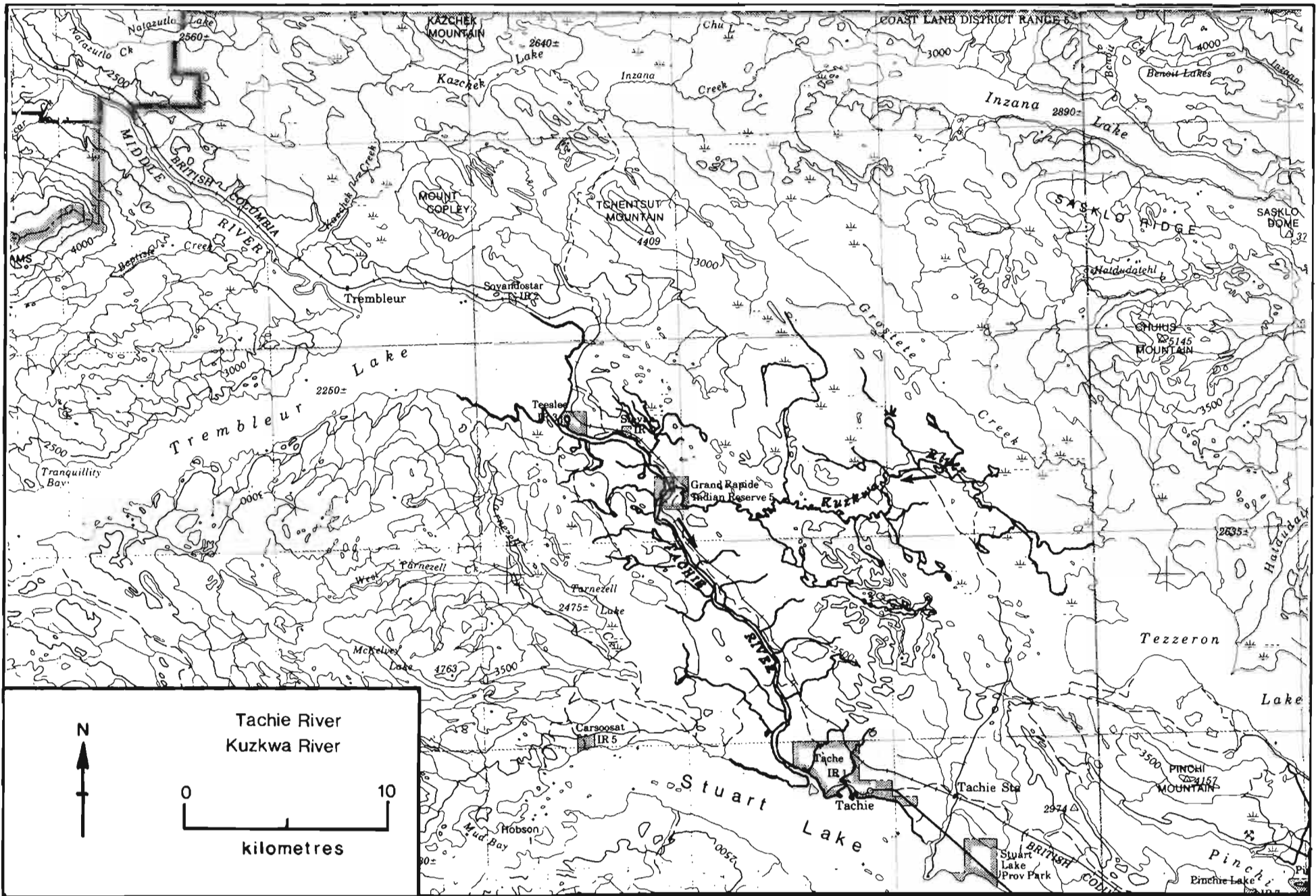
ESCAPEMENT RECORD FOR SWIFT CREEK

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		75				
71		75				
72		200				
73		75				
74		200				
75		75				
76		200				
77		275				
78		200				
79		350				
80						
81						
82						
83						
84						
85						

TIMING

ARRIVE		E. AUG				
START		M. AUG				
PEAK		L. AUG				
END		E. SEPT				

REMARKS



NAME OF STREAM TACHIE RIVER
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Between Stuart and Trembleur Ls., Rge. 5, Coast Dist.
 POSITION 54 124 NW.
 LENGTH 25 km WIDTH 30 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

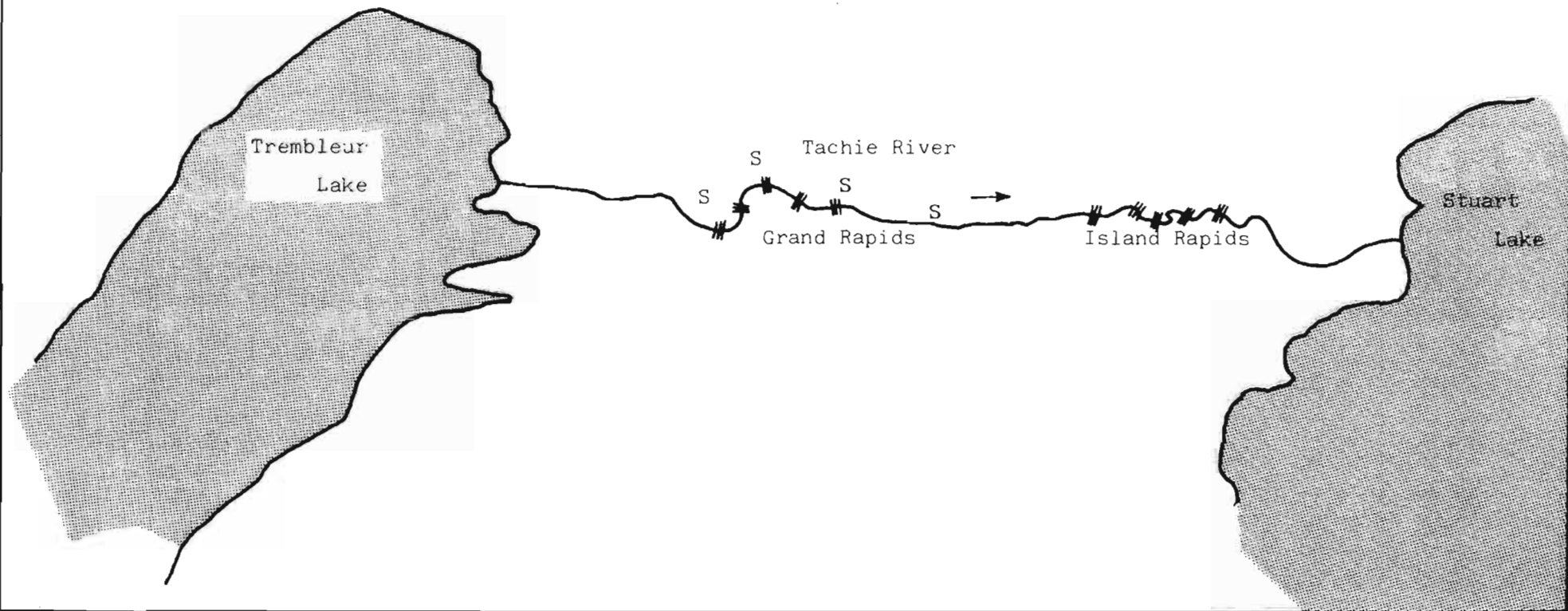
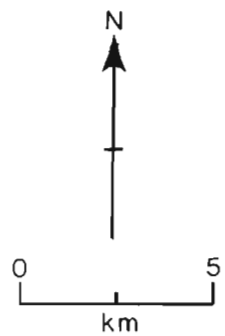
SPAWNING DISTRIBUTION

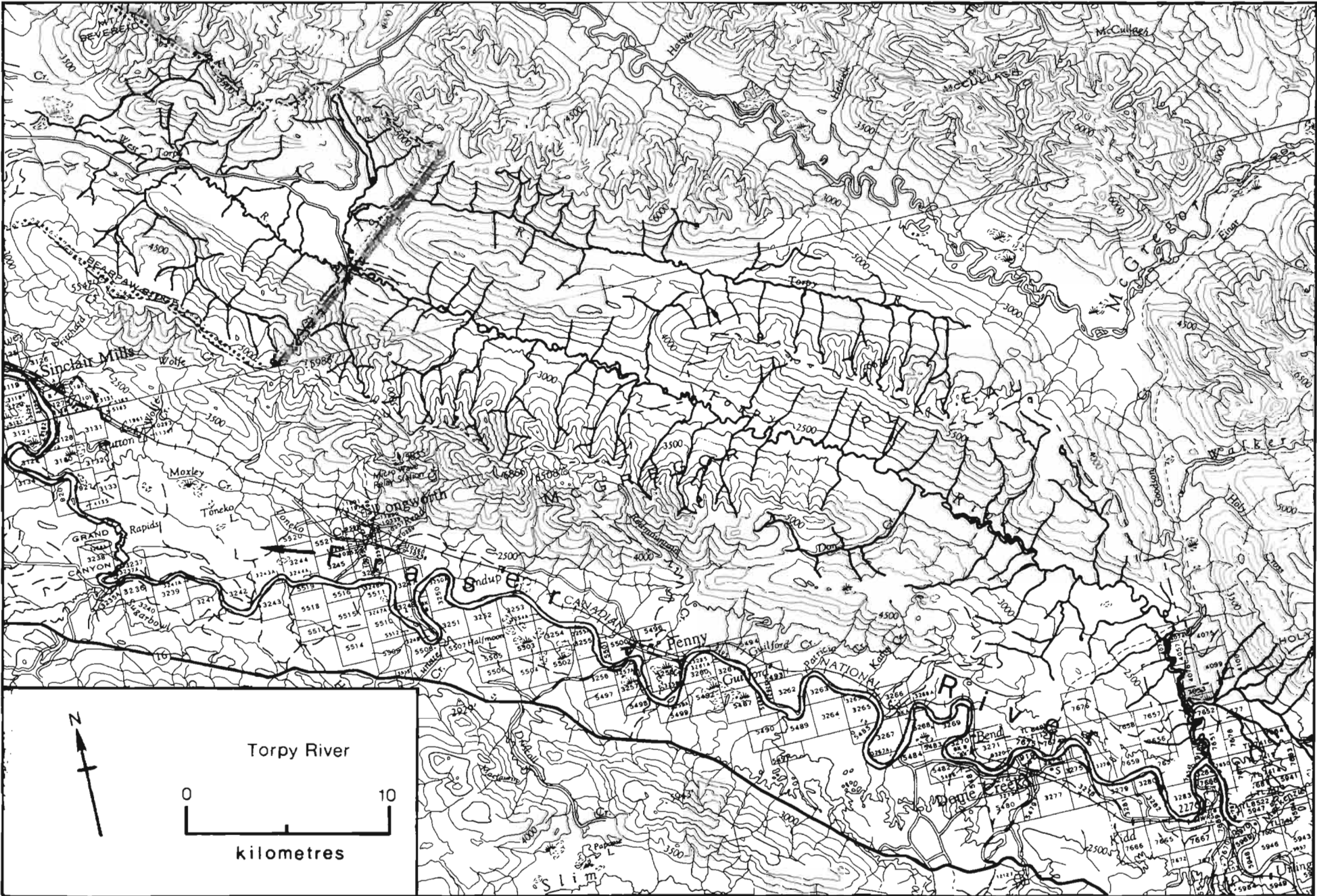
SPECIES	SECTION OF STREAM USED
SOCKEYE	- throughout; heaviest at and below grand rapids
CHINOOK	
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM

GENERAL REMARKS - There are 4 indian reservations along this river.
 - This is fast flowing stream with numerous riffles, navigable by boats under their own power.
 - Large gravel and boulders throughout its length.
 - 1959. Log drive by Riverbank Sawmills of Fort St. James, B. C.
 - 1969. Second log drive was cancelled due to low water.
 - 1970. Log drive on this river in June 3-24.
 - 1971. Construction of P.G.E. Railway along Middle River and Takla Lake made the traffic on this river very heavy.
 - 1975. Piling for the booming grounds at the mouth of the river were removed in late Oct.
 - 1976. Several million kokanee spawned this fall.

Sketch of
Tachie River, 1965





NAME OF STREAM TORPY RIVER
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows SE. into Fraser R., NE. of Kidd, Cariboo Dist.
 POSITION 53 120 NW.
 LENGTH 63 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 1,549,342 m² SPAWNING AREA 201,134 m²

DISCHARGE (m³/s)

TEMPERATURE (°C)

BARRIERS OR POINTS OF DIFFICULT ASCENT

SPAWNING DISTRIBUTION

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	- throughout; mainly upper end of valley and West Torpy River
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM

GENERAL REMARKS

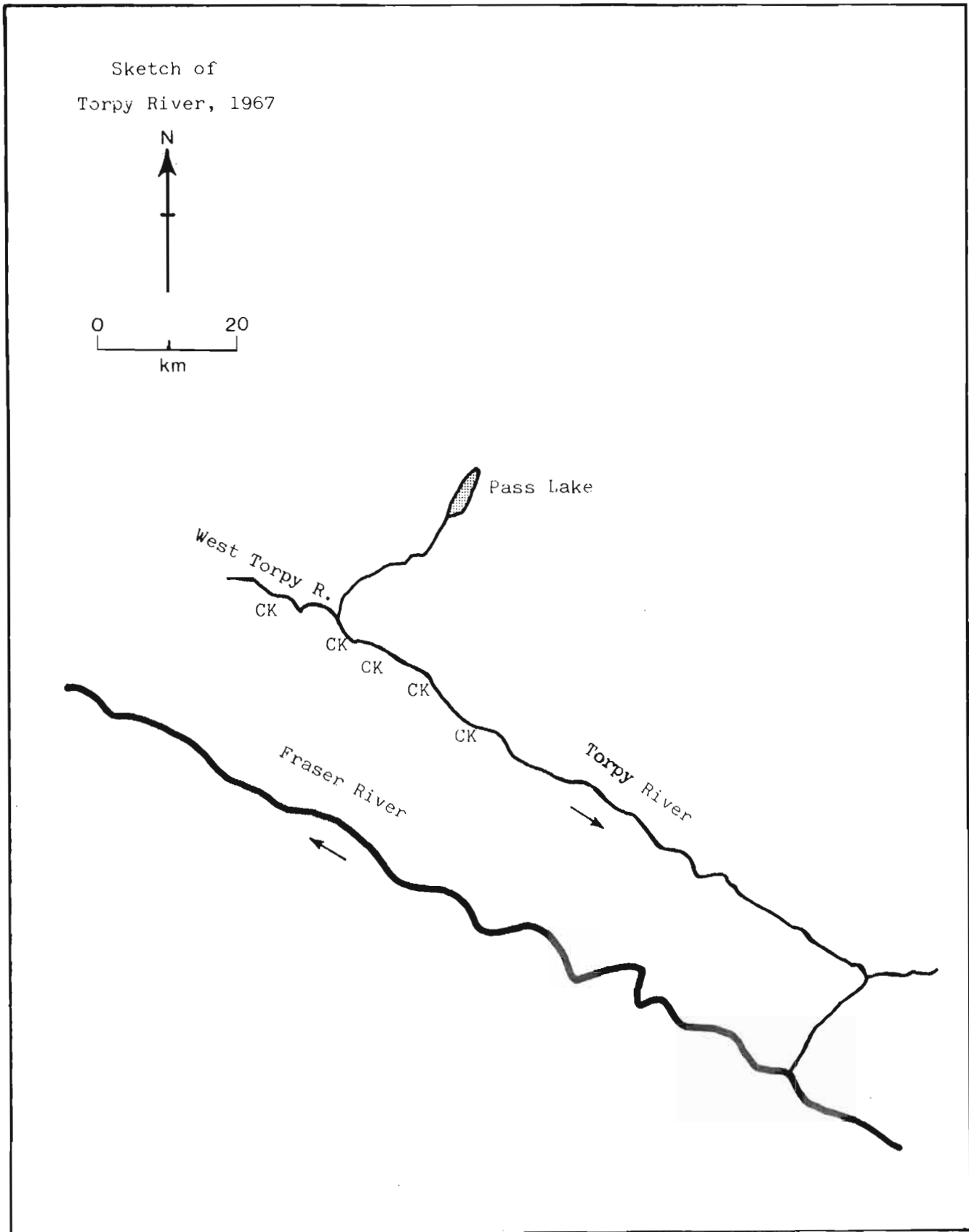
- Stream bottom and banks are composed mainly of sand and clay.
- Lower section of river to 43 km. has very moderate gradient.
- Poor visibility due to turbidity.
- Water flow is slow and the river meanders.
- 1976. This year's run showed a 50% reduction from brood years 1972 and 1973.

Tributaries:

1. West Torpy River (Keg Creek) - Flows SE. into Torpy R., Cariboo Dist.
 Position - 54 121 SE.
 Length - 18 km.
 Wetted Area - 88,280 square meters
 Spawning Area - 30,900 square meters

GENERAL REMARKS (cont'd.) - Torpy River

- The water is very clear although the first kilometer and a half is swampy and slow-flowing; the substrate consists mainly of sand and very fine gravel.
2. Walker Creek - Has a separate escapement record since 1971.



ESCAPEMENT RECORD FOR TORPY RIVER

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59		NO RECORDS PRIOR TO 1960				
60						
61		250**				
62		1500**				
63		600				
64		600				
65		200				
66		350				
67		650				
68		400				
69		400				
70		750				
71		750*				
72		400*				
73		750*				
74		400				
75		200				
76		400				
77		400				
78		200				
79		750				
80						
81						
82						
83						
84						
85						

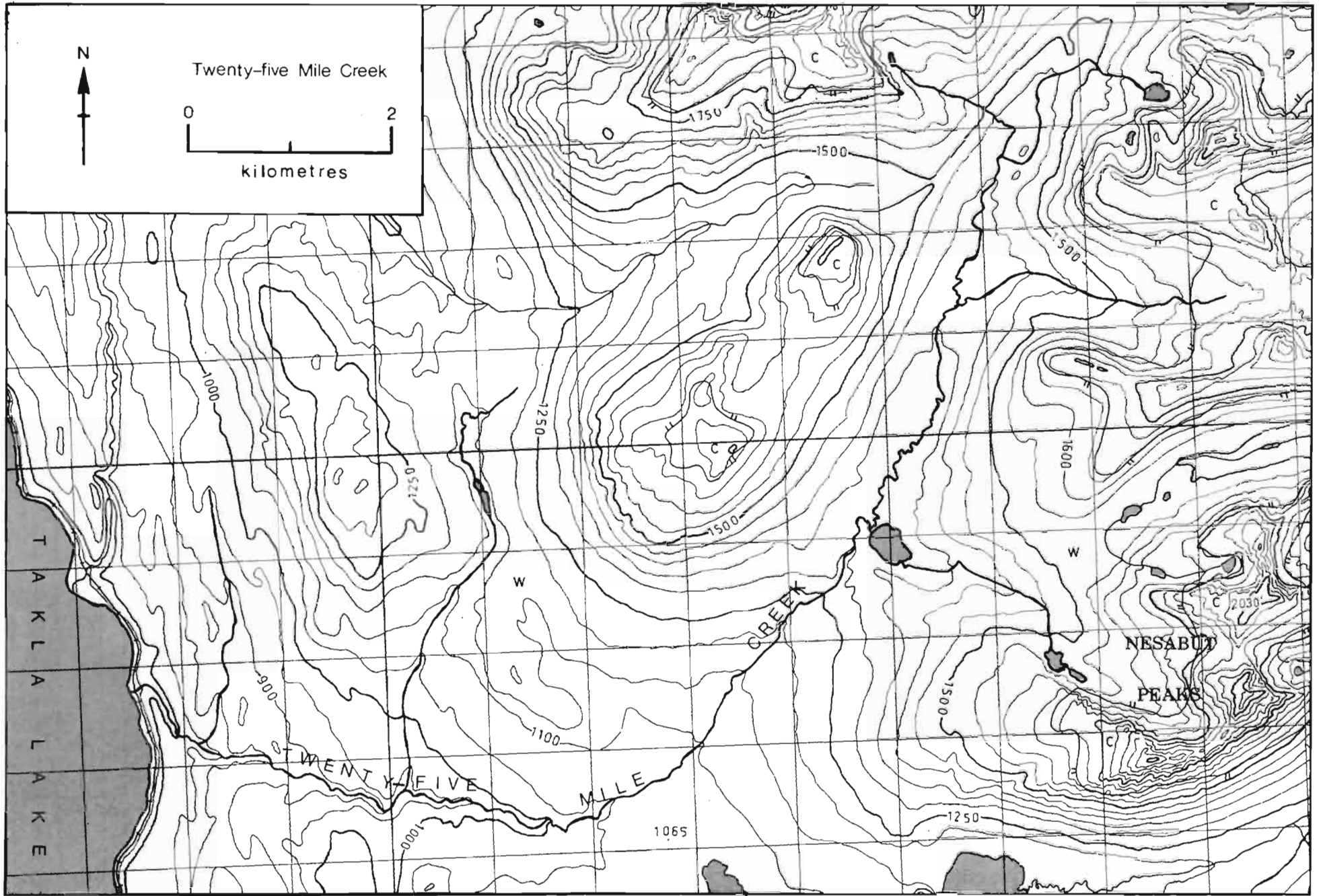
TIMING:

ARRIVE		L. JULY				
START						
PEAK		L. AUG				
END						

REMARKS

* Include escapements to West Torpy River and Walker Creek.

**Report from Fraser River Board.



NAME OF STREAM _____ (Twenty-Five Mile Creek)
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows SW. into Takla L., 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 _____ m²
 DISCHARGE (m³/s) _____
 TEMPERATURE (°C) _____
 BARRIERS OR POINTS OF DIFFICULT ASCENT _____

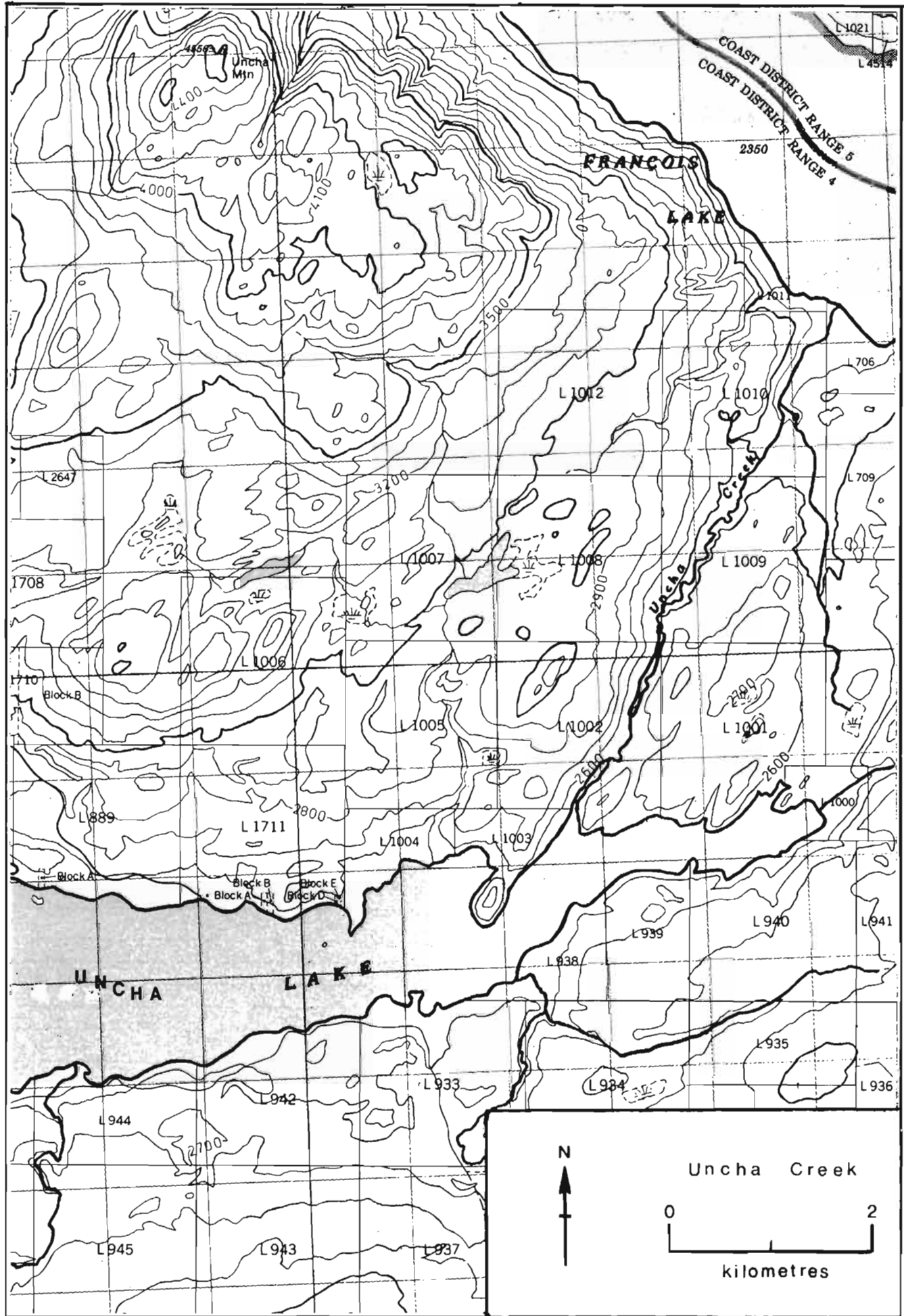
SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- Cycle year spawning stream.
- 1971. Catre Construction placed a temporary bridge across the creek in July on the P.G.E. right-of-way.
- 1972. Due to the very heavy run-off in June, the bed of the stream "graveled up" to the extent that it would leave very little clearance under the proposed B.C.R. bridge. With a verbal approval from the Vancouver office, the stream was moved over a few feet, deepened and widened. As a result, there is now twice as much available spawning gravel.



NAME OF STREAM UNCHA CREEK
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows NE. into François L., E. of Mollice L., Rge.4,
Coast Dist. POSITION 53 125 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	- throughout
CHINOOK	
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- This stream received the overflow fish from a very heavy run to the Stellako R. - 1961. Due to very low water level, fish could not get into the stream.

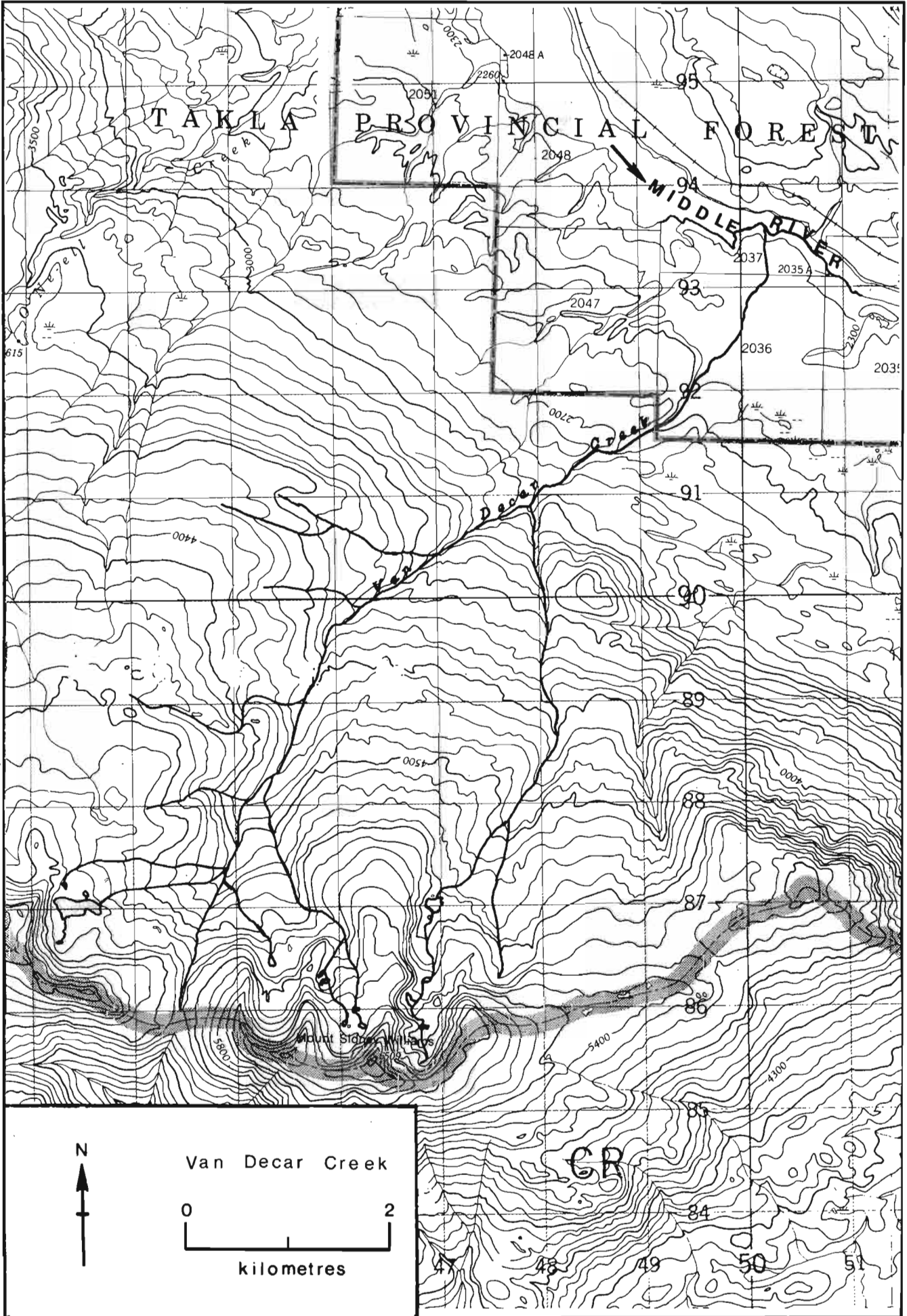
ESCAPEMENT RECORD FOR UNCHA CREEK

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48	N/O					
49						
50	25					
51	25					
52						
53	75					
54						
55	25					
56	N/O					
57	N/O					
58	6					
59	N/O					
60	N/O					
61	N/O					
62	N/O					
63	N/O					
64						
65		RECORDS DISCONTINUED				
66						
67						
68						
69						
70						
71						
72						
73						
74						
75						
76						
77						
78						
79						
80						
81						
82						
83						
84						
85						

TIMING:

ARRIVE						
START						
PEAK						
END						

REMARKS



NAME OF STREAM VAN DECAR CREEK (Rossette Creek)
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows NE. into Middle R., SW. of Natazutlo L., Rge. 5,
Coast Dist. POSITION 54 125 NE.
 LENGTH _____ km WIDTH 9.0 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 _____

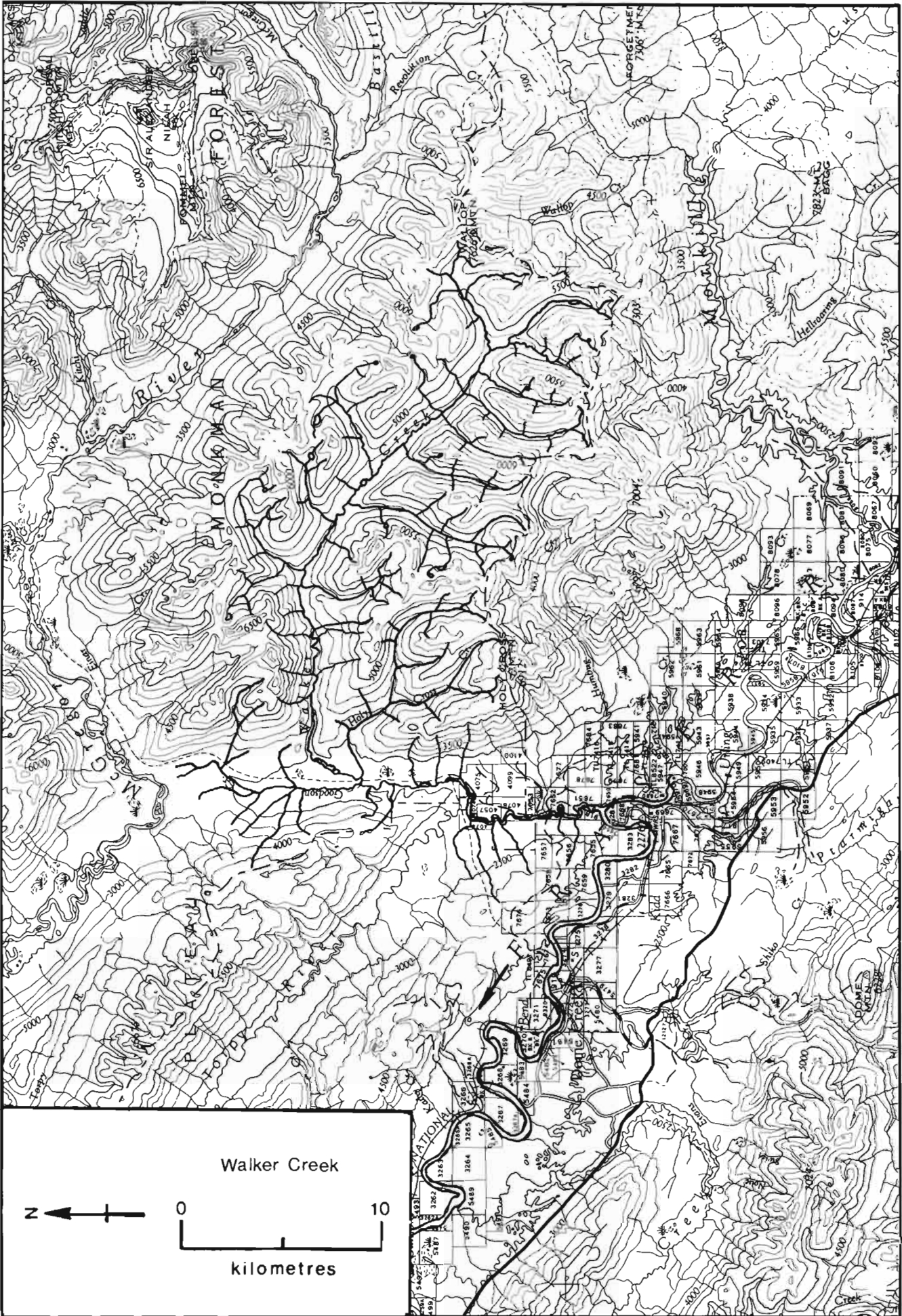
SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- 1949. Fish suffered from overcrowding.
 - 1974. The heavier than normal run-off moved many windfalls and small jams that helped stabilize this stream.



NAME OF STREAM WALKER CREEK

CONSERVATION DISTRICT 1 SUBDISTRICT Prince George

LOCATION OF MOUTH Flows SW. into Torpy R., N. of Holy Cross Mtn., Cariboo

Dist. _____ POSITION 53 120 NW.

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 361,585 m² SPAWNING AREA 81,475 m²

DISCHARGE (m³/s) _____

TEMPERATURE (°C) _____

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- 1973. North Central Plywoods in operation north of this creek towards upper McGregor River where they will be logging some 4 million cubic feet or 24 million board feet.

- The water is very clear and the visibility is excellent.

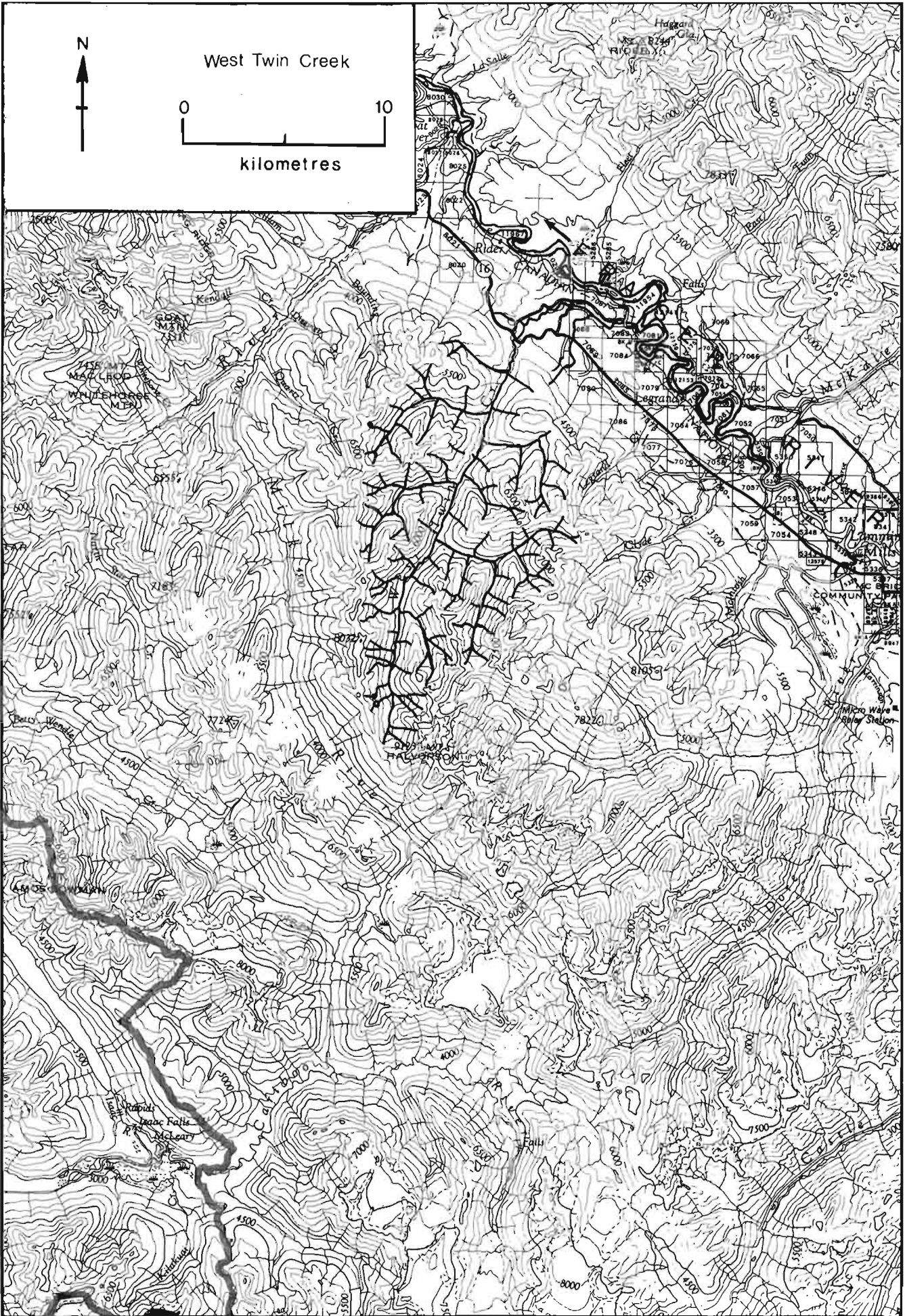
ESCAPEMENT RECORD FOR WALKER CREEK

YEAR	SOCKEYE	CHITNOOK	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		200				
72		200				
73		200				
74		200				
75		200				
76		200				
77		200				
78		125				
79		200				
80						
81						
82						
83						
84						
85						

TIMING

ARRIVE		E. AUG				
START						
PEAK		L. AUG				
END						

REMARKS



NAME OF STREAM WEST TWIN CREEK

CONSERVATION DISTRICT 1 SUBDISTRICT Prince George

LOCATION OF MOUTH Flows NE. into Fraser R., S. of Goat R., Cariboo Dist.

POSITION 53 120 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	
CHINOOK	- throughout
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS _____

ESCAPEMENT RECORD FOR WEST TWIN CREEK

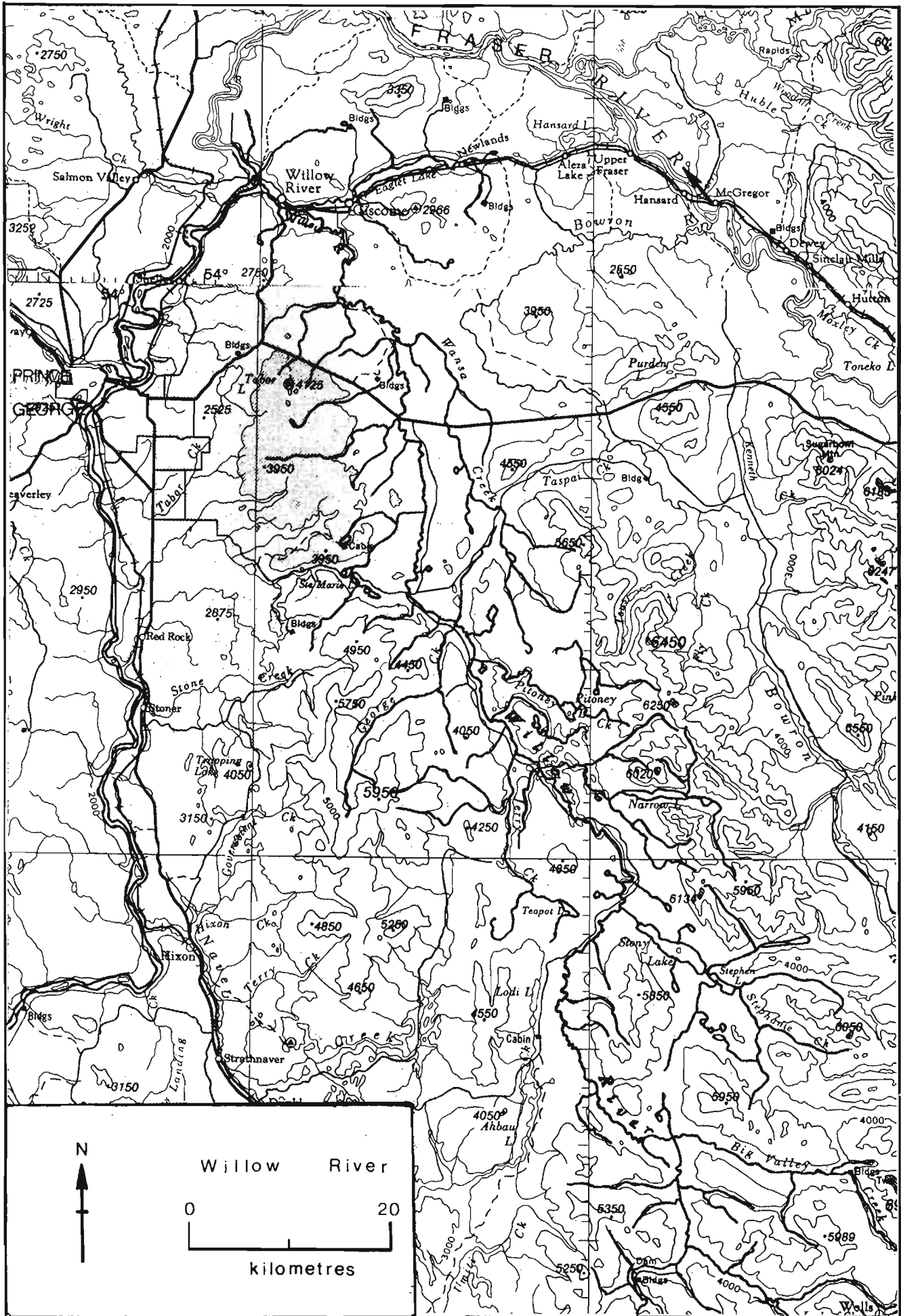
YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947						
48						
49						
50						
51						
52						
53						
54						
55						
56						
57						
58						
59						
60						
61						
62						
63						
64						
65						
66						
67						
68						
69						
70						
71						
72						
73		59*				
74		25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

TIMING

ARRIVE						
START						
PEAK						
END						

REMARKS

* Estimate includes escapement to Milk River.



NAME OF STREAM WILLOW RIVER
 CONSERVATION DISTRICT 1 SUBDISTRICT Prince George
 LOCATION OF MOUTH Flows NW. into Fraser R., W. of Eaglet L., Cariboo Dist.
 POSITION 54 122 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

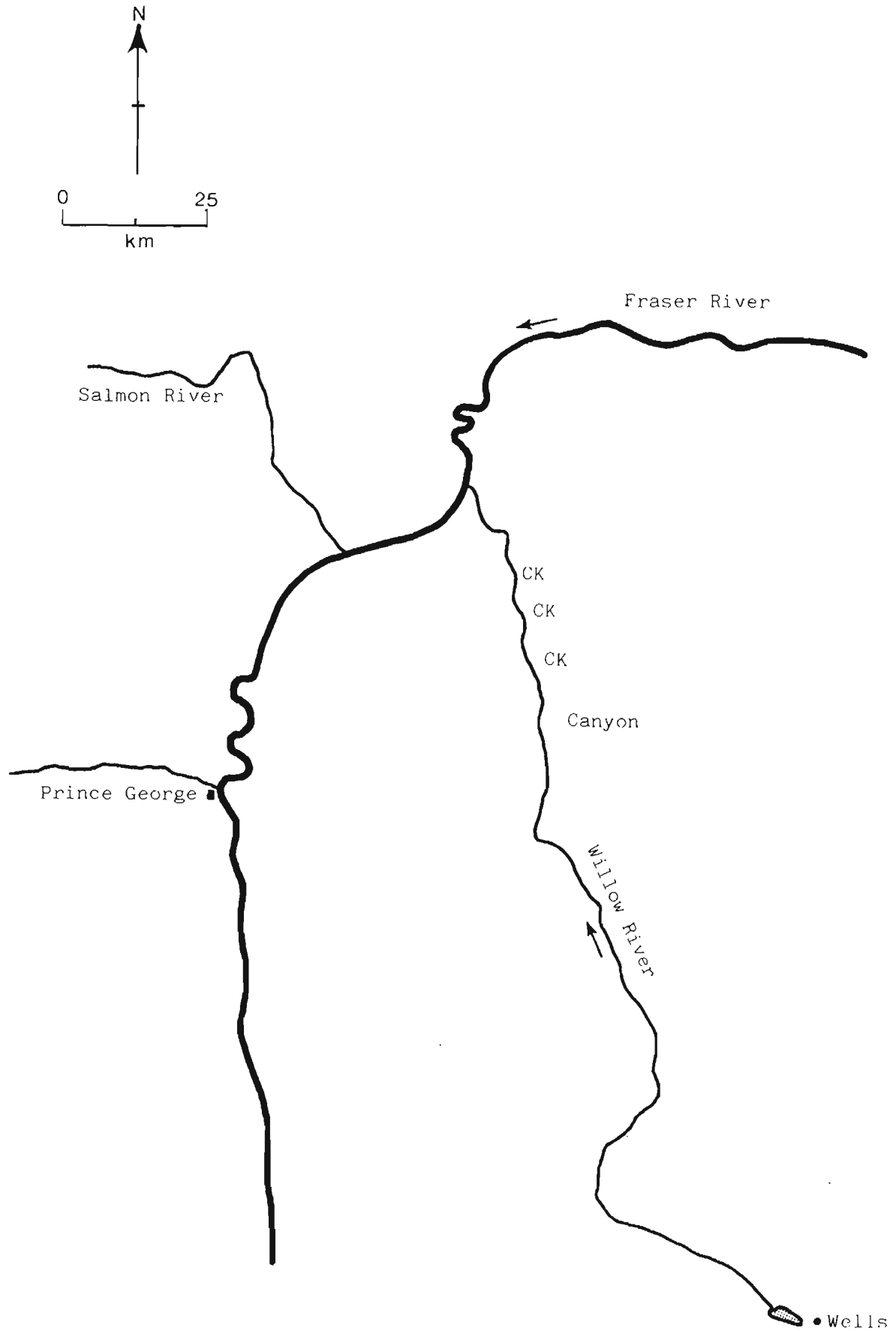
SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	- throughout
COHO	
CHUM	
PINK (ODD YEAR)	
PINK (EVEN YEAR)	
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS

- Only accessible areas are patrolled.
 - 1951,56. Dry, warm summer caused very low water level and above normal water temperature.
 - 1961. Two large forest fires which burned to the banks of the river.
 - Bottom composition is made up of pebble, silt, some cobble, boulder and bedrock.

Sketch of
Willow River, 1967



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

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- British Columbia Research Council. 1965. Water quality study of the Fraser River near Prince George. B.C.R.C. at U.B.C. Progress Rep. 11, 8pp.
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- Kahl, A.L. 1977. Fraser River system reconnaissance. (Unpublished Report).