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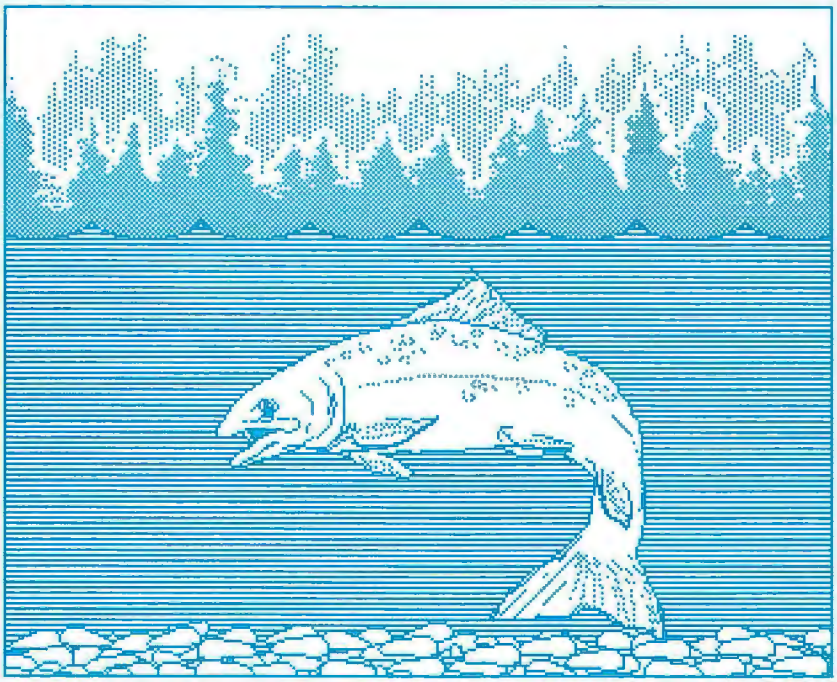
Fish Habitat Inventory & Information Program

STREAM SUMMARY CATALOGUE

SUBDISTRICT # 20
SOOKE



Fisheries and Oceans
BC Ministry of Environment and Parks
Canada

Fish Habitat
Inventory & Information Program

STREAM SUMMARY CATALOGUE

SUBDISTRICT # 20
SOOKE

South Coast Division
Fisheries Branch
Department of Fisheries & Oceans

October 1987

PREFACE

This catalogue contains a summary of information on fish and fish habitat for 22 streams in DFO Subdistrict #20, Sooke. The catalogue is organized as follows:

1.0 Map Indices;
2.0 User Guides;
3.0 Stream Information Summaries;
4.0 Escapement Records; and
5.0 Stream Information Summary maps.

Stream Information Summaries and escapement records are arranged by watershed code. Cross indices of watershed codes and stream names are included in section 1.0 of this catalogue.

ACKNOWLEDGEMENTS

This catalogue was prepared by G. Kapahi under a contract managed by B. D. Tutty, South Coast Division. Catalogue production was coordinated by J.S. Mathers, Habitat Management Division. The assistance of Fishery Officers J. Stephen and R. Kehl in providing & verifying much of the information is greatly appreciated. Stream Information Summaries were produced by K. Pontus, Habitat Management Division, using the Stream Information Summary System (SISS). Escapement records were generated by G. Serbic and G. Hudson, Pacific Biological Station, Nanaimo, using the Salmon Escapement Data System (SEDS).

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  - MOEP Region Map
  - 1:250,000 National Topographic Series Map Index
  - 1:50,000 National Topographic Series Map Index
  - 1:20,000 Planimetric Map Index

2.0 User Guides
  2.1 Stream Information Summary
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  2.3 Stream Information Summary Map

3.0 Stream Information Summary
  3.1 Stream Information Summary (by Watershed Code)
  3.2 Subdistrict Bibliography

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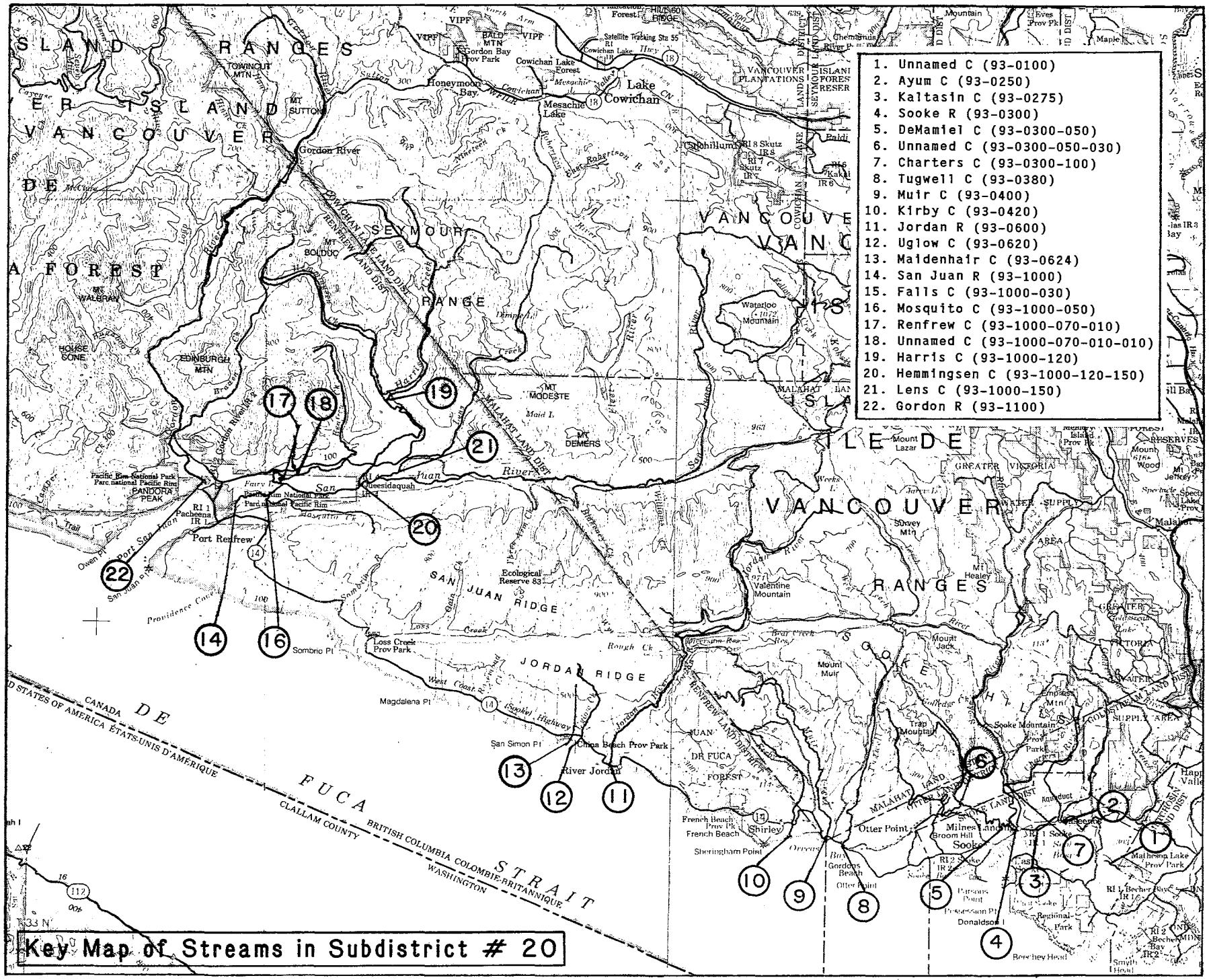


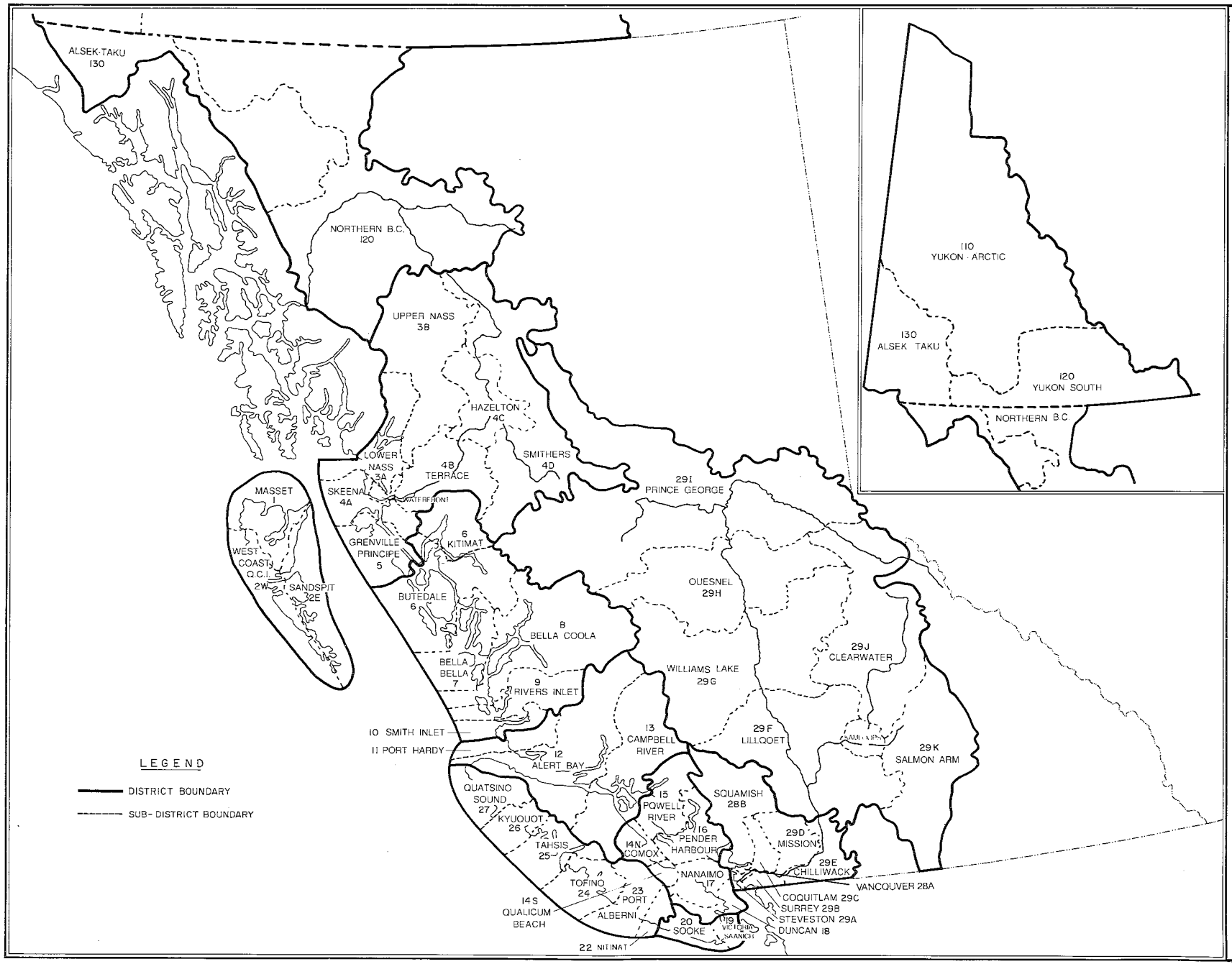
Key Map of Streams in Subdistrict # 20

WATERSHED CODE LISTING OF STREAM NAMES

WATERSHED CODE	STREAM NAME
93-0100	Unnamed C
93-0250	Ayum C
93-0275	Kaltasin C
93-0300	Sooke R
93-0300-050	DeMamiel C
93-0300-050-030	Unnamed C
93-0300-100	Charters C
93-0380	Tugwell C
93-0400	Muir C
93-0420	Kirby C
93-0600	Jordon R
93-0620	Uglow C
93-0624	Maidenhair C
93-1000	San Juan R
93-1000-030	Falls C
93-1000-050	Mosquito C
93-1000-070-010	Renfrew C
93-1000-070-010-010	Unnamed C
93-1000-120	Harris C
93-1000-120-150	Hemmingsen C
93-1000-150	Lens C
93-1100	Gordon R

ALPHABETIC LISTING OF STREAM NAMES AND WATERSHED CODES

WATERSHED CODE	STREAM NAME
93-0250	Ayum C
93-0300-100	Charters C
93-0300-050	DeMamiel C
93-1000-030	Falls C
93-1100	Gordon R
93-1000-120	Harris C
93-1000-120-150	Hemmingsen C
93-0600	Jordan R
93-0275	Kaltasin C
93-0420	Kirby C
93-1000-150	Lens C
93-0624	Maidenhair C
93-1000-050	Mosquito C
93-0400	Muir C
93-1000-070-010	Renfrew C
93-1000	San Juan R
93-0300	Sooke R
93-0380	Tugwell C
93-0620	Uglow C
93-0100	Unnamed C
93-0300-050-030	Unnamed C
93-1000-070-010-010	Unnamed C



DISTRICT #1 — KAMLOOPS
- Subdist 29F - Lillooet
- Subdist 29G - Williams Lake
- Subdist 29H - Quesnel
- Subdist 29I - Prince George
- Subdist 29J - Clearwater
- Subdist 29K - Salmon Arm

DISTRICT #2 — NEW WESTMINSTER
- Subdist 28A - Vancouver
- Subdist 28B - Squamish
- Subdist 29A - Steveston
- Subdist 29B - Surrey
- Subdist 29C - Coquitlam
- Subdist 29D - Mission
- Subdist 29E - Chilliwack

DISTRICT #3 — NANAIMO
- Subdist 14S - Qualicum Beach
- Subdist 14N - Comox
- Subdist 15 - Powell River
- Subdist 16 - Pender Harbour
- Subdist 17 - Nanaimo/Ladysmith
- Subdist 18 - Duncan

DISTRICT #4 — PORT ALBERNI
- Subdist 22 - Nitinat
- Subdist 23 - Port Alberni
- Subdist 24 - Tofino
- Subdist 25 - Tahsis
- Subdist 26 - Kyuquot
- Subdist 27 - Quatsino Sound

DISTRICT #5 — CAMPBELL RIVER
- Subdist 11 - Port Hardy
- Subdist 12 - Alert Bay
- Subdist 13 - Campbell River

DISTRICT #6 — VICTORIA
- Subdist 19 - Victoria/Saanich
- Subdist 20 - Sooke

DISTRICT #7 — CENTRAL COAST
- Subdist 6 - Kitimat/Butedale
- Subdist 7 - Bella Bella
- Subdist 8 - Bella Coola
- Subdist 9 - Rivers Inlet
- Subdist 10 - Smith Inlet

DISTRICT #8 — PRINCE RUPERT
- Subdist 3A - Lower Nass
- Subdist 3B - Upper Nass
- Subdist 4A - Lower Skeena
- Subdist 4B - Terrace
- Subdist 4C - Hazelton
- Subdist 4D - Smithers
- Subdist 5 - Grenville Principe

DISTRICT #9 — QUEEN CHARLOTTE ISLANDS
- Subdist 1 - Masset
- Subdist 2W - West Coast Q.C.I.
- Subdist 2E - Sandspit

DISTRICT #10 — WHITEHORSE
- Subdist 110 - Yukon Arctic
- Subdist 120 - Yukon — North B.C.
- Subdist 130 - Alsek — Taku

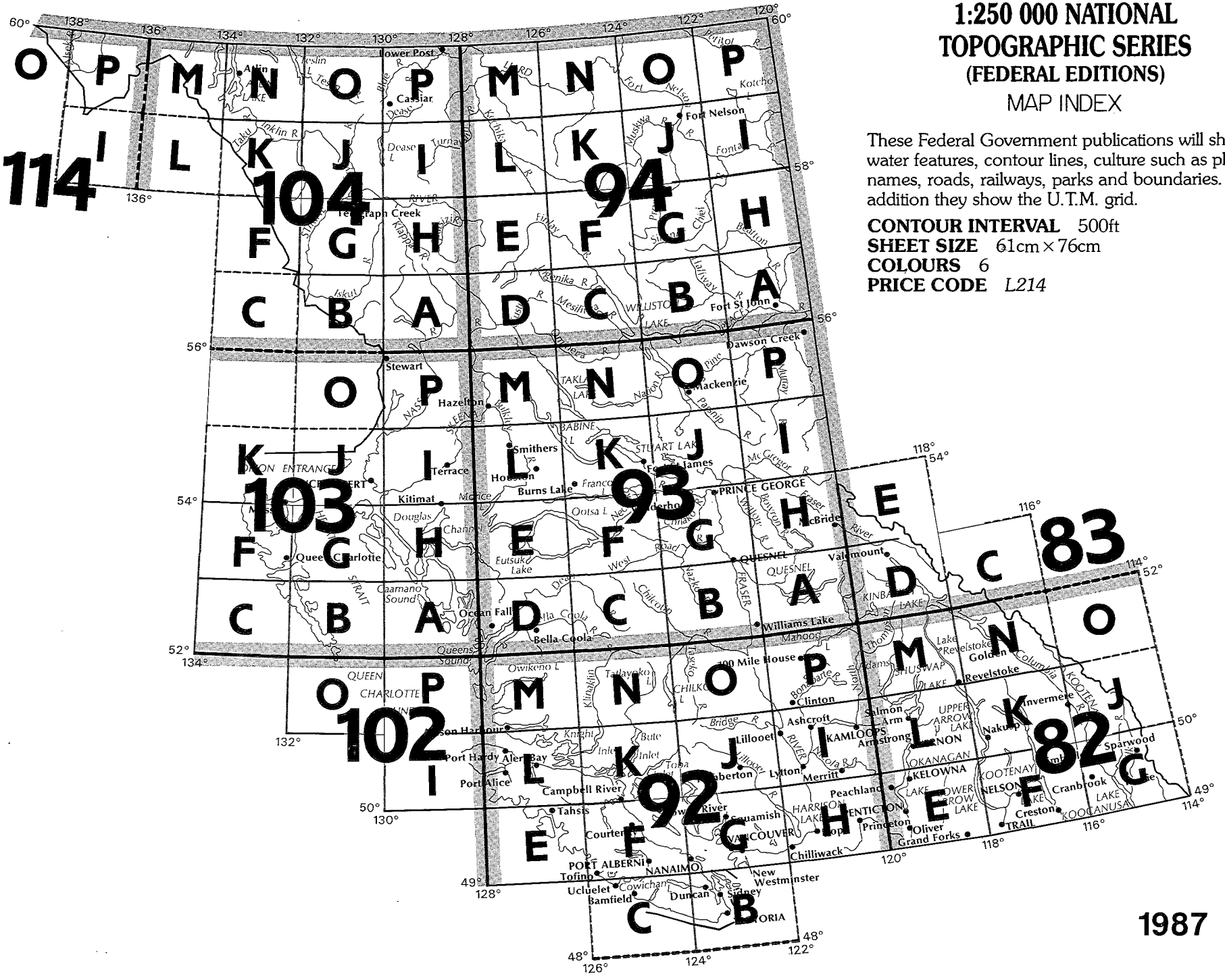
DFO PACIFIC REGION SUBDISTRICTS AND DISTRICTS

MOEP RESOURCE MANAGEMENT REGIONS

1:250 000 NATIONAL TOPOGRAPHIC SERIES
(FEDERAL EDITIONS)
MAP INDEX

These Federal Government publications will show water features, contour lines, culture such as place names, roads, railways, parks and boundaries. In addition they show the U.T.M. grid.

CONTOUR INTERVAL 500ft
SHEET SIZE 61cm × 76cm
COLOURS 6
PRICE CODE *L214*



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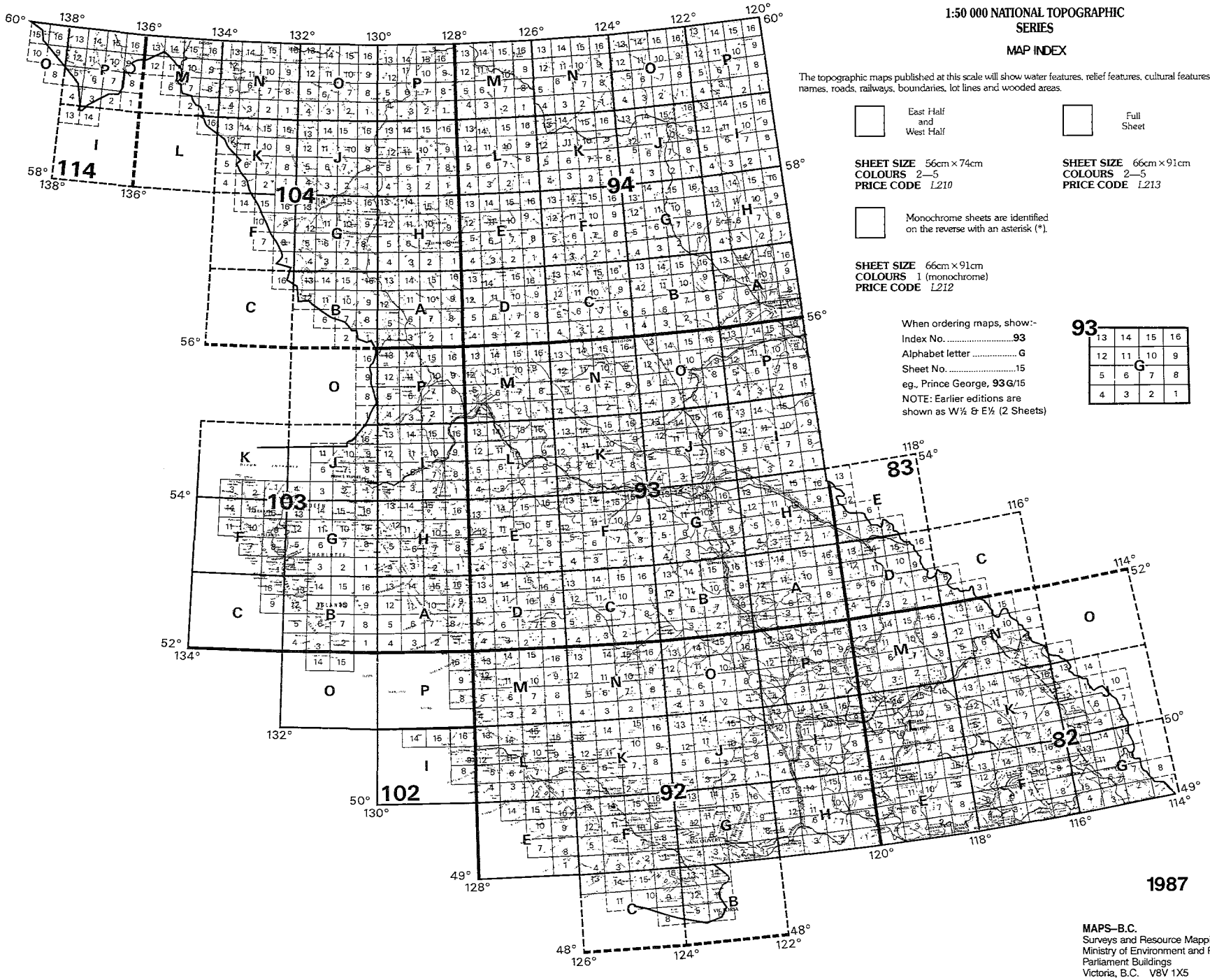


1:50 000 NATIONAL TOPOGRAPHIC SERIES

MAP INDEX

The topographic maps published at this scale will show water features, relief features, cultural features such as place names, roads, railways, boundaries, lot lines and wooded areas.

East Half and West Half

SHEET SIZE 56cm × 74cm
COLOURS 2—5
PRICE CODE *L210*

Full Sheet

SHEET SIZE 66cm × 91cm
COLOURS 2—5
PRICE CODE *L213*

Monochrome sheets are identified on the reverse with an asterisk (*).

SHEET SIZE 66cm × 91cm
COLOURS 1 (monochrome)
PRICE CODE *L212*

When ordering maps, show:-
Index No. **93**
Alphabet letter ..... **G**
Sheet No. **15**
eg., Prince George, **93G**/15
NOTE: Earlier editions are shown as W½ & E½ (2 Sheets)

93

13	14	15	16
12	11	10	9
5	6	7	8
4	3	2	1

G

1987

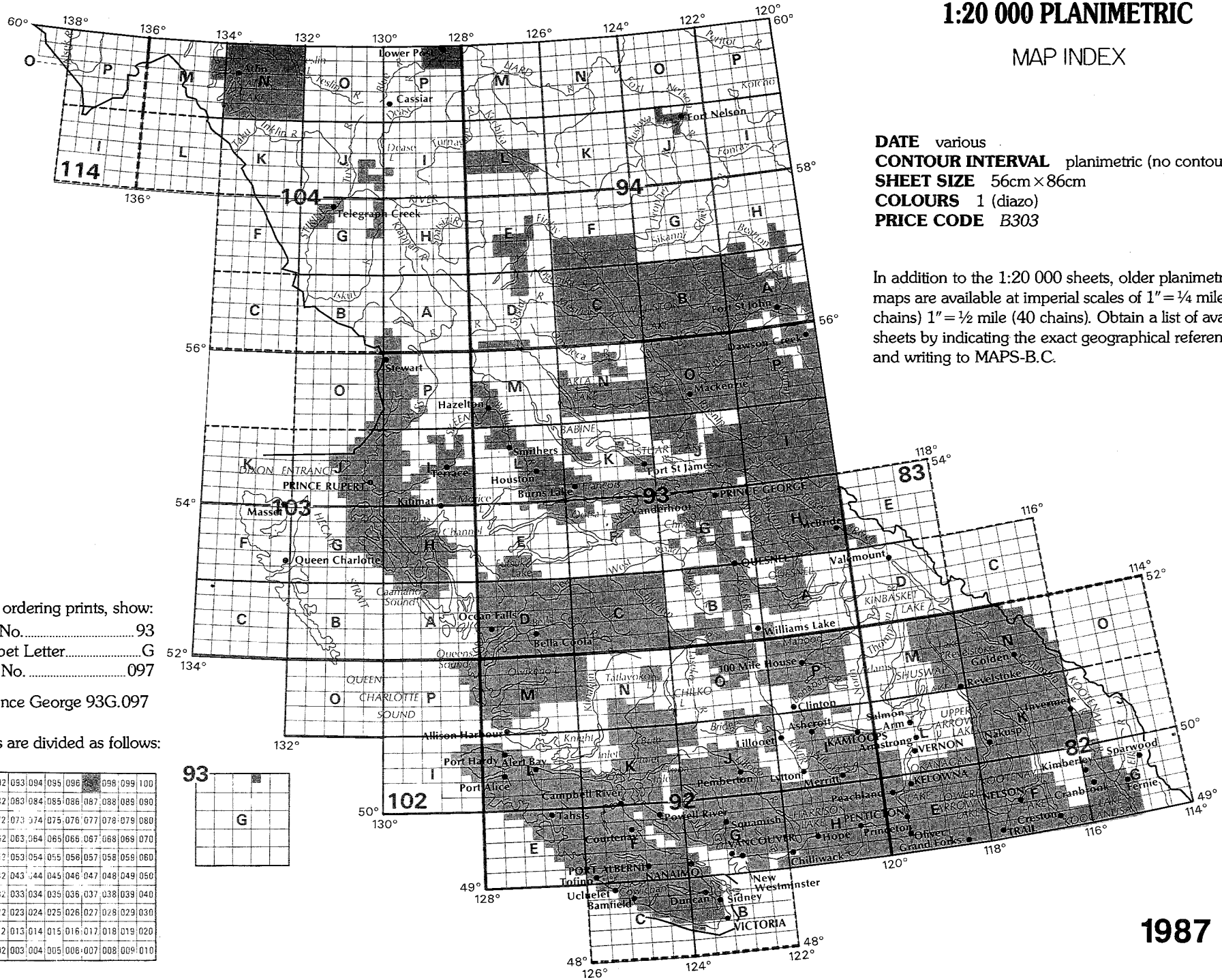
MAPS—B.C.
Surveys and Resource Mapping Branch
Ministry of Environment and Parks
Parliament Buildings
Victoria, B.C. V8V 1X5

1:20 000 PLANIMETRIC

MAP INDEX

DATE various
CONTOUR INTERVAL planimetric (no contours)
SHEET SIZE 56cm × 86cm
COLOURS 1 (diazo)
PRICE CODE *B303*

In addition to the 1:20 000 sheets, older planimetric maps are available at imperial scales of 1″ = ¼ mile (20 chains) 1″ = ½ mile (40 chains). Obtain a list of available sheets by indicating the exact geographical reference and writing to MAPS-B.C.


114
104
94
103
93
83
82
102
92
Lower Post
Cassiar
Fort Nelson
Telegraph Creek
Stewart
Hazelton
Smithers
Terrace
Houston
Burns Lake
Fort St James
PRINCE RUPERT
Kitimat
Massett
Queen Charlotte
Vanderhoof
PRINCE GEORGE
Fort St John
Dawson Creek
Mackenzie
Mcbride
Valemount
QUESNEL
Ocean Falls
Bella Coola
Williams Lake
100 Mile House
Clinton
Ashcroft
Lillooet
Allison Harbour
Port Hardy
Alert Bay
Port Alice
Campbell River
Tahsis
Powell River
Pemberton
Lytton
Merritt
Salmon Arm
Armstrong
KAMLOOPS
VERNON
Revelstoke
Golden
Invermere
Nakusp
Sparwood
Kimberley
Fernie
Cranbrook
Creston
TRAIL
NELSON
KELOWNA
PENTICTON
Princeton
Hope
Oliver
Grand Forks
Chilliwack
VANCOUVER
Squamish
Courtenay
PORT ALBERNI
NANAIMO
Tofino
Ucluelet
Bamfield
Duncan
Sidney
New Westminster
VICTORIA
QUEEN CHARLOTTE SOUND
DIXON ENTRANCE
HECATE STRAIT
Queens Sound
Caamaño Sound
Tatlayoko L.
CHILKO L.
SHUSWAP L.
KINBASKET LAKE
UPPER ARROW LAKE
KOOTENAY LAKE
OKANAGAN LAKE
PEACHLAND
Bridge
Knight Inlet
Bute Inlet
Toba Inlet
Thompson
Nicola
Nechako
Stuart
Fraser
Chilcotin
Kitimat
Skeena
Nass
Finlay
Peace
Liard
Pelly
Ross
Dease
Tumeka
Inklin R.
Stikine
Iskut
Klappan R.
Tatlatui L.
Frances
Pelly
Ross
Sikanni Chief
Beatton
Kechika
Muskwa
Fort Nelson
Prophet
Sustut
Bulkley
Morice
Babine
Francois L.
Fraser
Nechako
Quesnel
Cariboo
Thompson
Shuswap
Kootenay
Okanagan
Similkameen
Tulameen
Coquihalla
Nicola
Chilcotin
Bridge
Seton
Anderson
Harrison
Lillooet
Pemberton
Squamish
Howe Sound
Jervis Inlet
Sechelt
Texada
Quadra
Vancouver
Gulf Islands
Saltspring
Pender
Galiano
Mayne
Salt Spring
Sooke
Victoria
Saanich
Cowichan
Nanaimo
Alberni
Clayoquot
Barkley
Nootka
Kyuquot
Quatsino
Rupert
Moresby
Graham
Masset
Tlell
Skidegate
Queen Charlotte
Tlell
Sandspit
Rennell Sound
Tasu
Sewell Inlet
Rivers Inlet
Owikeno L.
Kitlope
Kitimat
Douglas Channel
Gardner Canal
Portland Canal
Observatory Inlet
Ootsa L.
Francois L.
Babine L.
Stuart L.
Fraser L.
Quesnel L.
Cariboo L.
Okanagan L.
Kootenay L.
Arrow L.
Shuswap L.
Kinbasket L.
Mica Creek
Revelstoke
Golden
Invermere
Nakusp
Kimberley
Cranbrook
Fernie
Sparwood
Creston
Trail
Nelson
Kelowna
Penticton
Princeton
Hope
Oliver
Grand Forks
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Cassiar
Lower Post
Fort Nelson
Telegraph Creek
Allison Harbour
Port Hardy
Alert Bay
Port Alice
Campbell River
Tahsis
Powell River

2.0 USER GUIDES

2.1 STREAM INFORMATION SUMMARY (SIS)

The Stream Information Summary (SIS) form, designed by the Fish Habitat Inventory & Information Program, has been used by Departmental staff and contractors to compile existing information on a stream by stream basis. A companion computer database, the Stream Information Summary System (SISS), is designed for the input, storage and output of SIS information. The SISS "User's Manual" provides details on coding SIS forms and operation of the computer system. A number of codes are used during data entry to SISS. In all cases the equivalent of the code is printed on the SISS output. Notwithstanding, a complete list of codes is provided in Tables 1 and 2. Most information on the SIS form is linked to a reference number. The source of the information can, therefore, be determined from the reference list at the back of each SIS printout. In addition, an alphabetic listing of all references used is included at the back of Section 3.0. Although the preparation of Stream Information Summaries has been thorough, the focus has been on collecting key information rather than all information. The summaries will be updated using SISS as more information becomes available.

Stream Information Summaries, arranged by watershed code, are included in Section 3.0 of the catalogue. The following describes the content of each section in the SIS form and printout.

A. DESCRIPTION

A.1 Stream Name:

The official stream name listed in the "Gazetteer of Canada" is displayed here.

A.2 Local Name

Any local name(s) are listed.

A.3 Watershed Code:

The watershed code is a unique number which identifies a stream and the watershed that it is in. The hierarchical nature of the watershed coding system allows features associated with basins or channels to be aggregated or separated to the desired level of detail. A dictionary of watershed codes is available from the Water Management Branch, Ministry of Environment and Parks, Victoria.

A.4 Tributaries:

A list of tributaries to the stream is provided. The "code" when added to the stream's watershed code gives the tributary watershed code. Example:

Cowichan River watershed code	= 92-4800
Koksilah River code	= 020
Koksilah River watershed code	= 92-4800-020

A.5 DFO Division, District, Subdistrict & Statistical Subarea:

The DFO management areas in which the stream mouth is located are listed.

A.6 MOEP Region, Management Unit:

The MOEP management areas in which the stream mouth is located are listed.

A.7 Topographic (1:50K) Map, BCGS (1:20K) Map:

Codes of the National Topographic Series (NTS) map sheet and the British Columbia Geographic System (BCGS) map sheet that show the stream mouth are listed here.

A.8 U.T.M. Mouth:

The Universal Transverse Mercator (UTM) coordinates of the stream mouth are listed. UTM is a metric grid reference system displayed on most 1:50,000 scale NTS maps.

A.9 Lat./Long. Mouth:

The latitude and longitude (degrees, minutes and seconds) of the stream mouth are listed.

A.10 Mainstream Length:

The total mainstream length is provided in kilometres.

A.11 Watershed Area:

The area of the stream's watershed is given in square kilometers.

A.12 Location:

The general location of the stream is listed.

A.13 Gradient:

Location(s) given as a range of kilometers upstream from the mouth are provided for five gradient classes: 0-0.5%, 0.5-2%, 2-5%, 5-10%, 10+%. Any comments on gradient are also listed in this field.

B. OBSTRUCTIONS TO MIGRATION

This section lists barrier type, the height of the barrier (m) as appropriate, the barrier location in kilometers upstream from mouth, the species that are obstructed and any additional comments.

C. FLOW

This section indicates if there is flow control on the system (Y or N), if there is a Water Survey of Canada (WSC) Flow Gauge (Y or N), the station nos. and any comments on flow (eg. low flows, floods).

D. DISTRIBUTION SUMMARY

Species and watershed distribution including spawning, rearing, overwintering, holding, and migration areas are listed.

E. ESCAPEMENT SUMMARY

This section lists the species, mean escapement for a specified period of record, maximum recorded escapement for the same period, management target escapement and any comments on escapement.

F. LIFE HISTORY TIMING

Life history timing is provided by species for each one-half month period by the following activities: migration, spawning, incubation and rearing. The timing of these activities is indicated by an X and the peak by a P.

G. ENHANCEMENT/MANAGEMENT ACTIVITIES IN WATERSHED

Listed in this section are the type of activity, the species affected by the activity, location of the facility in kilometers upstream of the mouth, comments and period of operation.

H. LAND USE/WATER USE/WATER QUALITY

This section lists the type of activity and description of land use; water use or activities affecting water quality.

I. FISH PRODUCTION POTENTIAL/CONSTRAINTS/GENERAL COMMENTS

This section provides comments on fish production potential including habitat potential, constraints to production, opportunities for restoration or enhancement, watershed sensitivity, quality of information to assess the above and the need for inventory data collection.

J. FISHERY OFFICER NARRATIVE

This section indicates the date and person who may have prepared a Fishery Officer narrative on the stream.

K. SIS COMPLETED BY:

The name of the person(s) completing, checking or updating the information and date (year/month/day) are listed.

A. DESCRIPTION

Stream Name: A.1 Local Name: A.2 Watershed Code: A.3	D.F.O. Division: District: A.5 Subdistrict: Statistical Subarea: M.O.E.P. Region: Management Unit: A.6

Tributaries	Code	
A.4		Topographic (1:50k) Map: A.7 B.C.G.S. (1:20k) Map: U.T.M. Mouth: A.8 Lat./Long. Mouth: A.9 DG. ' '' DG. ' '' Mainstem Length: A.10 Ref. No.: Watershed Area: A.11 Ref. No.: Location: A.12

Gradient Class/Location (km upstream from mouth)					Comments
0 - .5%	.5 - 2%	2 - 5%	5 - 10%	>10%	
A.13					

B. OBSTRUCTIONS TO MIGRATION

Barrier (Type)	Height (meters)	Location (km U/S)	Impassable to (species)	Comments

C. FLOW

Flow Control: W.S.C. Station No. 1:	Water Survey of Canada (WSC) Flow Gauge: No. 2:	No. 3:	No. 4:

D. DISTRIBUTION SUMMARY

Species	Watershed Distribution

E. ESCAPEMENT SUMMARY

Species	Escapement			Maximum Recorded Escapement	Ref. No.	Management Target Escapement	Ref. No.
	Mean	Period of Record	Ref. No.				

F. LIFE HISTORY TIMING

Species	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

G. ENHANCEMENT/MANAGEMENT ACTIVITIES IN WATERSHED

Type of Activity	Species	Location (km U/S)	Comments	Period of Operation Start/Finish

H. LAND USE/WATER USE/WATER QUALITY

Activity	Description/Location

I. FISH PRODUCTION POTENTIAL/CONSTRAINTS/GENERAL COMMENTS

J. FISHERY OFFICER NARRATIVE

Date Prepared: / / Prepared By:

K. SIS COMPLETED BY

Completed by: Date:

TABLE 1. LIST OF CODES

Stream Name

R	River
C	Creek
S	Slough
B	Brook
G	Gulch

Barrier Type

R	Rock
X	Log Jam
D	Dam
BD	Beaver Dam
CV	Culvert
C	Cascade, Chute
F	Falls (type unknown)

Enhancement Activities

BX	Incubation box
CH	Spawning channel
CO	Colonization from existing hatchery
EI	Estuary improvement
FC	Flow control
FP	Multiple fish production strategies
FT	Lake fertilization
FW	Fishway
HC	Combination channel/ hatchery
HX	Multiple combination hatchery, channel, flow control
HY	Conventional hatchery
JH	Hatchery, primarily Japanese style technique
LJ	Log jam removal
OR	Obstruction removal
SC	Side channel
SI	Stream improvement
TR	Transplant
TT	Trap/truck over obstruction

Management Activities

MR	Mark Recovery
CC	Creel Census
CF	Counting Fence
FS	Fish Sampling

Land Use/Water Use/Water Quality

FO	Forestry
UD	Urban Development
MI	Mining
DA	Dams
LD	Linear Development
IP	Industrial Processing
AG	Agriculture
WW	Water Withdrawal
PR	Parks
RE	Reserves
WQ	Water Quality (ie. activities adversely affecting water quality)

TABLE 2. FISH SPECIES CODES

AGB	BROWN TROUT (ANAD)
AC	ARCTIC CHAR
ACT	CUTTHROAT TROUT (ANAD)
ADV	DOLLY VARDEN (ANAD)
ACB	BROOK TROUT (ANAD)
AF	ALL FISH
AL	ARCTIC LAMPREY
AO	ALL ONCORHYNCHUS
AS	ATLANTIC SALMON
ASM	ARCTIC SMELT
BB	BURBOT
BCB	BLACK CRAPPIE
BH	CATFISH NERAL
BKH	BLACK BULLHEAD
BL	WESTERN BROOK LAMPREY
BMC	BRASSY MINNOW
BNH	BROWN BULLHEAD
BS	BASS/SUNFISH (GENERAL)
BSB	BROOK STICKLEBACK
BSU	BRIDGELIP SUCKER
BW	BROAD WHITEFISH
C	MINNOWS (GENERAL)
CA	ARCTIC CISCO
CAL	ALEUTIAN SCULPIN
CAS	PRICKLY SCULPIN
CBA	MOTTLED SCULPIN
CBC	CHUB (GENERAL)
CC	SCULPINS (GENERAL)
CCG	SLIMY SCULPIN
CCN	SHORTHEAD SCULPIN
CH	CHINOOK SALMON
CL	LAKE HERRING/CISCO/TULIBEE
CLA	STAGHORN SCULPIN
CM	CHUM SALMON
CMC	CHISELMOUTH CHUB
CO	COHO SALMON
CP	CARP
CRH	TORRENT SCULPIN
CRI	SPOONHEAD SCULPIN
CS	LEAST CISCO
CSU	LARGESCALE SUCKER
CT	CUTTHROAT TROUT
DC	DACE
DV	DOLLY VARDEN
EB	BROOK TROUT
ESC	EMERALD SHINER
EU	EULACHON
FDC	FINESCALE DACE
FHC	FLATHEAD CHUB
GAM	MOSQUITOFISH
GB	BROWN TROUT
GC	GOLDFISH
GE	GOLDEYE
GR	GRAYLING ARCTIC
GSG	GREEN STURGEON
HW	HUMPBACKED WHITFISH
IN	INCONNU
KO	KOKANEE
L	LAMPREYS (GENERAL)
LDC	LEOPARD DACE
LKC	LAKE CHUB
LMB	LARGEMOUTH BASS
LNC	LONGNOSE DACE
LSM	LONGFIN SMELT
LSU	LONGNOSE SUCKER
LT	LAKE TROUT
LW	LAKE WHITEFISH
MSU	NORTHERN MOUNTAIN SUCKER
MW	ROCKY MOUTAIN WHITEFISH
NP	NORTHERN PIKE
NSC	NORTHERN SQUAWFISH
P	PERCH (GENERAL)
PCC	PEAMOUTH CHUB
PDC	NORTHERN PEARL DACE
PK	PINK SALMON
PL	PACIFIC LAMBREY
PMB	PUMPKINSEED
PW	PIGMY WHITEFISH
RB	RAINBOW TROUT
RDC	NORTHERN REDBELLY DACE
RL	RIVER LAMPREY
RSC	REDSIDED SHINER
RW	ROUND WHITEFISH
SA	SALMON (GENERAL)
SB	STICKLEBACKS (GENERAL)
SDC	SPECKLED DACE
SFL	STARRY FLOUNDER
SG	STURGEONS (GENERAL)
SH	AMERICAN SHAD
SK	SOCKEYE SALMON
SM	SMELTS (GENERAL)
SMB	SMALLMOUTH BASS
ST	STEELHEAD
STC	SPOTTAIL SHINER
SU	SUCKERS (GENERAL)
TC	TENCH
TP	TROUTPERCH
TR	TROUT (GENERAL)
TSB	THREESPINE STICKLEBACK
WF	WHITEFISH (GENERAL)
WP	WALLEYE
WSG	WHITE STURGEON
WSU	WHITE SUCKER
YCT	YELLOWSTONE CUTTHROAT
YP	YELLOWPERCH

2.2 ESCAPEMENT

Annual escapement by species is provided, where available, in Section 4.0. Escapement and run time graphs were plotted only where at least five years of record were available. Graphs showing average escapement as a percentage of District and Divisional escapement were produced only when this percentage was greater than five. Steelhead data were not graphed as records are intermittent.

The escapement tables and graphics were generated by the Salmon Escapement Data System (SEDS) managed by the Pacific Biological Station, Nanaimo. Information in SEDS comes from the DFO Annual Report of Salmon Streams and Spawning Populations (BC16) completed by the Fishery Officer/Patrolman following stream inspections. In limited cases the officer's numbers have been revised where more accurate information is available (e.g. mark/recapture studies).

2.3 STREAM INFORMATION SUMMARY MAP

During the preparation of Stream Information Summary (SIS) forms, maps of fish distribution, major spawning areas, obstructions to migration and enhancement facilities were drafted on 1:50,000 National Topographic Series bases. Reduced copies of the maps are included in Section 5.0 of this report.

3.0 STREAM INFORMATION SUMMARY

This section of the catalogue contains Stream Information Summaries arranged in asceding order of watershed code. An index of watershed codes and stream names is found in Section 1.0. An alphabetic listing of all references used in preparing the Stream Information Summaries is included at the back of Section 3.0.

A. DESCRIPTION

Stream Name: UNNAMED CREEK Local Name: MATHESON CREEK, MATHESON LAKE CREEK Watershed Code: 93-0100	D.F.O. Division: SOUTH COAST District: 6 VICTORIA Subdistrict: 20 SOOKE Statistical Subarea: 20-7 M.O.E.P. Region: 1 VANCOUVER ISLAND Management Unit: 2

Tributaries	Code

Topographic (1:50k) Map: 92B/5
B.C.G.S. (1:20k) Map:
U.T.M. Mouth: 400575
Lat./Long. Mouth: 48 DG. 22' 18'' 123 DG. 37' 23''
Mainstem Length: Ref. No.:
Watershed Area: Ref. No.:

Location: FLOWS INTO ROCHE COVE (SOOKE BASIN)

Gradient Class/Location (km upstream from mouth)					Comments
0 - .5%	.5 - 2%	2 - 5%	5 - 10%	>10%	GRADIENT IS MODERATE TO FALLS, THEN SLIGHT TO ROCHE COVE. (REF. 20-4, REF. 20-6)

B. OBSTRUCTIONS TO MIGRATION

Barrier (Type)	Height (meters)	Location (km U/S)	Impassable to (species)	Comments
D DAM				OLD ROCK DAM AT IMMEDIATE OUTLET HAS CRUMBLED BUT MAY INHIBIT FRY MIGRATION TO LAKE. (REF. 20-4)
D DAM	1.0		CT CUTTHROAT TROUT	AT OUTLET OF MATHESON LAKE (REF. 20-5)
F FALLS			CO COHO SALMON	FALLS ARE A SERIES OF SMALL DROPS OVER GRADUALLY INCLINED BEDROCK, GREATEST VERTICAL DROP IS 0.7M AT LOW WATER, AND MIGRANT FISH COULD POSS. NAVIGATE THE OBSTRUCTION. (REF. 20-4)
F FALLS				FALLS ARE A SERIES OF SMALL DROPS OVER GRADUALLY INCLINED BEDROCK, GREATEST VERTICAL DROP IS 0.7M (REF. 20-4)
F FALLS			CO COHO SALMON	SMALL FALLS APPEARS TO LIMIT PRESENT COHO ACCESS (REF. 20-4)
F FALLS	3.0	0.9		(REF. 20-3)

C. FLOW

Flow Control: W.S.C. Station No. 1:	Water Survey of Canada (WSC) Flow Gauge: No. 2:	No. 3:	No. 4:
Comments: DISCHARGE INTERMITTENT (8/22/72); GRAVEL IS SPARSE, SUBSTRATE IS MAINLY BOULDERS AND STONES TO THE FALLS. (REF. 20-4)			
STREAM OFTEN BECOMES INTERMITTENT IN LATE SUMMER. (REF. 20-6)			

D. DISTRIBUTION SUMMARY

Species	Watershed Distribution
CO COHO SALMON	PRIOR TO 1979, NO COHO WERE NOTED IN MATHESON LAKE. (REF. 20-5)
CT CUTTHROAT TROUT	ANAD. CT FOUND IN THE SYSTEM. ASCEND THE STREAM TO MATHESON LAKE TO SPAWN, MAINLY IN THE FIRST 60M BELOW THE LAKE. CT APPARENTLY NAVIGATE THE FALLS. (REF. 20-3, REF. 20-5, REF. 20-6)

E. ESCAPEMENT SUMMARY

Species	Escapement			Maximum Recorded Escapement	Ref. No.	Management Target Escapement	Ref. No.
	Mean	Period of Record	Ref. No.				
NO INFORMATION AVAILABLE							

F. LIFE HISTORY TIMING

Species	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
NO INFORMATION AVAILABLE													

G. ENHANCEMENT/MANAGEMENT ACTIVITIES IN WATERSHED

Type of Activity	Species	Location (km U/S)	Comments	Period of Operation Start/Finish
EN ENHANCEMENT ACTS		0.0	SOOKE CONSERVATION SOCIETY SPREAD SPAWNING GRAVEL IN MATHESON C IN 1979. (REF. 20-7)	1979/
TR TRANSPLANT	CO COHO SALMON	0.0	FRY PLANTING 1980 - 1983; MINIMAL RETURNS. (REF. 20-38)	1980/1983

H. LAND USE/WATER USE/WATER QUALITY

Activity	Description/Location
FO FORESTRY	PAST LOGGING (REF. 20-2)
PR PARKS	RECREATIONAL LAKE. (REF. 20-38)

I. FISH PRODUCTION POTENTIAL/CONSTRAINTS/GENERAL COMMENTS

DAM SHOULD BE MODIFIED TO PROVIDE FREE ACCESS OF MATHESON LAKE CUTTHROAT. (REF. 20-5)

HABITAT VARIETY IS EXCELLENT IN THIS STREAM BUT IT BECOMES INTERMITTENT IN DRY PERIODS. (REF. 20-5)

ONE INLET HAS SOME POTENTIAL BUT IS FLASHY AND DRIES COMPLETELY SOMETIME IN JUNE. (REF. 20-4)

OUTLET PRESENTLY PROVIDES LIMITED SPAWNING AND IS SUITABLE FOR MINOR IMPROVEMENT, CT PARR SCATTERED IN ISOLATED POOLS, NO COHO NOTED BELOW FALLS. (REF. 20-4)

J. FISHERY OFFICER NARRATIVE

Date Prepared: / / Prepared By:

K. SIS COMPLETED BY

Completed by:	GITA KAPAHI	Date:	1986/04/07
Checked by:	JOHN STEPHEN	Date:	1986/04/07
Last updated by:	GITA KAPAHI	Date:	1987/09/22
Last checked by:	BRIAN TUTTY	Date:	1987/09/25

REFERENCE NO: 20- 2

AUTHOR: UNKNOWN 1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS ; MATHESON CREEK.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 3

AUTHOR:
DESCRIPTION: M.O.E. STREAM AND LAKE INVENTORY MAPS: MAP 92 B/5 E&W (1971)1:50,000.
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AF ALL SPECIES PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 4

AUTHOR: BURNS, J.E.
DESCRIPTION: LAKES OF THE VICTORIA AREA: A CURSORY EVALUATION WITH SOME MANAGEMENT RECOMMENDATIONS.
LOCATION: M MOE - FISHERIES BRANCH - VICTORIA
KEYWORDS: AF ALL SPECIES HS HABITAT SAMPLING PY PHYSICAL HABITAT

REFERENCE NO: 20- 5

AUTHOR: BURNS, TED & ROB FALLS ; 1977
DESCRIPTION: SEA RUN CUTTHROAT TROUT IN THE GREATER VICTORIA AREA - THEIR PRESENT STATUS AND OPPORTUNITIES FOR ENHANCEMENT.
LOCATION: M MOE - FISHERIES BRANCH - VICTORIA
KEYWORDS: CT CUTTHROAT TROUT EN ENHANCEMENT FS FISH SAMPLING
HS HABITAT SAMPLING

REFERENCE NO: 20- 6

AUTHOR: LANGFORD, R.W. & TED BURNS ; 1977
DESCRIPTION: LAKE AND STREAM INVENTORY OF THE CAPITAL REGIONAL DISTRICT
LOCATION: M MOE - FISHERIES BRANCH - VICTORIA
KEYWORDS: FS FISH SAMPLING HS HABITAT SAMPLING PY PHYSICAL HABITAT

REFERENCE NO: 20- 7

AUTHOR: ASSORTED DATES AND AUTHORS
DESCRIPTION: MATHESON LAKE FILE
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AF ALL SPECIES HS HABITAT SAMPLING PY PHYSICAL HABITAT

REFERENCE NO: 20- 38

AUTHOR: STEPHEN,JOHN. FISHERY OFFICER, SOOKE OFFICE.
DESCRIPTION: PERSONAL INFORMATION ABOUT STREAMS WITHIN STATISTICAL AREA 20.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

A. DESCRIPTION

Stream Name: AYUM CREEK Local Name: STONEY CREEK Watershed Code: 93-0250	D.F.O. Division: SOUTH COAST District: 6 VICTORIA Subdistrict: 20 SOOKE Statistical Subarea: 20-7 M.O.E.P. Region: 1 VANCOUVER ISLAND Management Unit: 2

Tributaries	Code	
		Topographic (1:50k) Map: 92B/5 B.C.G.S. (1:20k) Map: U.T.M. Mouth: 452535 Lat./Long. Mouth: 48 DG. 23' 31'' 123 DG. 39' 23'' Mainstem Length: Ref. No.: Watershed Area: Ref. No.:
		Location: FLOWS S.E. & S.W. INTO COOPER COVE, N. SIDE OF SOOKE BASIN (REF.8)DRAINS THE AREA S.E. OF SOOKE MOUNTAIN PARK (REF.6)

Gradient Class/Location (km upstream from mouth)					Comments
0 - .5%	.5 - 2%	2 - 5%	5 - 10%	>10%	VERY STEEP GRADIENT INHOSPITABLE TO FISH OF ANY KIND 1KM UPSTREAM FROM MOUTH (REF. 20-38)

B. OBSTRUCTIONS TO MIGRATION

Barrier (Type)	Height (meters)	Location (km U/S)	Impassable to (species)	Comments
D DAM				AT GLINZ LAKE. (REF. 20-38)
F FALLS	6.8	1.2		(REF. 20-8)

C. FLOW

Flow Control: Y
W.S.C. Station No. 1:
Water Survey of Canada (WSC) Flow Gauge:
No. 2:
No. 3:
No. 4:

Comments: EXTREME LOW DISCHARGE AND OVERWINTERING CAPABILITY COULD BE IMPROVED. (REF. 20-5)

SECOND DAM ON WESTERLY TRIBUTARY (40FT HIGH) CEMENT DAM.BUILT BY SAWMILL AND MAINTAINED BY IT FOR FIREFIGHTING PURPOSES. (REF. 20-38)

SUMMER FLOW OS LARGELY DEPENDENT ON A CONTROLLED MAKESHIFT DAM AT GLINZ LAKE CONSTRUCTED BY THE YM-YWCA CAMP (1962-70),SAWMILL AND HOUSES IN COOPER'S COVE DRAWS WATER FROM THIS CREEK. (1970) (REF. 20-1)

D. DISTRIBUTION SUMMARY

Species	Watershed Distribution
CO COHO SALMON	A TRIBUTARY THAT PARALLELS HARBOUR VIEW ROAD FOR MUCH OF ITS LENGTH IS ACCESSIBLE FOR ABOUT 15-30M AND REARS LARGE NUMBERS OF CO IN THE SHORT STRETCH AT THE BASE OF A LONG SERIES OF FALLS (TOTAL DROP AT LEAST 30M ; DAM) (REF. 20-6, REF. 20-38)
CO COHO SALMON	HOLD IN GORGE FOR SPAWNING IMMEDIATELY BELOW (REF. 20-8)
CO COHO SALMON	IMMEDIATELY BELOW FALLS (REF. 20-6, REF. 20-38)
CM CHUM SALMON	SPAWN UP TO GORGE (REF. 20-8)
CM CHUM SALMON	THROUGHOUT (REF. 20-6, REF. 20-38)
ST STEELHEAD	NOT POSSIBLE FOR ST TO ASCEND THE DOUBLE FALLS, BUT AMOUNT OF ACCESSIBLE UPSTREAM WATER IS UNKNOWN. A FEW ST REAR IN THE SHORT STRETCH AT THE BASE OF A LONG SERIES OF FALLS (TOTAL DROP AT LEAST 30M; DAM). (REF. 20-6, REF. 20-38)

D. DISTRIBUTION SUMMARY CONTINUED

Species	Watershed Distribution
AO ALL SALMON	ANADROMOUS LENGTH 1.2KM (REF. 20-6)

E. ESCAPEMENT SUMMARY

Species	Escapement			Maximum Recorded Escapement	Ref. No.	Management Target Escapement	Ref. No.
	Mean	Period of Record	Ref. No.				
CO COHO SALMON	48	1971 - 1983	20-8	400	20-8		
CM CHUM SALMON	2242	1973 - 1985	20-8	4000	20-8		

F. LIFE HISTORY TIMING

Species	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CO COHO SALMON	Migration Spawning Incubation Rearing											X	X
CM CHUM SALMON	Migration Spawning Incubation Rearing										X	X X	

G. ENHANCEMENT/MANAGEMENT ACTIVITIES IN WATERSHED

Type of Activity	Species	Location (km U/S)	Comments	Period of Operation Start/Finish
NO INFORMATION AVAILABLE				

H. LAND USE/WATER USE/WATER QUALITY

Activity	Description/Location
WW WATER WITHDRAWAL	WATER STORAGE AT YMCA CAMP FOR FIREFIGHTING. (REF. 20-1, REF. 20-38)

I. FISH PRODUCTION POTENTIAL/CONSTRAINTS/GENERAL COMMENTS

ACCESS IS GOOD AND THERE ARE SOME GOOD FISH POOLS BLEOW CN CROSSING AND IN CANYON BELOW FALLS (REF. 20-5)

THE ONLY PRACTICAL ENHANCEMENT OPPORTUNITY WOULD BE UTILIZATION OF AN EXISTING ESTUARINE EXCAVATED POND FOR BRACKISH WATER REARING. (REF. 20-5)

J. FISHERY OFFICER NARRATIVE

Date Prepared: 1987/05/01 Prepared By: J. STEPHEN / G. KAPAHI

K. SIS COMPLETED BY

Completed by:	GITA KAPAHI	Date:	1986/04/07
Checked by:	JOHN STEPHEN	Date:	1986/04/07
Last updated by:	GITA KAPAHI	Date:	1987/09/22
Last checked by:	BRIAN TUTTY	Date:	1987/09/25

REFERENCE NO: 20- 1

AUTHOR: MARSHALL,D.E.;ET AL
DESCRIPTION: PRELIMINARY CATALOGUE OF SALMON STREAMS AND SPAWNING ESCAPEMENTS OF STATISTICAL AREAS 19 & 20 (VICTORIA-SOOKE)
PAC/D-77-9
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AF ALL SPECIES PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 5

AUTHOR: BURNS, TED & ROB FALLS ; 1977
DESCRIPTION: SEA RUN CUTTHROAT TROUT IN THE GREATER VICTORIA AREA - THEIR PRESENT STATUS AND OPPORTUNITIES FOR ENHANCEMENT.
LOCATION: M MOE - FISHERIES BRANCH - VICTORIA
KEYWORDS: CT CUTTHROAT TROUT EN ENHANCEMENT FS FISH SAMPLING
HS HABITAT SAMPLING

REFERENCE NO: 20- 6

AUTHOR: LANGFORD, R.W. & TED BURNS ; 1977
DESCRIPTION: LAKE AND STREAM INVENTORY OF THE CAPITAL REGIONAL DISTRICT
LOCATION: M MOE - FISHERIES BRANCH - VICTORIA
KEYWORDS: FS FISH SAMPLING HS HABITAT SAMPLING PY PHYSICAL HABITAT

REFERENCE NO: 20- 8

AUTHOR: UNKNOWN. 1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS ; AYUM CREEK 1983 (SOOKE OFFICE)
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 38

AUTHOR: STEPHEN,JOHN. FISHERY OFFICER, SOOKE OFFICE.
DESCRIPTION: PERSONAL INFORMATION ABOUT STREAMS WITHIN STATISTICAL AREA 20.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

A. DESCRIPTION

Stream Name: KALTASIN CREEK Local Name: LANNON CREEK Watershed Code: 93-0275	D.F.O. Division: SOUTH COAST District: 6 VICTORIA Subdistrict: 20 SOOKE Statistical Subarea: 20-7 M.O.E.P. Region: 1 VANCOUVER ISLAND Management Unit: 2

Tributaries	Code	
		Topographic (1:50k) Map: 92B/5 B.C.G.S. (1:20k) Map: U.T.M. Mouth: 495595 Lat./Long. Mouth: 48 DG. 23' 22'' 123 DG. 41' 0'' Mainstem Length: Ref. No.: Watershed Area: Ref. No.:
		Location: FLOWS INTO SOOKE BASIN (REF.9)

Gradient Class/Location (km upstream from mouth)	Comments
0 - .5% .5 - 2% 2 - 5% 5 - 10% >10%	EVEN, FLAT GRADIENT. STREAM WANDERS THROUGH A SERIES OF FIELDS. (REF. 20-38)

B. OBSTRUCTIONS TO MIGRATION

Barrier (Type)	Height (meters)	Location (km U/S)	Impassable to (species)	Comments
CV CULVERT		0.6	AO ALL SALMON	HANGING CONCRETE CULVERT UNDER THE RAILWAY TRACKS (REF. 20-9)
D DAM		0.6		JUST BELOW THE CULVERT (100 YDS) IMPASSABLE TO SALMON UNLESS THERE ARE LARGE FLOWS OF WATER. (REF. 20-3, REF. 20-9)

C. FLOW

Flow Control: Y W.S.C. Station No. 1:	Water Survey of Canada (WSC) Flow Gauge: No. 2: No. 3: No. 4:
NO INFORMATION AVAILABLE	

D. DISTRIBUTION SUMMARY

Species	Watershed Distribution
CO COHO SALMON	PRESENT UP TO THE DAM (REF. 20-9, REF. 20-38)
CT CUTTHROAT TROUT	UP TO THE DAM. (UP TO 5LBS IN JAN.) (REF. 20-38)

E. ESCAPEMENT SUMMARY

Species	Escapement			Maximum Recorded Escapement	Ref. No.	Management Target Escapement	Ref. No.
	Mean	Period of Record	Ref. No.				
NO INFORMATION AVAILABLE							

F. LIFE HISTORY TIMING

Species	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CO COHO SALMON	Migration Spawning Incubation Rearing											X	X

F. LIFE HISTORY TIMING CONTINUED

Species	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CM CHUM SALMON	Migration Spawning Incubation Rearing											X X	X
CT CUTTHROAT TROUT	Migration Spawning Incubation Rearing	X X											
Comments: POOR RETURN FROM THE 1900 CO FRY INTRODUCED IN 1981 (REF. 20-9)													

G. ENHANCEMENT/MANAGEMENT ACTIVITIES IN WATERSHED

Type of Activity	Species	Location (km U/S)	Comments	Period of Operation Start/Finish
SI STREAM IMPROVEM'T		0.0	CLEARING OF SAND AND MUD FROM STREAM COURSE AND REPLACING IT WITH SPAWNING GRAVEL. ALSO SEVERAL REARING POOLS WERE DUG FROM THE HIGHWAY CULVERT TO THE POND. (REF. 20-9)	1982/1982

H. LAND USE/WATER USE/WATER QUALITY

Activity	Description/Location
AG AGRICULTURE	(REF. 20-38)

I. FISH PRODUCTION POTENTIAL/CONSTRAINTS/GENERAL COMMENTS

NO INFORMATION AVAILABLE

J. FISHERY OFFICER NARRATIVE

Date Prepared: 1987/05/01 Prepared By: J. STEPHEN/ G. KAPAHI

K. SIS COMPLETED BY

Completed by:	GITA KAPAHI	Date:	1986/04/07
Checked by:	JOHN STEPHEN	Date:	1986/04/07
Last updated by:	GITA KAPAHI	Date:	1987/09/22
Last checked by:	BRIAN TUTTY	Date:	1987/09/25

REFERENCE NO: 20- 3

AUTHOR:
DESCRIPTION: M.O.E. STREAM AND LAKE INVENTORY MAPS: MAP 92 B/5 E&W (1971)1:50,000.
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AF ALL SPECIES PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 9

AUTHOR: UNKNOWN. 1980,1982,1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; LANNON CREEK 1980,1982,1983.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 38

AUTHOR: STEPHEN,JOHN. FISHERY OFFICER, SOOKE OFFICE.
DESCRIPTION: PERSONAL INFORMATION ABOUT STREAMS WITHIN STATISTICAL AREA 20.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

A. DESCRIPTION

Stream Name: SOOKE RIVER Local Name: Watershed Code: 93-0300	D.F.O. Division: SOUTH COAST District: 6 VICTORIA Subdistrict: 20 SOOKE Statistical Subarea: 20-6 M.O.E.P. Region: 1 VANCOUVER ISLAND Management Unit: 2

Tributaries	Code
DE MAMIEL CREEK	050
CHARTERS RIVER	100

Topographic (1:50k) Map: 92B/5
B.C.G.S. (1:20k) Map:
U.T.M. Mouth: 485590
Lat./Long. Mouth: 48 DG. 23' 8'' 123 DG. 41' 50''
Mainstem Length: 16.0 km Ref. No.: 20-1
Watershed Area: 77.0 km2 Ref. No.: 20-1

Location: FLOWS S. INTO SOOKE HARBOUR, SOOKE DISTRICT.

Gradient Class/Location (km upstream from mouth)					Comments
0 - .5%	.5 - 2%	2 - 5%	5 - 10%	>10%	UNIFORMLY LEVEL FROM POTHOLES TO TIDAL INFLUENCE (REF. 20-38)

B. OBSTRUCTIONS TO MIGRATION

Barrier (Type)	Height (meters)	Location (km U/S)	Impassable to (species)	Comments
F FALLS		9.7	AO ALL SALMON	(REF. 20-1)

C. FLOW

Flow Control: Y
Water Survey of Canada (WSC) Flow Gauge: Y
W.S.C. Station No. 1: 08HA005 No. 2: 08HA006 No. 3: 08HA018 No. 4: 08HA029

Comments: 08HA005 ; LOCATED ON SOOKE RIVER NEAR SOOKE LAKE (REF. 20-39)

08HA006 ; LOCATED ON SOOKE RIVER (VICTORIA WATER SUPPLY) (REF. 20-39)

08HA018 ; LOCATED ON SOOKE RIVER ABOVE TODD C (REF. 20-39)

08HA029 ; LOCATED ON SOOKE RIVER BELOW CHARTERS RIVER (REF. 20-39)

D. DISTRIBUTION SUMMARY

Species	Watershed Distribution
SK SOCKEYE SALMON	OCCASIONAL (REF. 20-38)
CO COHO SALMON	THROUGHOUT (REF. 20-38)
CM CHUM SALMON	THROUGHOUT (REF. 20-1)
CH CHINOOK SALMON	SPRING SALMON NOW FOUND AS A RESULT OF ENHANCEMENT ACTIVITIES (IN PAST FEW YEARS) (REF. 20-38)
CH CHINOOK SALMON	THROUGHOUT (REF. 20-1)
ST STEELHEAD	PRESENT (REF. 20-38)

E. ESCAPEMENT SUMMARY

Species	Escapement			Maximum Recorded Escapement	Ref. No.	Management Target Escapement	Ref. No.
	Mean	Period of Record	Ref. No.				
CO COHO SALMON	122	1971 - 1983	20-11	400	20-11		
CM CHUM SALMON	20917	1971 - 1983	20-11	75000	20-11		
CH CHINOOK SALMON	437	1971 - 1983	20-11	3500	20-11		

F. LIFE HISTORY TIMING

Species	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CO COHO SALMON	Migration										X	X X	X X
	Spawning												
	Incubation												
	Rearing												
CM CHUM SALMON	Migration									X	X X	X X	X
	Spawning												
	Incubation												
	Rearing												
CH CHINOOK SALMON	Migration										X	X X	
	Spawning												
	Incubation												
	Rearing												

G. ENHANCEMENT/MANAGEMENT ACTIVITIES IN WATERSHED

Type of Activity	Species	Location (km U/S)	Comments	Period of Operation Start/Finish
BX INCUBATION BOX	CO COHO SALMON	0.0	(REF. 20-38)	1972/
BX INCUBATION BOX	CH CHINOOK SALMON CO COHO SALMON ST STEELHEAD	0.0	ON ROCKY C, TRANSPLANTING CO,CH,AND ST TO SOOKE R. (REF. 20-38)	1979/

H. LAND USE/WATER USE/WATER QUALITY

Activity	Description/Location
FO FORESTRY	IN UPPER LEACH R (TRIB. TO UPPER SOOKE) (REF. 20-38)
MI MINING	UPSTREAM OF OBSTRUCTION ARE OCCASIONAL PLACER MINES (REF. 20-38)
RE RESERVES	HUGE RESERVOIR, SOOKE LAKE, SUPPLYS VICTORIA WITH WATER. (REF. 20-38)

I. FISH PRODUCTION POTENTIAL/CONSTRAINTS/GENERAL COMMENTS

EXCELLENT HABITAT UPSTREAM OF OBSTRUCTION. WOULD LIKE TO SEE OBSTRUCTION REMOVED. (REF. 20-38)

J. FISHERY OFFICER NARRATIVE

Date Prepared: 1987/05/01 Prepared By: J. STEPHEN/ G. KAPAHI

K. SIS COMPLETED BY

Completed by:	GITA KAPAHI	Date:	1986/04/07
Checked by:	JOHN STEPHEN	Date:	1986/04/07
Last updated by:	GITA KAPAHI	Date:	1987/09/22
Last checked by:	BRIAN TUTTY	Date:	1987/09/25

REFERENCE NO: 20- 1

AUTHOR: MARSHALL,D.E.;ET AL
DESCRIPTION: PRELIMINARY CATALOGUE OF SALMON STREAMS AND SPAWNING ESCAPEMENTS OF STATISTICAL AREAS 19 & 20 (VICTORIA-SOOKE)
PAC/D-77-9
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AF ALL SPECIES PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 11

AUTHOR: ASSORTED DATES AND AUTHORS
DESCRIPTION: SOOKE RIVER FILES
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AF ALL SPECIES PY PHYSICAL HABITAT

REFERENCE NO: 20- 38

AUTHOR: STEPHEN,JOHN. FISHERY OFFICER, SOOKE OFFICE.
DESCRIPTION: PERSONAL INFORMATION ABOUT STREAMS WITHIN STATISTICAL AREA 20.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 39

AUTHOR: INLAND WATERS DIRECTORATE, WATER RESOURCES BRANCH
DESCRIPTION: SURFACE WATER DATA, BRITISH COLUMBIA; 1984
LOCATION: CC WATER SURVEY CANADA - VANCOUVER
KEYWORDS: FL FLOW

A. DESCRIPTION

Stream Name: DE MAMIEL CREEK	D.F.O. Division: SOUTH COAST
Local Name: DEMAMIEL CREEK	District: 6 VICTORIA
Watershed Code: 93-0300-050	Subdistrict: 20 SOOKE
	Statistical Subarea: 20-6
	M.O.E.P. Region: 1 VANCOUVER ISLAND
	Management Unit: 2

Tributaries	Code
UNNAMED CREEK	030

Topographic (1:50k) Map: 92B/5
B.C.G.S. (1:20k) Map:
U.T.M. Mouth: 476597
Lat./Long. Mouth: 48 DG. 23' 23'' 123 DG. 42' 31''
Mainstem Length: Ref. No.:
Watershed Area: 36.0 km2 Ref. No.: 20-39

Location: FLOWS S.E. INTO SOOKE R.,NEAR MOUTH, SOOKE DIST. FLOWS INTO YOUNG LAKE.

Gradient Class/Location (km upstream from mouth)					Comments
0 - .5%	.5 - 2%	2 - 5%	5 - 10%	>10%	EVEN UP TO TUGWELL ROAD, THEN BECOMES A SERIES OF EXTENDED CASCADES UPSTREAM TO ITS ORIGIN. (REF. 20-38)

B. OBSTRUCTIONS TO MIGRATION

Barrier (Type)	Height (meters)	Location (km U/S)	Impassable to (species)	Comments
NB NO BARRIER				OBSTRUCTIONS HAVE BEEN MADE EASILY PASSABLE (1977) (REF. 20-5)
F FALLS		5.8		(REF. 20-1)
F FALLS		9.1		(REF. 20-1)

C. FLOW

Flow Control: Y
W.S.C. Station No. 1: 08HA025
Water Survey of Canada (WSC) Flow Gauge: Y
No. 2: No. 3: No. 4:

Comments: CRITICAL PERIOD DISCHARGE HAS BEEN INCREASED TO A POINT WHERE IT IS ALMOST IDEAL. (REF. 20-5)

DAM AT OUTLET OF YOUNG LAKE (REF. 20-38)

GAUGE LOCATED AT THE MOUTH. (REF. 20-39)

SPRING 1970, FISHERIES SERVICE CONSTRUCTED A STORAGE DAM AT YOUNG LAKE TO MAINTAIN FLOW AT 0.014CMS THROUGHOUT THE SUMMER MONTHS (REF. 20-10)

D. DISTRIBUTION SUMMARY

Species	Watershed Distribution
CO COHO SALMON	PASS THROUGH YOUNG LAKE (REF. 20-4)
CO COHO SALMON	THROUGHOUT TO 2ND FALLS (REF. 20-1)
CM CHUM SALMON	LOWER REACHES (TO FIRST FALLS IN SOME YEARS) (REF. 20-1, REF. 20-11)
ST STEELHEAD	PASS THROUGH YOUNG LAKE (REF. 20-4)
ST STEELHEAD	TO 2ND FALLS. (?; REF. 38, TO 14.3KM) (REF. 20-11, REF. 20-38)
CT CUTTHROAT TROUT	PASS THROUGH YOUNG LAKE (REF. 20-4)

D. DISTRIBUTION SUMMARY CONTINUED

Species	Watershed Distribution
CT CUTTHROAT TROUT	TO 14.0KM. (?; REF.38) (REF. 20-11)
RB RAINBOW TROUT	SOME RESIDENT RB'S MUST ALSO BE IN YOUNG LAKE SINCE ST MIGRATE THROUGH THE LAKE. (?; REF 38) (REF. 20-4)
SMB SMALLMOUTH BASS	IN YOUNG LAKE (REF. 20-4)

E. ESCAPEMENT SUMMARY

Species	Escapement			Maximum Recorded Escapement	Ref. No.	Management Target Escapement	Ref. No.
	Mean	Period of Record	Ref. No.				
CO COHO SALMON	1611	1971 - 1983	20-11	6400	20-11		
CM CHUM SALMON	8646	1971 - 1983	20-11	35000	20-11		

Comments: BASS FISHING IS SAID TO HAVE DECLINED SINCE SONMSTRUCTION OF THE FISHERIES SERVICE DAM. (REF. 20-4)

CM OVERSPAWN THROUGHOUT (1980) (REF. 20-10)

CO AND ANADROMOUS CT ARE PARTICULARLY STRONG IN SYSTEM (REF. 20-5)

DUE TO IMPASSABLE WATER LEVELS, MUCH OF DE MAMIEL CREEK CM STOCKS SPAWNED IN LOWER SOOKE RIVER (1974) (REF. 20-10)

EXTREMELY IMPORTANT REGIONAL SALMONID PRODUCER (REF. 20-5)

INLET TO YOUNG LAKE PROVIDES EXCELLENT SPAWNING FOR A\T LEAST 3.2 KM UPSTREAM AND ALTHOUGH THE OUTLET IS DAMMED BELOW WHAT MIGHT HAVE BEEN A TRADITIONAL SPAWNING AREA, SOME SPAWNING MAY STILL OCCUR HERE. (REF. 20-4)

F. LIFE HISTORY TIMING

Species	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CO COHO SALMON	Migration Spawning Incubation Rearing	X									X	X X	X X
CM CHUM SALMON	Migration Spawning Incubation Rearing										X X	X X	X
ST STEELHEAD	Migration Spawning Incubation Rearing	X X											X X
CT CUTTHROAT TROUT	Migration Spawning Incubation Rearing											X X	X X

G. ENHANCEMENT/MANAGEMENT ACTIVITIES IN WATERSHED

Type of Activity	Species	Location (km U/S)	Comments	Period of Operation Start/Finish
CF COUNTING FENCE	CO COHO SALMON	0.0	ADULT TRAPPING FENCE AT YOUNG LAKE WHICH SUPPLIES ROCKY C HATCHERY (REF. 20-38)	1977/
CO COLONIZATION		0.0	MOST OF FRY REINTRODUCED INTO DE MAMIEL (REF. 20-38)	/

G. ENHANCEMENT/MANAGEMENT ACTIVITIES IN WATERSHED CONTINUED

Type of Activity	Species	Location (km U/S)	Comments	Period of Operation Start/Finish
FS FISH SAMPLING		0.0	SMOLT TRAP AT BOTTOM END OF DE MAMIEL (REF. 20-38)	1984/
SI STREAM IMPROVEM'T		0.0	LOG JAMS REMOVED ANNUALLY BY WINTER WORK CREWS. FRY FED AND RESCUED ANNUALLY BY STUDENT CREWS. (REF. 20-3B)	/

H. LAND USE/WATER USE/WATER QUALITY

Activity	Description/Location
FO FORESTRY	15 YEARS WATERSHED WAS LOGGED (1950) (REF. 20-10)
PR PARKS	YOUNG LAKE ALSO USED FOR RECREATION (REF. 20-38)
WW WATER WITHDRAWAL	USED EXTENSIVELY FOR DOMESTIC WATER SUPPLY (REF. 20-38)

I. FISH PRODUCTION POTENTIAL/CONSTRAINTS/GENERAL COMMENTS

A LAMPREY FULL OF ROE WAS CAUGHT IN MAY 1984. (REF. 20-3B)
MYSTERY SINCE BEGAN SMOLT TRAP, SMOLT SURVIVAL FOR COHO IN 1984 WAS 2.5 %, IN 1985 IT WAS 11.5 % (REF. 20-38)
RECRUITMENT POTENTIAL FOR YOUNG LAKE IS VERY GOOD. (REF. 20-4)

J. FISHERY OFFICER NARRATIVE

Date Prepared: 1987/05/01	Prepared By: J. STEPHEN/ G. KAPAHI

K. SIS COMPLETED BY

Completed by:	GITA KAPAHI	Date:	1986/04/07
Checked by:	JOHN STEPHEN	Date:	1986/04/07
Last updated by:	GITA KAPAHI	Date:	1987/09/22
Last checked by:	BRIAN TUTTY	Date:	1987/09/25

REFERENCE NO: 20- 1

AUTHOR: MARSHALL,D.E.;ET AL
DESCRIPTION: PRELIMINARY CATALOGUE OF SALMON STREAMS AND SPAWNING ESCAPEMENTS OF STATISTICAL AREAS 19 & 20 (VICTORIA-SOOKE) PAC/D-77-9
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AF ALL SPECIES PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 4

AUTHOR: BURNS, J.E.
DESCRIPTION: LAKES OF THE VICTORIA AREA: A CURSORY EVALUATION WITH SOME MANAGEMENT RECOMMENDATIONS.
LOCATION: M MOE - FISHERIES BRANCH - VICTORIA
KEYWORDS: AF ALL SPECIES HS HABITAT SAMPLING PY PHYSICAL HABITAT

REFERENCE NO: 20- 5

AUTHOR: BURNS, TED & ROB FALLS ; 1977
DESCRIPTION: SEA RUN CUTTHROAT TROUT IN THE GREATER VICTORIA AREA - THEIR PRESENT STATUS AND OPPORTUNITIES FOR ENHANCEMENT.
LOCATION: M MOE - FISHERIES BRANCH - VICTORIA
KEYWORDS: CT CUTTHROAT TROUT EN ENHANCEMENT FS FISH SAMPLING
HS HABITAT SAMPLING

REFERENCE NO: 20- 10

AUTHOR: UNKNOWN. 1982,1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; DE MAMIEL CREEK. 1982, 1983.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 11

AUTHOR: ASSORTED DATES AND AUTHORS
DESCRIPTION: SOOKE RIVER FILES
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AF ALL SPECIES PY PHYSICAL HABITAT

REFERENCE NO: 20- 38

AUTHOR: STEPHEN,JOHN. FISHERY OFFICER, SOOKE OFFICE.
DESCRIPTION: PERSONAL INFORMATION ABOUT STREAMS WITHIN STATISTICAL AREA 20.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 39

AUTHOR: INLAND WATERS DIRECTORATE, WATER RESOURCES BRANCH
DESCRIPTION: SURFACE WATER DATA, BRITISH COLUMBIA; 1984
LOCATION: CC WATER SURVEY CANADA - VANCOUVER
KEYWORDS: FL FLOW

A. DESCRIPTION

Stream Name: UNNAMED CREEK	D.F.O. Division: SOUTH COAST
Local Name: ROCKY CREEK, STONEY CREEK	District: 6 VICTORIA
Watershed Code: 93-0300-050-030	Subdistrict: 20 SOOKE
	Statistical Subarea: 20-6
	M.O.E.P. Region: 1 VANCOUVER ISLAND
	Management Unit: 2

Tributaries	Code	
		Topographic (1:50k) Map: 92B/5 B.C.G.S. (1:20k) Map: U.T.M. Mouth: Lat./Long. Mouth: 0 DG. 0' 0'' 0 DG. 0' 0'' Mainstem Length: Ref. No.: Watershed Area: Ref. No.: Location:

Gradient Class/Location (km upstream from mouth)					Comments
0 - .5%	.5 - 2%	2 - 5%	5 - 10%	>10%	MODERATE TO HATCHERY THEN STEEP UPSTREAM. (REF. 20-38)

B. OBSTRUCTIONS TO MIGRATION

Barrier (Type)	Height (meters)	Location (km U/S)	Impassable to (species)	Comments
NO INFORMATION AVAILABLE				

C. FLOW

Flow Control:	Water Survey of Canada (WSC) Flow Gauge:		
W.S.C. Station No. 1:	No. 2:	No. 3:	No. 4:
Comments: SUBJECT TO FURIOUS FLOODING. SUCJECT TO EXTREME DROUGHT IN SUMMER. (REF. 20-38)			

D. DISTRIBUTION SUMMARY

Species	Watershed Distribution
CO COHO SALMON	UP TO HATCHERY WATER INTAKE (1/4MI) (REF. 20-38)
CM CHUM SALMON	UP TO HATCHERY WATER INTAKE (REF. 20-38)
CH CHINOOK SALMON	UP TO HATCHERY WATER INTAKE (REF. 20-38)
ST STEELHEAD	UP TO HATCHERY WATER INTAKE (REF. 20-38)

E. ESCAPEMENT SUMMARY

Species	Escapement			Maximum Recorded Escapement	Ref. No.	Management Target Escapement	Ref. No.
	Mean	Period of Record	Ref. No.				
NO INFORMATION AVAILABLE							

F. LIFE HISTORY TIMING

Species	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CO COHO SALMON	Migration Spawning Incubation Rearing	X									X	X X	X X

F. LIFE HISTORY TIMING CONTINUED

Species	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CM CHUM SALMON	Migration Spawning Incubation Rearing										X X	X X	X
CH CHINOOK SALMON	Migration Spawning Incubation Rearing										X	X X	
ST STEELHEAD	Migration Spawning Incubation Rearing	X X											X X

G. ENHANCEMENT/MANAGEMENT ACTIVITIES IN WATERSHED

Type of Activity	Species	Location (km U/S)	Comments	Period of Operation Start/Finish
HY HATCHERY		0.0	LOCATED ON CREEK (REF. 20-38)	1981/
TR TRANSPLANT	CH CHINOOK SALMON CO COHO SALMON	0.0	FRY RESCUING AND FEEDING BY SUMMER STUDENTS (REF. 20-38)	1981/

H. LAND USE/WATER USE/WATER QUALITY

Activity	Description/Location
FO FORESTRY	CREEK ACTS AS A HUGE DITCH ALONG MAIN LOGGING ROAD, WATER OFTEN BECOMES QUITE TURBID (REF. 20-38)
FO FORESTRY	HEAVY LOGGING IN UPPER REACHES (REF. 20-38)
WW WATER WITHDRAWAL	HATCHERY WATER INTAKE 0.7 KM UPSTREAM FROM DE MAMIEL (REF. 20-38)

I. FISH PRODUCTION POTENTIAL/CONSTRAINTS/GENERAL COMMENTS

DOWNSTREAM OF HATCHERY SHOULD BE EXCAVATED. TOO MUCH GRAVEL, NOT ENOUGH WATER. (REF. 20-38)

J. FISHERY OFFICER NARRATIVE

Date Prepared: 1987/05/01 Prepared By: J. STEPHEN/ G. KAPAHI

K. SIS COMPLETED BY

Completed by:	GITA KAPAHI	Date:	1986/04/07
Checked by:	JOHN STEPHEN	Date:	1986/04/07
Last updated by:	GITA KAPAHI	Date:	1987/09/22
Last checked by:	BRIAN TUTTY	Date:	1987/09/25

REFERENCE NO: 20- 38

AUTHOR: STEPHEN,JOHN. FISHERY OFFICER, SOOKE OFFICE.
DESCRIPTION: PERSONAL INFORMATION ABOUT STREAMS WITHIN STATISTICAL AREA 20.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

A. DESCRIPTION

Stream Name: CHARTERS RIVER Local Name: CHARTERS (EAST BRANCH) RIVER Watershed Code: 93-0300-100	D.F.O. Division: SOUTH COAST District: 6 VICTORIA Subdistrict: 20 SOOKE Statistical Subarea: 20-6 M.O.E.P. Region: 1 VANCOUVER ISLAND Management Unit: 2

Tributaries	Code	
		Topographic (1:50k) Map: 92B/5 B.C.G.S. (1:20k) Map: U.T.M. Mouth: 475624 Lat./Long. Mouth: 48 DG. 24' 55'' 123 DG. 42' 38'' Mainstem Length: Ref. No.: Watershed Area: Ref. No.:
		Location: FLOWS INTO SOOKE RIVER

Gradient Class/Location (km upstream from mouth)					Comments
0 - .5%	.5 - 2%	2 - 5%	5 - 10%	>10%	EVEN, WIDE FLOW ABOUT 2/3 WAY UP FROM SOOKE R, THEN BOULDERY UP TO THE DAM (LAST 1/3) (REF. 20-38)

B. OBSTRUCTIONS TO MIGRATION

Barrier (Type)	Height (meters)	Location (km U/S)	Impassable to (species)	Comments
D DAM				DAM IS UPWARD LIMIT TO MIGRATION (REF. 20-38)
D DAM		1.2		BUILT TO SUPPLY SOOKE AREA WATER NEEDS (REF. 20-5, REF. 20-12)
F FALLS	3.0	1.8		(REF. 20-3)

C. FLOW

Flow Control: Y W.S.C. Station No. 1:	Water Survey of Canada (WSC) Flow Gauge: No. 2:	No. 3:	No. 4:
Comments: FRY MAY GET WASHED OUT OF SYSTEM EVERY 5 YEARS WHEN DAM IS FLUSHED (REF. 20-38)			
MANY YOUNG SALMONIDS, ESPECIALLY COHO, DIE WHEN POOLS DRY DURING CRITICAL DISCHARGE PERIODS. (REF. 20-5)			

D. DISTRIBUTION SUMMARY

Species	Watershed Distribution
CO COHO SALMON	0.0 TO 0.6KM (REF. 20-11)
CM CHUM SALMON	0.0 TO 0.6KM (REF. 20-11, REF. 20-12)
CH CHINOOK SALMON	ALSO UTILIZE RIVER (REF. 20-5)
ST STEELHEAD	0.0 TO 0.6KM (REF. 20-11)
AO ALL SALMON	FROM 1.0 KM UPSTREAM FROM MOUTH TO 1.8KM IS INACCESSIBLE TO MIGRANT FISH (REF. 20-3, REF. 20-12)
CT CUTTHROAT TROUT	0.0 TO 5.3KM; 5.4KM TO 6.2KM (REF. 20-11)

E. ESCAPEMENT SUMMARY

Species	Escapement			Maximum Recorded Escapement	Ref. No.	Management Target Escapement	Ref. No.
	Mean	Period of Record	Ref. No.				
CO COHO SALMON	57	1983 -	20-12	57	20-12		
CM CHUM SALMON	1100	1983 -	20-12	1100	20-12		
Comments: MINOR PRODUCER (REF. 20-6)							
ONLY ONE YEAR OF ESCAPEMENT DATA AVAIL. (REF. 20-12)							

F. LIFE HISTORY TIMING

Species	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CO COHO SALMON	Migration Spawning Incubation Rearing											X	X
CM CHUM SALMON	Migration Spawning Incubation Rearing										X X	X X	

G. ENHANCEMENT/MANAGEMENT ACTIVITIES IN WATERSHED

Type of Activity	Species	Location (km U/S)	Comments	Period of Operation Start/Finish
SI STREAM IMPROVEM'T		0.0	MR. E. VANBEEN, STREAMSIDE RESIDENT, RIP-RAPPED AND CEMENTED THE SOUTH BANK AT THE MOUTH TO STABILIZE STREAM FLOW; WORK COMPLETED APR. 1982 AND HAS BEEN SUCESSFUL. (REF. 20-12)	1982/1982

H. LAND USE/WATER USE/WATER QUALITY

Activity	Description/Location
FO FORESTRY	UPSTREAM LOGGING (REF. 20-38)
RE RESERVES	DRINKING WATER RESERVOIR FOR SOOKE ON CHARTERS RUN BY GVWD (REF. 20-38)

I. FISH PRODUCTION POTENTIAL/CONSTRAINTS/GENERAL COMMENTS

SOME POTENTIAL HABITAT (REF. 20-3)

STREAM NEEDS MORE WATER, CONTROL OF UPSTREAM LAKES COULD PRODUCE ENOUGH WATER FOR CRITICAL PERIOD DISCHARGE. (REF. 20-5)

VERY LIMITED SPAWNING HABITAT PRESENT, REARING FAVORABLE, HOWEVER, WHICH MAY ATTRACT SOOKE RIVER JUVENILES, OVERWINTERING CAPABILITY IS LOW. (REF. 20-5)

J. FISHERY OFFICER NARRATIVE

Date Prepared: 1987/05/01 Prepared By: J. STEPHEN/ G. KAPAHI

K. SIS COMPLETED BY

Completed by:	GITA KAPAHI	Date:	1986/04/07
Checked by:	JOHN STEPHEN	Date:	1986/04/07
Last updated by:	GITA KAPAHI	Date:	1987/09/22
Last checked by:	BRIAN TUTTY	Date:	1987/09/25

REFERENCE NO: 20- 3

AUTHOR:
DESCRIPTION: M.O.E. STREAM AND LAKE INVENTORY MAPS: MAP 92 B/5 E&W (1971)1:50,000.
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AF ALL SPECIES PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 5

AUTHOR: BURNS, TED & ROB FALLS ; 1977
DESCRIPTION: SEA RUN CUTTHROAT TROUT IN THE GREATER VICTORIA AREA - THEIR PRESENT STATUS AND OPPORTUNITIES FOR ENHANCEMENT.
LOCATION: M MOE - FISHERIES BRANCH - VICTORIA
KEYWORDS: CT CUTTHROAT TROUT EN ENHANCEMENT FS FISH SAMPLING
HS HABITAT SAMPLING

REFERENCE NO: 20- 6

AUTHOR: LANGFORD, R.W. & TED BURNS ; 1977
DESCRIPTION: LAKE AND STREAM INVENTORY OF THE CAPITAL REGIONAL DISTRICT
LOCATION: M MOE - FISHERIES BRANCH - VICTORIA
KEYWORDS: FS FISH SAMPLING HS HABITAT SAMPLING PY PHYSICAL HABITAT

REFERENCE NO: 20- 11

AUTHOR: ASSORTED DATES AND AUTHORS
DESCRIPTION: SOOKE RIVER FILES
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AF ALL SPECIES PY PHYSICAL HABITAT

REFERENCE NO: 20- 12

AUTHOR: UNKNOWN. 1981,1982,1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; CHARTERS CREEK. 1981, 1982, 1983.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON FS FISH SAMPLING PY PHYSICAL HABITAT
S SPAWNING

REFERENCE NO: 20- 38

AUTHOR: STEPHEN,JOHN. FISHERY OFFICER, SOOKE OFFICE.
DESCRIPTION: PERSONAL INFORMATION ABOUT STREAMS WITHIN STATISTICAL AREA 20.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

A. DESCRIPTION

Stream Name: TUGWELL CREEK Local Name: Watershed Code: 93-0380	D.F.O. Division: SOUTH COAST District: 6 VICTORIA Subdistrict: 20 SOOKE Statistical Subarea: 20-5 M.O.E.P. Region: 1 VANCOUVER ISLAND Management Unit: 2

Tributaries	Code	
		Topographic (1:50k) Map: 92B/5 B.C.G.S. (1:20k) Map: U.T.M. Mouth: 370582 Lat./Long. Mouth: 48 DG. 22' 33'' 123 DG. 50' 56'' Mainstem Length: 7.0 km Ref. No.: 20-1 Watershed Area: Ref. No.:
		Location: FLOWS S. INTO ORVEAS BAY, N.W. OF OTTER PT., OTTER DIST.

Gradient Class/Location (km upstream from mouth)					Comments
0 - .5%	.5 - 2%	2 - 5%	5 - 10%	>10%	LEVEL FROM THE OCEAN UNTIL ABOUT 2KM UPSTREAM, THEN BECOMES ROUGH AND ROCKY. (REF. 20-38)

B. OBSTRUCTIONS TO MIGRATION

Barrier (Type)	Height (meters)	Location (km U/S)	Impassable to (species)	Comments
C CASCADE		2.0		(REF. 20-38)
C CASCADE		8.0	AO ALL SALMON	EXTENSIVE EROSION THROUGHOUT CREATING EXCESSIVE GRAVEL MOVEMENT (REF. 20-13)
F FALLS		8.0	AO ALL SALMON	(REF. 20-1)

C. FLOW

Flow Control:	Water Survey of Canada (WSC) Flow Gauge: Y		
W.S.C. Station No. 1: 08HA031	No. 2:	No. 3:	No. 4:
Comments: GAUGE LOCATED AT THE MOUTH. (REF. 20-39)			

D. DISTRIBUTION SUMMARY

Species	Watershed Distribution
CO COHO SALMON	0.0 TO 4.8KM. SPARSELY SCATTERED THROUGHOUT SYSTEM BUT SPAWNING CONCENTRATED BELOW CASCADES. (REF. 20-1, REF. 20-13)
CM CHUM SALMON	LOWER 500M (REF. 20-1, REF. 20-13)
ST STEELHEAD	ALSO FOUND IN THIS SYSTEM (REF. 20-3)

E. ESCAPEMENT SUMMARY

Species	Escapement			Maximum Recorded Escapement	Ref. No.	Management Target Escapement	Ref. No.
	Mean	Period of Record	Ref. No.				
CO COHO SALMON	63	1971 - 1983	20-13	200	20-13		
CM CHUM SALMON	41	1971 - 1983	20-13	200	20-13		

F. LIFE HISTORY TIMING

Species	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CO COHO SALMON	Migration Spawning Incubation Rearing										X	X X	
CM CHUM SALMON	Migration Spawning Incubation Rearing											X X	X

Comments: A SANDBAR AT THE MOUTH OFTEN PREVENTS SMOLTS AND SPAWNED OUT ST FROM GETTING OUT TO SEA UNTIL SPRING FRESHET (REF. 20-38)

G. ENHANCEMENT/MANAGEMENT ACTIVITIES IN WATERSHED

Type of Activity	Species	Location (km U/S)	Comments	Period of Operation Start/Finish
TR TRANSPLANT	CO COHO SALMON	0.0	FRY DONATED TO TUGWELL C FROM ROCKY C HATCHERY SINCE 1979. NO APPARENT CORRESPONDING RETURN SO TERMINATED. (REF. 20-38)	1979/1984

H. LAND USE/WATER USE/WATER QUALITY

Activity	Description/Location
FO FORESTRY	EXTENSIVE LOGGING IN UPPER WATERSHED HAS CONTRIBUTED TO EXTENSIVE GRAVEL IN LOWER END. (REF. 20-38)

I. FISH PRODUCTION POTENTIAL/CONSTRAINTS/GENERAL COMMENTS

CAPABLE OF SUPPORTING MANY MORE SALMON THAN IT PRESENTLY DOES. (REF. 20-13)
ESCAPEMENT AFFECTED BY HEAVY COMMERCIAL FISHING DURING MIGRATION, LOGGING AND CHEMICAL SPRAYING (1967) (REF. 20-13)
LARGE ACCUMULATION OF GRAVEL IN LOWER 1KM OF STREAM (REF. 20-38)
PHOTOS AVAILABLE (REF. 20-13)

J. FISHERY OFFICER NARRATIVE

Date Prepared: 1987/05/01	Prepared By: J. STEPHEN/ G. KAPAHI

K. SIS COMPLETED BY

Completed by:	GITA KAPAHI	Date:	1986/04/07
Checked by:	JOHN STEPHEN	Date:	1986/04/07
Last updated by:	GITA KAPAHI	Date:	1987/09/22
Last checked by:	BRIAN TUTTY	Date:	1987/09/25

REFERENCE NO: 20- 1

AUTHOR: MARSHALL,D.E.;ET AL
DESCRIPTION: PRELIMINARY CATALOGUE OF SALMON STREAMS AND SPAWNING ESCAPEMENTS OF STATISTICAL AREAS 19 & 20 (VICTORIA-SOOKE) PAC/D-77-9
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AF ALL SPECIES PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 3

AUTHOR:
DESCRIPTION: M.O.E. STREAM AND LAKE INVENTORY MAPS: MAP 92 B/5 E&W (1971)1:50,000.
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AF ALL SPECIES PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 13

AUTHOR: UNKNOWN. 1980,1982,1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; TUGWELL CREEK 1980, 1982, 1983.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 38

AUTHOR: STEPHEN,JOHN. FISHERY OFFICER, SOOKE OFFICE.
DESCRIPTION: PERSONAL INFORMATION ABOUT STREAMS WITHIN STATISTICAL AREA 20.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 39

AUTHOR: INLAND WATERS DIRECTORATE, WATER RESOURCES BRANCH
DESCRIPTION: SURFACE WATER DATA, BRITISH COLUMBIA; 1984
LOCATION: CC WATER SURVEY CANADA - VANCOUVER
KEYWORDS: FL FLOW

A. DESCRIPTION

Stream Name: MUIR CREEK Local Name: Watershed Code: 93-0400	D.F.O. Division: SOUTH COAST District: 6 VICTORIA Subdistrict: 20 SOOKE Statistical Subarea: 20-5 M.O.E.P. Region: 1 VANCOUVER ISLAND Management Unit: 2

Tributaries	Code

Topographic (1:50k) Map: 92B/5
B.C.G.S. (1:20k) Map:
U.T.M. Mouth: 355613
Lat./Long. Mouth: 48 DG. 24' 7'' 123 DG. 52' 22''
Mainstem Length: 17.0 km Ref. No.: 20-1
Watershed Area: Ref. No.:

Location: FLOWS S. INTO ORVEAS BAY, E. OF SHERINGHAM PT., MALAHAT DIST.

Gradient Class/Location (km upstream from mouth)					Comments
0 - .5%	.5 - 2%	2 - 5%	5 - 10%	>10%	VERY EVEN AND LEVEL FOR 2KM FROM SALT WATER THEN HITS A STEEP ROCKY CASCADE (REF. 20-38)

B. OBSTRUCTIONS TO MIGRATION

Barrier (Type)	Height (meters)	Location (km U/S)	Impassable to (species)	Comments
F FALLS		8.0	AO ALL SALMON	(REF. 20-1, REF. 20-14)

C. FLOW

Flow Control: W.S.C. Station No. 1:	Water Survey of Canada (WSC) Flow Gauge: No. 2:	No. 3:	No. 4:
Comments: WATER LEVELS NORMAL (REF. 20-14)			

D. DISTRIBUTION SUMMARY

Species	Watershed Distribution
CO COHO SALMON	LOWER 4.8KM (REF. 20-1, REF. 20-14)
CM CHUM SALMON	LOWER 4.8KM (REF. 20-1, REF. 20-14)
ST STEELHEAD	PRESENT (REF. 20-38)

E. ESCAPEMENT SUMMARY

Species	Escapement			Maximum Recorded Escapement	Ref. No.	Management Target Escapement	Ref. No.
	Mean	Period of Record	Ref. No.				
CO COHO SALMON	43	1973 - 1983	20-14	100	20-14		
CM CHUM SALMON	954	1971 - 1983	20-14	8130	20-14		

F. LIFE HISTORY TIMING

Species	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CO COHO SALMON	Migration Spawning Incubation Rearing											X X	X
CM CHUM SALMON	Migration Spawning Incubation Rearing										X	X X	

G. ENHANCEMENT/MANAGEMENT ACTIVITIES IN WATERSHED

Type of Activity	Species	Location (km U/S)	Comments	Period of Operation Start/Finish
SI STREAM IMPROVEM'T	CO COHO SALMON	0.0	FROM ROCKY C DROPPED IN UPPER REACHES OF MUIR C WITH NO APPARENT EFFECT. PROGRAM TERMINATED. (REF. 20-38)	1979/1984

H. LAND USE/WATER USE/WATER QUALITY

Activity	Description/Location
FO FORESTRY	QUICK RUNOPFF AND SILTING ARE CONTINUING PROBLEMS CAUSED FROM PREVIOUS LOGGING (REF. 20-14)

I. FISH PRODUCTION POTENTIAL/CONSTRAINTS/GENERAL COMMENTS

NO INFORMATION AVAILABLE

J. FISHERY OFFICER NARRATIVE

Date Prepared: 1987/05/01 Prepared By: J. STEPHEN/ G. KAPAHI

K. SIS COMPLETED BY

Completed by:	GITA KAPAHI	Date:	1986/04/07
Checked by:	JOHN STEPHEN	Date:	1986/04/07
Last updated by:	GITA KAPAHI	Date:	1987/09/22
Last checked by:	BRIAN TUTTY	Date:	1987/09/25

REFERENCE NO: 20- 1

AUTHOR: MARSHALL,D.E.;ET AL
DESCRIPTION: PRELIMINARY CATALOGUE OF SALMON STREAMS AND SPAWNING ESCAPEMENTS OF STATISTICAL AREAS 19 & 20 (VICTORIA-SOOKE) PAC/D-77-9
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AF ALL SPECIES PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 14

AUTHOR: UNKNOWN. 1983
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; MUIR CREEK.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 38

AUTHOR: STEPHEN,JOHN. FISHERY OFFICER, SOOKE OFFICE.
DESCRIPTION: PERSONAL INFORMATION ABOUT STREAMS WITHIN STATISTICAL AREA 20.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

A. DESCRIPTION

Stream Name: KIRBY CREEK Local Name: COAL CREEK Watershed Code: 93-0420	D.F.O. Division: SOUTH COAST District: 6 VICTORIA Subdistrict: 20 SOOKE Statistical Subarea: 20-5 M.O.E.P. Region: 1 VANCOUVER ISLAND Management Unit: 3

Tributaries	Code	
		Topographic (1:50k) Map: 92B/5 B.C.G.S. (1:20k) Map: U.T.M. Mouth: 370589 Lat./Long. Mouth: 48 DG. 22' 52'' 123 DG. 53' 54'' Mainstem Length: Ref. No.: Watershed Area: Ref. No.:
		Location: FLOWS S. INTO ORVEAS BAY, E. OF SHERINGHAM PT.,RENFREW DIST.

Gradient Class/Location (km upstream from mouth)					Comments
0 - .5%	.5 - 2%	2 - 5%	5 - 10%	>10%	LOW AND MEANDERING GRADE ON S. SIDE OF HWY BRIDGE, THEN STREAM BECOMES STEEPER UNTIL 2KM UPSTREAM OF HWY BRIDGE, THEN DEVELOPS INTO SMALL CATARACTS BEYOND FISH HABITAT. (REF. 20-38)

B. OBSTRUCTIONS TO MIGRATION

Barrier (Type)	Height (meters)	Location (km U/S)	Impassable to (species)	Comments
F FALLS		2.4		NARROW ROCK GORGE PASSABLE AT HIGH WATER. (REF. 20-15)
F FALLS		6.4	AF ALL SPECIES	(REF. 20-1, REF. 20-15)

C. FLOW

Flow Control: W.S.C. Station No. 1:	Water Survey of Canada (WSC) Flow Gauge: No. 2: No. 3: No. 4:
Comments: HAS STABLE FLOWS (REF. 20-15)	

D. DISTRIBUTION SUMMARY

Species	Watershed Distribution
CO COHO SALMON	FOUND FROM LOWEST A-FRAME ON FARM TO GORGE. (REF. 20-15)
CM CHUM SALMON	FROM TIDAL WATERS TO AND INCLUDING WEST BRANCH (REF. 20-15)
CM CHUM SALMON	IN THE LOWER 0.8KM (REF. 20-1, REF. 20-15)
ST STEELHEAD	SHOWN ON M.O.E. MAP (REF. 20-3)
AO ALL SALMON	M.O.E. MAP SHOWS ANADROMOUS LIMIT AT 5KM (REF. 20-3, REF. 20-15)
CT CUTTHROAT TROUT	SHOWN ON M.O.E. MAP. (REF. 20-3)

E. ESCAPEMENT SUMMARY

Species	Escapement			Maximum Recorded Escapement	Ref. No.	Management Target Escapement	Ref. No.
	Mean	Period of Record	Ref. No.				
CO COHO SALMON	63	1971 - 1983	20-15	25	20-15		

E. ESCAPEMENT SUMMARY CONTINUED

Species	Escapement			Maximum Recorded Escapement	[Ref. No.[	Management Target Escapement	[Ref. No. [
	Mean	Period of Record	[Ref. No.[				
CM CHUM SALMON	70	1971 - 1983	20-15	204	20-15		
Comments: HAS GOOD GRAVEL AND SHOULD SUPPORT LARGER RUNS (1974) (REF. 20-15)							

F. LIFE HISTORY TIMING

Species	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CO COHO SALMON	Migration Spawning Incubation Rearing											X X	X
CM CHUM SALMON	Migration Spawning Incubation Rearing										X	X X	X

G. ENHANCEMENT/MANAGEMENT ACTIVITIES IN WATERSHED

Type of Activity	Species	Location (km U/S)	Comments	Period of Operation Start/Finish
BX INCUBATION BOX	CM CHUM SALMON	0.0	HAS BEEN SET UP (REF. 20-15)	1979/1979

H. LAND USE/WATER USE/WATER QUALITY

Activity	Description/Location
AG AGRICULTURE	BELOW HIGHWAY BRIDGE (REF. 20-38)
FO FORESTRY	LOGGING IN EXTREME UPPER REACHES, NO APPARENT AFFECT ON STREAM FLOW. (REF. 20-38)
LD LINEAR DEVELOPMENT	NEW HIGHWAY BRIDGE ABUTMENTS CONSTRUCTED IN 1983, COMPLETED 1985. (REF. 20-15)

I. FISH PRODUCTION POTENTIAL/CONSTRAINTS/GENERAL COMMENTS

NO INFORMATION AVAILABLE

J. FISHERY OFFICER NARRATIVE

Date Prepared: 1987/05/01 Prepared By: J. STEPHEN/ G. KAPAHI

K. SIS COMPLETED BY

Completed by:	GITA KAPAHI	Date:	1986/04/07
Checked by:	JOHN STEPHEN	Date:	1986/04/07
Last updated by:	GITA KAPAHI	Date:	1987/09/22
Last checked by:	BRIAN TUTTY	Date:	1987/09/25

REFERENCE NO: 20- 1

AUTHOR: MARSHALL,D.E.;ET AL
DESCRIPTION: PRELIMINARY CATALOGUE OF SALMON STREAMS AND SPAWNING ESCAPEMENTS OF STATISTICAL AREAS 19 & 20 (VICTORIA-SOOKE) PAC/D-77-9
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AF ALL SPECIES PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 3

AUTHOR:
DESCRIPTION: M.O.E. STREAM AND LAKE INVENTORY MAPS: MAP 92 B/5 E&W (1971)1:50,000.
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AF ALL SPECIES PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 15

AUTHOR: UNKNOWN. 1981,1982,1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; KIRBY CREEK. 1981, 1982, 1983
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 38

AUTHOR: STEPHEN,JOHN. FISHERY OFFICER, SOOKE OFFICE.
DESCRIPTION: PERSONAL INFORMATION ABOUT STREAMS WITHIN STATISTICAL AREA 20.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

A. DESCRIPTION

Stream Name: JORDAN RIVER Local Name: Watershed Code: 93-0600	D.F.O. Division: SOUTH COAST District: 6 VICTORIA Subdistrict: 20 SOOKE Statistical Subarea: 20-4 M.O.E.P. Region: 1 VANCOUVER ISLAND Management Unit: 3

Tributaries	Code	
		Topographic (1:50k) Map: 92B/5 B.C.G.S. (1:20k) Map: U.T.M. Mouth: Lat./Long. Mouth: 48 DG. 25' 20'' 124 DG. 03' 20'' Mainstem Length: Ref. No.: Watershed Area: Ref. No.:
		Location: FLOWS S.W. INTO JUAN DE FUCA STRAIGHT, S.E. SIDE OF SAN SIMEON PT.,RENFREW DIST.

Gradient Class/Location (km upstream from mouth)	Comments
0 - .5% .5 - 2% 2 - 5% 5 - 10% >10%	
NO INFORMATION AVAILABLE	

B. OBSTRUCTIONS TO MIGRATION

Barrier (Type)	Height (meters)	Location (km U/S)	Impassable to (species)	Comments
F FALLS		2.4	AO ALL SALMON	(REF. 20-1, REF. 20-16)

C. FLOW

Flow Control: Y	Water Survey of Canada (WSC) Flow Gauge:		
W.S.C. Station No. 1:	No. 2:	No. 3:	No. 4:

Comments: A THIRD DAM (ELLIOT DAM) AND A NEW POWERHOUSE WERE COMPLETED IN 1971, THIS RENDERED THE RIVER USELESS FOR SALMON PRODUCTION. (CONFIRMED 1984, SOOKE F/O) (REF. 20-16)

BC HYDRO HAS USED JORDAN R. SINCE ABOUT 1912; 2 STORAGE DAMS, A POWERHOUSE NEAR TIDEWATER AND A DIVERSION FLUME AND PIPELINE TO THE POWERHOUSE. HYDRO AGREED TO PROVIDE 0.98CMS (ENOUGH FOR SPAWNING PURPOSES) (REF. 20-16)

HYDRO'S RELEASE MECHANISM IS NOT GEARED TO PARTIAL, CONTINUOUS FLOW. (REF. 20-17)

POOL BELOW DAM MAY BE TRAPPING FISH DUE TO BUILDUP OF GRAVEL AND ONCE DAM IS SHUT OFF, PERCOLATION OF WATER THROUGH GRAVEL MAY STRAND FISH ANYWAY. (REF. 20-17)

D. DISTRIBUTION SUMMARY

Species	Watershed Distribution
NO INFORMATION AVAILABLE	

E. ESCAPEMENT SUMMARY

Species	Escapement			Maximum Recorded Escapement	Ref. No.	Management Target Escapement	Ref. No.
	Mean	Period of Record	Ref. No.				
NO INFORMATION AVAILABLE							

F. LIFE HISTORY TIMING

Species	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CO COHO SALMON	Migration Spawning Incubation Rearing										X X	X X	
CM CHUM SALMON	Migration Spawning Incubation Rearing								X	X X	X		

G. ENHANCEMENT/MANAGEMENT ACTIVITIES IN WATERSHED

Type of Activity	Species	Location (km U/S)	Comments	Period of Operation Start/Finish
NO INFORMATION AVAILABLE				

H. LAND USE/WATER USE/WATER QUALITY

Activity	Description/Location
FO FORESTRY	EXTENSIVE LOGGING IN WATERSHED. (REF. 20-38)

I. FISH PRODUCTION POTENTIAL/CONSTRAINTS/GENERAL COMMENTS

NO INFORMATION AVAILABLE

J. FISHERY OFFICER NARRATIVE

Date Prepared: / / Prepared By:

K. SIS COMPLETED BY

Completed by:	GITA KAPAHI	Date:	1986/04/07
Checked by:	JOHN STEPHEN	Date:	1986/04/07
Last updated by:	GITA KAPAHI	Date:	1987/09/22
Last checked by:	BRIAN TUTTY	Date:	1987/09/25

REFERENCE NO: 20- 1

AUTHOR: MARSHALL,D.E.;ET AL
DESCRIPTION: PRELIMINARY CATALOGUE OF SALMON STREAMS AND SPAWNING ESCAPEMENTS OF STATISTICAL AREAS 19 & 20 (VICTORIA-SOOKE) PAC/D-77-9
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AF ALL SPECIES PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 16

AUTHOR: UNKNOWN.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; JORDAN RIVER. VARIOUS YEARS.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 17

AUTHOR: ASSORTED DATES AND AUTHORS
DESCRIPTION: JORDAN RIVER FILE
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AF ALL SPECIES PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 38

AUTHOR: STEPHEN,JOHN. FISHERY OFFICER, SOOKE OFFICE.
DESCRIPTION: PERSONAL INFORMATION ABOUT STREAMS WITHIN STATISTICAL AREA 20.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

A. DESCRIPTION

Stream Name: UGLOW CREEK Local Name: Watershed Code: 93-0620	D.F.O. Division: SOUTH COAST District: 6 VICTORIA Subdistrict: 20 SOOKE Statistical Subarea: 20-4 M.O.E.P. Region: 1 VANCOUVER ISLAND Management Unit: 3

Tributaries	Code

Topographic (1:50k) Map: 92C/8
B.C.G.S. (1:20k) Map:
U.T.M. Mouth:
Lat./Long. Mouth: 48 DG. 25' 50'' 124 DG. 05' 25''
Mainstem Length: Ref. No.:
Watershed Area: Ref. No.:

Location: FLOWS INTO JUAN DE FUCA STRAIT

Gradient Class/Location (km upstream from mouth)					Comments
0 - .5%	.5 - 2%	2 - 5%	5 - 10%	>10%	EVEN, FLAT FOR 1/2 MI. (REF. 20-38)

B. OBSTRUCTIONS TO MIGRATION

Barrier (Type)	Height (meters)	Location (km U/S)	Impassable to (species)	Comments
X LOG JAMS		1.7		LOG AND GRAVEL JAM (REF. 20-18)

C. FLOW

Flow Control: W.S.C. Station No. 1:	Water Survey of Canada (WSC) Flow Gauge: No. 2:	No. 3:	No. 4:
NO INFORMATION AVAILABLE			

D. DISTRIBUTION SUMMARY

Species	Watershed Distribution
CO COHO SALMON	PRESENT (REF. 20-18)
ST STEELHEAD	PRESENT (REF. 20-18)

E. ESCAPEMENT SUMMARY

Species	Escapement			Maximum Recorded Escapement	Ref. No.	Management Target Escapement	Ref. No.
	Mean	Period of Record	Ref. No.				
Comments: NO FISH REPORTED IN 1983 SPAWNING RECORD. (REF. 20-18)							

F. LIFE HISTORY TIMING

Species	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CO COHO SALMON	Migration Spawning Incubation Rearing											X X	

G. ENHANCEMENT/MANAGEMENT ACTIVITIES IN WATERSHED

Type of Activity	Species	Location (km U/S)	Comments	Period of Operation Start/Finish
TR TRANSPLANT	CO COHO SALMON	0.0	TRANSPLANTED 2000 CO FRY FROM ROCKY C INCUBATION SITE (REF. 20-18)	1981/

H. LAND USE/WATER USE/WATER QUALITY

Activity	Description/Location
NO INFORMATION AVAILABLE	

I. FISH PRODUCTION POTENTIAL/CONSTRAINTS/GENERAL COMMENTS

JORDAN RIVER INMATES COULD CLEAR A PASS ON WESTERN SIDE OF THIS JAM, ALLOWING THE ACCUMULATED GRAVEL TO MOVE DOWNSTREAM. (1981 FILE) (NO REPORT IN 1983 OF ANYTHING DONE) (REF. 20-18)

J. FISHERY OFFICER NARRATIVE

Date Prepared: / / Prepared By:

K. SIS COMPLETED BY

Completed by:	GITA KAPAHI	Date:	1986/04/07
Checked by:	JOHN STEPHEN	Date:	1986/04/07
Last updated by:	GITA KAPAHI	Date:	1987/09/22
Last checked by:	BRIAN TUTTY	Date:	1987/09/25

REFERENCE NO: 20- 18

AUTHOR: UNKNOWN. 1981,1982,1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; UGLOW CREEK. 1981, 1982, 1983
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 38

AUTHOR: STEPHEN,JOHN. FISHERY OFFICER, SOOKE OFFICE.
DESCRIPTION: PERSONAL INFORMATION ABOUT STREAMS WITHIN STATISTICAL AREA 20.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

A. DESCRIPTION

Stream Name: MAIDENHAIR CREEK	D.F.O. Division: SOUTH COAST
Local Name: LITTLE CHINA CREEK	District: 6 VICTORIA
Watershed Code: 93-0624	Subdistrict: 20 SOOKE
	Statistical Subarea: 20-4
	M.O.E.P. Region: 1 VANCOUVER ISLAND
	Management Unit: 3

Tributaries	Code

Topographic (1:50k) Map: 92C/8
B.C.G.S. (1:20k) Map:
U.T.M. Mouth:
Lat./Long. Mouth: 48 DG. 25' 58'' 124 DG. 05' 25''
Mainstem Length: Ref. No.:
Watershed Area: Ref. No.:

Location: FLOWS INTO JUAN DE FUCA STRAIT.

Gradient Class/Location (km upstream from mouth)					Comments
0 - .5%	.5 - 2%	2 - 5%	5 - 10%	>10%	
NO INFORMATION AVAILABLE					

B. OBSTRUCTIONS TO MIGRATION

Barrier (Type)	Height (meters)	Location (km U/S)	Impassable to (species)	Comments
X LOG JAMS		0.3		(REF. 20-19)

C. FLOW

Flow Control:	Water Survey of Canada (WSC) Flow Gauge:		
W.S.C. Station No. 1:	No. 2:	No. 3:	No. 4:
NO INFORMATION AVAILABLE			

D. DISTRIBUTION SUMMARY

Species	Watershed Distribution
CO COHO SALMON	SPAWNING IN LOWER 1KM. (REF. 20-19)

E. ESCAPEMENT SUMMARY

Species	Escapement			Maximum Recorded Escapement	Ref. No.	Management Target Escapement	Ref. No.
	Mean	Period of Record	Ref. No.				
Comments: 1983 - BAD RETURN OF COHO THIS YEAR. ANOTHER 1500 FRY WERE PLANTED THIS SPRING. (REF. 20-19)							

F. LIFE HISTORY TIMING

Species	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CO COHO SALMON	Migration Spawning Incubation Rearing											X	

G. ENHANCEMENT/MANAGEMENT ACTIVITIES IN WATERSHED

Type of Activity	Species	Location (km U/S)	Comments	Period of Operation Start/Finish
NO INFORMATION AVAILABLE				

H. LAND USE/WATER USE/WATER QUALITY

Activity	Description/Location
NO INFORMATION AVAILABLE	

I. FISH PRODUCTION POTENTIAL/CONSTRAINTS/GENERAL COMMENTS

NO INFORMATION AVAILABLE

J. FISHERY OFFICER NARRATIVE

Date Prepared: / / Prepared By:

K. SIS COMPLETED BY

Completed by:	GITA KAPAHI	Date:	1986/04/07
Checked by:	JOHN STEPHEN	Date:	1986/04/07
Last updated by:	GITA KAPAHI	Date:	1987/09/22
Last checked by:	BRIAN TUTTY	Date:	1987/09/25

REFERENCE NO: 20- 19

AUTHOR: UNKNOWN. 1983
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS ; MAIDENHAIR CREEK.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON S SPAWNING

A. DESCRIPTION

Stream Name: SAN JUAN RIVER Local Name: Watershed Code: 93-1000	D.F.O. Division: SOUTH COAST District: 6 VICTORIA Subdistrict: 20 SOOKE Statistical Subarea: 20-2 M.O.E.P. Region: 1 VANCOUVER ISLAND Management Unit: 3

Tributaries	Code
FALLS CREEK	030
MOSQUITO CREEK	050
HARRIS CREEK	120
LENS CREEK	150

Topographic (1:50k) Map: 92C/9
B.C.G.S. (1:20k) Map:
U.T.M. Mouth: 660792
Lat./Long. Mouth: 0 DG. 0' 0'' 0 DG. 0' 0''
Mainstem Length: 46.0 km Ref. No.: 20-22
Watershed Area: 580.0 km2 Ref. No.: 20-39

Location: FLOWS S. & W. INTO PORT SAN JUAN, RENFREW DIST.

Gradient Class/Location (km upstream from mouth)					Comments
0 - .5%	.5 - 2%	2 - 5%	5 - 10%	>10%	GENERALLY EVEN UP TO HEADWATERS. (REF. 20-38)

B. OBSTRUCTIONS TO MIGRATION

Barrier (Type)	Height (meters)	Location (km U/S)	Impassable to (species)	Comments
C CASCADE	6.5			LOCATION NOT IDENTIFIED. (REF. 20-22)
F FALLS				VARIOUS FALLS LOCATED ON TRIBS TO THE SAN JUAN RIVER. (REF. 20-21)
X LOG JAMS		8.0		(REF. 20-23, REF. 20-25, REF. 20-26)
F FALLS		19.2	AO ALL SALMON	(HEMMINGSEN FALLS) (REF. 20-1, REF. 20-25)

C. FLOW

Flow Control: Water Survey of Canada (WSC) Flow Gauge: Y
W.S.C. Station No. 1: 08HA010 No. 2: No. 3: No. 4:

Comments: AVE. DISCHARGE RATE IS 52 CMS, MAX. 1064 CMS, MIN. 12 CMS. (REF. 20-1, REF. 20-23)

DISCHARGE 1854CFS; MAX;38,000 CFS (1961); MIN; 38.5 CFS (1961) (REF. 20-1)

SEVERE FLOOD DAMAGE OCCURRED IN LOWER REACHES AND TO SOME EXTENT UPSTREAM (1962). HAPPENS ALMOST ANNUALLY. FEB. 23,1986 WAS 12" IN 24 HRS. *NOTE RECORD RAINFALL. (REF. 20-38)

WATER LEVELS LOW IN SUMMER (1971) (REF. 20-23, REF. 20-25)

D. DISTRIBUTION SUMMARY

Species	Watershed Distribution
SK SOCKEYE SALMON	PRESENT; HOLD IN FAIRY LAKE, SPAWN IN RENFREW C IMMEDIATELY ABOVE FAIRY LAKE. USUALLY ABOUT 300 IN NUMBER. (REF. 20-38)
CO COHO SALMON	(SECTION #3)- MODERATE NUMBERS OF JUV. IN ALL POOLS ABOVE SHORT CANYON SECTION. (REF. 20-22)
CO COHO SALMON	FRY SHOW UP HALFWAY THROUGH SECTION #2; NUMEROUS IN ALL POOLS AFTER THIS. (REF. 20-22)
CO COHO SALMON	THROUGHOUT TRIBUTARIES. IN SIDE STREAMS AND ABOVE 8KM. EXCELLENT REARING AND TRANSITIONAL AREA FOR SMOLTS. (REF. 20-1, REF. 20-23, REF. 20-24)

D. DISTRIBUTION SUMMARY CONTINUED

Species	Watershed Distribution
PK PINK SALMON	SPAWN IN LOWER 8KM. (REF. 20-23)
CH CHINOOK SALMON	IN MAINSTREAM (REF. 20-1)
ST STEELHEAD	ALSO PRESENT IN RIVER. (REF. 20-22, REF. 20-26)
CT CUTTHROAT TROUT	EXCELLENT REARING AND TRANSITIONAL AREA FOR SMOLTS. (REF. 20-24)
RB RAINBOW TROUT	(SECTION #3)- LOW NUMBERS OF JUV. IN ALL POOLS ABOVE SHORT CANYON SECTION. (REF. 20-22)
RB RAINBOW TROUT	JUV. APPEARED BELOW 12M FALLS, START DROPPING AS GRADIENT DECREASES AND POOL/RIFFLE RATIO INCREASES. (COHO FRY SHOW UP IN THIS SEC- TION OF RIVER) (REF. 20-27)
RB RAINBOW TROUT	PARR AND FRY THROUGHOUT SECTION #1; PARR AT HEAD OF POOLS BELOW RIFFLE SECTIONS; FRY IN RIFFLES MODERATE TO POOR. (REF. 20-23)

E. ESCAPEMENT SUMMARY

Species	Escapement			Maximum Recorded Escapement	Ref. No.	Management Target Escapement	Ref. No.
	Mean	Period of Record	Ref. No.				
SK SOCKEYE SALMON	246	1971 - 1983	20-23	1500	20-23		
CO COHO SALMON	6367	1971 - 1983	20-23	15000	20-23		
PK PINK SALMON	121	1971 - 1983	20-23	200	20-23		
CM CHUM SALMON	388	1971 - 1983	20-23	3500	20-23		
CH CHINOOK SALMON	979	1971 - 1983	20-23	3500	20-23		
Comments: NOTE- PINK ESCAPEMENT IS AVE. OF 6 RECORDS. (REF. 20-23)							

F. LIFE HISTORY TIMING

Species	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
SK SOCKEYE SALMON	Migration Spawning Incubation Rearing						X X	X X	X X	X X	X X		
CO COHO SALMON	Migration Spawning Incubation Rearing	X								X	X X	X X	X X
CM CHUM SALMON	Migration Spawning Incubation Rearing										X	X X	
CH CHINOOK SALMON	Migration Spawning Incubation Rearing									X	X X	X X	
Comments: POSSIBLE SUMMER AND WINTER RUNS (REF. 20-23)													

G. ENHANCEMENT/MANAGEMENT ACTIVITIES IN WATERSHED

Type of Activity	Species	Location (km U/S)	Comments	Period of Operation Start/Finish
HY HATCHERY	AO ALL SALMON	0.0	4 MILE CREEK HATCHERY CAPTURES BROODSTOCK IN SAN JUAN RIVER WITH SEINE NET. CAN PRODUCE 1.8 MILLION COHO/YEAR. (REF. 20-38)	1978/

H. LAND USE/WATER USE/WATER QUALITY

Activity	Description/Location
FO FORESTRY	EXTENSIVE LOGGING THROUGHOUT (REF. 20-38)
MI MINING	SOME PLACER MINING UPSTREAM. (REF. 20-38)

I. FISH PRODUCTION POTENTIAL/CONSTRAINTS/GENERAL COMMENTS

10 KM OF NON-UTILIZED STREAM ABOVE MAIN FALLS MIGHT PROVIDE OPPORTUNITY FOR STOCKING PROGRAM (REF. 20-22)
4 KM OF POTENTIAL HABITAT ABOVE MAIN FALLS (REF. 20-28)
AT LEAST 9.6KM OF FAIR SPAWNING GROUNDS ABOVE FALLS. (REF. 20-23)
COHO FRY DISTRIBUTION HAS BEEN RECOMMENDED FOR THE MAINSTEM BETWEEN FAIRY LAKE AND WILLIAMS CREEK. (REF. 20-29)
FOR PAST 10 - 20 YEARS (1972), SPAWNING GROUNDS BELOW FALLS HAVE NOT BEEN FULLY UTILIZED (REF. 20-23)
PASSABLE FALLS SHOULD BE REMOVED (19.2KM) (1983) (REF. 20-23)
PIXIE LAKE HAS BEEN STOCKED SINCE 1983 WITH UP TO 80,000 FRY FROM 4 MILE CREEK HATCHERY (WITH COHO). FED BY SUMMER STUDENT CREWS AND HAVE BEEN SMOLT TRAPPED ON WAY OUT AT MOUTH OF PIXIE LAKE. (REF. 20-38)
SAN JUAN RIVER COULD ACCOMODATE APPROXIMATELY 100,000 FISH (REF. 20-28)

J. FISHERY OFFICER NARRATIVE

Date Prepared: 1987/05/01	Prepared By: J. STEPHEN/ G. KAPAHI

K. SIS COMPLETED BY

Completed by:	GITA KAPAHI	Date:	1986/04/07
Checked by:	JOHN STEPHEN	Date:	1986/04/07
Last updated by:	GITA KAPAHI	Date:	1987/09/22
Last checked by:	BRIAN TUTTY	Date:	1987/09/25

REFERENCE NO: 20- 1
AUTHOR: MARSHALL,D.E.;ET AL
DESCRIPTION: PRELIMINARY CATALOGUE OF SALMON STREAMS AND SPAWNING ESCAPEMENTS OF STATISTICAL AREAS 19 & 20 (VICTORIA-SOOKE) PAC/D-77-9
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AF ALL SPECIES PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 21
AUTHOR:
DESCRIPTION: M.O.E. STREAM AND LAKE INVENTORY MAPS ; MAP NO. 92C/9 E & W. 1971
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 22
AUTHOR: WITT & CLOZZA
DESCRIPTION: SAN JUAN WATERSHED, SUMMER STEELHEAD SURVEY REPORT.
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: PY PHYSICAL HABITAT ST STEELHEAD

REFERENCE NO: 20- 23
AUTHOR: UNKNOWN. 1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; SAN JUAN RIVER.
LOCATION: G DFO - SOUTH COAST DIVISION - NANAIMO
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 24
AUTHOR: ASSORTED DATES AND AUTHORS
DESCRIPTION: SAANICH INLET FILE
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 25
AUTHOR: UNKNOWN. 1982,1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS ; SAN JUAN RIVER.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON S SPAWNING

REFERENCE NO: 20- 26
AUTHOR: STEPHEN,JOHN 1982.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS. SAN JUAN RIVER.
LOCATION: J DFO - PACIFIC BIOLOGICAL STATION - NANAIMO
KEYWORDS: AO ALL SALMON S SPAWNING

REFERENCE NO: 20- 27
AUTHOR: ASSORTED DATES AND AUTHORS
DESCRIPTION: SAN JUAN RIVER FILES
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AO ALL SALMON S SPAWNING

REFERENCE NO: 20- 28
AUTHOR:
DESCRIPTION: M.O.E. STREAM AND LAKE INVENTORY MAPS. MAP NO. 92B/12 E & W. 1971
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AO ALL SALMON S SPAWNING

REFERENCE NO: 20- 29
AUTHOR: DUKE,L.B.
DESCRIPTION: LETTER TO JOHN STEPHEN, F/O SOOKE, B.C. FROM L.B.DUKE, DISTRICT SUPERVISOR, VICTORIA, B.C. "COHO FRY DISTRIBUTION - SAN JUAN RIVER SYSTEM" APRIL 12, 1983.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: CO COHO

REFERENCE NO: 20- 38
AUTHOR: STEPHEN,JOHN. FISHERY OFFICER, SOOKE OFFICE.
DESCRIPTION: PERSONAL INFORMATION ABOUT STREAMS WITHIN STATISTICAL AREA 20.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 39

AUTHOR: INLAND WATERS DIRECTORATE, WATER RESOURCES BRANCH
DESCRIPTION: SURFACE WATER DATA, BRITISH COLUMBIA; 1984
LOCATION: CC WATER SURVEY CANADA - VANCOUVER
KEYWORDS: FL FLOW

A. DESCRIPTION

Stream Name: FALLS CREEK	D.F.O. Division: SOUTH COAST
Local Name: FALL CREEK, FALLER CREEK, FALSE CREEK	District: 6 VICTORIA
Watershed Code: 93-1000-030	Subdistrict: 20 SOOKE
	Statistical Subarea: 20-2
	M.O.E.P. Region: 1 VANCOUVER ISLAND
	Management Unit: 3

Tributaries	Code

Topographic (1:50k) Map: 92C/9
B.C.G.S. (1:20k) Map:
U.T.M. Mouth: 960803
Lat./Long. Mouth: 48 DG. 34' 5'' 124 DG. 21' 33''
Mainstem Length: Ref. No.:
Watershed Area: Ref. No.:

Location: FLOWS INTO SAN JUAN RIVER.

Gradient Class/Location (km upstream from mouth)					Comments
0 - .5%	.5 - 2%	2 - 5%	5 - 10%	>10%	LEVEL TO ROAD, THEN BECOMES STEEP AND GENERALLY UNUSABLE FOR FISH. (REF. 20-38)

B. OBSTRUCTIONS TO MIGRATION

Barrier (Type)	Height (meters)	Location (km U/S)	Impassable to (species)	Comments
X LOG JAMS		3.2		PASSABLE AT HIGH WATERS (REF. 20-20)
F FALLS	7.6	3.4	AO ALL SALMON	VERTICAL FALLS (REF. 20-21)

C. FLOW

Flow Control:
W.S.C. Station No. 1:

Water Survey of Canada (WSC) Flow Gauge:
No. 2: No. 3: No. 4:

Comments: SUBJECT TO VIOLENT FLASH FLOODS. (REF. 20-38)

D. DISTRIBUTION SUMMARY

Species	Watershed Distribution
CO COHO SALMON	SPAWNING DISTRIBUTION WIDESPREAD UP TO FALLS. (REF. 20-20)
CT CUTTHROAT TROUT	ANADROMOUS CUTTHROAT INDICATED. (REF. 20-21)

E. ESCAPEMENT SUMMARY

Species	Escapement			Maximum Recorded Escapement	Ref. No.	Management Target Escapement	Ref. No.
	Mean	Period of Record	Ref. No.				

Comments: VERY STABLE SPAWNING BEDS. (REF. 20-20)

F. LIFE HISTORY TIMING

Species	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CO COHO SALMON	Migration Spawning Incubation Rearing											X	X X

G. ENHANCEMENT/MANAGEMENT ACTIVITIES IN WATERSHED

Type of Activity	Species	Location (km U/S)	Comments	Period of Operation Start/Finish
EN ENHANCEMENT ACTS		0.0	MINOR LOG JAM REMOVAL. (REF. 20-38)	1977/1984

H. LAND USE/WATER USE/WATER QUALITY

Activity	Description/Location
FO FORESTRY	LOGGING IN UPPER REACHES. (REF. 20-38)

I. FISH PRODUCTION POTENTIAL/CONSTRAINTS/GENERAL COMMENTS

SILTATION OF STREAM 4%. (REF. 20-20)
STREAM CLEANING SHOULD BE DONE ANNUALLY. (REF. 20-20)

J. FISHERY OFFICER NARRATIVE

Date Prepared: / /	Prepared By:

K. SIS COMPLETED BY

Completed by:	GITA KAPAHI	Date:	1986/04/07
Checked by:	JOHN STEPHEN	Date:	1986/04/07
Last updated by:		Date:	/ /
Last checked by:		Date:	/ /

REFERENCE NO: 20- 20

AUTHOR: UNKNOWN. 1981,1982,1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; FALLS CREEK. 1981,1982,1983
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON S SPAWNING

REFERENCE NO: 20- 21

AUTHOR:
DESCRIPTION: M.O.E. STREAM AND LAKE INVENTORY MAPS ; MAP NO. 92C/9 E & W. 1971
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 38

AUTHOR: STEPHEN,JOHN. FISHERY OFFICER, SOOKE OFFICE.
DESCRIPTION: PERSONAL INFORMATION ABOUT STREAMS WITHIN STATISTICAL AREA 20.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

A. DESCRIPTION

Stream Name: MOSQUITO CREEK	D.F.O. Division: SOUTH COAST
Local Name: DAVIS CREEK	District: 6 VICTORIA
Watershed Code: 93-1000-050	Subdistrict: 20 SOOKE
	Statistical Subarea: 20-2
	M.O.E.P. Region: 1 VANCOUVER ISLAND
	Management Unit: 3

Tributaries	Code

Topographic (1:50k) Map: 92C/9
B.C.G.S. (1:20k) Map:
U.T.M. Mouth: 010810
Lat./Long. Mouth: 48 DG. 34' 28'' 124 DG. 21' 6''
Mainstem Length: Ref. No.:
Watershed Area: Ref. No.:

Location: TRIBUTARY TO SAN JUAN RIVER.

Gradient Class/Location (km upstream from mouth)					Comments
0 - .5%	.5 - 2%	2 - 5%	5 - 10%	>10%	STEEP BEYOND THE ROAD. FROM ROAD TO RIVER, VERY EVEN, LOW FLOWS. (REF. 20-38)

B. OBSTRUCTIONS TO MIGRATION

Barrier (Type)	Height (meters)	Location (km U/S)	Impassable to (species)	Comments
X LOG JAMS				STREAM COURSE DOESN'T CHANGE IN UPPER PART, BUT LOWER PART IS PLUGGED WITH LOGS. (REF. 20-30)
F FALLS	12.7	3.0		(REF. 20-21)
X LOG JAMS		4.8		PASSABLE IN HIGH WATER ONLY. (REF. 20-31)

C. FLOW

Flow Control: Water Survey of Canada (WSC) Flow Gauge:
W.S.C. Station No. 1: No. 2: No. 3: No. 4:

Comments: SUBJECT TO FLASH FLOODING. (REF. 20-38)

WATER LEVEL HIGH (REF. 20-30)

D. DISTRIBUTION SUMMARY

Species	Watershed Distribution
CO COHO SALMON	TO LOG JAM BELOW FALLS. (REF. 20-38)
ST STEELHEAD	PRESENT (REF. 20-21)
AO ALL SALMON	ANADROMOUS FISH ARE LIMITED TO THE FIRST 3 KM (REF. 20-21)
CT CUTTHROAT TROUT	PRESENT (REF. 20-21)

E. ESCAPEMENT SUMMARY

Species	Escapement			Maximum Recorded Escapement	Ref. No.	Management Target Escapement	Ref. No.
	Mean	Period of Record	Ref. No.				
NO INFORMATION AVAILABLE							

F. LIFE HISTORY TIMING

Species	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CO COHO SALMON	Migration											X	X
	Spawning												X
	Incubation												
	Rearing												

G. ENHANCEMENT/MANAGEMENT ACTIVITIES IN WATERSHED

Type of Activity	Species	Location (km U/S)	Comments	Period of Operation Start/Finish
EN ENHANCEMENT ACTS		0.0	LOG JAM REMOVAL (REF. 20-38)	1977/1984

H. LAND USE/WATER USE/WATER QUALITY

Activity	Description/Location
FO FORESTRY	LOGGING IN UPPER REACHES (REF. 20-38)

I. FISH PRODUCTION POTENTIAL/CONSTRAINTS/GENERAL COMMENTS

COHO FRY DISTRIBUTION HAS BEEN RECOMMENDED. (REF. 20-29)

EROSION SILTATION OF STREAM 5% (REF. 20-30)

LOG JAMS SHOULD BE REMOVED ON A YEARLY BASIS. THIS IS CAUSED BY BAD LOGGING PRACTICES IN THE HEADWATER OF THE SYSTEM. (REF. 20-1, REF. 20-30, REF. 20-31)

J. FISHERY OFFICER NARRATIVE

Date Prepared: / / Prepared By:

K. SIS COMPLETED BY

Completed by:	GITA KAPAHI	Date:	1986/04/07
Checked by:	JOHN STEPHEN	Date:	1986/04/07
Last updated by:		Date:	/ /
Last checked by:		Date:	/ /

REFERENCE NO: 20- 1

AUTHOR: MARSHALL,D.E.;ET AL
DESCRIPTION: PRELIMINARY CATALOGUE OF SALMON STREAMS AND SPAWNING ESCAPEMENTS OF STATISTICAL AREAS 19 & 20 (VICTORIA-SOOKE) PAC/D-77-9
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AF ALL SPECIES PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 21

AUTHOR:
DESCRIPTION: M.O.E. STREAM AND LAKE INVENTORY MAPS ; MAP NO. 92C/9 E & W. 1971
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 29

AUTHOR: DUKE,L.B.
DESCRIPTION: LETTER TO JOHN STEPHEN, F/O SOOKE, B.C. FROM L.B.DUKE, DISTRICT SUPERVISOR, VICTORIA, B.C. "COHO FRY DISTRIBUTION - SAN JUAN RIVER SYSTEM" APRIL 12, 1983.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: CO COHO

REFERENCE NO: 20- 30

AUTHOR: UNKNOWN 1981,1983
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; MOSQUITO CREEK. (FILE FROM THE VICTORIA OFFICE).
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON S SPAWNING

REFERENCE NO: 20- 31

AUTHOR: UNKNOWN 1982,1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; MOSQUITO CREEK. 1982, 1983 (SOOKE OFFICE)
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON S SPAWNING

REFERENCE NO: 20- 38

AUTHOR: STEPHEN,JOHN. FISHERY OFFICER, SOOKE OFFICE.
DESCRIPTION: PERSONAL INFORMATION ABOUT STREAMS WITHIN STATISTICAL AREA 20.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

A. DESCRIPTION

Stream Name: RENFREW CREEK	D.F.O. Division: SOUTH COAST
Local Name: GRANITE CREEK	District: 6 VICTORIA
Watershed Code: 93-1000-070-010	Subdistrict: 20 SOOKE
	Statistical Subarea: 20-2
	M.O.E.P. Region: 1 VANCOUVER ISLAND
	Management Unit: 3

Tributaries	Code

Topographic (1:50k) Map: 92C/9
B.C.G.S. (1:20k) Map:
U.T.M. Mouth: 030821
Lat./Long. Mouth: 48 DG. 35' 4'' 124 DG. 20' 38''
Mainstem Length: Ref. No.:
Watershed Area: Ref. No.:

Location: STREAM DRAINS INTO FAIRY LAKE BEFORE FLOWING INTO MAINSTEM SAN JUAN RIVER.

Gradient Class/Location (km upstream from mouth)					Comments
0 - .5%	.5 - 2%	2 - 5%	5 - 10%	>10%	VERY LEVEL (REF. 20-38)

B. OBSTRUCTIONS TO MIGRATION

Barrier (Type)	Height (meters)	Location (km U/S)	Impassable to (species)	Comments
F FALLS		8.0		PASSABLE (REF. 20-33, REF. 20-34)

C. FLOW

Flow Control:
W.S.C. Station No. 1:
Water Survey of Canada (WSC) Flow Gauge:
No. 2:
No. 3:
No. 4:

Comments: 4.2CMS DISCHARGE (REF. 20-24)

SUBJECT TO SEVERE SCOURING (REF. 20-34)

D. DISTRIBUTION SUMMARY

Species	Watershed Distribution
CO COHO SALMON	AN IMPORTANT PRODUCER (?; REF. 38) (REF. 20-32)
ST STEELHEAD	AN IMPORTANT PRODUCER. (?;REF. 38). FOUND IN LOWER REACHES AND AT LEAST TO FALLS. (REF. 20-21, REF. 20-32)
AO ALL SALMON	ANADROMOUS FISH ARE LIMITED TO THE FIRST 7 KM (REF. 20-21)
CT CUTTHROAT TROUT	IN FAIRY LAKE. SPAWNING DISTRIBUTION WIDESPREAD. CONTAINS 6KM OF EXCELLENT FISH HABITAT. (REF. 20-32, REF. 20-33, REF. 20-34)
CT CUTTHROAT TROUT	IN LOWER REACHES (REF. 20-21)

E. ESCAPEMENT SUMMARY

Species	Escapement			Maximum Recorded Escapement	Ref. No.	Management Target Escapement	Ref. No.
	Mean	Period of Record	Ref. No.				
NO INFORMATION AVAILABLE							

F. LIFE HISTORY TIMING

Species	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
SK SOCKEYE SALMON	Migration Spawning Incubation Rearing						X	X X	X X	X X	X X		
CO COHO SALMON	Migration Spawning Incubation Rearing	X										X	X X
CM CHUM SALMON	Migration Spawning Incubation Rearing										X	X X	X

G. ENHANCEMENT/MANAGEMENT ACTIVITIES IN WATERSHED

Type of Activity	Species	Location (km U/S)	Comments	Period of Operation Start/Finish
HY HATCHERY		0.0	FOUR MILE CREEK HATCHERY IS LOCATED ON THIS DRAINAGE. (REF. 20-32)	/

H. LAND USE/WATER USE/WATER QUALITY

Activity	Description/Location
FO FORESTRY	EXTENSIVE LOGGING THROUGHOUT UPPER WATERSHED. OCCASIONALLY CAUSES WATER CLARITY DIFFICULTIES. (REF. 20-38)

I. FISH PRODUCTION POTENTIAL/CONSTRAINTS/GENERAL COMMENTS

COHO FRY DISTRIBUTION HAS BEEN RECOMMENDED (REF. 20-29)
EVIDENCE OF SILTATION 12% (REF. 20-24, REF. 20-34)
POTENTIAL HABITAT SHOWN (REF. 20-21)
STEEPENS ABOVE FALLS BUT REASONABLE HABITAT (REF. 20-24)

J. FISHERY OFFICER NARRATIVE

Date Prepared: / / Prepared By:

K. SIS COMPLETED BY

Completed by:	GITA KAPAHI	Date:	1986/04/07
Checked by:	JOHN STEPHEN	Date:	1986/04/07
Last updated by:	GITA KAPAHI	Date:	1987/09/22
Last checked by:	BRIAN TUTTY	Date:	1987/09/25

REFERENCE NO: 20- 21
AUTHOR:
DESCRIPTION: M.O.E. STREAM AND LAKE INVENTORY MAPS ; MAP NO. 92C/9 E & W. 1971
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 24
AUTHOR: ASSORTED DATES AND AUTHORS
DESCRIPTION: SAANICH INLET FILE
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 29
AUTHOR: DUKE,L.B.
DESCRIPTION: LETTER TO JOHN STEPHEN, F/O SOOKE, B.C. FROM L.B.DUKE, DISTRICT SUPERVISOR, VICTORIA, B.C. "COHO FRY DISTRIBUTION - SAN JUAN RIVER SYSTEM" APRIL 12, 1983.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: CO COHO

REFERENCE NO: 20- 32
AUTHOR: (DFO FILES,NITINAT LAKE & TRIBS.;PT.ALBERNI OFFICE
DESCRIPTION: T.F.L. FISHERIES DISTRIBUTION STUDY - B.C. FOREST PRODUCTS LTD. RESOURCE PLANNING GROUP, CROFTON, B.C.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON S SPAWNING

REFERENCE NO: 20- 33
AUTHOR: UNKNOWN. 1982,1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; GRANITE CREEK 1982, 1983
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON S SPAWNING

REFERENCE NO: 20- 34
AUTHOR: UNKNOWN. 1981.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; GRANITE CREEK 1981. (VICTORIA FILES)
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON S SPAWNING

REFERENCE NO: 20- 38
AUTHOR: STEPHEN,JOHN. FISHERY OFFICER, SOOKE OFFICE.
DESCRIPTION: PERSONAL INFORMATION ABOUT STREAMS WITHIN STATISTICAL AREA 20.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

A. DESCRIPTION

Stream Name: UNNAMED CREEK Local Name: FIVE MILE CREEK, REDER CREEK Watershed Code: 93-1000-070-010-010	D.F.O. Division: SOUTH COAST District: 6 VICTORIA Subdistrict: 20 SOOKE Statistical Subarea: 20-2 M.O.E.P. Region: 1 VANCOUVER ISLAND Management Unit: 3

Tributaries	Code	
		Topographic (1:50k) Map: 92C/9 B.C.G.S. (1:20k) Map: U.T.M. Mouth: Lat./Long. Mouth: 0 DG. 0' 0'' 0 DG. 0' 0'' Mainstem Length: Ref. No.: Watershed Area: Ref. No.: Location: FLOWS INTO RENFREW (GRANITE C)

Gradient Class/Location (km upstream from mouth)					Comments
0 - .5%	.5 - 2%	2 - 5%	5 - 10%	>10%	VERY EVEN. EXCELLENT OVERWINTERING COHO HABITAT. (REF. 20-38)

B. OBSTRUCTIONS TO MIGRATION

Barrier (Type)	Height (meters)	Location (km U/S)	Impassable to (species)	Comments
NB NO BARRIER				NO OBSTRUCTIONS (REF. 20-35)

C. FLOW

Flow Control: W.S.C. Station No. 1:	Water Survey of Canada (WSC) Flow Gauge: No. 2:	No. 3:	No. 4:
Comments: NORMAL WATER FLOWS (REF. 20-35)			

D. DISTRIBUTION SUMMARY

Species	Watershed Distribution
CO COHO SALMON	PRESENT. SPAWNING WIDESPREAD BUT MAINLY IN HEADWATERS (?; REF.38) (REF. 20-35)
CT CUTTHROAT TROUT	PRESENT (REF. 20-21)

E. ESCAPEMENT SUMMARY

Species	Escapement			Maximum Recorded Escapement	Ref. No.	Management Target Escapement	Ref. No.
	Mean	Period of Record	Ref. No.				
NO INFORMATION AVAILABLE							

F. LIFE HISTORY TIMING

Species	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CO COHO SALMON	Migration Spawning Incubation Rearing											X X	

G. ENHANCEMENT/MANAGEMENT ACTIVITIES IN WATERSHED

Type of Activity	Species	Location (km U/S)	Comments	Period of Operation Start/Finish
EN ENHANCEMENT ACTS		0.0	STREAM CLEARED (MADE INTO A PARK); FRY ARE FED IN SUMMER BY STUDENT CREWS. (REF. 20-38)	/

H. LAND USE/WATER USE/WATER QUALITY

Activity	Description/Location
FO FORESTRY	LOGGING IN UPPER REACHES. (REF. 20-38)

I. FISH PRODUCTION POTENTIAL/CONSTRAINTS/GENERAL COMMENTS

EXCELLENT FOR REARING. (REF. 20-38)
POTENTIAL HABITAT INDICATED. (REF. 20-21)

J. FISHERY OFFICER NARRATIVE

Date Prepared: / /	Prepared By:

K. SIS COMPLETED BY

Completed by:	GITA KAPAHI	Date:	1986/04/07
Checked by:	JOHN STEPHEN	Date:	1986/04/07
Last updated by:		Date:	/ /
Last checked by:		Date:	/ /

REFERENCE NO: 20- 21

AUTHOR:
DESCRIPTION: M.O.E. STREAM AND LAKE INVENTORY MAPS ; MAP NO. 92C/9 E & W. 1971
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 35

AUTHOR: UNKNOWN. 1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; 5 MILE CREEK 1983
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON S SPAWNING

REFERENCE NO: 20- 38

AUTHOR: STEPHEN,JOHN. FISHERY OFFICER, SOOKE OFFICE.
DESCRIPTION: PERSONAL INFORMATION ABOUT STREAMS WITHIN STATISTICAL AREA 20.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

A. DESCRIPTION

Stream Name: HARRIS CREEK Local Name: Watershed Code: 93-1000-120	D.F.O. Division: SOUTH COAST District: 6 VICTORIA Subdistrict: 20 SOOKE Statistical Subarea: 20-2 M.O.E.P. Region: 1 VANCOUVER ISLAND Management Unit: 3

Tributaries	Code
HEMMINGSEN CREEK	150

Topographic (1:50k) Map: 92C/9
B.C.G.S. (1:20k) Map:
U.T.M. Mouth: 590814
Lat./Long. Mouth: 48 DG. 34' 40'' 124 DG. 16' 23''
Mainstem Length: 28.0 km Ref. No.: 20-1
Watershed Area: Ref. No.:

Location: TRIBUTARY TO THE SAN JUAN RIVER

Gradient Class/Location (km upstream from mouth)					Comments
0 - .5%	.5 - 2%	2 - 5%	5 - 10%	>10%	GRADIENT A) 2% ; B) 1% (REF. 20-22) GRADIENT STEEP NEAR SOURCE THEN SLIGHT TO MODERATE TO TOP CANYON, THEN MODERATE TO STEEP TO START OF BOTTOM CANMYON, THEN SLIGHT TO MODERATE TO MOUTH. (REF. 20-27)

B. OBSTRUCTIONS TO MIGRATION

Barrier (Type)	Height (meters)	Location (km U/S)	Impassable to (species)	Comments
C CASCADE		28.8		AREAS OF CASCADES AND SMALL FALLS, THEN LOG JAMS AND FALLS NEAR 28.8 KM. (REF. 20-22)

C. FLOW

Flow Control:
W.S.C. Station No. 1:

Water Survey of Canada (WSC) Flow Gauge:
No. 2: No. 3: No. 4:

Comments: ESTIMATED DISCHARGE RATE: ABOVE HEMMINGSEN 0.056 - 56 CMS; BELOW HEMMINGSEN - 0.56 - 224 CMS. (REF. 20-27)

D. DISTRIBUTION SUMMARY

Species	Watershed Distribution
CO COHO SALMON	PRESENT; UTILIZE THE LOWER 9KM FOR REARING. STILL FOUND IN SIDE STREAMS (1984, F/O SOOKE CONFIRM.) ABOVE CONFLUENCE WITH HEMMINGSEN, CREEK HAS SOME EXCELLENT TROUT REARING HABITAT. (REF. 20-27, REF. 20-32)
CM CHUM SALMON	IN LOWER REACHES (REF. 20-38)
ST STEELHEAD	PRESENT. ENOUGH ADULTS PASS IN MOST YEARS TO SEED UPPER STREAM SECTIONS; CREEK IS NOTED FOR SUMMER STEELHEAD. 20KM OF EXCELLENT REAR ING HABITAT; CREEK IS IMPORTANT WINTER AND SUMMER RUN ST STREAM. (REF. 20-27, REF. 20-32)
AF ALL SPECIES	ACCESSIBLE LENGTH 16.5 KM. 12.1 KM INACCESIBLE (REF. 20-22)
CT CUTTHROAT TROUT	PRESENT; UP TO 3KM (REF. 20-21, REF. 20-27)
RB RAINBOW TROUT	PRESENT (REF. 20-27)

E. ESCAPEMENT SUMMARY

Species	Escapement			Maximum Recorded Escapement	Ref. No.	Management Target Escapement	Ref. No.
	Mean	Period of Record	Ref. No.				
NO INFORMATION AVAILABLE							

F. LIFE HISTORY TIMING

Species	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
SK SOCKEYE SALMON	Migration Spawning Incubation Rearing									X X			
CO COHO SALMON	Migration Spawning Incubation Rearing	X										X	X X
CM CHUM SALMON	Migration Spawning Incubation Rearing										X	X X	X
ST STEELHEAD	Migration Spawning Incubation Rearing	X X	X X	X X	X X	X							

G. ENHANCEMENT/MANAGEMENT ACTIVITIES IN WATERSHED

Type of Activity	Species	Location (km U/S)	Comments	Period of Operation Start/Finish
NO INFORMATION AVAILABLE				

H. LAND USE/WATER USE/WATER QUALITY

Activity	Description/Location
FO FORESTRY	EXTENSIVE LOGGING (REF. 20-38)

I. FISH PRODUCTION POTENTIAL/CONSTRAINTS/GENERAL COMMENTS

DETAILED STANDING CROP, CARRYING CAPACITY AND FISH SAMPLE DATA IS AVAILABLE IN THIS REPORT FOR HARRIS CREEK. (REF. 20-37)

J. FISHERY OFFICER NARRATIVE

Date Prepared: / / Prepared By:

K. SIS COMPLETED BY

Completed by:	GITA KAPAHI	Date:	1986/04/07
Checked by:	JOHN STEPHEN	Date:	1986/04/07
Last updated by:	KATHY PONTUS	Date:	1987/07/23
Last checked by:	BRIAN TUTTY	Date:	1987/09/25

REFERENCE NO: 20- 1
AUTHOR: MARSHALL,D.E.;ET AL
DESCRIPTION: PRELIMINARY CATALOGUE OF SALMON STREAMS AND SPAWNING ESCAPEMENTS OF STATISTICAL AREAS 19 & 20 (VICTORIA-SOOKE) PAC/D-77-9
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AF ALL SPECIES PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 21
AUTHOR:
DESCRIPTION: M.O.E. STREAM AND LAKE INVENTORY MAPS ; MAP NO. 92C/9 E & W. 1971
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 22
AUTHOR: WITT & CLOZZA
DESCRIPTION: SAN JUAN WATERSHED, SUMMER STEELHEAD SURVEY REPORT.
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: PY PHYSICAL HABITAT ST STEELHEAD

REFERENCE NO: 20- 27
AUTHOR: ASSORTED DATES AND AUTHORS
DESCRIPTION: SAN JUAN RIVER FILES
LOCATION: O MOE - REGION I - NANAIMO
KEYWORDS: AO ALL SALMON S SPAWNING

REFERENCE NO: 20- 32
AUTHOR: (DFO FILES,NITINAT LAKE & TRIBS.;PT.ALBERNI OFFICE
DESCRIPTION: T.F.L. FISHERIES DISTRIBUTION STUDY - B.C. FOREST PRODUCTS LTD. RESOURCE PLANNING GROUP, CROFTON, B.C.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON S SPAWNING

REFERENCE NO: 20- 37
AUTHOR: SHIP ENVIRONMENTAL CONSULTANTS, LTD. JAN. 1986
DESCRIPTION: ASSESSMENT OF HABITAT, SALMONID BIOMASS AND POTENTIAL CARRYING CAPACITY OF THE SAN JUAN AND GORDON RIVER SYSTEMS, VANC. IS., B.C.FOR S.E.P. SPECIAL PROJECTS, DFO, 1090 W. PENDER ST, VAN.
LOCATION: C DFO - SALMONID ENHANCEMENT PROGRAM - VANCOUVER
KEYWORDS: AO ALL SALMON

REFERENCE NO: 20- 38
AUTHOR: STEPHEN,JOHN. FISHERY OFFICER, SOOKE OFFICE.
DESCRIPTION: PERSONAL INFORMATION ABOUT STREAMS WITHIN STATISTICAL AREA 20.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

A. DESCRIPTION

Stream Name: HEMMINGSEN CREEK Local Name: Watershed Code: 93-1000-120-150	D.F.O. Division: SOUTH COAST District: 6 VICTORIA Subdistrict: 20 SOOKE Statistical Subarea: 20-2 M.O.E.P. Region: 1 VANCOUVER ISLAND Management Unit: 3

Tributaries	Code

Topographic (1:50k) Map: 92C/9
B.C.G.S. (1:20k) Map:
U.T.M. Mouth: 770871
Lat./Long. Mouth: 48 DG. 38' 5'' 124 DG. 15' 19''
Mainstem Length: Ref. No.:
Watershed Area: Ref. No.:

Location: TRIBUTARY TO HARRIS C, SAN JUAN RIVER SYSTEM.

Gradient Class/Location (km upstream from mouth)					Comments
0 - .5%	.5 - 2%	2 - 5%	5 - 10%	>10%	MODERATE TO BARRIER, THEN ROCKY, BOULDERY WITH LARGE COBBLES ALL THE WAY UP. (REF. 20-38)

B. OBSTRUCTIONS TO MIGRATION

Barrier (Type)	Height (meters)	Location (km U/S)	Impassable to (species)	Comments
NO INFORMATION AVAILABLE				

C. FLOW

Flow Control:
W.S.C. Station No. 1:
Water Survey of Canada (WSC) Flow Gauge:
No. 2:
No. 3:
No. 4:

Comments: VERY STABLE (REF. 20-38)

D. DISTRIBUTION SUMMARY

Species	Watershed Distribution
CO COHO SALMON	PRESENT (REF. 20-38)
ST STEELHEAD	PRESENT (REF. 20-38)

E. ESCAPEMENT SUMMARY

Species	Escapement			Maximum Recorded Escapement	Ref. No.	Management Target Escapement	Ref. No.
	Mean	Period of Record	Ref. No.				
NO INFORMATION AVAILABLE							

F. LIFE HISTORY TIMING

Species	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CO COHO SALMON	Migration Spawning Incubation Rearing											X	X X
ST STEELHEAD	Migration Spawning Incubation Rearing	X X	X X	X X	X X	X							

G. ENHANCEMENT/MANAGEMENT ACTIVITIES IN WATERSHED

Type of Activity	Species	Location (km U/S)	Comments	Period of Operation Start/Finish
NO INFORMATION AVAILABLE				

H. LAND USE/WATER USE/WATER QUALITY

Activity	Description/Location
FO FORESTRY	EXTENSIVE LOGGING (REF. 20-38)

I. FISH PRODUCTION POTENTIAL/CONSTRAINTS/GENERAL COMMENTS

NO INFORMATION AVAILABLE

J. FISHERY OFFICER NARRATIVE

Date Prepared: / / Prepared By:

K. SIS COMPLETED BY

Completed by:	GITA KAPAHI	Date:	1986/04/07
Checked by:	JOHN STEPHEN	Date:	1986/04/07
Last updated by:		Date:	/ /
Last checked by:		Date:	/ /

REFERENCE NO: 20- 38

AUTHOR: STEPHEN,JOHN. FISHERY OFFICER, SOOKE OFFICE.
DESCRIPTION: PERSONAL INFORMATION ABOUT STREAMS WITHIN STATISTICAL AREA 20.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

A. DESCRIPTION

Stream Name: LENS CREEK Local Name: Watershed Code: 93-1000-150	D.F.O. Division: SOUTH COAST District: 6 VICTORIA Subdistrict: 20 SOOKE Statistical Subarea: 20-2 M.O.E.P. Region: 1 VANCOUVER ISLAND Management Unit: 3

Tributaries	Code	
		Topographic (1:50k) Map: 92C/9 B.C.G.S. (1:20k) Map: U.T.M. Mouth: 730820 Lat./Long. Mouth: 48 DG. 35' 21'' 124 DG. 15' 22'' Mainstem Length: Ref. No.: Watershed Area: Ref. No.:
		Location:

Gradient Class/Location (km upstream from mouth)					Comments
0 - .5%	.5 - 2%	2 - 5%	5 - 10%	>10%	VERY EVEN UNTIL FALLS, THEN CASCADES, THEN EVEN AGAIN, STABLE AND FLAT ABOVE FALLS. (REF. 20-38)

B. OBSTRUCTIONS TO MIGRATION

Barrier (Type)	Height (meters)	Location (km U/S)	Impassable to (species)	Comments
BD BEAVER DAM				IN FAR UPPER REACHES (REF. 20-38)
F FALLS	6.0	5.0	AO ALL SALMON	(REF. 20-38)

C. FLOW

Flow Control: W.S.C. Station No. 1:	Water Survey of Canada (WSC) Flow Gauge: No. 2:	No. 3:	No. 4:
Comments: VERY EVEN, THE LEAST AFFECTED BY FLOODING. (REF. 20-38)			

D. DISTRIBUTION SUMMARY

Species	Watershed Distribution
CO COHO SALMON	TO FALLS (REF. 20-38)
ST STEELHEAD	TO FALLS (REF. 20-38)

E. ESCAPEMENT SUMMARY

Species	Escapement			Maximum Recorded Escapement	Ref. No.	Management Target Escapement	Ref. No.
	Mean	Period of Record	Ref. No.				
NO INFORMATION AVAILABLE							

F. LIFE HISTORY TIMING

Species	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CO COHO SALMON	Migration Spawning Incubation Rearing											X	X

F. LIFE HISTORY TIMING CONTINUED

Species	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
ST STEELHEAD	Migration Spawning Incubation Rearing	X X	X X	X X	X X	X							

G. ENHANCEMENT/MANAGEMENT ACTIVITIES IN WATERSHED

Type of Activity	Species	Location (km U/S)	Comments	Period of Operation Start/Finish
TR TRANSPLANT	CO COHO SALMON	0.0	HEAVY FRY PLANTS IN UPPER REACHES, ESPECIALLY IN 1983. (REF. 20-38)	1983/

H. LAND USE/WATER USE/WATER QUALITY

Activity	Description/Location
FO FORESTRY	EXTENSIVE LOGGING (REF. 20-38)

I. FISH PRODUCTION POTENTIAL/CONSTRAINTS/GENERAL COMMENTS

GOOD SYSTEM FOR REARING IN UPPER REACHES BECAUSE OF FLAT GRADIENT. (REF. 20-38)

J. FISHERY OFFICER NARRATIVE

Date Prepared: / / Prepared By:

K. SIS COMPLETED BY

Completed by:	GITA KAPAHI	Date:	1986/04/07
Checked by:	JOHN STEPHEN	Date:	1986/04/07
Last updated by:		Date:	/ /
Last checked by:		Date:	/ /

REFERENCE NO: 20- 38

AUTHOR: STEPHEN,JOHN. FISHERY OFFICER, SOOKE OFFICE.
DESCRIPTION: PERSONAL INFORMATION ABOUT STREAMS WITHIN STATISTICAL AREA 20.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

A. DESCRIPTION

Stream Name: GORDON RIVER Local Name: Watershed Code: 93-1100	D.F.O. Division: SOUTH COAST District: 6 VICTORIA Subdistrict: 20 SOOKE Statistical Subarea: 20-2 M.O.E.P. Region: 1 VANCOUVER ISLAND Management Unit: 3

Tributaries	Code	
		Topographic (1:50k) Map: 92C/9 B.C.G.S. (1:20k) Map: U.T.M. Mouth: 610814 Lat./Long. Mouth: 48 DG. 34' 43'' 124 DG. 24' 22'' Mainstem Length: Ref. No.: Watershed Area: Ref. No.:
		Location: FLOWS S.W. & S. INTO PORT SAN JUAN, RENFREW DIST.

Gradient Class/Location (km upstream from mouth)					Comments
0 - .5%	.5 - 2%	2 - 5%	5 - 10%	>10%	MEANDERING UNTIL LOGGING BRIDGE, FROM THERE TO BUGABOO, LARGE COBBLES, EVEN GRADIENT. BUGABOO TO LOUP C, CANYONS, BEDROCK, NO REAR- ING OR SPAWNING. UPSTREAM, EVEN FLAT GRADIENT, STABLE WATER THROUGHOUT HEADWATER (REF. 20-38)

B. OBSTRUCTIONS TO MIGRATION

Barrier (Type)	Height (meters)	Location (km U/S)	Impassable to (species)	Comments
F FALLS		13.0		AT LOUP C. (ACTUALLY FROM 12.8 - 16 KM UPSTREAM FROM MOUTH) (REF. 20-1, REF. 20-38)

C. FLOW

Flow Control: W.S.C. Station No. 1:	Water Survey of Canada (WSC) Flow Gauge: No. 2:	No. 3:	No. 4:
Comments: SUBJECT TO SEVERE HIGH WATER LEVELS (REF. 20-38)			

D. DISTRIBUTION SUMMARY

Species	Watershed Distribution
CO COHO SALMON	TO BUGABOO; HAVE GONE TO LOUP C IN SOME YEARS. IN 1966 GOT UP TO HAUK C AND WINNIE C. (REF. 20-38)
CM CHUM SALMON	TO LOGGING BRIDGE (REF. 20-38)
CH CHINOOK SALMON	TO BRADEN C (REF. 20-38)
ST STEELHEAD	UP TO AND INTO LOUP C, AND GET ABOVE LOUP C FALLS TO HEADWATER OF GORDON (REF. 20-38)

E. ESCAPEMENT SUMMARY

Species	Escapement			Maximum Recorded Escapement	Ref. No.	Management Target Escapement	Ref. No.
	Mean	Period of Record	Ref. No.				
CO COHO SALMON	831	1971 - 1983	20-1	3500	20-1		
CM CHUM SALMON	160	1971 - 1983	20-1	750	20-1		
CH CHINOOK SALMON	437	1971 - 1983	20-1	3500	20-1		

F. LIFE HISTORY TIMING

Species	Activity	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
CO COHO SALMON	Migration Spawning Incubation Rearing	X								X	X X	X X	X X
CM CHUM SALMON	Migration Spawning Incubation Rearing										X	X X	X
CH CHINOOK SALMON	Migration Spawning Incubation Rearing									X	X X	X X	

G. ENHANCEMENT/MANAGEMENT ACTIVITIES IN WATERSHED

Type of Activity	Species	Location (km U/S)	Comments	Period of Operation Start/Finish
TR TRANSPLANT	CO COHO SALMON	0.0	FRY PLANTING IN UPPER REACHES (REF. 20-38)	1983/1983

H. LAND USE/WATER USE/WATER QUALITY

Activity	Description/Location
FO FORESTRY	HEAVY LOGGING THROUGHOUT (REF. 20-38)
MI MINING	SOME PLACER MINING (REF. 20-38)

I. FISH PRODUCTION POTENTIAL/CONSTRAINTS/GENERAL COMMENTS

FALLS AT LOUP C SHOULD BE BYPASSED (FISH LADDER, ETC.) TO PROVIDE UPSTREAM PASSAGE TO COHO. (REF. 20-38)

J. FISHERY OFFICER NARRATIVE

Date Prepared: 1987/05/01 Prepared By: J. STEPHEN/ G. KAPAHI

K. SIS COMPLETED BY

Completed by:	GITA KAPAHI	Date:	1986/04/07
Checked by:	JOHN STEPHEN	Date:	1986/04/07
Last updated by:	GITA KAPAHI	Date:	1987/09/22
Last checked by:	BRIAN TUTTY	Date:	1987/09/25

REFERENCE NO: 20- 1

AUTHOR: MARSHALL,D.E.;ET AL
DESCRIPTION: PRELIMINARY CATALOGUE OF SALMON STREAMS AND SPAWNING ESCAPEMENTS OF STATISTICAL AREAS 19 & 20 (VICTORIA-SOOKE)
PAC/D-77-9
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AF ALL SPECIES PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 38

AUTHOR: STEPHEN,JOHN. FISHERY OFFICER, SOOKE OFFICE.
DESCRIPTION: PERSONAL INFORMATION ABOUT STREAMS WITHIN STATISTICAL AREA 20.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

3.2 SUBDISTRICT BIBLIOGRAPHY

REFERENCE LIST
1987/09/29

REFERENCE NO: 20- 3
AUTHOR:
DESCRIPTION: M.O.E. STREAM AND LAKE INVENTORY MAPS: MAP 92 B/5 E&W (1971)1:50,000.
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AF ALL SPECIES PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 21
AUTHOR:
DESCRIPTION: M.O.E. STREAM AND LAKE INVENTORY MAPS ; MAP NO. 92C/9 E & W. 1971
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 28
AUTHOR:
DESCRIPTION: M.O.E. STREAM AND LAKE INVENTORY MAPS. MAP NO. 92B/12 E & W. 1971
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AO ALL SALMON S SPAWNING

REFERENCE NO: 20- 32
AUTHOR: (DFO FILES,NITINAT LAKE & TRIBS.;PT.ALBERNI OFFICE
DESCRIPTION: T.F.L. FISHERIES DISTRIBUTION STUDY - B.C. FOREST PRODUCTS LTD. RESOURCE PLANNING GROUP, CROFTON, B.C.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON S SPAWNING

REFERENCE NO: 20- 7
AUTHOR: ASSORTED DATES AND AUTHORS
DESCRIPTION: MATHESON LAKE FILE
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AF ALL SPECIES HS HABITAT SAMPLING PY PHYSICAL HABITAT

REFERENCE NO: 20- 11
AUTHOR: ASSORTED DATES AND AUTHORS
DESCRIPTION: SOOKE RIVER FILES
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AF ALL SPECIES PY PHYSICAL HABITAT

REFERENCE NO: 20- 17
AUTHOR: ASSORTED DATES AND AUTHORS
DESCRIPTION: JORDAN RIVER FILE
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AF ALL SPECIES PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 24
AUTHOR: ASSORTED DATES AND AUTHORS
DESCRIPTION: SAANICH INLET FILE
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 27
AUTHOR: ASSORTED DATES AND AUTHORS
DESCRIPTION: SAN JUAN RIVER FILES
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: AO ALL SALMON S SPAWNING

REFERENCE NO: 20- 4
AUTHOR: BURNS, J.E.
DESCRIPTION: LAKES OF THE VICTORIA AREA: A CURSORY EVALUATION WITH SOME MANAGEMENT RECOMMENDATIONS.
LOCATION: M MOE - FISHERIES BRANCH - VICTORIA
KEYWORDS: AF ALL SPECIES HS HABITAT SAMPLING PY PHYSICAL HABITAT

REFERENCE NO: 20- 5
AUTHOR: BURNS, TED & ROB FALLS ; 1977
DESCRIPTION: SEA RUN CUTTHROAT TROUT IN THE GREATER VICTORIA AREA - THEIR PRESENT STATUS AND OPPORTUNITIES FOR ENHANCEMENT.
LOCATION: M MOE - FISHERIES BRANCH - VICTORIA
KEYWORDS: CT CUTTHROAT TROUT EN ENHANCEMENT FS FISH SAMPLING
HS HABITAT SAMPLING

REFERENCE NO: 20- 29
AUTHOR: DUKE,L.B.
DESCRIPTION: LETTER TO JOHN STEPHEN, F/O SOOKE, B.C. FROM L.B.DUKE, DISTRICT SUPERVISOR, VICTORIA, B.C. "COHO FRY DISTRIBUTION - SAN JUAN RIVER SYSTEM" APRIL 12, 1983.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: CO COHO

REFERENCE NO: 20- 39
AUTHOR: INLAND WATERS DIRECTORATE, WATER RESOURCES BRANCH
DESCRIPTION: SURFACE WATER DATA, BRITISH COLUMBIA; 1984
LOCATION: CC WATER SURVEY CANADA - VANCOUVER
KEYWORDS: FL FLOW

REFERENCE NO: 20- 6
AUTHOR: LANGFORD, R.W. & TED BURNS ; 1977
DESCRIPTION: LAKE AND STREAM INVENTORY OF THE CAPITAL REGIONAL DISTRICT
LOCATION: M MOE - FISHERIES BRANCH - VICTORIA
KEYWORDS: FS FISH SAMPLING HS HABITAT SAMPLING PY PHYSICAL HABITAT

REFERENCE NO: 20- 1
AUTHOR: MARSHALL,D.E.;ET AL
DESCRIPTION: PRELIMINARY CATALOGUE OF SALMON STREAMS AND SPAWNING ESCAPEMENTS OF STATISTICAL AREAS 19 & 20 (VICTORIA-SOOKE) PAC/D-77-9
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AF ALL SPECIES PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 37
AUTHOR: SHIP ENVIRONMENTAL CONSULTANTS, LTD. JAN. 1986
DESCRIPTION: ASSESSMENT OF HABITAT, SALMONID BIOMASS AND POTENTIAL CARRYING CAPACITY OF THE SAN JUAN AND GORDON RIVER SYSTEMS, VANC. IS., B.C.FOR S.E.P. SPECIAL PROJECTS, DFO, 1090 W. PENDER ST, VAN.
LOCATION: C DFO - SALMONID ENHANCEMENT PROGRAM - VANCOUVER
KEYWORDS: AO ALL SALMON

REFERENCE NO: 20- 26
AUTHOR: STEPHEN,JOHN 1982.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS. SAN JUAN RIVER.
LOCATION: J DFO - PACIFIC BIOLOGICAL STATION - NANAIMO
KEYWORDS: AO ALL SALMON S SPAWNING

REFERENCE NO: 20- 38
AUTHOR: STEPHEN,JOHN. FISHERY OFFICER, SOOKE OFFICE.
DESCRIPTION: PERSONAL INFORMATION ABOUT STREAMS WITHIN STATISTICAL AREA 20.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 30
AUTHOR: UNKNOWN 1981,1983
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; MOSQUITO CREEK. (FILE FROM THE VICTORIA OFFICE).
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON S SPAWNING

REFERENCE NO: 20- 31
AUTHOR: UNKNOWN 1982,1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; MOSQUITO CREEK. 1982, 1983 (SOOKE OFFICE)
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON S SPAWNING

REFERENCE NO: 20- 2
AUTHOR: UNKNOWN 1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS ; MATHESON CREEK.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 16
AUTHOR: UNKNOWN.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; JORDAN RIVER. VARIOUS YEARS.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 15
AUTHOR: UNKNOWN. 1981,1982,1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; KIRBY CREEK. 1981, 1982, 1983
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 9
AUTHOR: UNKNOWN. 1980,1982,1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; LANNON CREEK 1980,1982,1983.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 8
AUTHOR: UNKNOWN. 1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS ; AYUM CREEK 1983 (SOOKE OFFICE)
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 10
AUTHOR: UNKNOWN. 1982,1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; DE MAMIEL CREEK. 1982, 1983.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 14
AUTHOR: UNKNOWN. 1983
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; MUIR CREEK.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 12
AUTHOR: UNKNOWN. 1981,1982,1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; CHARTERS CREEK. 1981, 1982, 1983.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON FS FISH SAMPLING PY PHYSICAL HABITAT
S SPAWNING

REFERENCE NO: 20- 20
AUTHOR: UNKNOWN. 1981,1982,1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; FALLS CREEK. 1981,1982,1983
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON S SPAWNING

REFERENCE NO: 20- 23
AUTHOR: UNKNOWN. 1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; SAN JUAN RIVER.
LOCATION: G DFO - SOUTH COAST DIVISION - NANAIMO
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 13
AUTHOR: UNKNOWN. 1980,1982,1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; TUGWELL CREEK 1980, 1982, 1983.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 18
AUTHOR: UNKNOWN. 1981,1982,1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; UGLOW CREEK. 1981, 1982, 1983
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON PY PHYSICAL HABITAT S SPAWNING

REFERENCE NO: 20- 34
AUTHOR: UNKNOWN. 1981.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; GRANITE CREEK 1981. (VICTORIA FILES)
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON S SPAWNING

REFERENCE NO: 20- 19
AUTHOR: UNKNOWN. 1983
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS ; MAIDENHAIR CREEK.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON S SPAWNING

REFERENCE NO: 20- 35
AUTHOR: UNKNOWN. 1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; 5 MILE CREEK 1983
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON S SPAWNING

REFERENCE NO: 20- 25
AUTHOR: UNKNOWN. 1982,1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS ; SAN JUAN RIVER.
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON S SPAWNING

REFERENCE NO: 20- 33
AUTHOR: UNKNOWN. 1982,1983.
DESCRIPTION: ANNUAL REPORT OF SALMON STREAM AND SPAWNING GROUNDS; GRANITE CREEK 1982, 1983
LOCATION: S DFO - SUBDISTRICT (INCLUDED IN REF. NO)
KEYWORDS: AO ALL SALMON S SPAWNING

REFERENCE NO: 20- 22
AUTHOR: WITT & CLOZZA
DESCRIPTION: SAN JUAN WATERSHED, SUMMER STEELHEAD SURVEY REPORT.
LOCATION: O MOE - REGION 1 - NANAIMO
KEYWORDS: PY PHYSICAL HABITAT ST STEELHEAD

4.0 ESCAPEMENT

This section contains escapement information for the following streams:

WATERSHED CODE	STREAM NAME
93-0100	Unnamed C (Matheson C)
93-0250	Ayum C
93-0275	Kaltasin C
93-0300	Sooke R
93-0300-050	DeMamiel C
93-0300-050-030	Unnamed C (Rocky C)
93-0300-100	Charters C
93-0380	Tugwell C
93-0400	Muir C
93-0420	Kirby C
93-0600	Jordon R
93-0620	Uglow C
93-0624	Maidenhair C
93-1000	San Juan R
93-1000-030	Falls C
93-1000-050	Mosquito C
93-1000-070-010	Renfrew C
93-1000-120	Harris C
93-1000-120-150	Hemmingsen C
93-1000-150	Lens C
93-1100	Gordon R

ESCAPEMENT : MATHESON CREEK

WATERSHED-CODE : 93-0100

YEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK	STEELHEAD
53	UNK	UNK	UNK	UNK	UNK	UNK
54	UNK	UNK	UNK	UNK	UNK	UNK
55	UNK	UNK	UNK	UNK	UNK	UNK
56	UNK	UNK	UNK	UNK	UNK	UNK
57	UNK	UNK	UNK	UNK	UNK	UNK
58	UNK	UNK	UNK	UNK	UNK	UNK
59	UNK	UNK	UNK	UNK	UNK	UNK
60	UNK	UNK	UNK	UNK	UNK	UNK
61	UNK	UNK	UNK	UNK	UNK	UNK
62	UNK	UNK	UNK	UNK	UNK	UNK
63	UNK	UNK	UNK	UNK	UNK	UNK
64	UNK	UNK	UNK	UNK	UNK	UNK
65	UNK	UNK	UNK	UNK	UNK	UNK
66	UNK	UNK	UNK	UNK	UNK	UNK
67	UNK	UNK	UNK	UNK	UNK	UNK
68	UNK	UNK	UNK	UNK	UNK	UNK
69	UNK	UNK	UNK	UNK	UNK	UNK
70	UNK	UNK	UNK	UNK	UNK	UNK
71	UNK	UNK	UNK	UNK	UNK	UNK
72	UNK	UNK	UNK	UNK	UNK	UNK
73	UNK	UNK	UNK	UNK	UNK	UNK
74	UNK	UNK	UNK	UNK	UNK	UNK
75	UNK	UNK	UNK	UNK	UNK	UNK
76	UNK	UNK	UNK	UNK	UNK	UNK
77	UNK	UNK	UNK	UNK	UNK	UNK
78	UNK	UNK	UNK	UNK	UNK	UNK
79	UNK	UNK	UNK	UNK	UNK	UNK
80	0	16	0	0	0	0
81	0	7	0	0	0	0
82	0	4	0	0	0	0
83	0	N/O	0	0	0	0
84	0	0	0	0	0	0
85	N/O	0	N/O	N/O	N/O	0
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						

N/O = STREAM INSPECTED,NO FISH OBSERVED
UNK = STREAM NOT INSPECTED OR NOT INSPECTED FOR SPECIES INDICATED OR SPECIES PRESENT BUT NO ESTIMATE MADE

ESCAPEMENT : AYUM CREEK

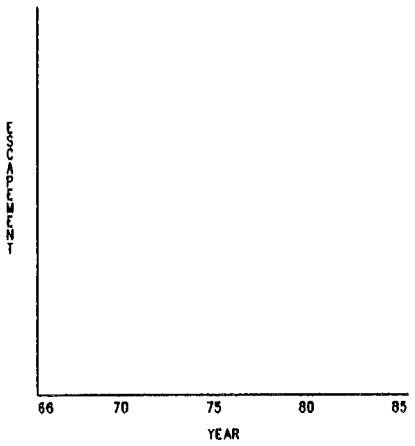
WATERSHED-CODE : 93-0250

YEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK	STEELHEAD
53	0	75	0	3500	0	0
54	0	25	0	3500	0	0
55	0	25	0	3500	0	0
56	0	0	0	150	0	0
57	0	N/O	0	750	0	0
58	0	75	0	3500	0	25
59	0	0	0	200	0	UNK
60	0	0	N/O	25	0	0
61	0	25	0	25	0	0
62	0	25	0	750	0	0
63	0	N/O	0	25	0	0
64	0	0	0	75	0	0
65	0	N/O	0	750	0	0
66	0	0	0	30	0	0
67	0	N/O	0	750	0	0
68	0	0	0	3500	0	0
69	0	N/O	0	750	0	0
70	0	0	0	3500	0	0
71	0	0	0	3500	0	0
72	0	0	0	3500	0	0
73	0	0	0	3500	0	0
74	0	N/O	N/O	1500	0	0
75	0	25	0	400	0	0
76	0	N/O	0	400	0	0
77	0	25	0	3500	N/O	0
78	0	40	0	1500	0	0
79	0	0	0	1200	0	0
80	0	25	0	2000	0	0
81	0	6	0	4000	0	0
82	0	0	0	1000	0	0
83	0	8	0	1500	0	0
84	0	6	0	1000	0	0
85	N/O	N/O	N/O	1500	N/O	0
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						

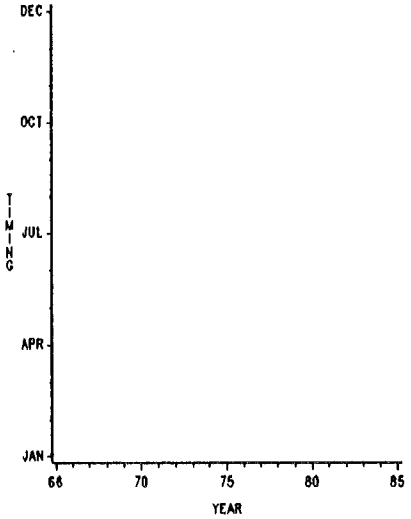
N/O = STREAM INSPECTED,NO FISH OBSERVED
UNK = STREAM NOT INSPECTED,OR NOT INSPECTED FOR SPECIES INDICATED,
OR SPECIES PRESENT BUT NO ESTIMATE MADE.

AYUM CREEK (93-0250)
ESCAPEMENT AND RUN TIMING

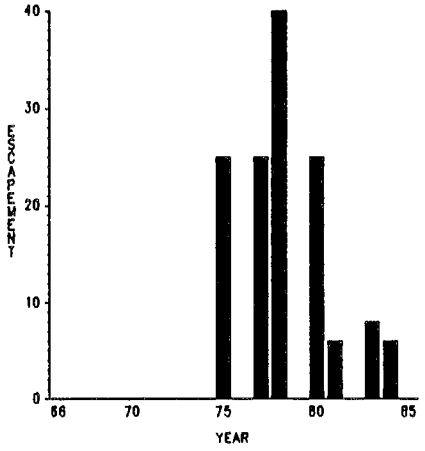
SOCKEYE (SK)



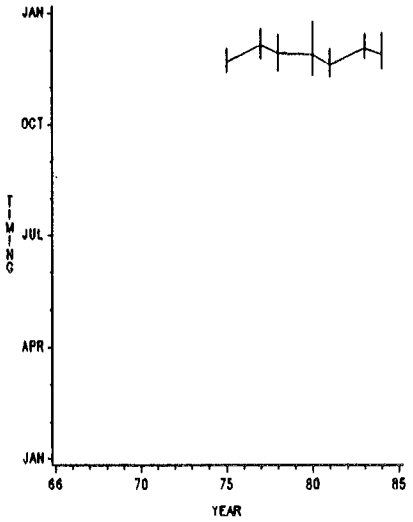
SOCKEYE



COHO (CO)



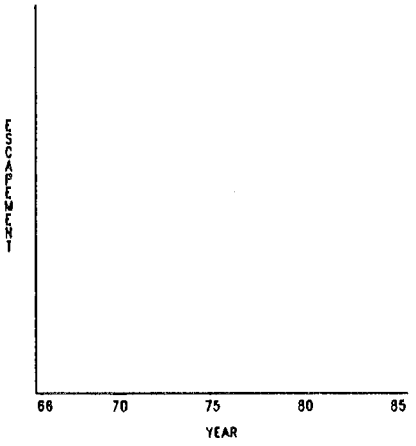
COHO



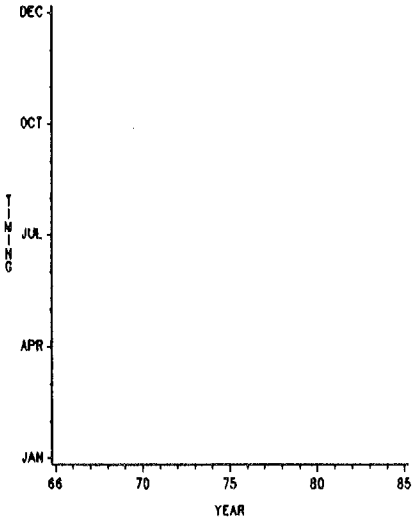
COHO

YEAR	ESCAPEMENT	START	PEAK	END
1966	-	-	-	-
1967	-	-	-	-
1968	-	-	-	-
1969	-	-	-	-
1970	-	-	-	-
1971	-	-	-	-
1972	-	-	-	-
1973	-	-	-	-
1974	-	-	-	-
1975	25	NOV 10	NOV 15	NOV 30
1976	-	-	-	-
1977	25	NOV 20	DEC 01	DEC 15
1978	40	NOV 10	NOV 25	DEC 10
1979	-	-	-	-
1980	25	NOV 05	NOV 13	DEC 20
1981	6	NOV 04	NOV 12	NOV 27
1982	-	-	-	-
1983	8	NOV 20	NOV 25	DEC 10
1984	6	NOV 10	NOV 15	DEC 10
1985	-	-	-	-

PINK (PK)

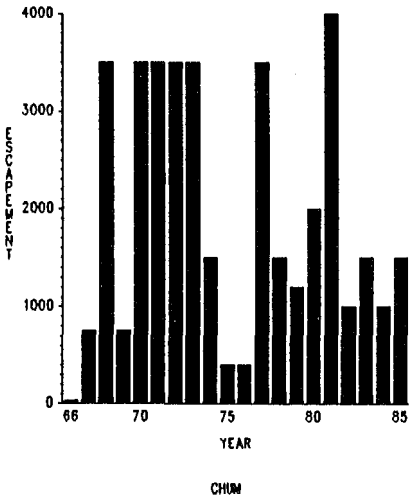


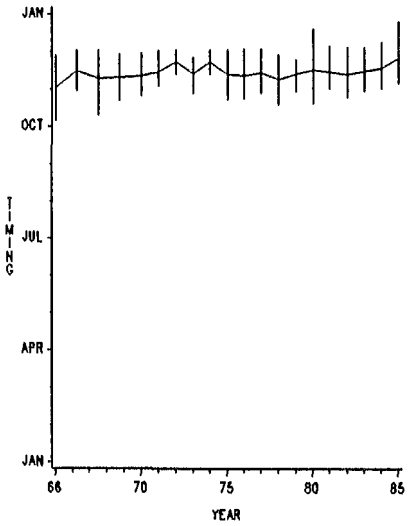
PINK



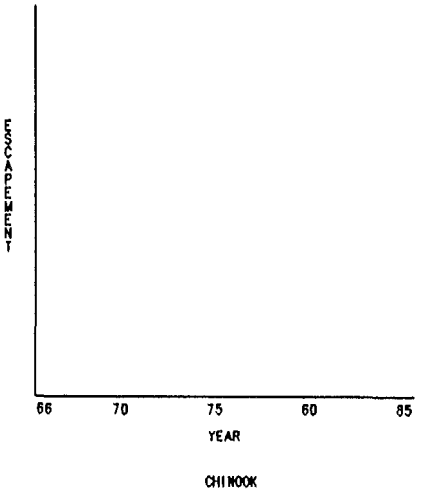
AYUM CREEK (93-0250)
ESCAPEMENT AND RUN TIMING

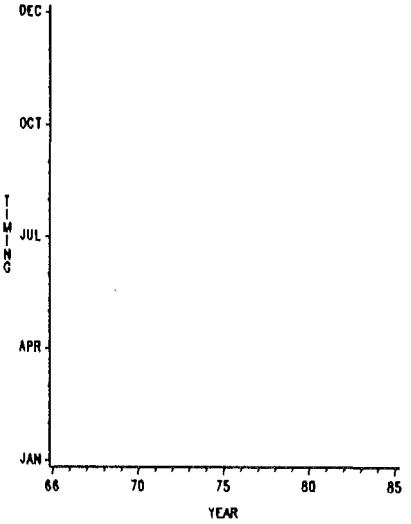
CHUM (CM)



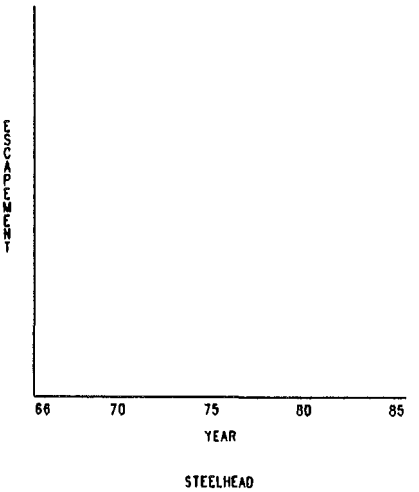


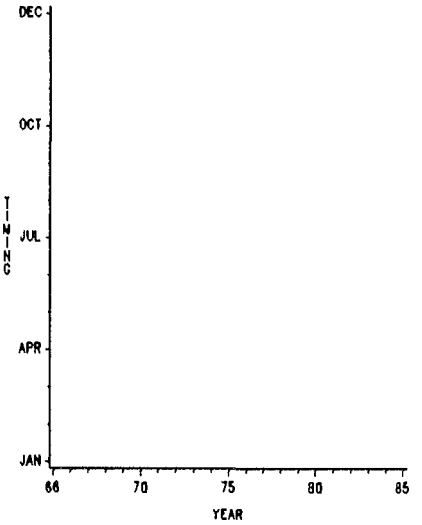
CHINOOK (CH)





STEELHEAD (ST)

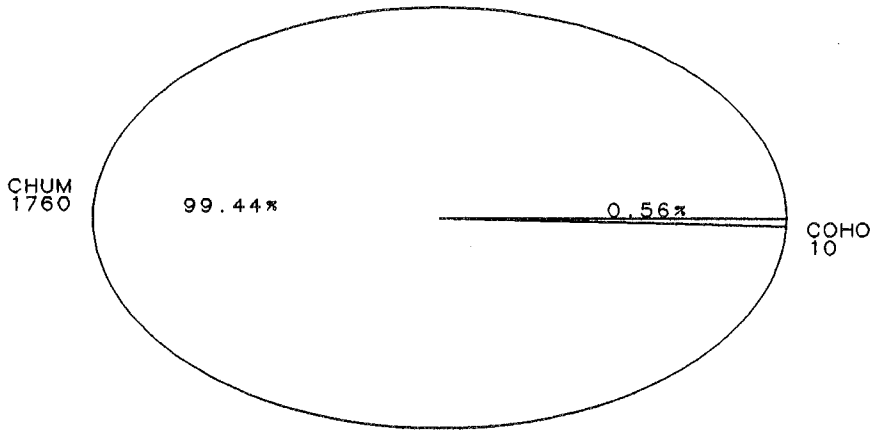




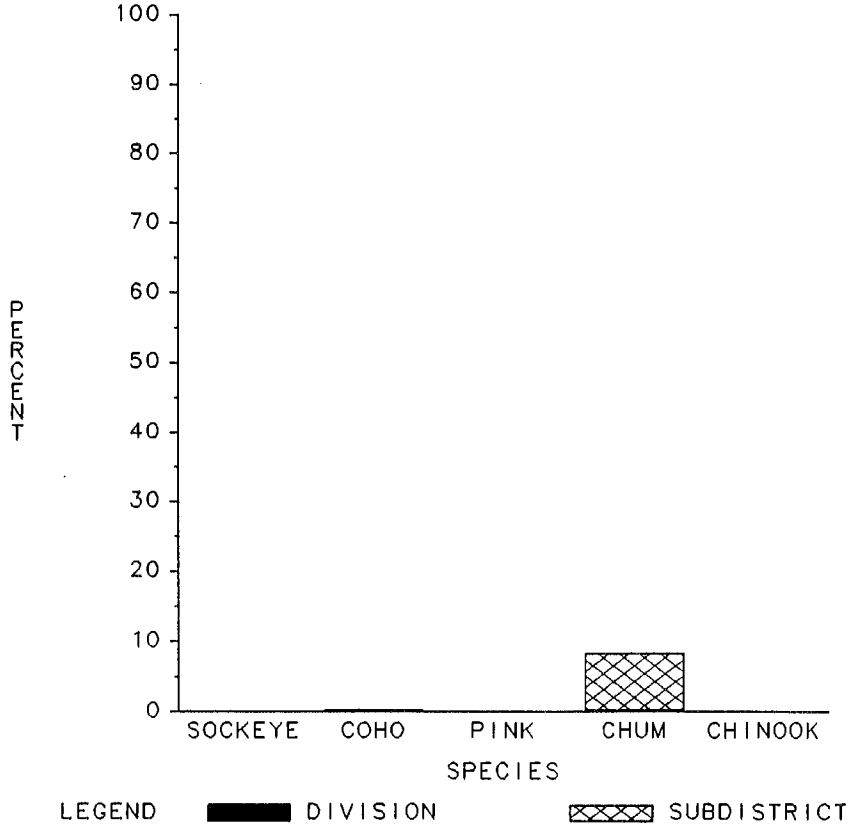
CHUM

YEAR	ESCAPEMENT	START	PEAK	END
1966	30	-	OCT 05	NOV 27
1967	750	OCT 29	NOV 15	DEC 01
1968	3500	OCT 08	NOV 15	NOV 30
1969	750	OCT 20	NOV 09	NOV 27
1970	3500	OCT 24	NOV 06	NOV 28
1971	3500	NOV 01	NOV 08	NOV 30
1972	3500	-	NOV 10	NOV 30
1973	3500	OCT 25	NOV 14	NOV 24
1974	1500	NOV 10	NOV 20	NOV 30
1975	400	OCT 20	NOV 10	NOV 30
1976	400	OCT 20	NOV 05	NOV 30
1977	3500	OCT 24	NOV 08	NOV 30
1978	1500	OCT 15	NOV 05	NOV 25
1979	1200	OCT 26	NOV 12	NOV 21
1980	2000	OCT 15	NOV 05	DEC 15
1981	4000	OCT 27	NOV 04	DEC 01
1982	1000	OCT 20	NOV 04	NOV 30
1983	1500	OCT 25	NOV 08	NOV 30
1984	1000	OCT 26	NOV 10	DEC 03
1985	1500	OCT 30	NOV 13	DEC 20

AYUM CREEK
10 YR. AVG. ESCAPEMENT
(1976-1985)



AYUM CREEK AVG. ESCAPEMENT (1976-1985)
(EXPRESSED AS A PERCENTAGE OF
SUBDISTRICT AND DIVISION AVERAGE ESCAPEMENT)



ESCAPEMENT : KALTASIN CREEK

WATERSHED-CODE : 93-0275

YEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK	STEELHEAD
53	UNK	UNK	UNK	UNK	UNK	UNK
54	UNK	UNK	UNK	UNK	UNK	UNK
55	UNK	UNK	UNK	UNK	UNK	UNK
56	UNK	UNK	UNK	UNK	UNK	UNK
57	UNK	UNK	UNK	UNK	UNK	UNK
58	UNK	UNK	UNK	UNK	UNK	UNK
59	UNK	UNK	UNK	UNK	UNK	UNK
60	UNK	UNK	UNK	UNK	UNK	UNK
61	UNK	UNK	UNK	UNK	UNK	UNK
62	UNK	UNK	UNK	UNK	UNK	UNK
63	UNK	UNK	UNK	UNK	UNK	UNK
64	UNK	UNK	UNK	UNK	UNK	UNK
65	UNK	UNK	UNK	UNK	UNK	UNK
66	UNK	UNK	UNK	UNK	UNK	UNK
67	UNK	UNK	UNK	UNK	UNK	UNK
68	UNK	UNK	UNK	UNK	UNK	UNK
69	UNK	UNK	UNK	UNK	UNK	UNK
70	UNK	UNK	UNK	UNK	UNK	UNK
71	UNK	UNK	UNK	UNK	UNK	UNK
72	UNK	UNK	UNK	UNK	UNK	UNK
73	UNK	UNK	UNK	UNK	UNK	UNK
74	UNK	UNK	UNK	UNK	UNK	UNK
75	UNK	UNK	UNK	UNK	UNK	UNK
76	UNK	UNK	UNK	UNK	UNK	UNK
77	UNK	UNK	UNK	UNK	UNK	UNK
78	UNK	UNK	UNK	UNK	UNK	UNK
79	UNK	UNK	UNK	UNK	UNK	UNK
80	0	11	0	0	0	0
81	0	2	0	0	0	0
82	0	4	0	0	0	0
83	0	12	0	0	0	0
84	0	6	0	2	0	0
85	N/O	N/O	N/O	N/O	N/O	0
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						

N/O = STREAM INSPECTED,NO FISH OBSERVED
UNK = STREAM NOT INSPECTED,OR NOT INSPECTED FOR SPECIES INDICATED, OR SPECIES PRESENT BUT NO ESTIMATE MADE.

ESCAPEMENT : SOOKE RIVER

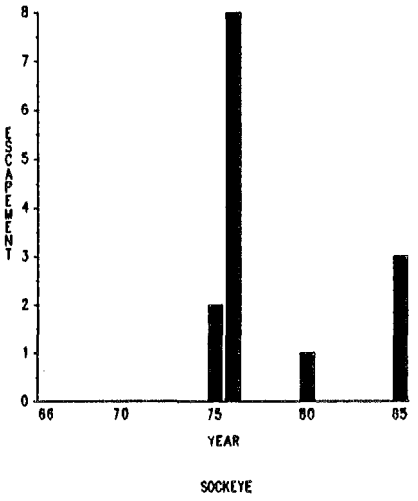
WATERSHED-CODE : 93-0300

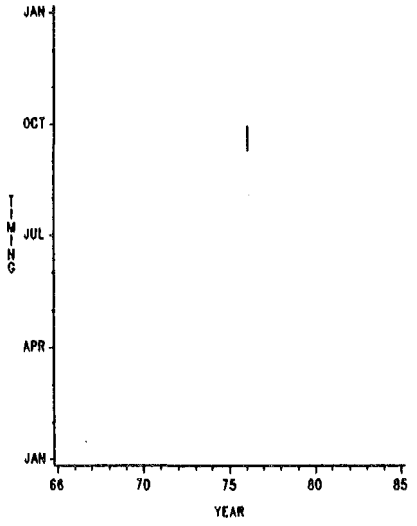
YEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK	STEELHEAD
53	0	400	0	35000	0	25
54	0	200	0	35000	75	25
55	0	75	0	35000	25	25
56	0	25	0	15000	0	N/O
57	0	200	0	15000	25	25
58	0	200	0	35000	200	25
59	0	200	0	15000	200	UNK
60	0	200	0	3500	400	UNK
61	0	200	0	3500	200	0
62	0	400	0	3500	750	0
63	0	200	0	7500	1500	0
64	0	75	0	35000	750	UNK
65	0	25	0	7500	400	0
66	0	25	0	7500	750	0
67	0	25	0	35000	1500	0
68	0	75	0	35000	3500	0
69	0	0	0	35000	1500	400
70	0	25	0	35000	1500	0
71	0	75	0	15000	750	0
72	0	200	0	75000	200	0
73	0	400	0	75000	3500	0
74	0	75	N/O	15000	200	UNK
75	2	200	0	3500	400	0
76	8	25	0	3500	30	UNK
77	N/O	75	0	7500	25	0
78	0	100	0	9500	6	6
79	0	40	0	4500	45	0
80	1	5	0	14500	36	0
81	0	0	0	11000	30	0
82	0	6	0	8000	3	0
83	0	0	0	9000	18	0
84	0	120	0	12000	400	0
85	3	9	N/O	35000	400	0
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						

N/O = STREAM INSPECTED,NO FISH OBSERVED
UNK = STREAM NOT INSPECTED,OR NOT INSPECTED FOR SPECIES INDICATED, OR SPECIES PRESENT BUT NO ESTIMATE MADE.

SOOKE RIVER (93-0300)
ESCAPEMENT AND RUN TIMING

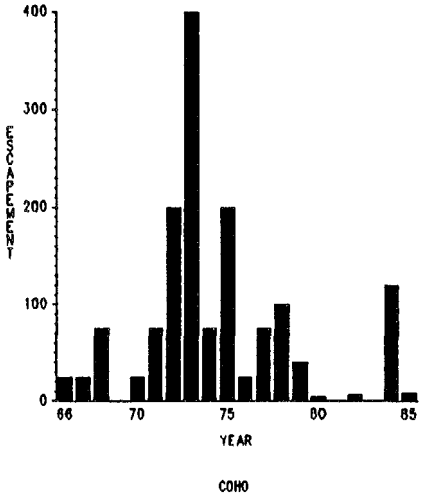
SOCKEYE (SK)

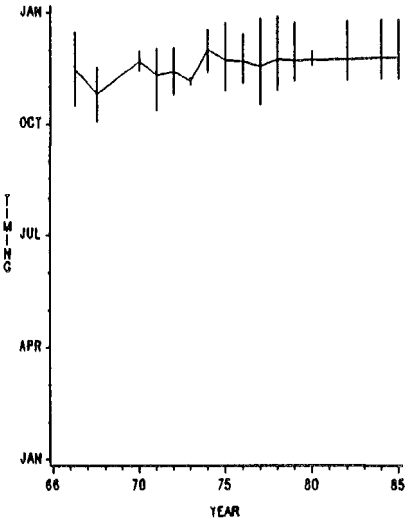




SOCKEYE				
YEAR	ESCAPEMENT	START	PEAK	END
1966	-	-	-	-
1967	-	-	-	-
1968	-	-	-	-
1969	-	-	-	-
1970	-	-	-	-
1971	-	-	-	-
1972	-	-	-	-
1973	-	-	-	-
1974	-	-	-	-
1975	2	-	-	-
1976	8	SEP 05	SEP 15	SEP 25
1977	-	-	-	-
1978	-	-	-	-
1979	-	-	-	-
1980	1	-	-	-
1981	-	-	-	-
1982	-	-	-	-
1983	-	-	-	-
1984	-	-	-	-
1985	3	-	-	-

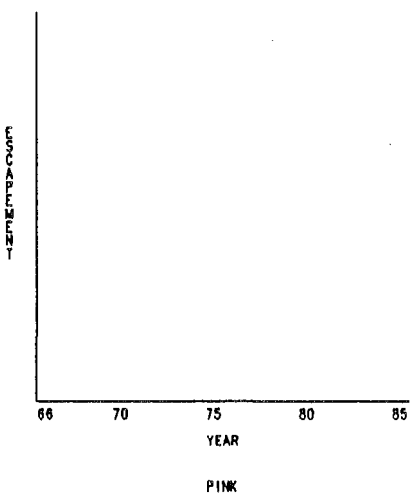
COHO (CO)

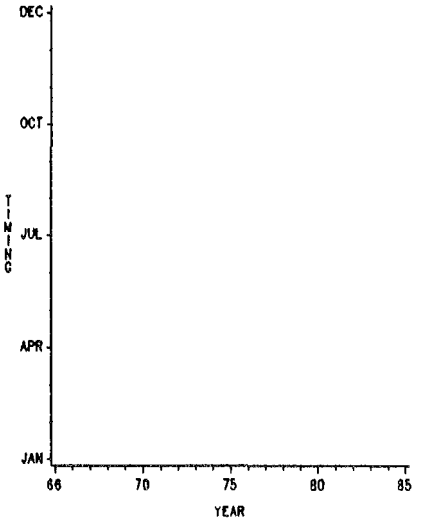




COHO				
YEAR	ESCAPEMENT	START	PEAK	END
1966	25	-	-	-
1967	25	OCT 15	NOV 12	DEC 15
1968	75	OCT 01	NOV 15	DEC 31
1969	-	-	-	-
1970	25	NOV 12	-	NOV 28
1971	75	OCT 10	NOV 15	NOV 30
1972	200	OCT 22	-	NOV 30
1973	400	OCT 30	NOV 05	-
1974	75	NOV 10	DEC 01	DEC 15
1975	200	OCT 25	NOV 15	DEC 20
1976	25	OCT 30	NOV 15	DEC 10
1977	75	OCT 13	NOV 06	DEC 23
1978	100	OCT 25	NOV 10	DEC 25
1979	40	NOV 01	NOV 05	DEC 20
1980	5	NOV 14	NOV 16	NOV 25
1981	-	-	-	-
1982	6	NOV 01	NOV 05	DEC 20
1983	-	-	-	-
1984	120	NOV 01	NOV 05	DEC 20
1985	9	NOV 01	NOV 05	DEC 20

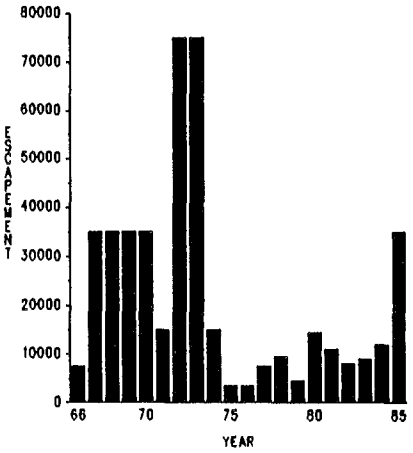
PINK (PK)



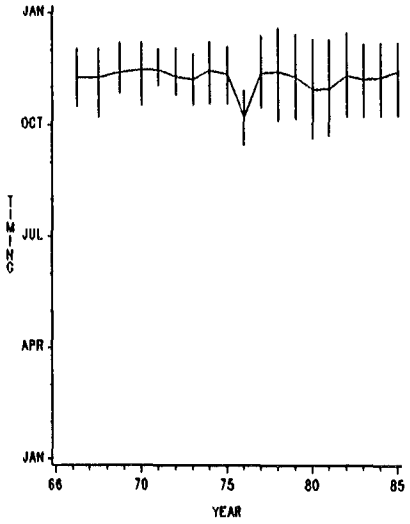


SOOKE RIVER (93-0300)
ESCAPEMENT AND RUN TIMING

CHUM (CM)

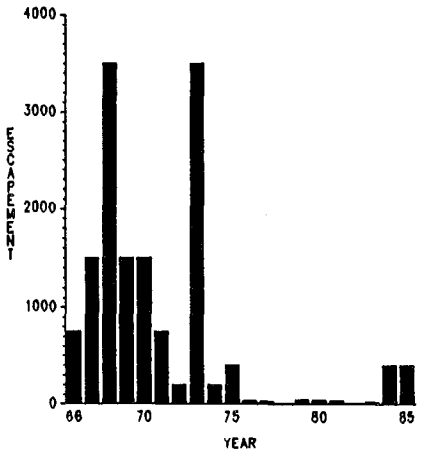


CHUM

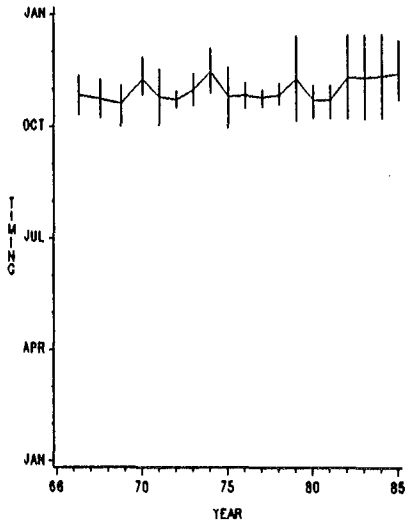


CHUM				
YEAR	ESCAPEMENT	START	PEAK	END
1966	7500	-	-	-
1967	35000	OCT 15	NOV 08	DEC 01
1968	35000	OCT 05	NOV 15	NOV 30
1969	35000	OCT 25	NOV 04	DEC 05
1970	35000	OCT 15	NOV 20	DEC 05
1971	15000	OCT 31	NOV 09	NOV 30
1972	75000	OCT 22	OCT 28	NOV 30
1973	75000	OCT 14	NOV 03	NOV 25
1974	15000	OCT 15	NOV 15	DEC 05
1975	3500	OCT 15	NOV 10	DEC 01
1976	3500	SEP 10	OCT 25	-
1977	7500	OCT 11	NOV 06	DEC 09
1978	9500	SEP 30	NOV 15	DEC 15
1979	4500	OCT 02	NOV 05	DEC 10
1980	14500	SEP 15	OCT 24	DEC 05
1981	11000	SEP 17	OCT 24	DEC 05
1982	8000	OCT 02	NOV 05	DEC 10
1983	9000	OCT 02	NOV 05	DEC 01
1984	12000	OCT 02	NOV 05	DEC 01
1985	35000	OCT 02	NOV 20	DEC 01

CHINOOK (CH)

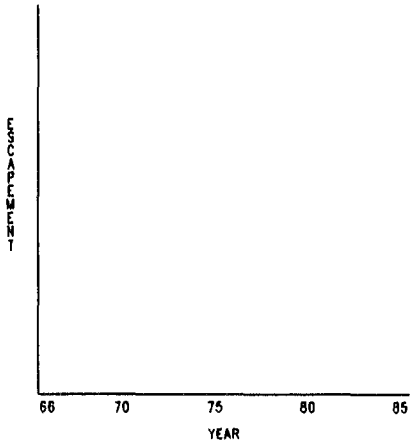


CHINOOK

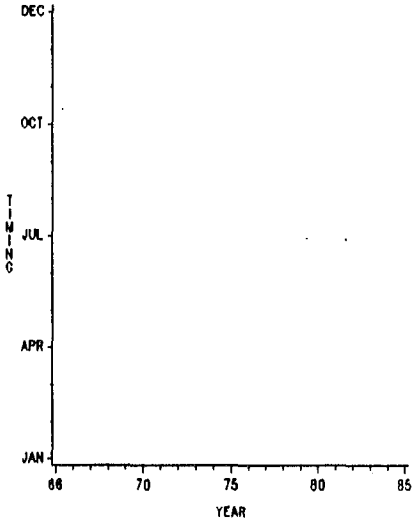


CHINOOK				
YEAR	ESCAPEMENT	START	PEAK	END
1966	750	-	-	-
1967	1500	OCT 09	OCT 26	NOV 10
1968	3500	OCT 06	OCT 21	NOV 06
1969	1500	SEP 29	OCT 22	NOV 01
1970	1500	OCT 25	NOV 01	NOV 25
1971	750	SEP 30	OCT 23	NOV 15
1972	200	OCT 13	OCT 20	OCT 27
1973	3500	OCT 15	OCT 28	NOV 10
1974	200	OCT 25	NOV 10	DEC 01
1975	400	SEP 27	OCT 25	NOV 15
1976	30	OCT 12	OCT 25	NOV 01
1977	25	OCT 13	OCT 22	OCT 27
1978	6	OCT 15	OCT 20	NOV 01
1979	45	OCT 02	NOV 05	DEC 10
1980	36	OCT 03	OCT 20	OCT 30
1981	30	OCT 03	OCT 20	OCT 30
1982	3	OCT 02	NOV 05	DEC 10
1983	18	OCT 02	NOV 05	DEC 10
1984	400	OCT 02	NOV 05	DEC 10
1985	400	OCT 17	NOV 01	DEC 05

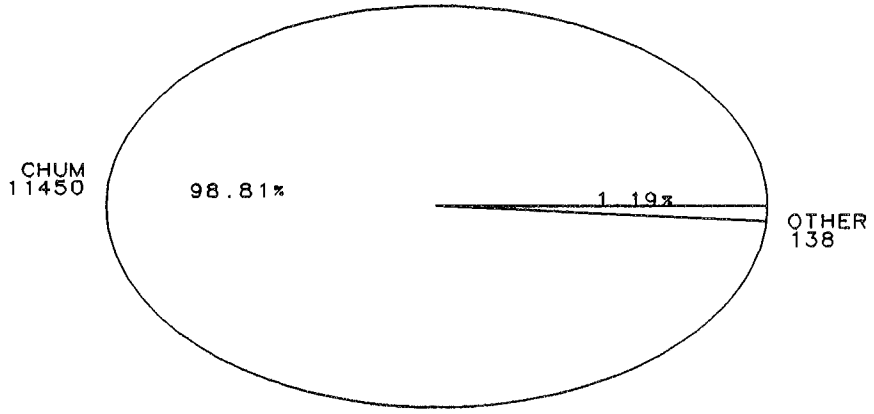
STEELHEAD (ST)



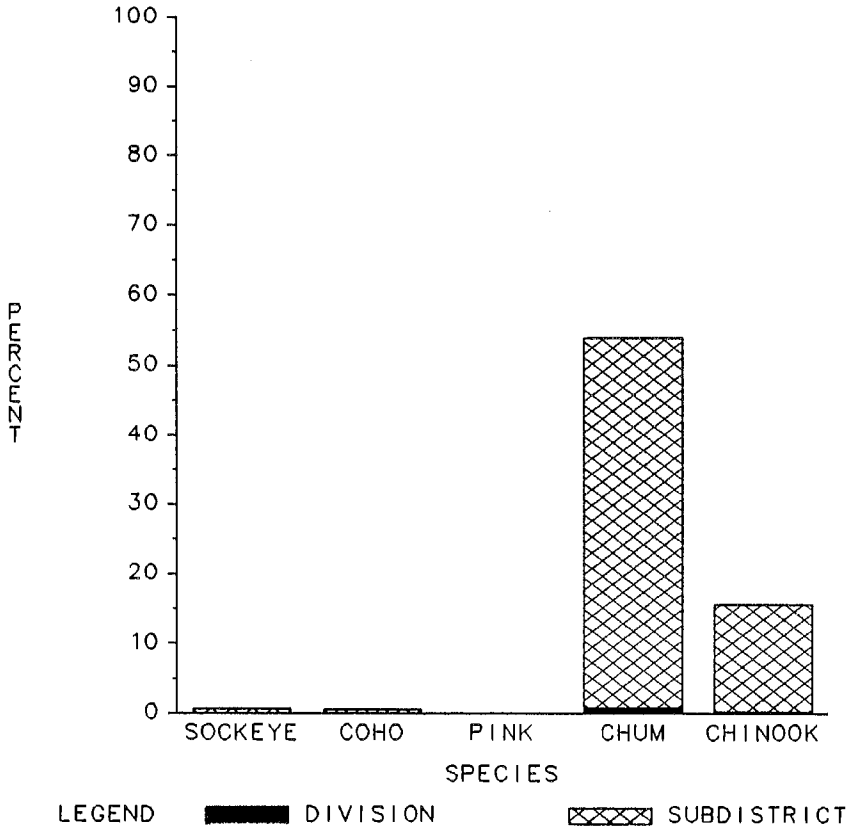
STEELHEAD



SOOKE RIVER
10 YR. AVG. ESCAPEMENT
(1976-1985)



SOOKE RIVER AVG. ESCAPEMENT (1976-1985)
(EXPRESSED AS A PERCENTAGE OF
SUBDISTRICT AND DIVISION AVERAGE ESCAPEMENT)



ESCAPEMENT : DE MAMIEL CREEK

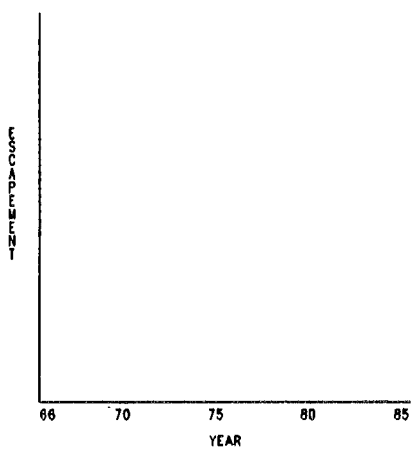
WATERSHED-CODE : 93-0300-050

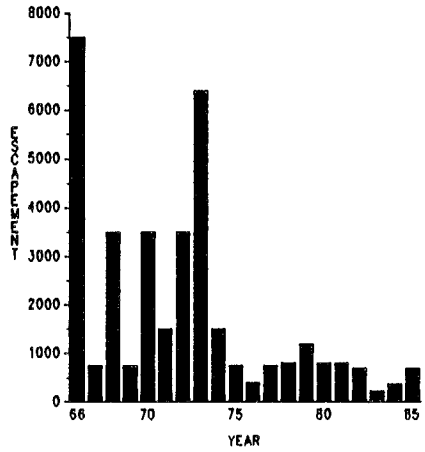
YEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK	STEELHEAD
53	0	400	0	15000	0	25
54	0	1500	0	7500	0	25
55	0	75	0	15000	0	25
56	0	400	0	7500	0	0
57	0	400	0	7500	0	25
58	0	3500	0	35000	0	25
59	0	750	0	7500	0	25
60	0	200	0	3500	0	0
61	0	3500	0	3500	0	0
62	0	3500	0	3500	0	0
63	0	3500	0	3500	0	UNK
64	0	1500	0	15000	0	0
65	0	3500	0	7500	0	0
66	0	7500	0	7500	0	0
67	0	750	0	7500	0	0
68	0	3500	0	35000	0	0
69	0	750	0	15000	0	0
70	0	3500	0	15000	0	200
71	0	1500	0	7500	0	0
72	0	3500	0	15000	0	0
73	0	6400	0	35000	0	0
74	0	1500	0	3500	2	0
75	0	750	0	3500	N/O	0
76	0	400	0	1500	0	0
77	0	750	0	3500	25	0
78	0	800	0	8000	15	0
79	0	1200	0	800	12	0
80	0	800	0	9000	N/O	0
81	0	800	0	6000	0	0
82	0	700	0	2500	0	0
83	0	230	0	8000	0	0
84	0	365	0	8000	0	0
85	0	700	0	11000	4	0
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						

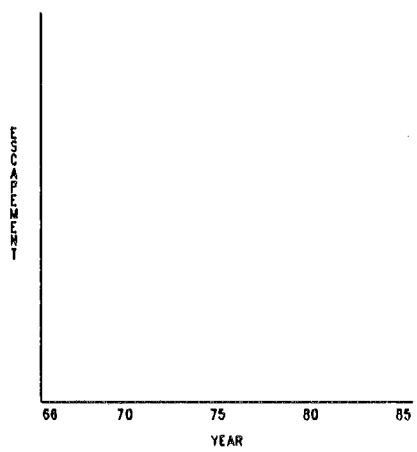
N/O = STREAM INSPECTED,NO FISH OBSERVED
UNK = STREAM NOT INSPECTED,OR NOT INSPECTED FOR SPECIES INDICATED, OR SPECIES PRESENT BUT NO ESTIMATE MADE.

DEMAMIEL CREEK (93-0300-050)
ESCAPEMENT AND RUN TIMING

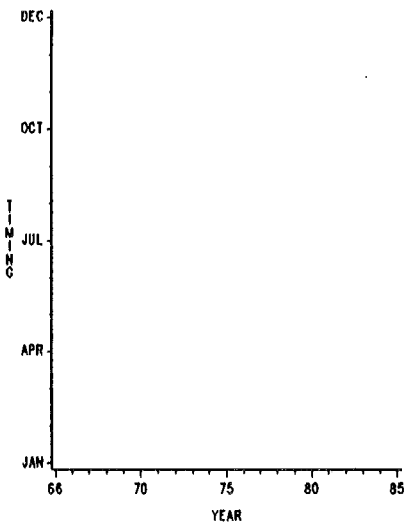
SOCKEYE (SK) | COHO (CO) | PINK (PK)

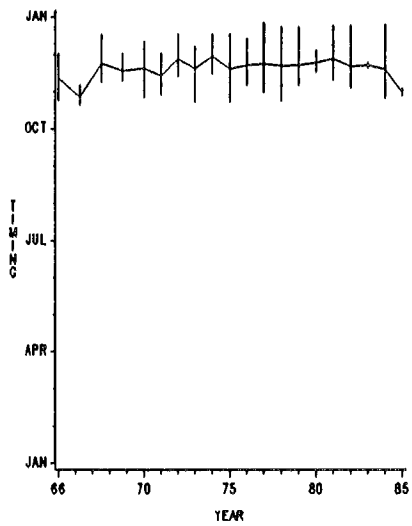


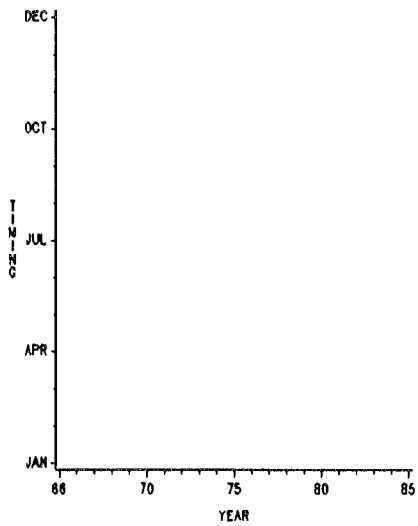




SOCKEYE | COHO | PINK





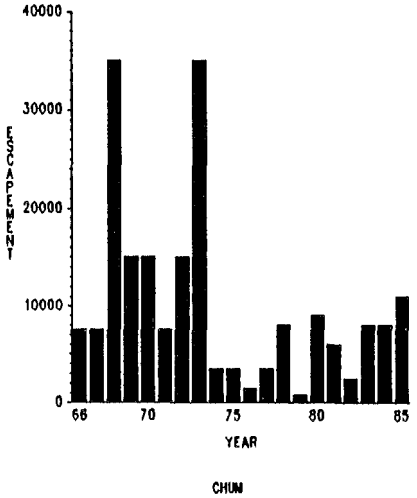


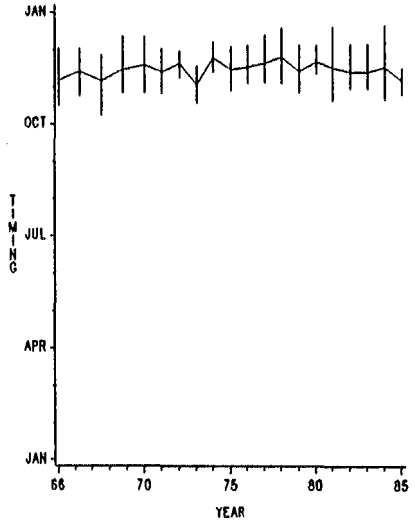
COHO

YEAR	ESCAPEMENT	START	PEAK	END
1966	7500	OCT 23	NOV 10	DEC 01
1967	750	OCT 19	OCT 23	NOV 05
1968	3500	NOV 06	NOV 15	DEC 15
1969	750	NOV 07	NOV 10	NOV 30
1970	3500	OCT 25	NOV 20	DEC 10
1971	1500	OCT 27	NOV 08	NOV 30
1972	3500	NOV 10	NOV 20	DEC 15
1973	6400	OCT 20	NOV 25	DEC 05
1974	1500	NOV 12	NOV 25	DEC 15
1975	750	OCT 20	NOV 15	DEC 15
1976	400	NOV 01	NOV 15	DEC 10
1977	750	OCT 27	NOV 10	DEC 23
1978	800	OCT 20	NOV 15	DEC 20
1979	1200	NOV 01	NOV 05	DEC 20
1980	800	NOV 12	NOV 18	NOV 30
1981	800	NOV 05	NOV 13	DEC 20
1982	700	OCT 29	NOV 01	DEC 20
1983	230	NOV 15	NOV 20	DEC 31
1984	365	OCT 20	NOV 01	DEC 20
1985	700	OCT 22	OCT 28	DEC 27

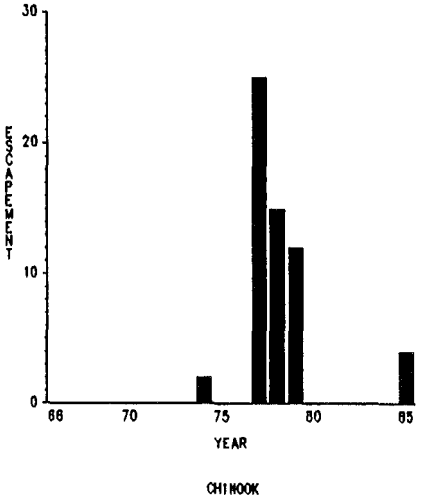
DEMAMIEL CREEK (93-0300-050)
ESCAPEMENT AND RUN TIMING

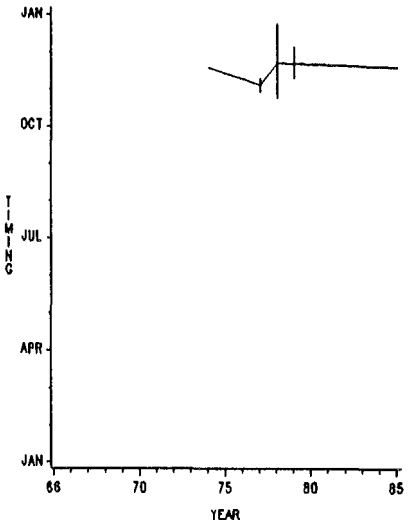
CHUM (CM)



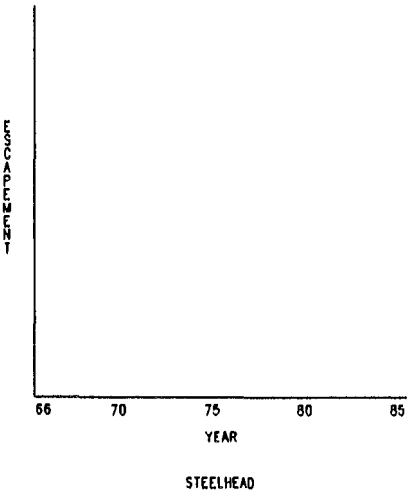


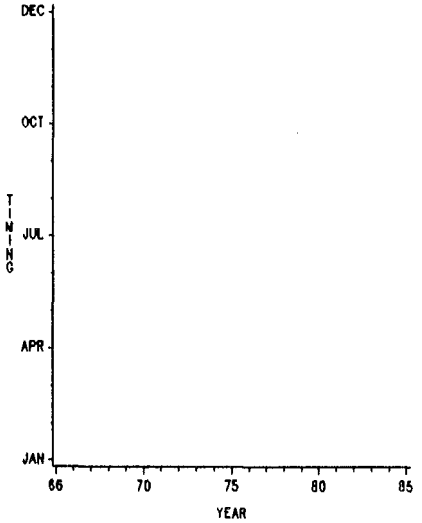
CHINOOK (CH)





STEELHEAD (ST)





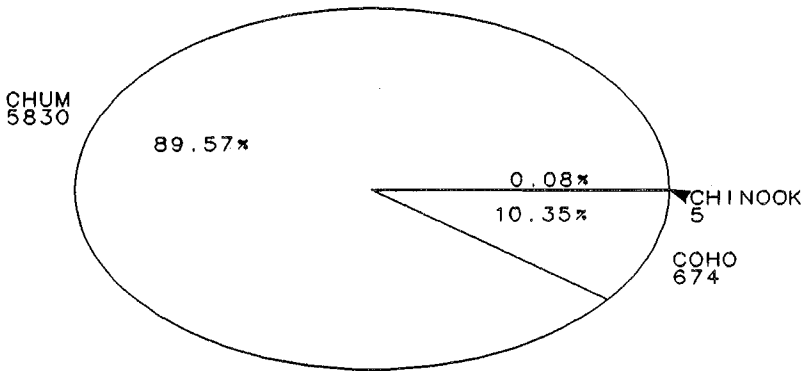
CHUM

YEAR	ESCAPEMENT	START	PEAK	END
1966	7500	OCT 15	OCT 31	DEC 01
1967	7500	OCT 23	NOV 15	DEC 01
1968	35000	OCT 06	NOV 10	NOV 25
1969	15000	OCT 24	NOV 07	DEC 10
1970	15000	OCT 24	NOV 18	DEC 10
1971	7500	OCT 24	NOV 09	NOV 30
1972	15000	NOV 05	NOV 20	NOV 27
1973	35000	OCT 15	NOV 15	-
1974	3500	NOV 10	NOV 20	DEC 05
1975	3500	OCT 25	NOV 10	DEC 01
1976	1500	OCT 30	NOV 10	DEC 01
1977	3500	OCT 31	NOV 10	DEC 09
1978	8000	OCT 30	NOV 20	DEC 15
1979	800	OCT 23	NOV 05	DEC 01
1980	9000	NOV 06	NOV 14	NOV 30
1981	6000	OCT 15	NOV 05	DEC 15
1982	2500	OCT 25	OCT 29	DEC 01
1983	8000	OCT 25	OCT 29	DEC 01
1984	8000	OCT 15	NOV 05	DEC 15
1985	11000	OCT 19	NOV 10	dec 30

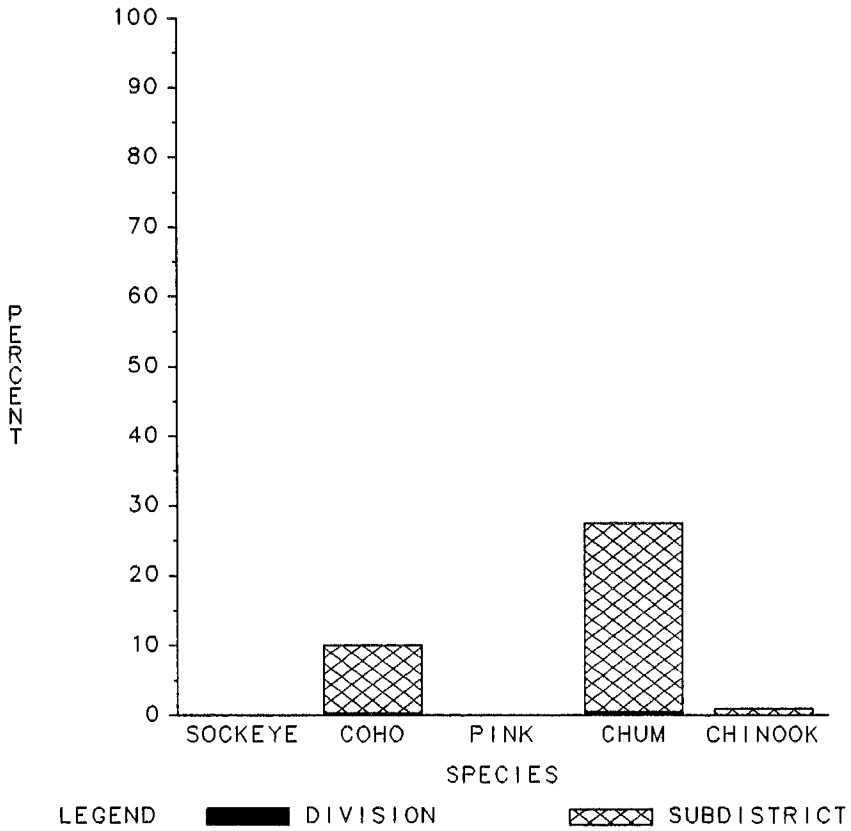
CHINOOK

YEAR	ESCAPEMENT	START	PEAK	END
1966	-	-	-	-
1967	-	-	-	-
1968	-	-	-	-
1969	-	-	-	-
1970	-	-	-	-
1971	-	-	-	-
1972	-	-	-	-
1973	-	-	-	-
1974	2	-	NOV 15	-
1975	-	-	-	-
1976	-	-	-	-
1977	25	OCT 25	OCT 31	NOV 05
1978	15	OCT 20	NOV 15	DEC 20
1979	12	NOV 05	NOV 17	DEC 01
1980	-	-	-	-
1981	-	-	-	-
1982	-	-	-	-
1983	-	-	-	-
1984	-	-	-	-
1985	4	-	NOV 13	-

DEMAMIEL CREEK
10 YR. AVG. ESCAPEMENT
(1976-1985)



DEMAMIEL CREEK AVG. ESCAPEMENT (1976-1985)
(EXPRESSED AS A PERCENTAGE OF
SUBDISTRICT AND DIVISION AVERAGE ESCAPEMENT)



ESCAPEMENT : ROCKY CREEK

WATERSHED-CODE : 93-0300-050-030

YEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK	STEELHEAD
53	UNK	UNK	UNK	UNK	UNK	UNK
54	UNK	UNK	UNK	UNK	UNK	UNK
55	UNK	UNK	UNK	UNK	UNK	UNK
56	UNK	UNK	UNK	UNK	UNK	UNK
57	UNK	UNK	UNK	UNK	UNK	UNK
58	UNK	UNK	UNK	UNK	UNK	UNK
59	UNK	UNK	UNK	UNK	UNK	UNK
60	UNK	UNK	UNK	UNK	UNK	UNK
61	UNK	UNK	UNK	UNK	UNK	UNK
62	UNK	UNK	UNK	UNK	UNK	UNK
63	UNK	UNK	UNK	UNK	UNK	UNK
64	UNK	UNK	UNK	UNK	UNK	UNK
65	UNK	UNK	UNK	UNK	UNK	UNK
66	UNK	UNK	UNK	UNK	UNK	UNK
67	UNK	UNK	UNK	UNK	UNK	UNK
68	UNK	UNK	UNK	UNK	UNK	UNK
69	UNK	UNK	UNK	UNK	UNK	UNK
70	UNK	UNK	UNK	UNK	UNK	UNK
71	UNK	UNK	UNK	UNK	UNK	UNK
72	UNK	UNK	UNK	UNK	UNK	UNK
73	UNK	UNK	UNK	UNK	UNK	UNK
74	UNK	UNK	UNK	UNK	UNK	UNK
75	UNK	UNK	UNK	UNK	UNK	UNK
76	UNK	UNK	UNK	UNK	UNK	UNK
77	UNK	UNK	UNK	UNK	UNK	UNK
78	UNK	UNK	UNK	UNK	UNK	UNK
79	UNK	UNK	UNK	UNK	UNK	UNK
80	UNK	UNK	UNK	UNK	UNK	UNK
81	0	6	0	110	0	0
82	0	28	0	0	0	0
83	0	18	0	50	0	0
84	0	77	0	600	0	0
85	N/O	20	N/O	600	5	0
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						

N/O = STREAM INSPECTED,NO FISH OBSERVED
UNK = STREAM NOT INSPECTED,OR NOT INSPECTED FOR SPECIES INDICATED,
OR SPECIES PRESENT BUT NO ESTIMATE MADE.

ESCAPEMENT : CHARTERS RIVER

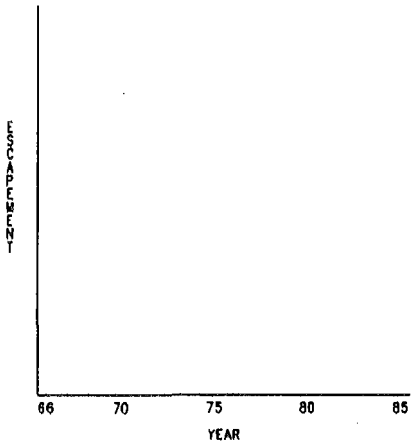
WATERSHED-CODE : 93-0300-100

YEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK	STEELHEAD
53	UNK	UNK	UNK	UNK	UNK	UNK
54	UNK	UNK	UNK	UNK	UNK	UNK
55	UNK	UNK	UNK	UNK	UNK	UNK
56	UNK	UNK	UNK	UNK	UNK	UNK
57	UNK	UNK	UNK	UNK	UNK	UNK
58	UNK	UNK	UNK	UNK	UNK	UNK
59	UNK	UNK	UNK	UNK	UNK	UNK
60	UNK	UNK	UNK	UNK	UNK	UNK
61	UNK	UNK	UNK	UNK	UNK	UNK
62	UNK	UNK	UNK	UNK	UNK	UNK
63	UNK	UNK	UNK	UNK	UNK	UNK
64	UNK	UNK	UNK	UNK	UNK	UNK
65	UNK	UNK	UNK	UNK	UNK	UNK
66	UNK	UNK	UNK	UNK	UNK	UNK
67	UNK	UNK	UNK	UNK	UNK	UNK
68	UNK	UNK	UNK	UNK	UNK	UNK
69	UNK	UNK	UNK	UNK	UNK	UNK
70	UNK	UNK	UNK	UNK	UNK	UNK
71	UNK	UNK	UNK	UNK	UNK	UNK
72	UNK	UNK	UNK	UNK	UNK	UNK
73	UNK	UNK	UNK	UNK	UNK	UNK
74	UNK	UNK	UNK	UNK	UNK	UNK
75	UNK	UNK	UNK	UNK	UNK	UNK
76	UNK	UNK	UNK	UNK	UNK	UNK
77	UNK	UNK	UNK	UNK	UNK	UNK
78	UNK	UNK	UNK	UNK	UNK	UNK
79	UNK	UNK	UNK	UNK	UNK	UNK
80	0	57	0	2300	0	1
81	0	N/O	0	1400	0	0
82	0	13	0	1300	0	0
83	0	N/O	0	1100	0	0
84	0	8	0	670	0	0
85	N/O	4	N/O	900	3	0
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						

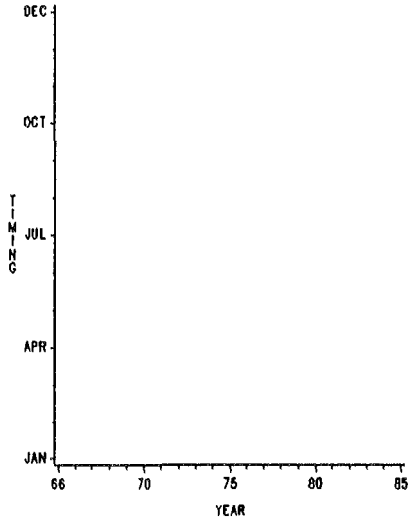
N/O = STREAM INSPECTED,NO FISH OBSERVED
UNK = STREAM NOT INSPECTED,OR NOT INSPECTED FOR SPECIES INDICATED, OR SPECIES PRESENT BUT NO ESTIMATE MADE.

CHARTERS RIVER (93-0300-100)
ESCAPEMENT AND RUN TIMING

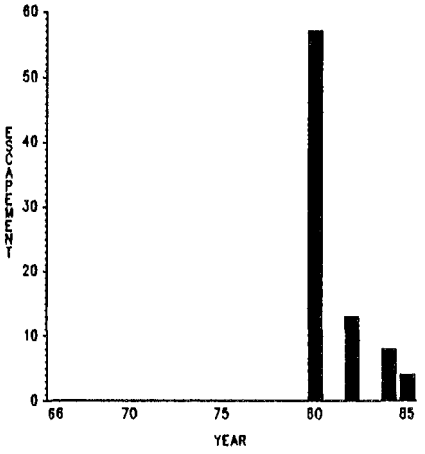
SOCKEYE (SK)



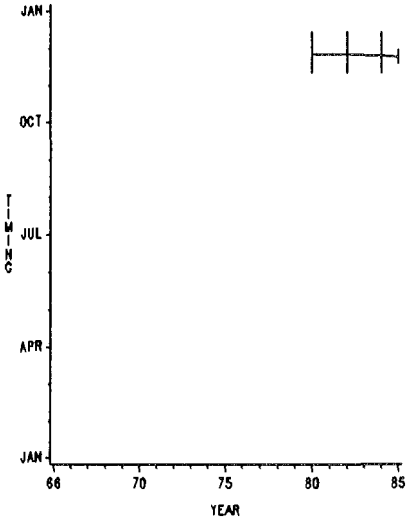
SOCKEYE



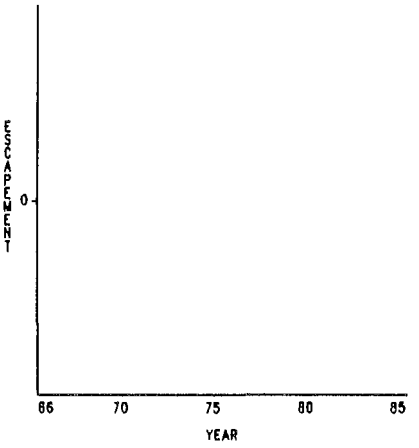
COHO (CO)



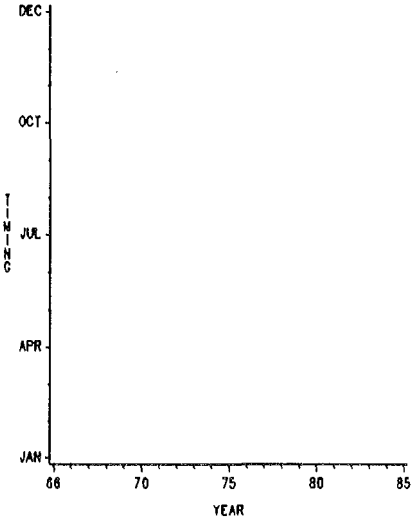
COHO



PINK (PK)



PINK

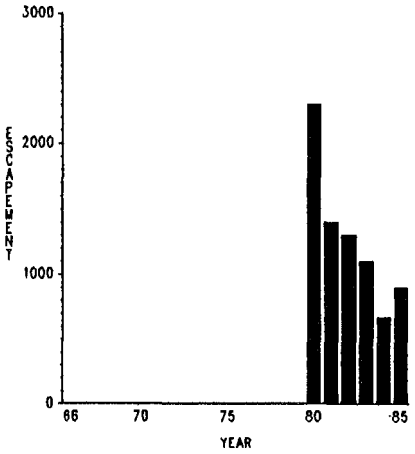


COHO

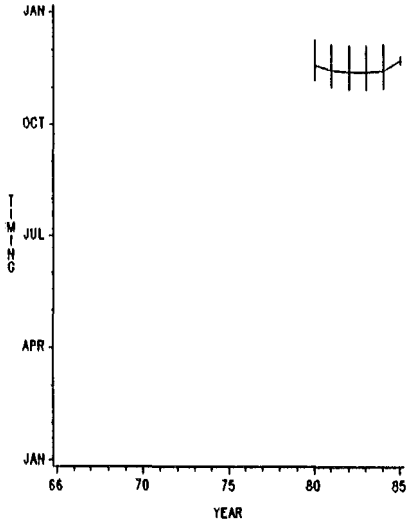
YEAR	ESCAPEMENT	START	PEAK	END
1966	-	-	-	-
1967	-	-	-	-
1968	-	-	-	-
1969	-	-	-	-
1970	-	-	-	-
1971	-	-	-	-
1972	-	-	-	-
1973	-	-	-	-
1974	-	-	-	-
1975	-	-	-	-
1976	-	-	-	-
1977	-	-	-	-
1978	-	-	-	-
1979	-	-	-	-
1980	57	NOV 06	NOV 20	DEC 10
1981	-	-	-	-
1982	13	NOV 06	NOV 20	DEC 10
1983	-	-	-	-
1984	8	NOV 06	NOV 14	DEC 10
1985	4	NOV 14	NOV 25	DEC 30

CHARTERS RIVER (93-0300-100)
ESCAPEMENT AND RUN TIMING

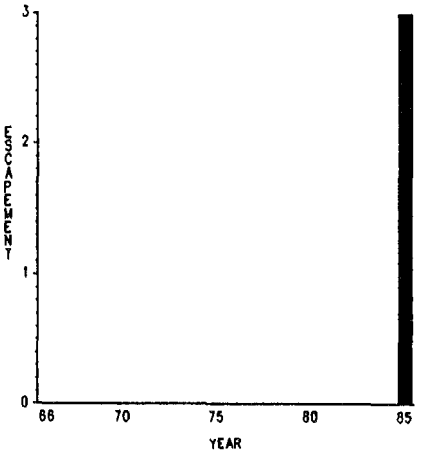
CHUM (CM)



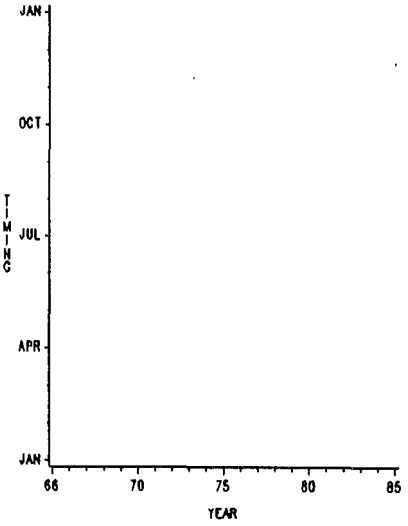
CHUM



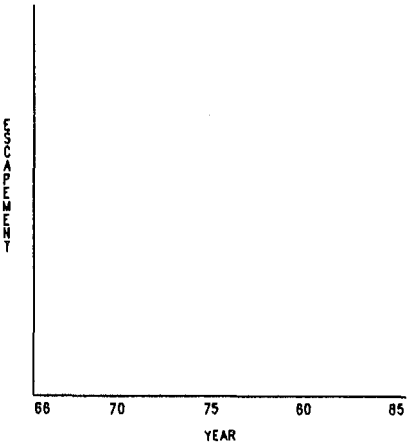
CHINOOK (CH)



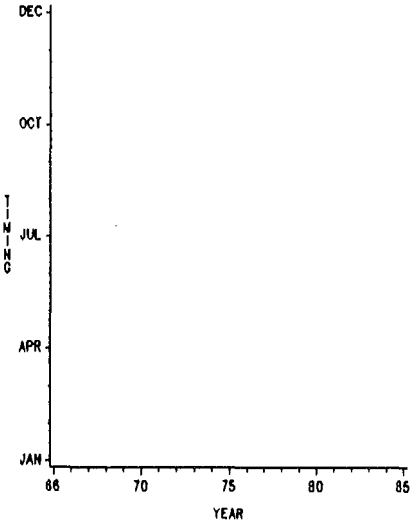
CHINOOK



STEELHEAD (ST)



STEELHEAD



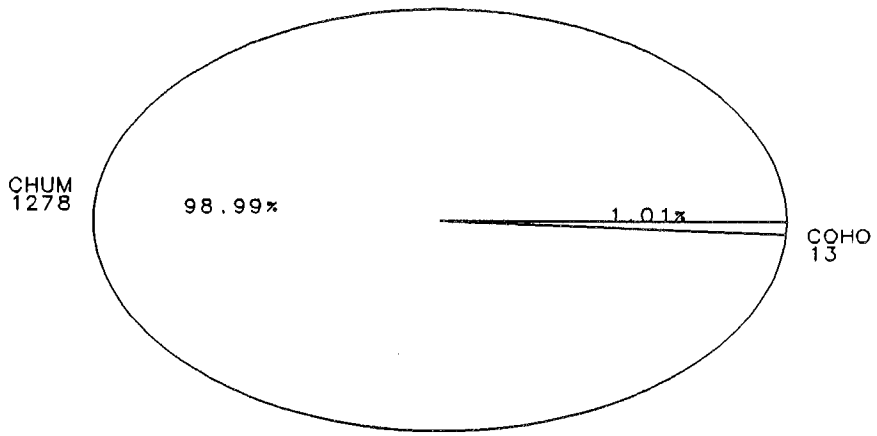
CHUM

YEAR	ESCAPEMENT	START	PEAK	END
1966	-	-	-	-
1967	-	-	-	-
1968	-	-	-	-
1969	-	-	-	-
1970	-	-	-	-
1971	-	-	-	-
1972	-	-	-	-
1973	-	-	-	-
1974	-	-	-	-
1975	-	-	-	-
1976	-	-	-	-
1977	-	-	-	-
1978	-	-	-	-
1979	-	-	-	-
1980	2300	NOV 02	NOV 06	DEC 05
1981	1400	OCT 27	NOV 04	DEC 01
1982	1300	OCT 25	NOV 01	NOV 30
1983	1100	OCT 25	NOV 01	NOV 30
1984	670	OCT 25	NOV 01	NOV 30
1985	900	NOV 14	NOV 20	DEC 30

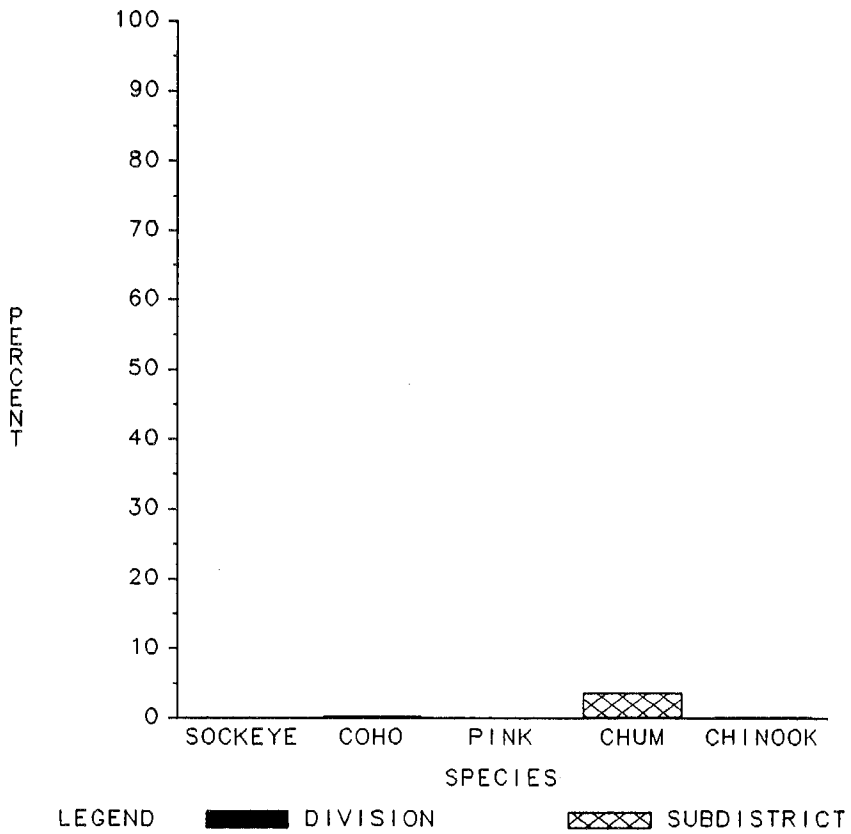
CHINOOK

YEAR	ESCAPEMENT	START	PEAK	END
1966	-	-	-	-
1967	-	-	-	-
1968	-	-	-	-
1969	-	-	-	-
1970	-	-	-	-
1971	-	-	-	-
1972	-	-	-	-
1973	-	-	-	-
1974	-	-	-	-
1975	-	-	-	-
1976	-	-	-	-
1977	-	-	-	-
1978	-	-	-	-
1979	-	-	-	-
1980	-	-	-	-
1981	-	-	-	-
1982	-	-	-	-
1983	-	-	-	-
1984	-	-	-	-
1985	3	NOV 14	NOV 15	NOV 15

CHARTERS RIVER
10 YR. AVG. ESCAPEMENT
(1976-1985)



CHARTERS RIVER AVG. ESCAPEMENT (1976-1985)
(EXPRESSED AS A PERCENTAGE OF
SUBDISTRICT AND DIVISION AVERAGE ESCAPEMENT)



ESCAPEMENT : TUGWELL CREEK

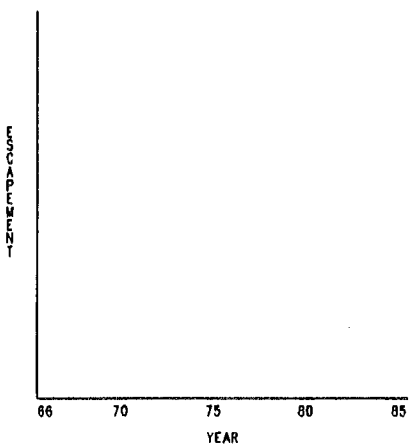
WATERSHED-CODE : 93-0380

YEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK	STEELHEAD
53	0	200	0	3500	0	25
54	0	200	0	1500	0	25
55	0	25	0	750	0	25
56	0	25	0	25	0	N/O
57	0	25	0	25	0	25
58	0	200	0	750	0	25
59	0	25	0	3500	0	UNK
60	0	25	0	25	0	0
61	0	25	0	25	0	0
62	0	75	0	750	N/O	25
63	0	25	0	25	0	0
64	0	25	0	200	0	0
65	0	25	0	25	0	0
66	0	25	0	25	0	0
67	0	25	0	75	0	0
68	0	25	0	75	0	0
69	0	N/O	0	25	0	0
70	0	25	0	25	0	0
71	0	N/O	0	25	0	0
72	0	25	0	25	0	0
73	0	35	0	25	0	0
74	0	200	0	N/O	0	0
75	0	75	0	25	0	0
76	0	N/O	0	25	0	0
77	0	25	0	25	0	0
78	0	200	0	20	0	0
79	0	70	0	N/O	0	0
80	0	50	0	100	0	0
81	0	16	0	200	0	0
82	0	22	0	2	0	0
83	0	40	0	20	0	0
84	0	20	0	50	0	0
85	N/O	26	N/O	50	N/O	0
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						

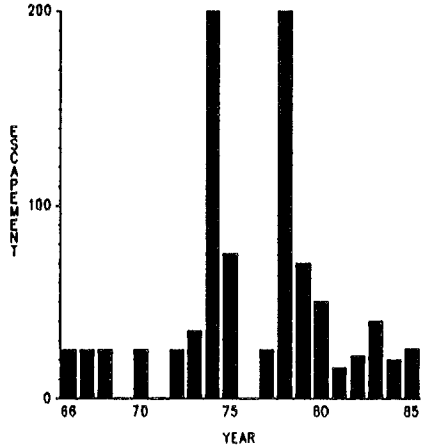
N/O = STREAM INSPECTED,NO FISH OBSERVED
UNK = STREAM NOT INSPECTED,OR NOT INSPECTED FOR SPECIES INDICATED, OR SPECIES PRESENT BUT NO ESTIMATE MADE.

TUGWELL CREEK (93-0360)
ESCAPEMENT AND RUN TIMING

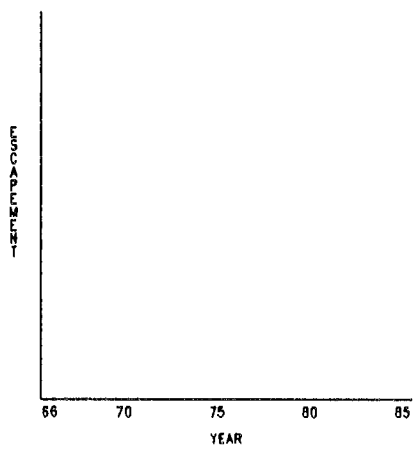
SOCKEYE (SK) | COHO (CO) | PINK (PK)



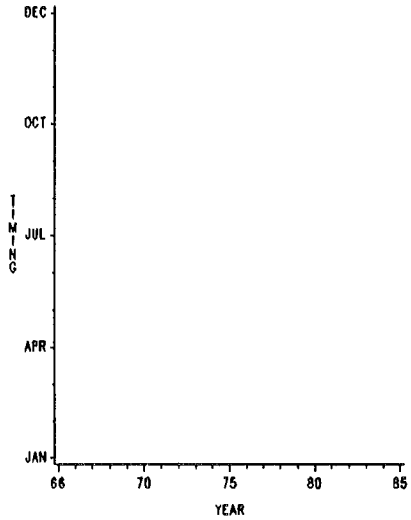
SOCKEYE

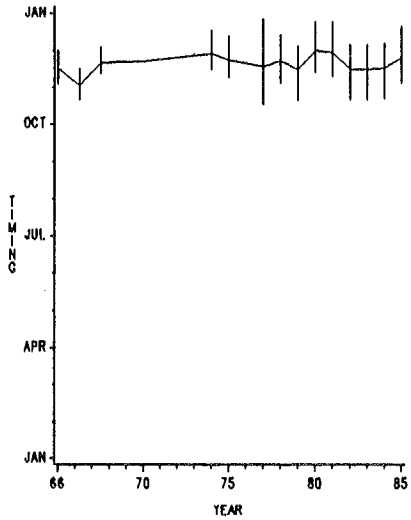


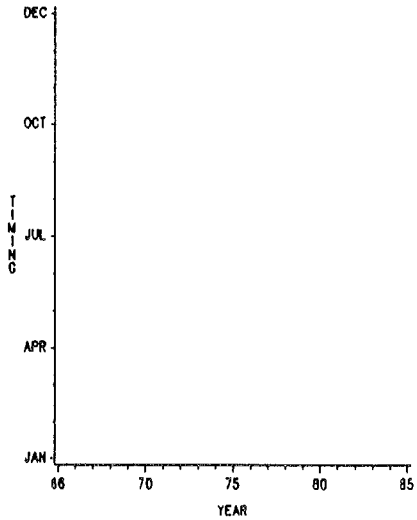
COHO



PINK





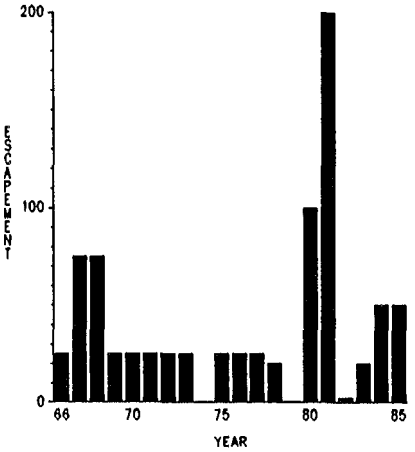


COHO

YEAR	ESCAPEMENT	START	PEAK	END
1966	25	NOV 02	NOV 14	NOV 30
1967	25	OCT 20	OCT 28	NOV 15
1968	25	NOV 10	NOV 15	DEC 02
1969	-	-	-	-
1970	25	NOV 20	-	-
1971	-	-	-	-
1972	25	-	-	-
1973	35	-	-	-
1974	200	NOV 12	NOV 20	DEC 15
1975	75	NOV 05	NOV 15	DEC 10
1976	-	-	-	-
1977	25	OCT 13	NOV 06	DEC 23
1978	200	OCT 31	NOV 15	DEC 10
1979	70	OCT 16	NOV 16	DEC 01
1980	50	NOV 08	NOV 20	DEC 20
1981	16	NOV 04	NOV 20	DEC 20
1982	22	OCT 16	NOV 16	DEC 01
1983	40	OCT 16	NOV 16	DEC 01
1984	20	OCT 16	NOV 16	DEC 01
1985	26	OCT 29	NOV 15	DEC 15

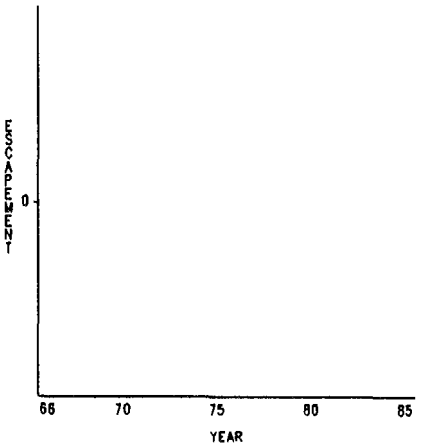
TUGWELL CREEK (93-0360)
ESCAPEMENT AND RUN TIMING

CHUM (CM)



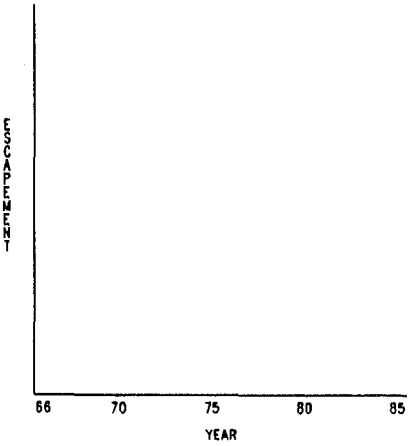
CHUM

CHINOOK (CH)

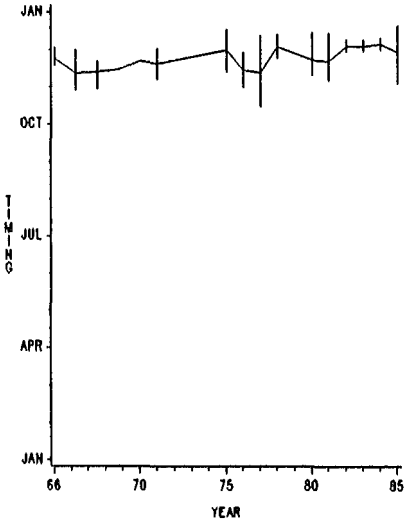


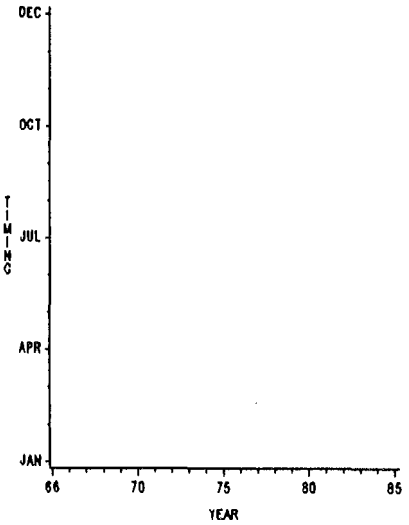
CHINOOK

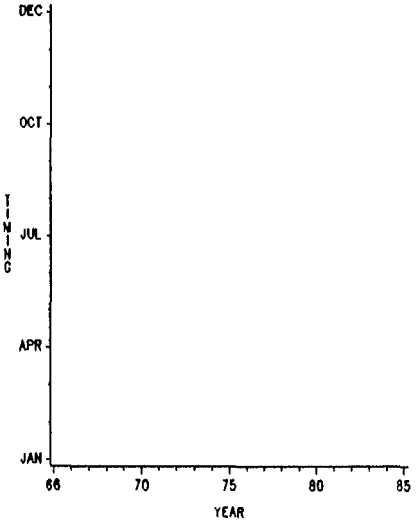
STEELHEAD (ST)



STEELHEAD



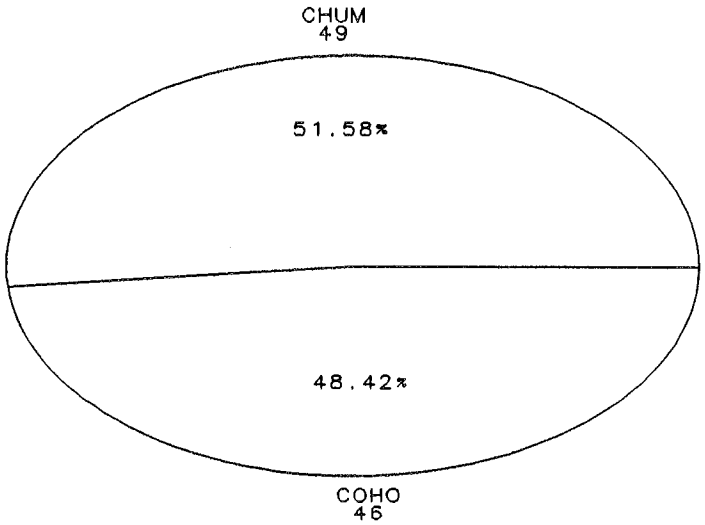




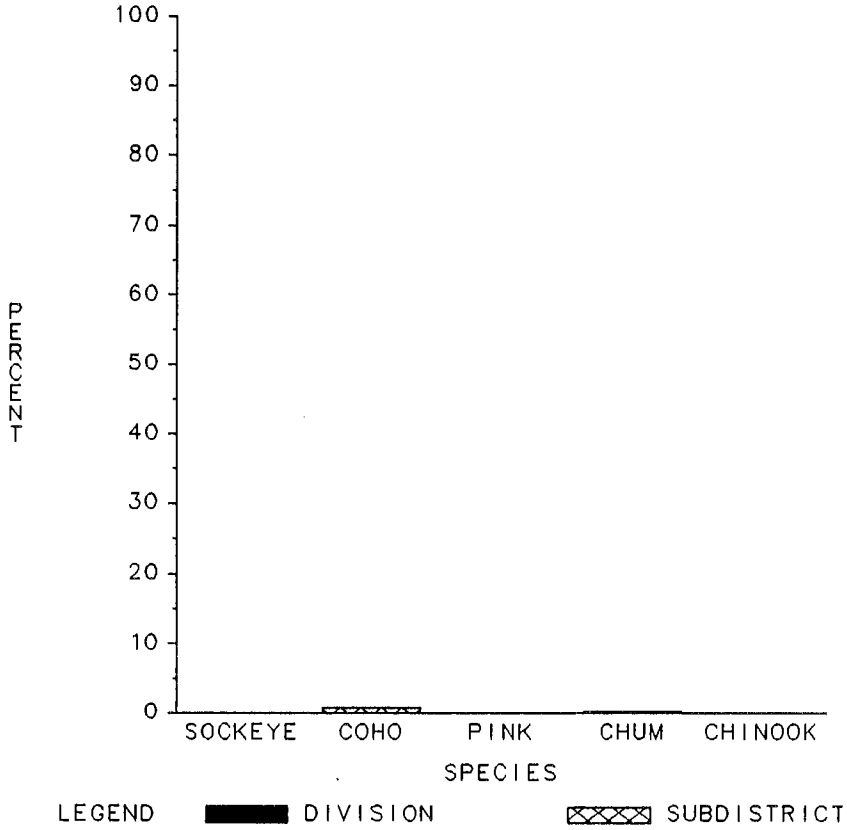
CHUM

YEAR	ESCAPEMENT	START	PEAK	END
1966	25	NOV 17	NOV 20	DEC 02
1967	75	OCT 28	NOV 06	NOV 30
1968	75	OCT 28	NOV 15	NOV 20
1969	25	NOV 13	-	-
1970	25	NOV 20	-	-
1971	25	NOV 05	NOV 30	-
1972	25	-	-	-
1973	25	-	-	-
1974	-	-	-	-
1975	25	NOV 10	NOV 30	DEC 15
1976	25	OCT 27	NOV 10	NOV 25
1977	25	OCT 11	NOV 06	DEC 09
1978	20	NOV 20	NOV 31	DEC 10
1979	-	-	-	-
1980	100	NOV 05	NOV 10	DEC 10
1981	200	NOV 01	NOV 10	DEC 10
1982	2	NOV 25	NOV 29	DEC 05
1983	20	NOV 25	NOV 29	DEC 05
1984	50	NOV 25	NOV 29	DEC 05
1985	50	OCT 29	NOV 28	DEC 15

TUGWELL CREEK
10 YR. AVG. ESCAPEMENT
(1976-1985)



TUGWELL CREEK AVG. ESCAPEMENT (1976-1985)
(EXPRESSED AS A PERCENTAGE OF
SUBDISTRICT AND DIVISION AVERAGE ESCAPEMENT)



ESCAPEMENT : MUIR CREEK

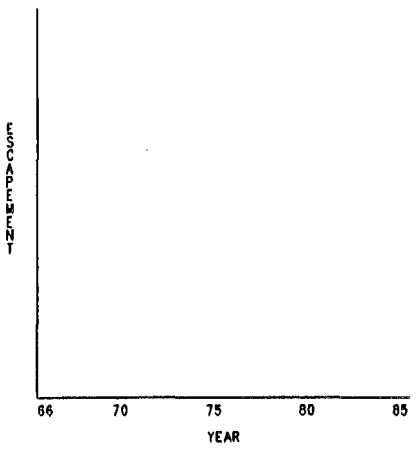
WATERSHED-CODE : 93-0400

YEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK	STEELHEAD
53	0	200	0	3500	0	25
54	0	200	0	3500	0	25
55	0	25	0	400	0	25
56	0	25	0	25	0	0
57	0	25	0	25	0	25
58	0	200	0	400	0	25
59	0	25	0	400	0	UNK
60	0	25	0	25	0	0
61	0	25	0	75	0	0
62	0	25	0	200	0	0
63	0	25	0	200	0	0
64	0	200	0	750	0	0
65	0	75	0	3500	0	0
66	0	25	0	25	0	0
67	0	25	0	400	0	0
68	0	25	0	750	0	0
69	0	N/O	0	750	0	0
70	0	24	0	25	0	0
71	0	N/O	0	75	0	0
72	0	N/O	0	200	0	0
73	0	25	0	750	0	0
74	0	25	0	400	0	0
75	0	75	0	200	0	0
76	0	75	0	400	0	0
77	0	75	0	200	0	0
78	0	100	0	350	0	0
79	0	30	0	80	0	0
80	0	15	0	1830	0	0
81	0	6	0	200	0	0
82	0	10	0	420	0	0
83	0	N/O	0	40	0	0
84	0	0	0	150	0	0
85	N/O	N/O	N/O	2000	N/O	0
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						

N/O = STREAM INSPECTED,NO FISH OBSERVED
UNK = STREAM NOT INSPECTED,OR NOT INSPECTED FOR SPECIES INDICATED, OR SPECIES PRESENT BUT NO ESTIMATE MADE.

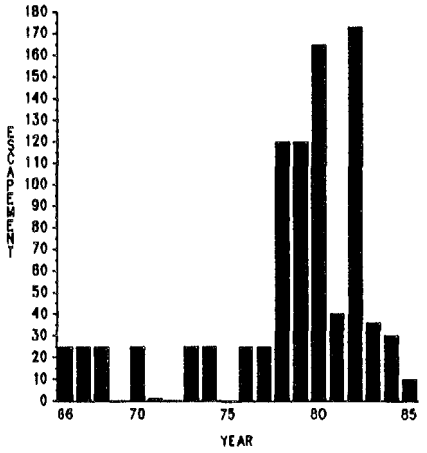
MUIR CREEK (93-0400)
ESCAPEMENT AND RUN TIMING

SOCKEYE (SK)



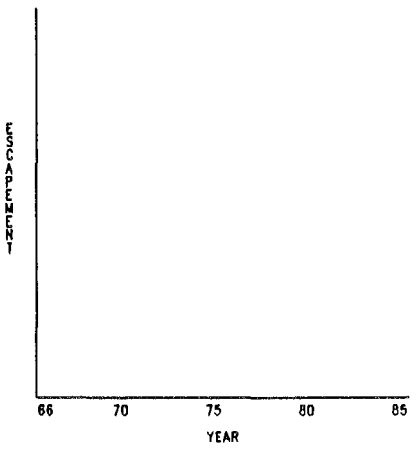
SOCKEYE

COHO (CO)

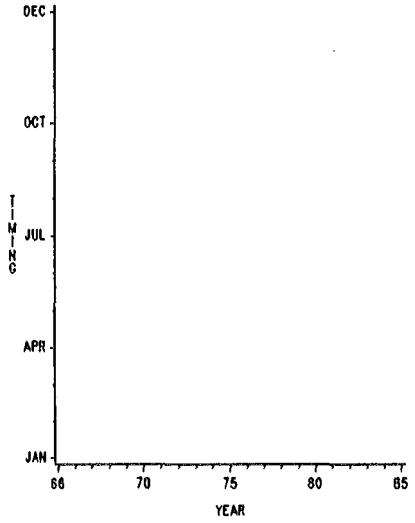


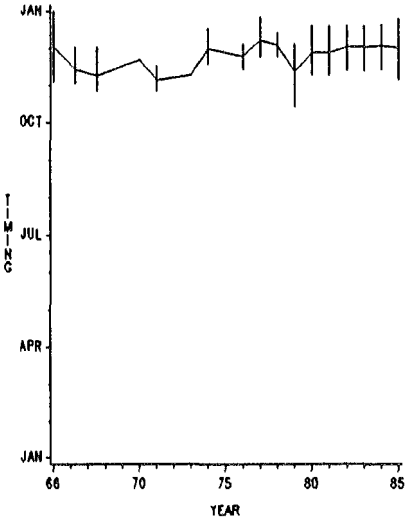
COHO

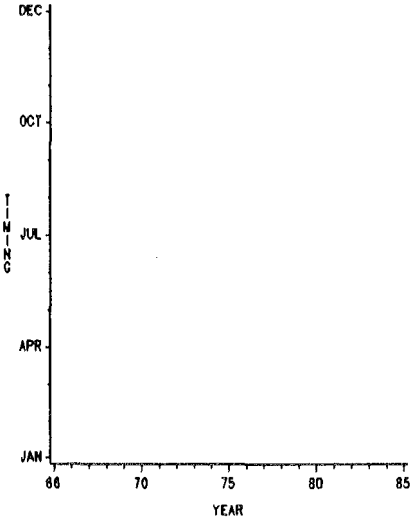
PINK (PK)



PINK





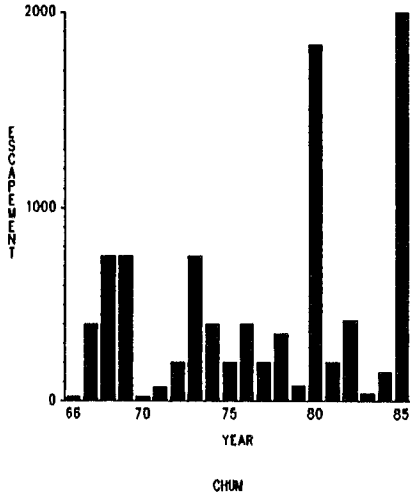


COHO

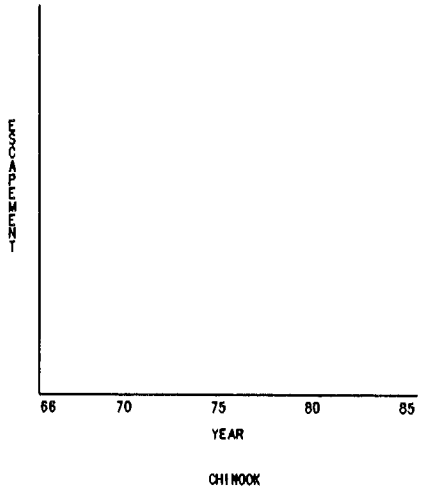
YEAR	ESCAPEMENT	START	PEAK	END
1966	25	NOV 02	DEC 02	DEC 31
1967	25	NOV 01	NOV 07	DEC 01
1968	25	OCT 25	OCT 27	NOV 30
1969	-	-	-	-
1970	25	NOV 20	-	-
1971	1	OCT 25	OCT 30	NOV 15
1972	-	-	-	-
1973	25	NOV 06	-	-
1974	25	NOV 15	NOV 25	DEC 15
1975	-	-	-	-
1976	25	NOV 10	NOV 20	DEC 01
1977	25	NOV 20	NOV 30	DEC 23
1978	120	NOV 20	DEC 10	DEC 30
1979	120	OCT 10	NOV 14	DEC 01
1980	165	NOV 04	NOV 20	DEC 15
1981	40	NOV 04	NOV 20	DEC 15
1982	173	NOV 08	NOV 30	DEC 15
1983	36	NOV 08	NOV 30	DEC 15
1984	30	NOV 08	NOV 30	DEC 15
1985	10	OCT 30	NOV 30	DEC 20

MUIR CREEK (93-0400)
ESCAPEMENT AND RUN TIMING

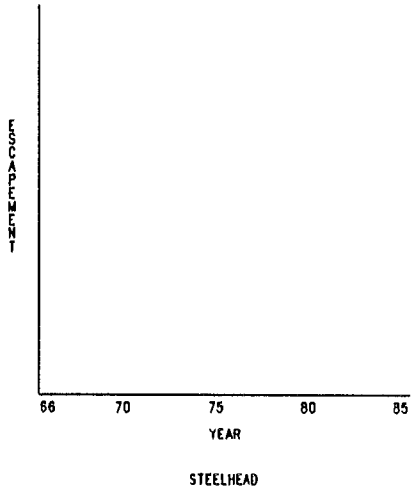
CHUM (CM)

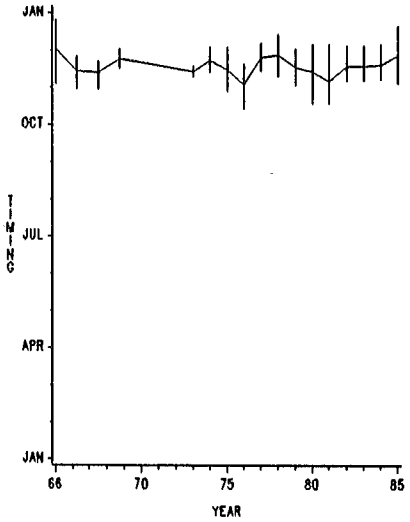


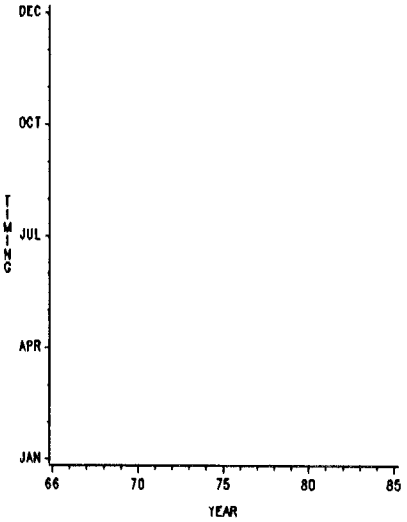
CHINOOK (CH)

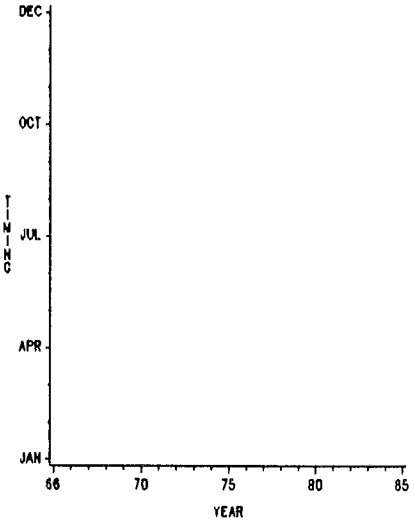


STEELHEAD (ST)





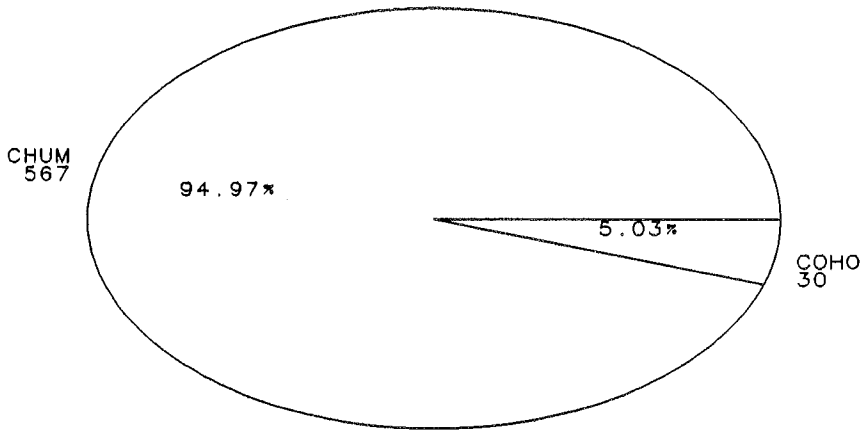




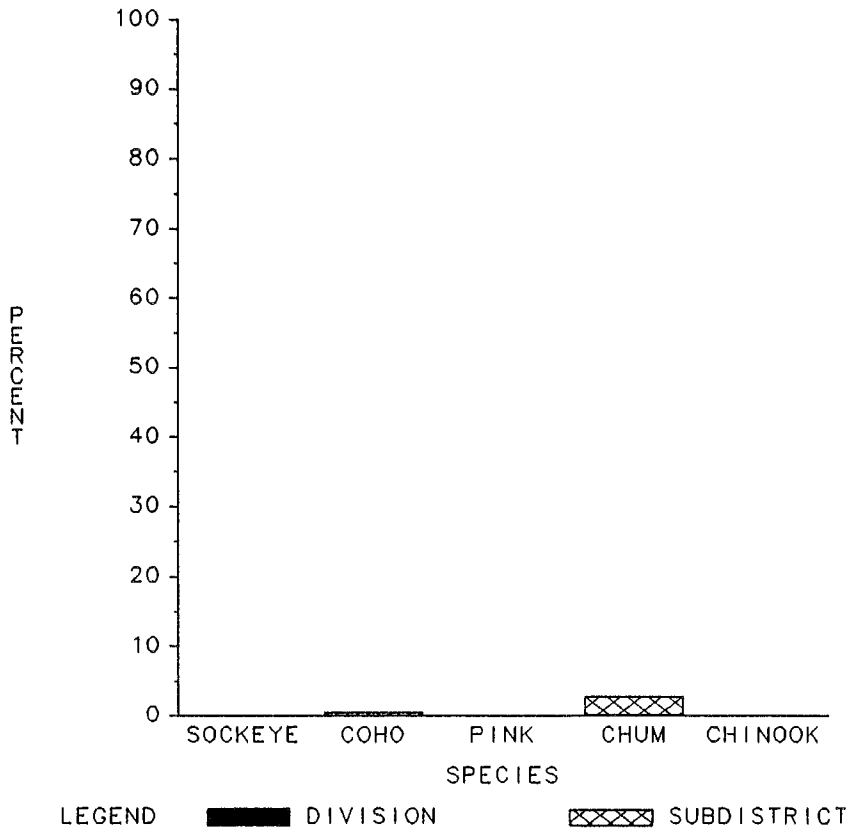
CHUM

YEAR	ESCAPEMENT	START	PEAK	END
1966	25	NOV 02	DEC 08	DEC 25
1967	400	OCT 29	NOV 16	NOV 25
1968	750	OCT 28	NOV 15	NOV 20
1969	750	NOV 14	-	NOV 30
1970	25	-	-	-
1971	75	-	NOV 17	-
1972	200	-	-	-
1973	750	NOV 06	NOV 15	-
1974	400	NOV 10	NOV 20	DEC 01
1975	200	OCT 25	NOV 10	DEC 01
1976	400	OCT 10	NOV 01	NOV 16
1977	200	NOV 10	NOV 21	DEC 03
1978	350	NOV 05	NOV 25	DEC 10
1979	80	OCT 29	NOV 14	NOV 28
1980	1830	OCT 13	NOV 12	DEC 01
1981	200	OCT 13	OCT 19	DEC 01
1982	420	NOV 01	NOV 09	NOV 30
1983	40	NOV 01	NOV 09	NOV 30
1984	150	NOV 01	NOV 09	NOV 30
1985	2000	OCT 29	NOV 20	DEC 15

MUIR CREEK
10 YR. AVG. ESCAPEMENT
(1976-1985)



MUIR CREEK AVG. ESCAPEMENT (1976-1985)
(EXPRESSED AS A PERCENTAGE OF
SUBDISTRICT AND DIVISION AVERAGE ESCAPEMENT)



ESCAPEMENT : KIRBY CREEK

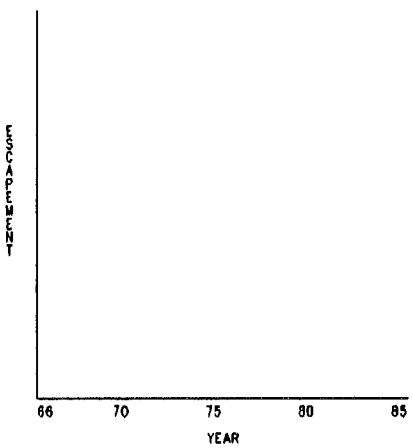
WATERSHED-CODE : 93-0420

YEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK	STEELHEAD
53	0	200	0	1500	0	25
54	0	25	0	1500	0	25
55	0	25	0	25	0	25
56	0	25	0	25	0	N/O
57	0	25	0	75	0	25
58	0	200	0	1500	0	25
59	0	25	0	1500	0	0
60	0	25	0	25	0	0
61	0	75	0	200	0	0
62	0	N/O	0	75	0	0
63	0	200	0	25	0	0
64	0	200	0	25	0	0
65	0	200	0	75	0	0
66	0	25	0	25	0	0
67	0	25	0	750	0	0
68	0	25	0	25	0	0
69	0	N/O	0	25	0	0
70	0	25	0	25	0	0
71	0	1	0	25	0	0
72	0	N/O	0	N/O	0	0
73	0	25	0	N/O	0	0
74	0	25	0	25	0	0
75	0	N/O	0	25	0	0
76	0	25	0	200	0	0
77	0	25	0	75	0	0
78	0	120	0	10	0	0
79	0	120	0	35	0	0
80	0	165	0	204	0	0
81	0	40	0	150	0	0
82	0	173	0	0	0	0
83	0	36	0	86	0	0
84	0	30	0	120	0	0
85	N/O	10	N/O	550	N/O	0
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						

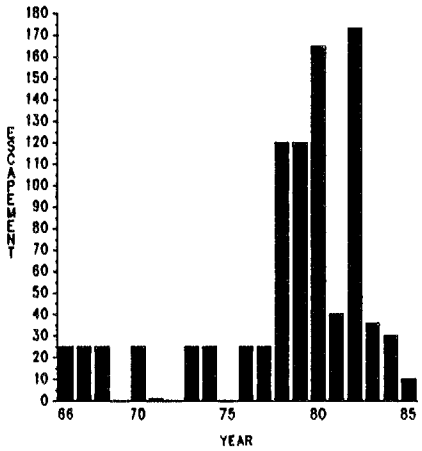
N/O = STREAM INSPECTED,NO FISH OBSERVED
UNK = STREAM NOT INSPECTED,OR NOT INSPECTED FOR SPECIES INDICATED,
OR SPECIES PRESENT BUT NO ESTIMATE MADE.

KIRBY CREEK (93-0420)
ESCAPEMENT AND RUN TIMING

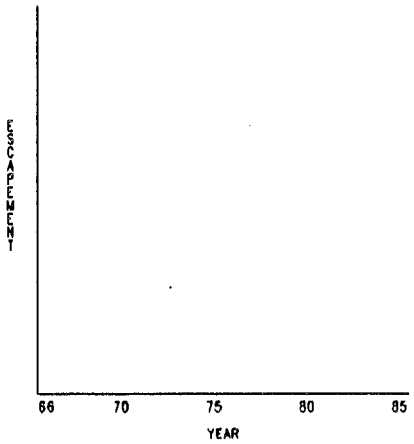
SOCKEYE (SK) | COHO (CO) | PINK (PK)



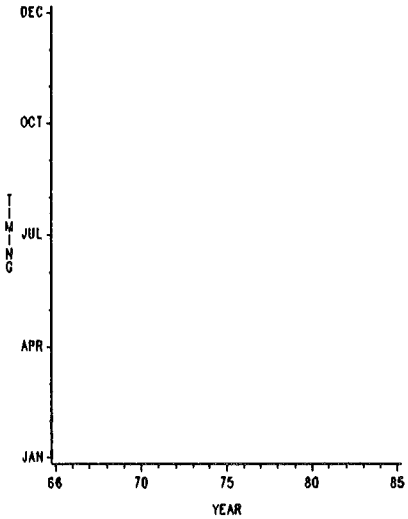
SOCKEYE

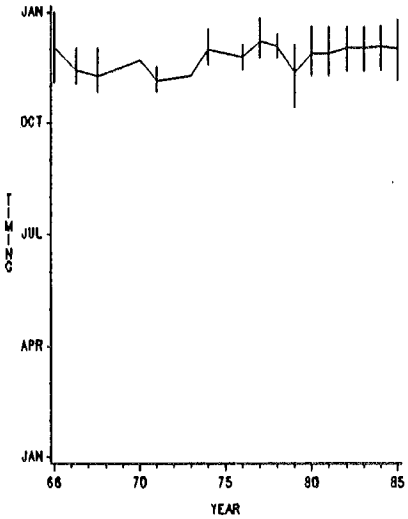


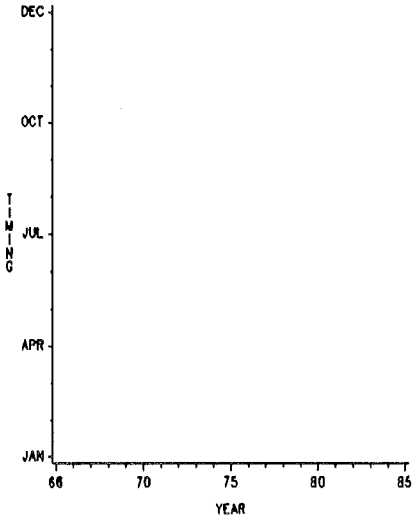
COHO



PINK





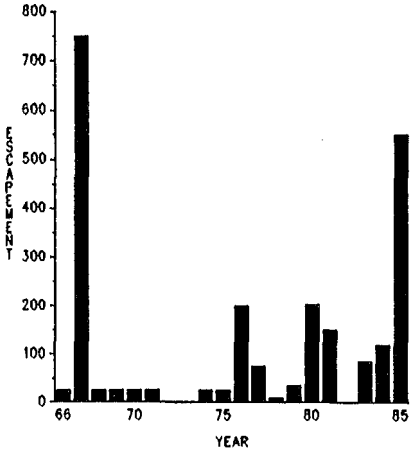


COHO

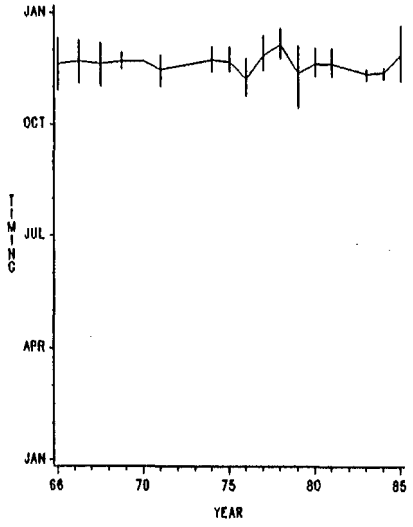
YEAR	ESCAPEMENT	START	PEAK	END
1966	25	NOV 02	DEC 02	DEC 31
1967	25	NOV 01	NOV 07	DEC 01
1968	25	OCT 25	OCT 27	NOV 30
1969	-	-	-	-
1970	25	NOV 20	-	-
1971	1	OCT 25	OCT 30	NOV 15
1972	-	-	-	-
1973	25	NOV 06	-	-
1974	25	NOV 15	NOV 25	DEC 15
1975	-	-	-	-
1976	25	NOV 10	NOV 20	DEC 01
1977	25	NOV 20	NOV 30	DEC 23
1978	120	NOV 20	DEC 10	DEC 30
1979	120	OCT 10	NOV 14	DEC 01
1980	165	NOV 04	NOV 20	DEC 15
1981	40	NOV 04	NOV 20	DEC 15
1982	173	NOV 08	NOV 30	DEC 15
1983	36	NOV 08	NOV 30	DEC 15
1984	30	NOV 08	NOV 30	DEC 15
1985	10	OCT 30	NOV 30	DEC 20

KIRBY CREEK (93-0420)
ESCAPEMENT AND RUN TIMING

CHUM (CM)

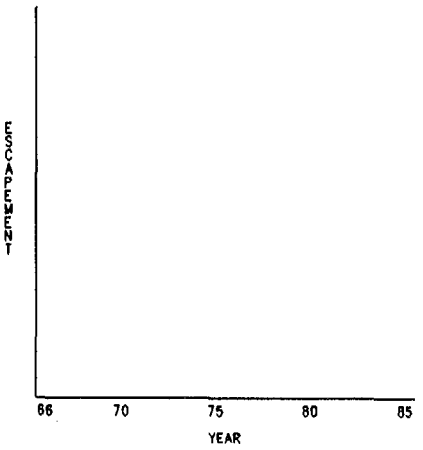


CHUM

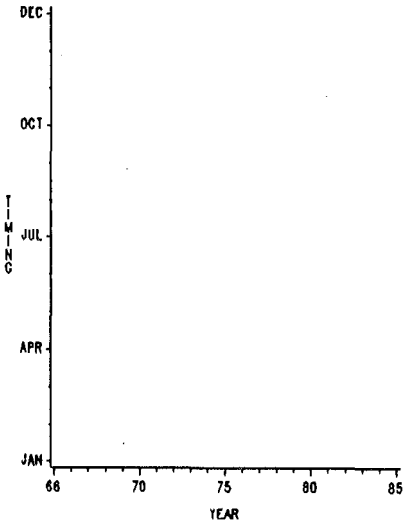


CHUM				
YEAR	ESCAPEMENT	START	PEAK	END
1966	25	OCT 28	NOV 20	DEC 10
1967	750	NOV 02	NOV 23	DEC 08
1968	25	OCT 30	NOV 20	DEC 05
1969	25	NOV 13	-	NOV 27
1970	25	NOV 20	-	-
1971	25	OCT 30	NOV 15	NOV 25
1972	-	-	-	-
1973	-	-	-	-
1974	25	NOV 10	NOV 20	DEC 01
1975	25	NOV 10	NOV 15	DEC 01
1976	200	OCT 20	NOV 01	NOV 20
1977	75	NOV 10	NOV 20	DEC 09
1978	10	NOV 20	NOV 30	DEC 15
1979	35	OCT 10	NOV 14	DEC 01
1980	204	NOV 04	NOV 12	NOV 28
1981	150	NOV 04	NOV 12	NOV 28
1982	-	-	-	-
1983	86	NOV 01	NOV 08	NOV 10
1984	120	NOV 01	NOV 08	NOV 10
1985	550	OCT 30	NOV 20	DEC 15

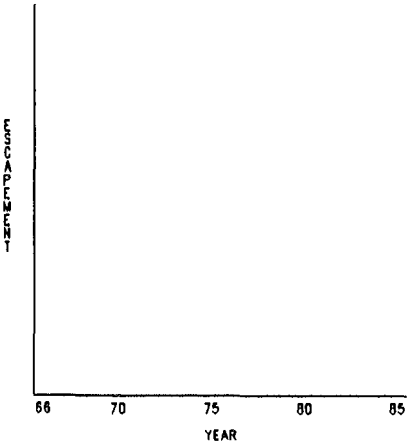
CHINOOK (CH)



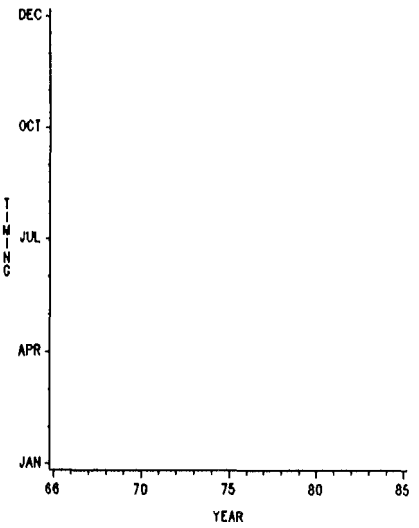
CHINOOK



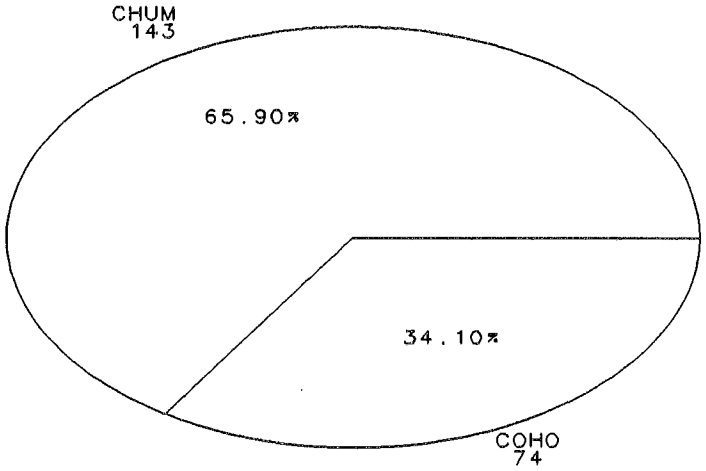
STEELHEAD (ST)



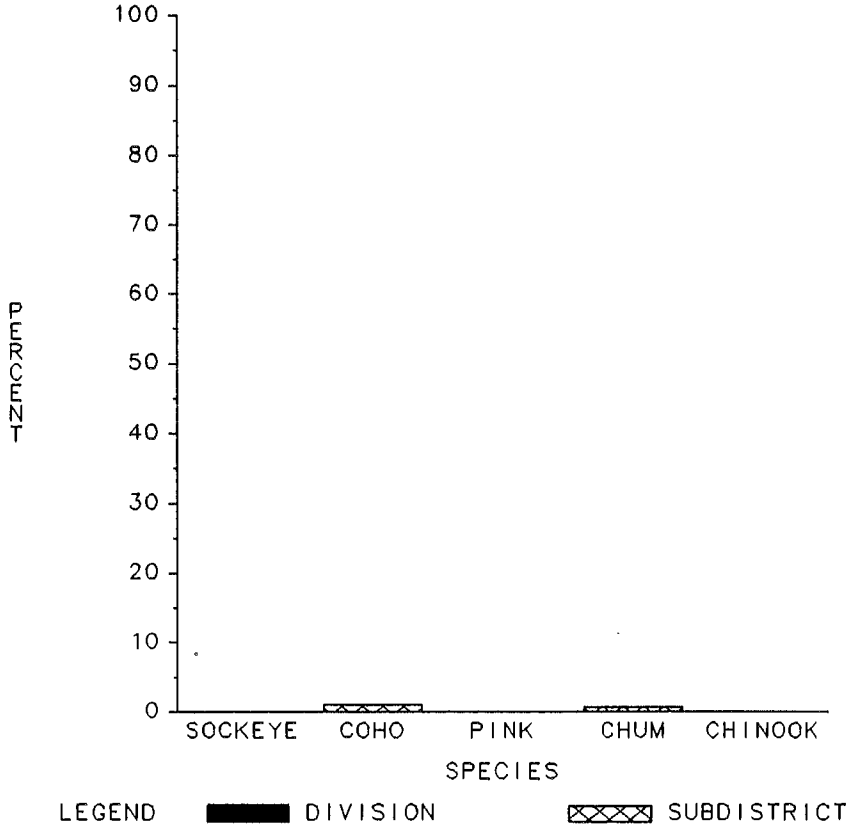
STEELHEAD



KIRBY CREEK
10 YR. AVG. ESCAPEMENT
(1976-1985)



KIRBY CREEK AVG. ESCAPEMENT (1976-1985)
(EXPRESSED AS A PERCENTAGE OF
SUBDISTRICT AND DIVISION AVERAGE ESCAPEMENT)



ESCAPEMENT : JORDAN RIVER

WATERSHED-CODE : 93-0600

YEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK	STEELHEAD
53	0	200	0	750	0	25
54	0	25	0	200	0	25
55	0	25	0	25	0	25
56	0	25	0	0	0	0
57	0	25	0	400	0	25
58	0	0	400	0	0	0
59	0	0	N/O	0	0	0
60	0	25	1500	0	0	0
61	0	25	0	N/O	0	0
62	0	75	7500	N/O	0	0
63	UNK	UNK	UNK	UNK	UNK	UNK
64	0	25	3500	0	0	UNK
65	0	25	0	0	0	UNK
66	0	0	5000	0	0	0
67	0	N/O	0	0	0	0
68	0	0	400	0	0	0
69	UNK	UNK	UNK	UNK	UNK	UNK
70	0	0	1500	0	0	0
71	0	N/O	0	0	0	0
72	0	N/O	N/O	N/O	0	0
73	0	0	0	4	0	0
74	UNK	UNK	UNK	UNK	UNK	UNK
75	0	N/O	N/O	N/O	N/O	N/O
76	0	UNK	0	0	0	0
77	0	0	N/O	0	0	0
78	0	N/O	0	0	0	0
79	0	N/O	0	0	0	0
80	UNK	UNK	UNK	UNK	UNK	UNK
81	UNK	UNK	UNK	UNK	UNK	UNK
82	UNK	UNK	UNK	UNK	UNK	UNK
83	UNK	UNK	UNK	UNK	UNK	UNK
84	0	0	0	0	0	0
85	UNK	UNK	UNK	UNK	UNK	UNK
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						

N/O = STREAM INSPECTED,NO FISH OBSERVED
UNK = STREAM NOT INSPECTED,OR NOT INSPECTED FOR SPECIES INDICATED, OR SPECIES PRESENT BUT NO ESTIMATE MADE.

ESCAPEMENT : UGLOW CREEK

WATERSHED-CODE : 93-0620

YEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK	STEELHEAD
53	UNK	UNK	UNK	UNK	UNK	UNK
54	UNK	UNK	UNK	UNK	UNK	UNK
55	UNK	UNK	UNK	UNK	UNK	UNK
56	UNK	UNK	UNK	UNK	UNK	UNK
57	UNK	UNK	UNK	UNK	UNK	UNK
58	UNK	UNK	UNK	UNK	UNK	UNK
59	UNK	UNK	UNK	UNK	UNK	UNK
60	UNK	UNK	UNK	UNK	UNK	UNK
61	UNK	UNK	UNK	UNK	UNK	UNK
62	UNK	UNK	UNK	UNK	UNK	UNK
63	UNK	UNK	UNK	UNK	UNK	UNK
64	UNK	UNK	UNK	UNK	UNK	UNK
65	UNK	UNK	UNK	UNK	UNK	UNK
66	UNK	UNK	UNK	UNK	UNK	UNK
67	UNK	UNK	UNK	UNK	UNK	UNK
68	UNK	UNK	UNK	UNK	UNK	UNK
69	UNK	UNK	UNK	UNK	UNK	UNK
70	UNK	UNK	UNK	UNK	UNK	UNK
71	UNK	UNK	UNK	UNK	UNK	UNK
72	UNK	UNK	UNK	UNK	UNK	UNK
73	UNK	UNK	UNK	UNK	UNK	UNK
74	UNK	UNK	UNK	UNK	UNK	UNK
75	UNK	UNK	UNK	UNK	UNK	UNK
76	UNK	UNK	UNK	UNK	UNK	UNK
77	UNK	UNK	UNK	UNK	UNK	UNK
78	UNK	UNK	UNK	UNK	UNK	UNK
79	UNK	UNK	UNK	UNK	UNK	UNK
80	0	6	0	0	0	0
81	0	7	0	0	0	0
82	UNK	UNK	UNK	UNK	UNK	UNK
83	0	N/O	0	0	0	0
84	0	0	0	0	0	0
85	UNK	UNK	UNK	UNK	UNK	UNK
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						

N/O = STREAM INSPECTED,NO FISH OBSERVED
UNK = STREAM NOT INSPECTED,OR NOT INSPECTED FOR SPECIES INDICATED, OR SPECIES PRESENT BUT NO ESTIMATE MADE.

ESCAPEMENT : MAIDENHAIR CREEK

WATERSHED-CODE : 93-0624

YEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK	STEELHEAD
53	UNK	UNK	UNK	UNK	UNK	UNK
54	UNK	UNK	UNK	UNK	UNK	UNK
55	UNK	UNK	UNK	UNK	UNK	UNK
56	UNK	UNK	UNK	UNK	UNK	UNK
57	UNK	UNK	UNK	UNK	UNK	UNK
58	UNK	UNK	UNK	UNK	UNK	UNK
59	UNK	UNK	UNK	UNK	UNK	UNK
60	UNK	UNK	UNK	UNK	UNK	UNK
61	UNK	UNK	UNK	UNK	UNK	UNK
62	UNK	UNK	UNK	UNK	UNK	UNK
63	UNK	UNK	UNK	UNK	UNK	UNK
64	UNK	UNK	UNK	UNK	UNK	UNK
65	UNK	UNK	UNK	UNK	UNK	UNK
66	UNK	UNK	UNK	UNK	UNK	UNK
67	UNK	UNK	UNK	UNK	UNK	UNK
68	UNK	UNK	UNK	UNK	UNK	UNK
69	UNK	UNK	UNK	UNK	UNK	UNK
70	UNK	UNK	UNK	UNK	UNK	UNK
71	UNK	UNK	UNK	UNK	UNK	UNK
72	UNK	UNK	UNK	UNK	UNK	UNK
73	UNK	UNK	UNK	UNK	UNK	UNK
74	UNK	UNK	UNK	UNK	UNK	UNK
75	UNK	UNK	UNK	UNK	UNK	UNK
76	UNK	UNK	UNK	UNK	UNK	UNK
77	UNK	UNK	UNK	UNK	UNK	UNK
78	UNK	UNK	UNK	UNK	UNK	UNK
79	UNK	UNK	UNK	UNK	UNK	UNK
80	0	2	0	0	0	0
81	0	9	0	0	0	0
82	0	2	0	0	0	0
83	0	N/O	0	0	0	0
84	0	0	0	0	0	0
85	UNK	UNK	UNK	UNK	UNK	UNK
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						

N/O = STREAM INSPECTED,NO FISH OBSERVED
UNK = STREAM NOT INSPECTED,OR NOT INSPECTED FOR SPECIES INDICATED, OR SPECIES PRESENT BUT NO ESTIMATE MADE.

ESCAPEMENT : SAN JUAN RIVER

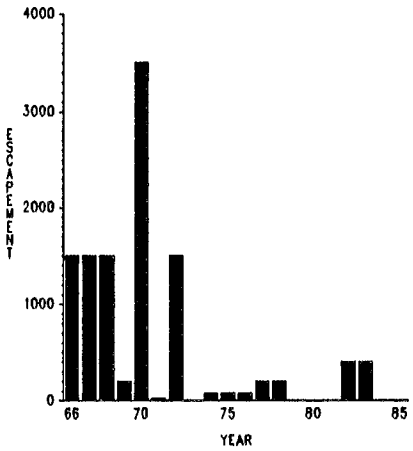
WATERSHED-CODE : 93-1000

YEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK	STEELHEAD
53	0	1500	0	750	400	400
54	0	3500	1500	1500	400	400
55	0	3500	0	400	200	750
56	0	7500	1500	200	25	750
57	0	7500	N/O	750	200	750
58	0	15000	750	1500	200	750
59	0	7500	N/O	750	200	750
60	75	15000	400	1500	1500	400
61	75	35000	N/O	400	400	750
62	75	15000	400	1500	400	0
63	25	7500	0	400	400	750
64	25	75000	25	1500	1500	0
65	1500	15000	0	1500	750	0
66	1500	15000	0	400	1500	0
67	1500	35000	750	750	400	0
68	1500	15000	0	3500	750	0
69	200	15000	0	200	400	400
70	3500	75000	0	7500	7500	0
71	25	7500	0	N/O	400	0
72	1500	15000	0	3500	3500	0
73	N/O	15000	0	200	3500	N/O
74	75	7500	75	N/O	750	0
75	75	1500	N/O	200	200	N/O
76	75	750	75	N/O	75	0
77	200	400	0	25	75	0
78	200	2850	0	25	50	150
79	0	3500	25	25	400	0
80	0	3000	200	100	500	0
81	N/O	3500	75	200	750	0
82	400	8400	200	225	775	0
83	400	7500	200	200	775	0
84	0	9000	200	500	1200	0
85	N/O	500	N/O	300	150	0
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						

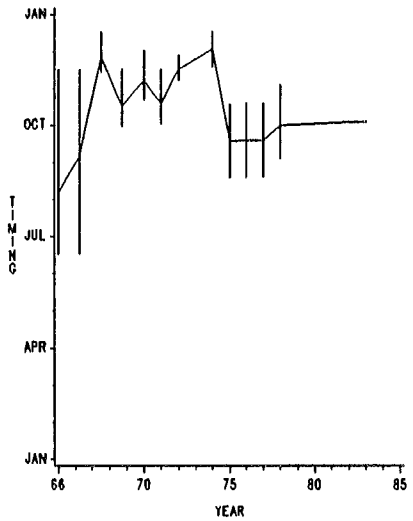
N/O = STREAM INSPECTED,NO FISH OBSERVED
UNK = STREAM NOT INSPECTED,OR NOT INSPECTED FOR SPECIES INDICATED, OR SPECIES PRESENT BUT NO ESTIMATE MADE.

SAN JUAN RIVER (93-1000)
ESCAPEMENT AND RUN TIMING

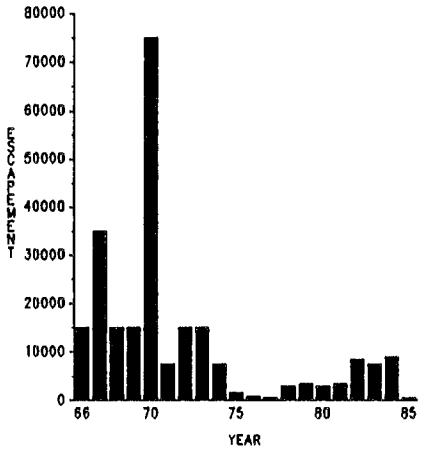
SOCKEYE (SK)



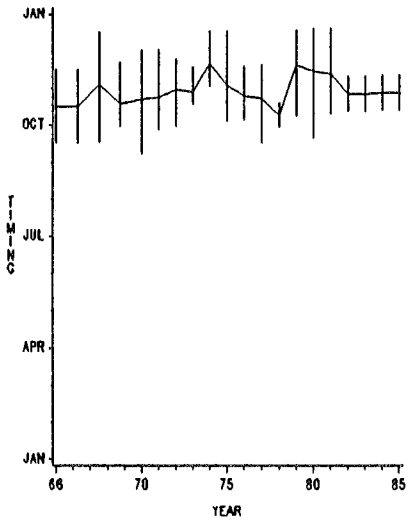
SOCKEYE



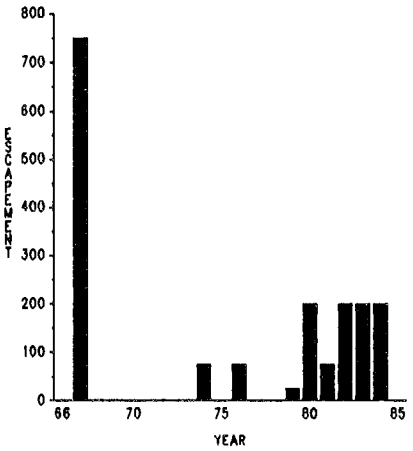
COHO (CO)



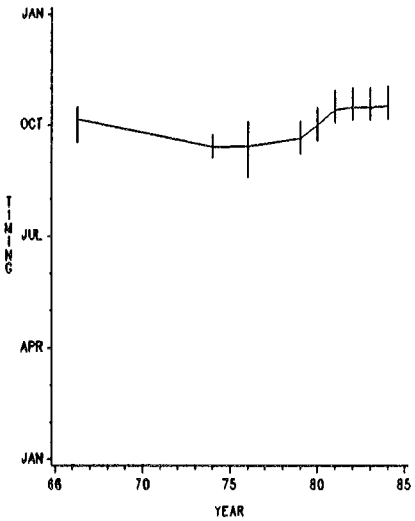
COHO



PINK (PK)



PINK



SOCKEYE

YEAR	ESCAPEMENT	START	PEAK	END
1966	1500	JUN 15	JUN 15	NOV 15
1967	1500	JUN 15	SEP 15	NOV 15
1968	1500	NOV 12	NOV 16	DEC 15
1969	200	SEP 28	SEP 30	NOV 15
1970	3500	OCT 20	OCT 28	NOV 30
1971	25	SEP 30	OCT 05	NOV 15
1972	1500	NOV 04	NOV 12	NOV 25
1973	-	-	-	-
1974	75	NOV 15	DEC 01	DEC 15
1975	75	AUG 15	SEP 15	OCT 15
1976	75	AUG 15	SEP 15	OCT 15
1977	200	AUG 15	SEP 15	OCT 15
1978	200	AUG 30	SEP 21	OCT 30
1979	-	-	-	-
1980	-	-	-	-
1981	-	-	-	-
1982	400	SEP 28	SEP 28	SEP 29
1983	400	SEP 28	SEP 28	SEP 29
1984	-	-	-	-
1985	-	-	-	-

COHO

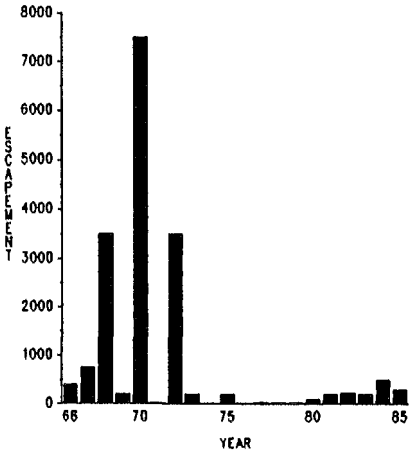
YEAR	ESCAPEMENT	START	PEAK	END
1966	15000	SEP 15	OCT 15	NOV 15
1967	35000	SEP 15	OCT 15	NOV 15
1968	15000	SEP 15	NOV 07	DEC 15
1969	15000	SEP 28	SEP 30	NOV 20
1970	75000	SEP 05	OCT 25	NOV 30
1971	7500	SEP 25	OCT 10	NOV 30
1972	15000	SEP 27	NOV 02	NOV 22
1973	15000	OCT 15	OCT 15	NOV 15
1974	7500	OCT 30	NOV 10	DEC 15
1975	1500	OCT 01	OCT 15	DEC 15
1976	750	OCT 01	OCT 15	NOV 15
1977	400	SEP 12	OCT 28	NOV 16
1978	2850	SEP 25	OCT 15	DEC 31
1979	3500	OCT 04	NOV 29	DEC 15
1980	3000	SEP 15	NOV 29	DEC 15
1981	3500	OCT 05	NOV 03	DEC 15
1982	8400	OCT 07	NOV 05	DEC 31
1983	7500	OCT 07	NOV 05	DEC 31
1984	9000	OCT 07	NOV 05	DEC 31
1985	500	OCT 07	NOV 05	DEC 31

PINK

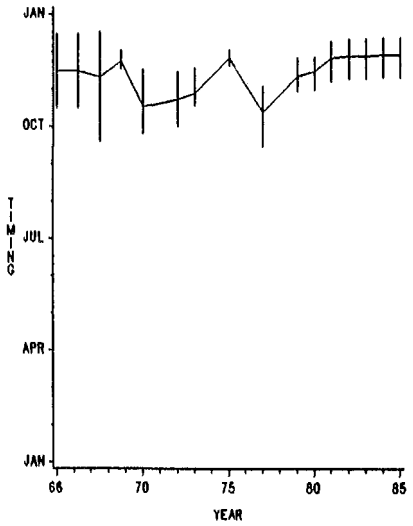
YEAR	ESCAPEMENT	START	PEAK	END
1966	-	-	-	-
1967	750	SEP 15	OCT 15	OCT 15
1968	-	-	-	-
1969	-	-	-	-
1970	-	-	-	-
1971	-	-	-	-
1972	-	-	-	-
1973	-	-	-	-
1974	75	SEP 01	SEP 10	SEP 20
1975	-	-	-	-
1976	75	AUG 15	SEP 15	SEP 30
1977	-	-	-	-
1978	-	-	-	-
1979	25	SEP 03	SEP 15	SEP 30
1980	200	SEP 13	SEP 25	OCT 10
1981	75	SEP 28	OCT 04	OCT 25
1982	200	SEP 30	OCT 06	OCT 27
1983	200	SEP 30	OCT 06	OCT 27
1984	200	SEP 30	OCT 06	OCT 27
1985	-	-	-	-

SAN JUAN RIVER (93-1000)
ESCAPEMENT AND RUN TIMING

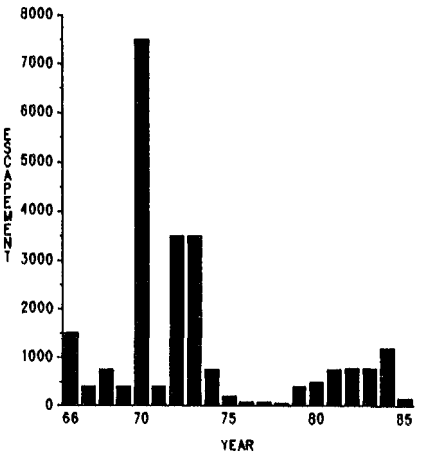
CHUM (CM)



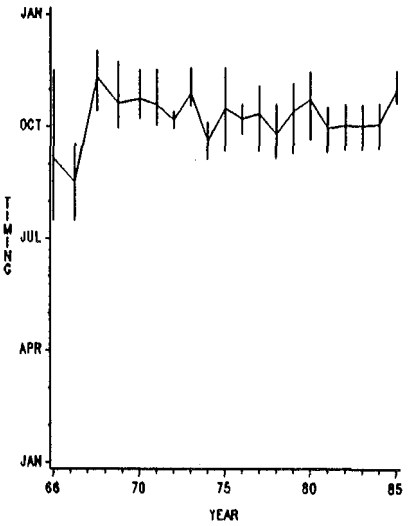
CHUM



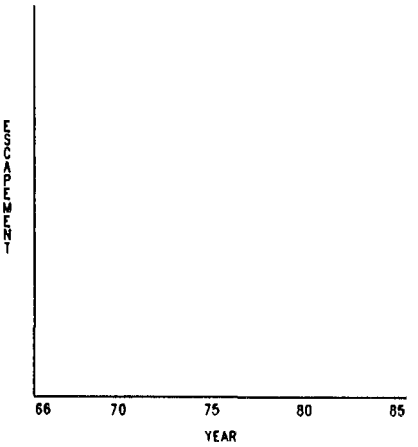
CHINOOK (CH)



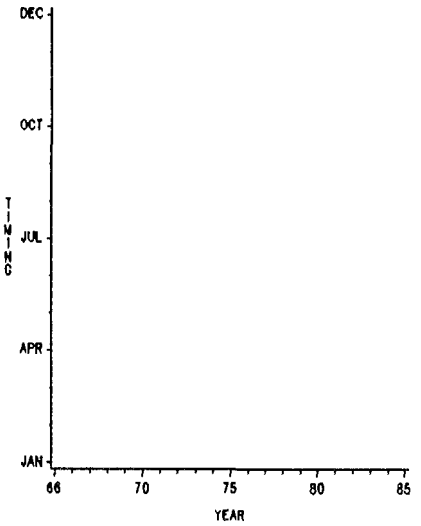
CHINOOK



STEELHEAD (ST)



STEELHEAD



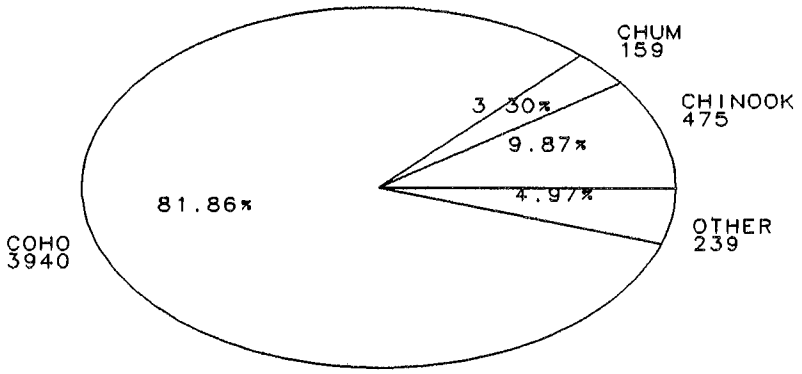
CHUM

YEAR	ESCAPEMENT	START	PEAK	END
1966	400	OCT 15	NOV 15	DEC 15
1967	750	OCT 15	NOV 15	DEC 15
1968	3500	SEP 16	NOV 24	DEC 15
1969	200	NOV 15	NOV 20	NOV 30
1970	7500	SEP 22	OCT 07	NOV 15
1971	-	-	-	-
1972	3500	SEP 28	-	NOV 12
1973	200	OCT 15	OCT 15	NOV 15
1974	-	-	-	-
1975	200	NOV 17	NOV 30	DEC 31
1976	-	-	-	-
1977	25	SEP 10	OCT 16	OCT 30
1978	25	-	-	-
1979	25	OCT 26	NOV 05	NOV 22
1980	100	OCT 26	NOV 15	NOV 22
1981	200	NOV 02	NOV 26	DEC 05
1982	225	NOV 04	NOV 28	DEC 07
1983	200	NOV 04	NOV 28	DEC 07
1984	500	NOV 04	NOV 28	DEC 07
1985	300	NOV 04	NOV 28	DEC 07

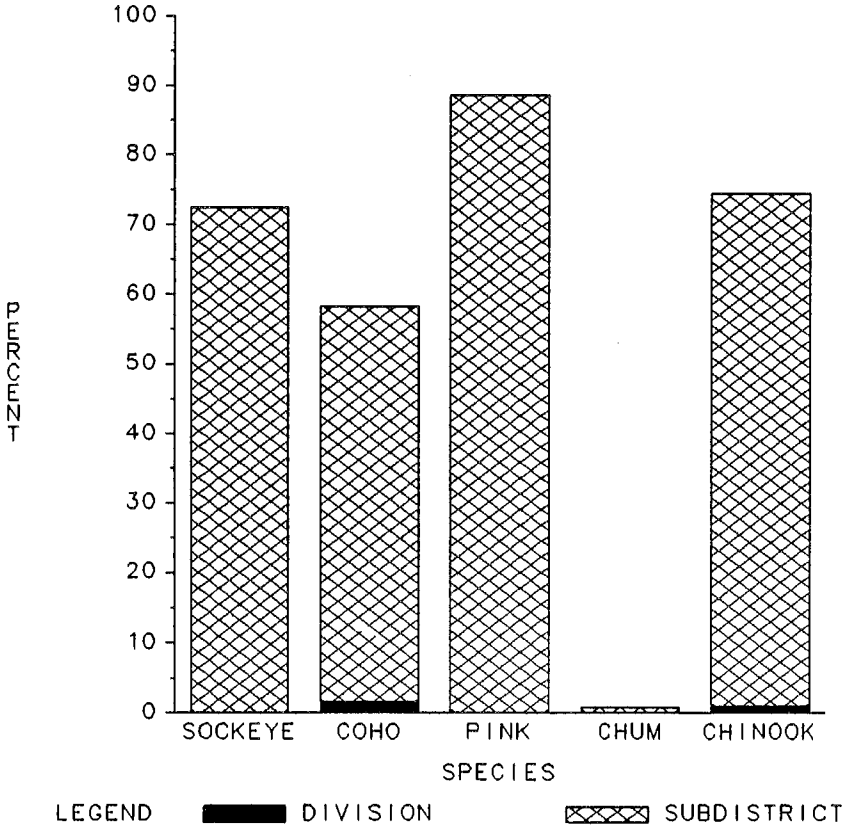
CHINOOK

YEAR	ESCAPEMENT	START	PEAK	END
1966	1500	JUL 15	AUG 15	NOV 15
1967	400	JUL 15	AUG 15	SEP 15
1968	750	OCT 12	NOV 15	NOV 30
1969	400	SEP 28	OCT 05	NOV 21
1970	7500	OCT 05	OCT 15	NOV 15
1971	400	SEP 30	OCT 05	NOV 15
1972	3500	SEP 26	OCT 04	OCT 10
1973	3500	OCT 15	OCT 15	NOV 15
1974	750	SEP 01	SEP 15	OCT 01
1975	200	SEP 08	OCT 15	NOV 15
1976	75	SEP 20	OCT 05	OCT 15
1977	75	SEP 07	OCT 15	OCT 30
1978	50	SEP 01	SEP 15	OCT 15
1979	400	SEP 05	OCT 23	NOV 01
1980	500	SEP 15	OCT 30	NOV 10
1981	750	SEP 05	SEP 28	OCT 12
1982	775	SEP 07	SEP 30	OCT 14
1983	775	SEP 07	SEP 30	OCT 14
1984	1200	SEP 07	SEP 30	OCT 14
1985	150	OCT 15	OCT 20	NOV 10

SAN JUAN RIVER
10 YR. AVG. ESCAPEMENT
(1976-1985)



SAN JUAN RIVER AVG. ESCAPEMENT (1976-1985)
(EXPRESSED AS A PERCENTAGE OF
SUBDISTRICT AND DIVISION AVERAGE ESCAPEMENT)



ESCAPEMENT : FALLS CREEK

WATERSHED-CODE : 93-1000-030

YEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK	STEELHEAD
53	UNK	UNK	UNK	UNK	UNK	UNK
54	UNK	UNK	UNK	UNK	UNK	UNK
55	UNK	UNK	UNK	UNK	UNK	UNK
56	UNK	UNK	UNK	UNK	UNK	UNK
57	UNK	UNK	UNK	UNK	UNK	UNK
58	UNK	UNK	UNK	UNK	UNK	UNK
59	UNK	UNK	UNK	UNK	UNK	UNK
60	UNK	UNK	UNK	UNK	UNK	UNK
61	UNK	UNK	UNK	UNK	UNK	UNK
62	UNK	UNK	UNK	UNK	UNK	UNK
63	UNK	UNK	UNK	UNK	UNK	UNK
64	UNK	UNK	UNK	UNK	UNK	UNK
65	UNK	UNK	UNK	UNK	UNK	UNK
66	UNK	UNK	UNK	UNK	UNK	UNK
67	UNK	UNK	UNK	UNK	UNK	UNK
68	UNK	UNK	UNK	UNK	UNK	UNK
69	UNK	UNK	UNK	UNK	UNK	UNK
70	UNK	UNK	UNK	UNK	UNK	UNK
71	UNK	UNK	UNK	UNK	UNK	UNK
72	UNK	UNK	UNK	UNK	UNK	UNK
73	UNK	UNK	UNK	UNK	UNK	UNK
74	UNK	UNK	UNK	UNK	UNK	UNK
75	UNK	UNK	UNK	UNK	UNK	UNK
76	UNK	UNK	UNK	UNK	UNK	UNK
77	UNK	UNK	UNK	UNK	UNK	UNK
78	UNK	UNK	UNK	UNK	UNK	UNK
79	UNK	UNK	UNK	UNK	UNK	UNK
80	UNK	UNK	UNK	UNK	UNK	UNK
81	0	25	0	0	0	0
82	UNK	UNK	UNK	UNK	UNK	UNK
83	UNK	UNK	UNK	UNK	UNK	UNK
84	0	0	0	0	0	0
85	UNK	UNK	UNK	UNK	UNK	UNK
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						

N/O = STREAM INSPECTED,NO FISH OBSERVED
UNK = STREAM NOT INSPECTED,OR NOT INSPECTED FOR SPECIES INDICATED,
OR SPECIES PRESENT BUT NO ESTIMATE MADE.

ESCAPEMENT : MOSQUITO CREEK

WATERSHED-CODE : 93-1000-050

YEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK	STEELHEAD
53	UNK	UNK	UNK	UNK	UNK	UNK
54	UNK	UNK	UNK	UNK	UNK	UNK
55	UNK	UNK	UNK	UNK	UNK	UNK
56	UNK	UNK	UNK	UNK	UNK	UNK
57	UNK	UNK	UNK	UNK	UNK	UNK
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60	UNK	UNK	UNK	UNK	UNK	UNK
61	UNK	UNK	UNK	UNK	UNK	UNK
62	UNK	UNK	UNK	UNK	UNK	UNK
63	UNK	UNK	UNK	UNK	UNK	UNK
64	UNK	UNK	UNK	UNK	UNK	UNK
65	UNK	UNK	UNK	UNK	UNK	UNK
66	UNK	UNK	UNK	UNK	UNK	UNK
67	UNK	UNK	UNK	UNK	UNK	UNK
68	UNK	UNK	UNK	UNK	UNK	UNK
69	UNK	UNK	UNK	UNK	UNK	UNK
70	UNK	UNK	UNK	UNK	UNK	UNK
71	UNK	UNK	UNK	UNK	UNK	UNK
72	UNK	UNK	UNK	UNK	UNK	UNK
73	UNK	UNK	UNK	UNK	UNK	UNK
74	UNK	UNK	UNK	UNK	UNK	UNK
75	UNK	UNK	UNK	UNK	UNK	UNK
76	UNK	UNK	UNK	UNK	UNK	UNK
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79	UNK	UNK	UNK	UNK	UNK	UNK
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84	0	0	0	0	0	0
85	UNK	UNK	UNK	UNK	UNK	UNK
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						

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UNK = STREAM NOT INSPECTED,OR NOT INSPECTED FOR SPECIES INDICATED,
OR SPECIES PRESENT BUT NO ESTIMATE MADE.

ESCAPEMENT : RENFREW CREEK

WATERSHED-CODE : 93-1000-070-001

YEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK	STEELHEAD
53	UNK	UNK	UNK	UNK	UNK	UNK
54	UNK	UNK	UNK	UNK	UNK	UNK
55	UNK	UNK	UNK	UNK	UNK	UNK
56	UNK	UNK	UNK	UNK	UNK	UNK
57	UNK	UNK	UNK	UNK	UNK	UNK
58	UNK	UNK	UNK	UNK	UNK	UNK
59	UNK	UNK	UNK	UNK	UNK	UNK
60	UNK	UNK	UNK	UNK	UNK	UNK
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62	UNK	UNK	UNK	UNK	UNK	UNK
63	UNK	UNK	UNK	UNK	UNK	UNK
64	UNK	UNK	UNK	UNK	UNK	UNK
65	UNK	UNK	UNK	UNK	UNK	UNK
66	UNK	UNK	UNK	UNK	UNK	UNK
67	UNK	UNK	UNK	UNK	UNK	UNK
68	UNK	UNK	UNK	UNK	UNK	UNK
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71	UNK	UNK	UNK	UNK	UNK	UNK
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73	UNK	UNK	UNK	UNK	UNK	UNK
74	UNK	UNK	UNK	UNK	UNK	UNK
75	UNK	UNK	UNK	UNK	UNK	UNK
76	UNK	UNK	UNK	UNK	UNK	UNK
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78	UNK	UNK	UNK	UNK	UNK	UNK
79	UNK	UNK	UNK	UNK	UNK	UNK
80	200	50	0	50	0	0
81	75	75	0	25	0	0
82	UNK	UNK	UNK	UNK	UNK	UNK
83	UNK	UNK	UNK	UNK	UNK	UNK
84	200	300	0	150	0	0
85	UNK	UNK	UNK	UNK	UNK	UNK
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						

N/O = STREAM INSPECTED,NO FISH OBSERVED
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ESCAPEMENT : HARRIS CREEK

WATERSHED-CODE : 93-1000-120

YEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK	STEELHEAD
53	UNK	UNK	UNK	UNK	UNK	UNK
54	UNK	UNK	UNK	UNK	UNK	UNK
55	UNK	UNK	UNK	UNK	UNK	UNK
56	UNK	UNK	UNK	UNK	UNK	UNK
57	UNK	UNK	UNK	UNK	UNK	UNK
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79	UNK	UNK	UNK	UNK	UNK	UNK
80	0	800	0	0	20	0
81	0	750	0	0	25	0
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84	0	8000	0	0	100	0
85	UNK	UNK	UNK	UNK	UNK	UNK
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						

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UNK = STREAM NOT INSPECTED,OR NOT INSPECTED FOR SPECIES INDICATED,
OR SPECIES PRESENT BUT NO ESTIMATE MADE.

ESCAPEMENT : HEMMINGSEN CREEK

WATERSHED-CODE : 93-1000-120-015

YEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK	STEELHEAD
53	UNK	UNK	UNK	UNK	UNK	UNK
54	UNK	UNK	UNK	UNK	UNK	UNK
55	UNK	UNK	UNK	UNK	UNK	UNK
56	UNK	UNK	UNK	UNK	UNK	UNK
57	UNK	UNK	UNK	UNK	UNK	UNK
58	UNK	UNK	UNK	UNK	UNK	UNK
59	UNK	UNK	UNK	UNK	UNK	UNK
60	UNK	UNK	UNK	UNK	UNK	UNK
61	UNK	UNK	UNK	UNK	UNK	UNK
62	UNK	UNK	UNK	UNK	UNK	UNK
63	UNK	UNK	UNK	UNK	UNK	UNK
64	UNK	UNK	UNK	UNK	UNK	UNK
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66	UNK	UNK	UNK	UNK	UNK	UNK
67	UNK	UNK	UNK	UNK	UNK	UNK
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70	UNK	UNK	UNK	UNK	UNK	UNK
71	UNK	UNK	UNK	UNK	UNK	UNK
72	UNK	UNK	UNK	UNK	UNK	UNK
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75	UNK	UNK	UNK	UNK	UNK	UNK
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81	0	3500	0	0	0	0
82	UNK	UNK	UNK	UNK	UNK	UNK
83	UNK	UNK	UNK	UNK	UNK	UNK
84	0	2000	0	0	0	0
85	UNK	UNK	UNK	UNK	UNK	UNK
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						

N/O = STREAM INSPECTED,NO FISH OBSERVED
UNK = STREAM NOT INSPECTED,OR NOT INSPECTED FOR SPECIES INDICATED,
OR SPECIES PRESENT BUT NO ESTIMATE MADE.

ESCAPEMENT : LENS CREEK

WATERSHED-CODE : 93-1000-150

YEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK	STEELHEAD
53	UNK	UNK	UNK	UNK	UNK	UNK
54	UNK	UNK	UNK	UNK	UNK	UNK
55	UNK	UNK	UNK	UNK	UNK	UNK
56	UNK	UNK	UNK	UNK	UNK	UNK
57	UNK	UNK	UNK	UNK	UNK	UNK
58	UNK	UNK	UNK	UNK	UNK	UNK
59	UNK	UNK	UNK	UNK	UNK	UNK
60	UNK	UNK	UNK	UNK	UNK	UNK
61	UNK	UNK	UNK	UNK	UNK	UNK
62	UNK	UNK	UNK	UNK	UNK	UNK
63	UNK	UNK	UNK	UNK	UNK	UNK
64	UNK	UNK	UNK	UNK	UNK	UNK
65	UNK	UNK	UNK	UNK	UNK	UNK
66	UNK	UNK	UNK	UNK	UNK	UNK
67	UNK	UNK	UNK	UNK	UNK	UNK
68	UNK	UNK	UNK	UNK	UNK	UNK
69	UNK	UNK	UNK	UNK	UNK	UNK
70	UNK	UNK	UNK	UNK	UNK	UNK
71	UNK	UNK	UNK	UNK	UNK	UNK
72	UNK	UNK	UNK	UNK	UNK	UNK
73	UNK	UNK	UNK	UNK	UNK	UNK
74	UNK	UNK	UNK	UNK	UNK	UNK
75	UNK	UNK	UNK	UNK	UNK	UNK
76	UNK	UNK	UNK	UNK	UNK	UNK
77	UNK	UNK	UNK	UNK	UNK	UNK
78	UNK	UNK	UNK	UNK	UNK	UNK
79	UNK	UNK	UNK	UNK	UNK	UNK
80	UNK	UNK	UNK	UNK	UNK	UNK
81	0	400	0	0	0	0
82	UNK	UNK	UNK	UNK	UNK	UNK
83	UNK	UNK	UNK	UNK	UNK	UNK
84	0	0	0	0	0	0
85	UNK	UNK	UNK	UNK	UNK	UNK
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						

N/O = STREAM INSPECTED,NO FISH OBSERVED
UNK = STREAM NOT INSPECTED,OR NOT INSPECTED FOR SPECIES INDICATED, OR SPECIES PRESENT BUT NO ESTIMATE MADE.

ESCAPEMENT : GORDON RIVER

WATERSHED-CODE : 93-1100

YEAR	SOCKEYE	COHO	PINK	CHUM	CHINOOK	STEELHEAD
53	0	750	0	75	200	N/O
54	0	1500	1500	1500	200	400
55	0	400	75	75	75	75
56	0	7500	1500	200	25	400
57	0	750	0	75	25	750
58	0	1500	750	1500	200	750
59	0	750	N/O	750	75	750
60	0	7500	750	1500	200	UNK
61	0	1500	0	1500	75	0
62	1	3500	750	3500	200	0
63	UNK	3500	0	750	750	3500
64	0	3500	25	200	200	1500
65	0	7500	0	1500	200	0
66	0	1500	UNK	750	75	0
67	0	1500	400	0	750	75
68	0	750	0	1500	400	0
69	0	400	0	200	200	0
70	0	3500	0	1500	750	0
71	0	750	0	N/O	750	0
72	0	1500	0	N/O	3500	0
73	0	3500	0	75	400	N/O
74	0	1500	0	750	200	0
75	UNK	25	UNK	200	25	UNK
76	0	75	N/O	200	N/O	0
77	0	200	0	200	25	0
78	0	300	0	150	50	0
79	N/O	25	25	75	25	0
80	0	1000	100	50	20	0
81	0	750	0	75	75	0
82	0	200	0	75	75	0
83	0	200	0	75	75	0
84	0	1000	0	200	150	0
85	N/O	12	N/O	3500	8	0
86						
87						
88						
89						
90						
91						
92						
93						
94						
95						

N/O = STREAM INSPECTED,NO FISH OBSERVED
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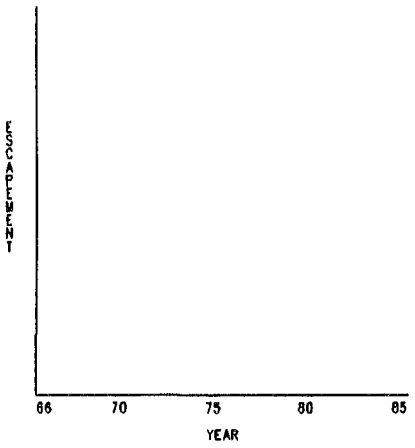
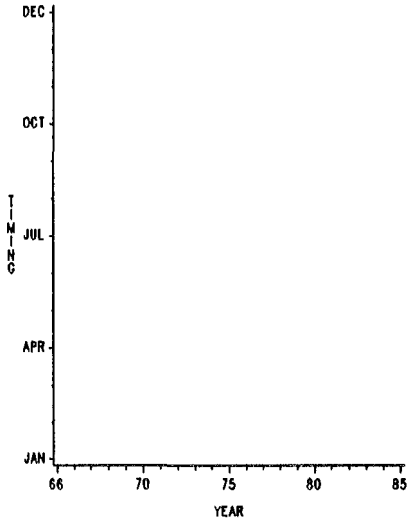
GORDON RIVER (93-1100)
ESCAPEMENT AND RUN TIMING

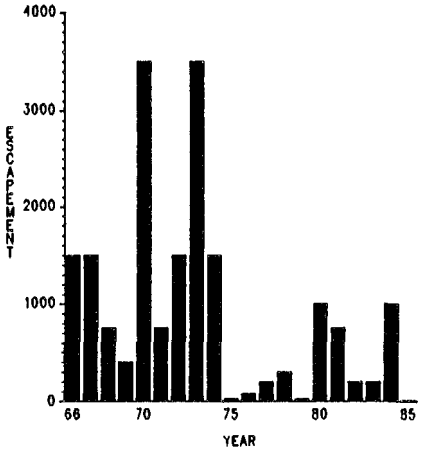
SOCKEYE (SK)



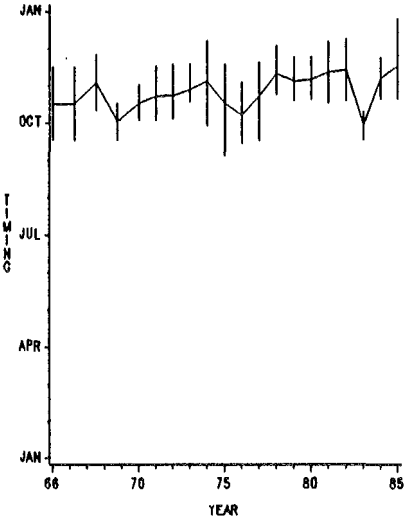
SOCKEYE



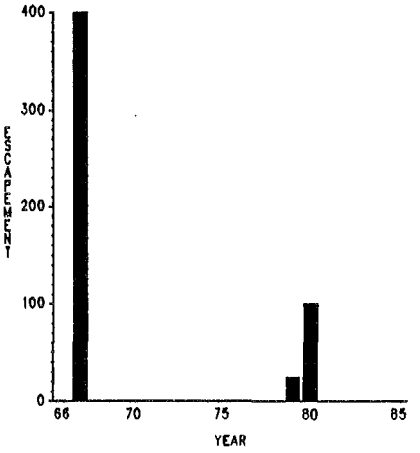
COHO (CO)



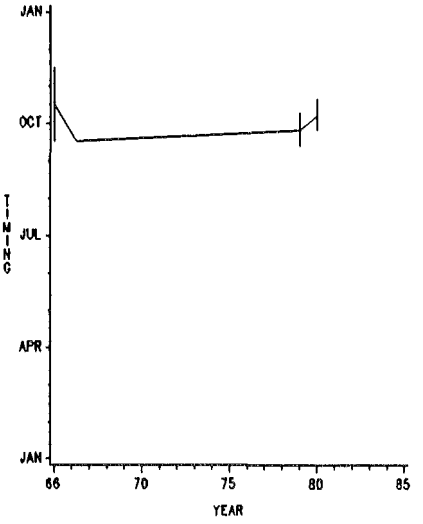
COHO



PINK (PK)



PINK



COHO

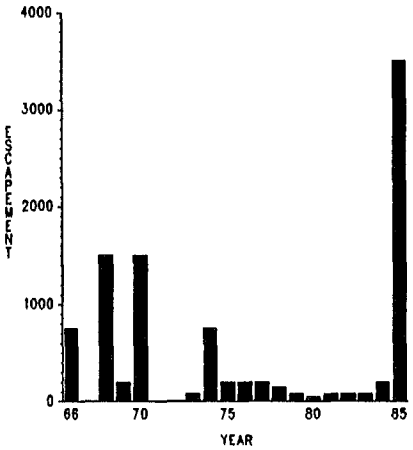
YEAR	ESCAPEMENT	START	PEAK	END
1966	1500	SEP 15	OCT 15	NOV 15
1967	1500	SEP 15	OCT 15	NOV 15
1968	750	OCT 09	NOV 24	DEC 31
1969	400	SEP 15	SEP 30	OCT 15
1970	3500	OCT 01	OCT 15	OCT 30
1971	750	OCT 01	OCT 15	NOV 15
1972	1500	OCT 01	OCT 15	NOV 15
1973	3500	OCT 15	OCT 15	NOV 15
1974	1500	SEP 25	NOV 05	DEC 05
1975	25	SEP 01	OCT 25	NOV 15
1976	75	SEP 10	OCT 01	OCT 30
1977	200	SEP 12	OCT 28	NOV 16
1978	300	OCT 20	NOV 01	NOV 30
1979	25	OCT 15	OCT 28	NOV 20
1980	1000	OCT 15	OCT 30	NOV 20
1981	750	OCT 12	NOV 08	DEC 02
1982	200	OCT 14	NOV 10	DEC 04
1983	200	SEP 12	SEP 24	OCT 05
1984	1000	OCT 15	OCT 31	NOV 18
1985	12	OCT 15	OCT 31	DEC 20

PINK

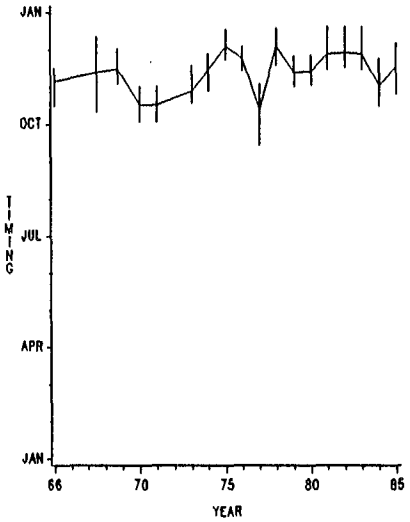
YEAR	ESCAPEMENT	START	PEAK	END
1966	-	SEP 15	OCT 15	NOV 15
1967	400	-	-	SEP 15
1968	-	-	-	-
1969	-	-	-	-
1970	-	-	-	-
1971	-	-	-	-
1972	-	-	-	-
1973	-	-	-	-
1974	-	-	-	-
1975	-	-	-	-
1976	-	-	-	-
1977	-	-	-	-
1978	-	-	-	-
1979	25	SEP 08	SEP 20	OCT 05
1980	100	SEP 20	SEP 30	OCT 15
1981	-	-	-	-
1982	-	-	-	-
1983	-	-	-	-
1984	-	-	-	-
1985	-	-	-	-

GORDON RIVER (93-1100)
ESCAPEMENT AND RUN TIMING

CHUM (CM)

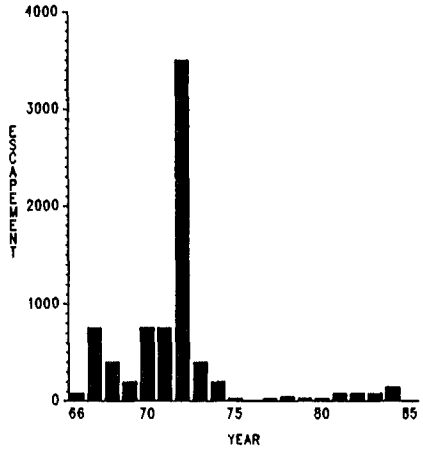


CHUM

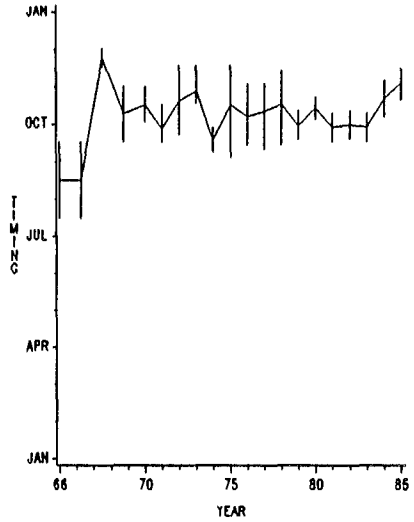


CHUM				
YEAR	ESCAPEMENT	START	PEAK	END
1966	750	OCT 15	NOV 15	NOV 15
1967	-	-	-	-
1968	1500	OCT 09	NOV 14	DEC 10
1969	200	NOV 01	NOV 10	NOV 30
1970	1500	OCT 01	OCT 15	OCT 30
1971	-	OCT 01	OCT 15	OCT 30
1972	-	-	-	-
1973	75	OCT 15	OCT 15	NOV 15
1974	750	OCT 25	NOV 15	NOV 25
1975	200	NOV 20	NOV 30	DEC 15
1976	200	NOV 10	NOV 20	NOV 30
1977	200	SEP 10	OCT 16	OCT 30
1978	150	NOV 15	DEC 01	DEC 15
1979	75	OCT 28	NOV 07	NOV 22
1980	50	OCT 28	NOV 07	NOV 22
1981	75	NOV 10	NOV 15	DEC 15
1982	75	NOV 12	NOV 15	DEC 15
1983	75	NOV 10	NOV 15	DEC 15
1984	200	OCT 10	OCT 20	NOV 18
1985	3500	OCT 20	NOV 15	DEC 01

CHINOOK (CH)

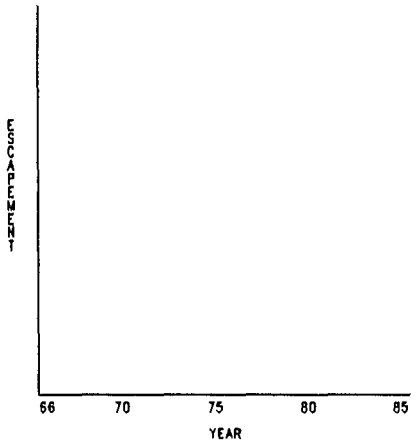


CHINOOK

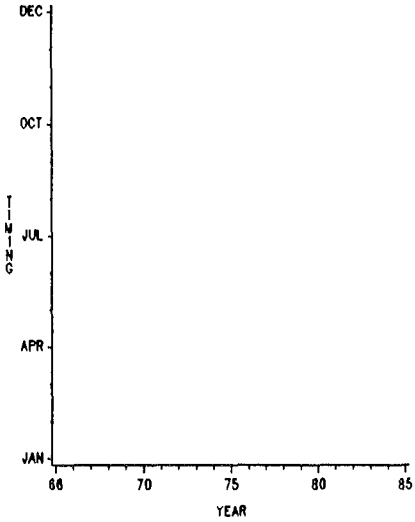


CHINOOK				
YEAR	ESCAPEMENT	START	PEAK	END
1966	75	JUL 15	AUG 15	SEP 15
1967	750	JUL 15	AUG 15	SEP 15
1968	400	NOV 15	NOV 30	DEC 31
1969	200	SEP 15	OCT 07	OCT 30
1970	750	OCT 01	OCT 15	OCT 30
1971	750	SEP 15	SEP 15	OCT 15
1972	3500	SEP 20	OCT 15	NOV 15
1973	400	OCT 15	OCT 15	NOV 15
1974	200	SEP 05	SEP 15	SEP 25
1975	25	SEP 01	OCT 25	NOV 15
1976	-	SEP 10	OCT 01	OCT 30
1977	25	SEP 07	OCT 15	OCT 30
1978	50	SEP 10	OCT 20	NOV 10
1979	25	SEP 15	SEP 25	OCT 08
1980	20	SEP 30	OCT 10	OCT 18
1981	75	SEP 12	SEP 24	OCT 05
1982	75	SEP 14	SEP 26	OCT 07
1983	75	SEP 12	SEP 24	OCT 05
1984	150	OCT 01	OCT 15	OCT 31
1985	8	OCT 15	NOV 01	NOV 10

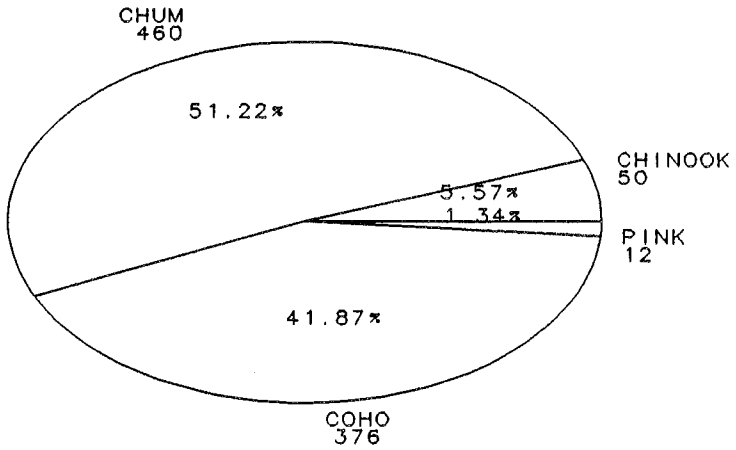
STEELHEAD (ST)



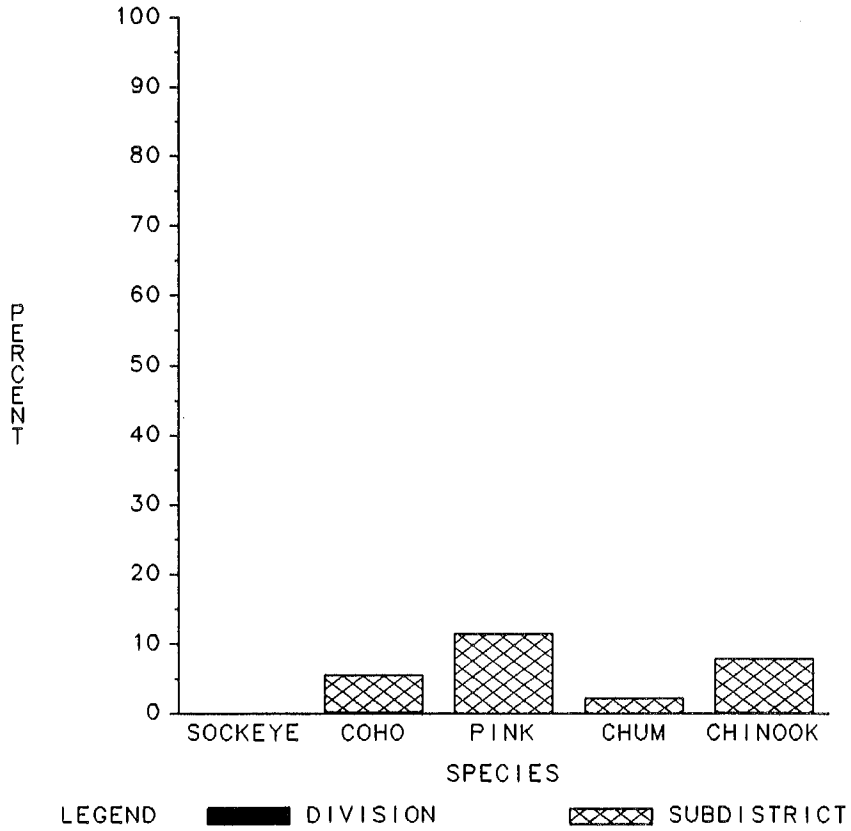
STEELHEAD



GORDON RIVER
10 YR. AVG. ESCAPEMENT
(1976-1985)



GORDON RIVER AVG. ESCAPEMENT (1976-1985)
(EXPRESSED AS A PERCENTAGE OF
SUBDISTRICT AND DIVISION AVERAGE ESCAPEMENT)



5.0 MAPS

This section contains the following Stream Information Summary Maps:

92B/5 Sooke
92B/12 Shawnigan Lake
92C/8 River Jordan
92C/9 Port Renfrew
92C/10 Carmanah Creek
92C/16 Cowichan Lake

Produced by the SURVEYS AND MAPPING BRANCH, DEPARTMENT OF ENERGY, MINES AND RESOURCES. Post aerial photographs taken in 1976. Culture check 1978. Published in 1981.

Copies may be obtained from the Canada Map Office, Department of Energy, Mines and Resources, Ottawa, or your nearest map dealer.

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Roads:	Routes:	
hard surface, all weather	pavée, toute saison	Dual highway 4 or more lanes / Chaussées séparées 4 voies et plus; 2 lanes / 2 voies; 2 lanes or more / 2 voies ou plus; more than 2 lanes / plus de 2 voies; less than 2 lanes / moins de 2 voies; less than 2 lanes / moins de 2 voies
hard surface, all weather	pavée, toute saison	
loose or stabilized surface, all weather	gravier, aggloméré, toute saison	
loose surface, dry weather	de gravier, temps sec	
unclassified streets	rues hors classe	
cart track	de terre	
trail, cut line or portage	sentier, percée ou portage	

SOOKE
BRITISH COLUMBIA

Scale 1:50 000 Échelle

Miles 1 0 1 2 3 Milles

Metres 1000 0 1000 2000 3000 4000 Mètres

Yards 1000 0 1000 2000 3000 4000 Verges

Information concerning location and precise elevation of bench marks can be obtained by writing to the Geodetic Survey, Surveys and Mapping Branch, Ottawa.

CONVERSION SCALE FOR ELEVATIONS

Metres 30 20 10 0 50 100 150

Feet 100 50 0 100 200 300 400 500 600 700 800 900 1000 Pieds

CONTOUR INTERVAL 20 METRES
Elevations in Metres above Mean Sea Level
North American Datum 1927

On peut obtenir des renseignements sur la lieu et l'altitude exacte des repères de nivellement en écrivant aux Levés géodésiques, Direction des levés et de la cartographie, Ottawa.

ÉCHELLE DE CONVERSION DES ALTITUDES

ÉQUIDISTANCE DES COURBES 20 MÈTRES
Altitudes en mètres
Système de référence géodésique nord-américain, 1927

Établie par la DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES, à l'aide de photographies aériennes prises en 1976. Vérification des ouvrages en 1978. Publiée en 1981.

Ces cartes sont en vente au Bureau des Cartes du Canada, ministère de l'Énergie, des Mines et des Ressources, Ottawa, ou chez le vendeur le plus près.

© 1981. Sa Majesté La Reine du Chef du Canada. Ministère de l'Énergie, des Mines et des Ressources.

Military users, refer to this map as: / Référence de cette carte pour usage militaire:	SERIES / SÉRIE	A721
	MAP / CARTE	92 B/5
	EDITION / ÉDITION	4 MCE

GLOSSARY GLOSSAIRE

Airfield	Terrain d'aviation
Arena	Aréna
City Limits	Limites de ville
Contours	Courbes
Ditch	Fossé
Dugout	Abreuvoir
Dump	Dépotoir
Filtration Plant	Usine de filtration
Gas	Gaz
Golf Course	Terrain de golf
Junk Yard	Ferraille
Kiln	Four
Lookout	Belvédère
Mine Waste	Déblai de mine
Oil Wells	Puits de pétrole
Park	Parc
Rink	Patinoire
Senior Citizens Home	Foyer de l'âge d'or
Ski Area	Station de ski
Stinking Bog	Fondrière à filaments
Surveyed Line	Ligne arpentée
Tank	Réservoir
Water	Eau
Winter Road	Chemin d'hiver

For a complete glossary see reverse side
Pour un glossaire complet, voir au verso

DFO/MOEF FISH HABITAT INVENTORY AND INFORMATION PROGRAM
STREAM INFORMATION SUMMARY

91-2900 / CO CM ST — Watershed Code and Species Summary

SPECIES INFORMATION

SK CO PK CM CH — species present

CO ST — lower limit of distribution

CO ST — upper limit of distribution

PK* — specific site of spawning

SK*, CO CO CO* — major spawning zone

CM* — upper limit of spawning

FLOW

OBSTRUCTIONS (measurements included where known)

log jam (persistent)

3F — D = dam; F = falls (3m high); CV = culvert; BD = beaver dam

2C100 — cascade, chute or canyon (height = 2m, length = 100m)

ENHANCEMENT/MANAGEMENT ACTIVITIES

HY — HY = hatchery; FW = fishway; SC = side channel; CH = spawning channel

WSC08FB003 — Water Survey of Canada Gauging Station

-300 / CO — tributary watershed code

SPECIES ABBREVIATION LIST

SK - Sockeye	BS - Bass (general)
CO - Coho	CT - Cutthroat
PK - Pink	DV - Dolly Varden
CM - Chum	KO - Kokanee
CH - Chinook	LT - Lake trout
ST - Steelhead	LW - Lake whitefish
AF - All fish	MW - Mountain whitefish
AO - All salmon	RB - Rainbow
	TR - Trout (general)

This Stream Information Summary map complements a companion Stream Summary Catalogue, organized by DFO Subdistrict. Maps and files are organized by watershed code.

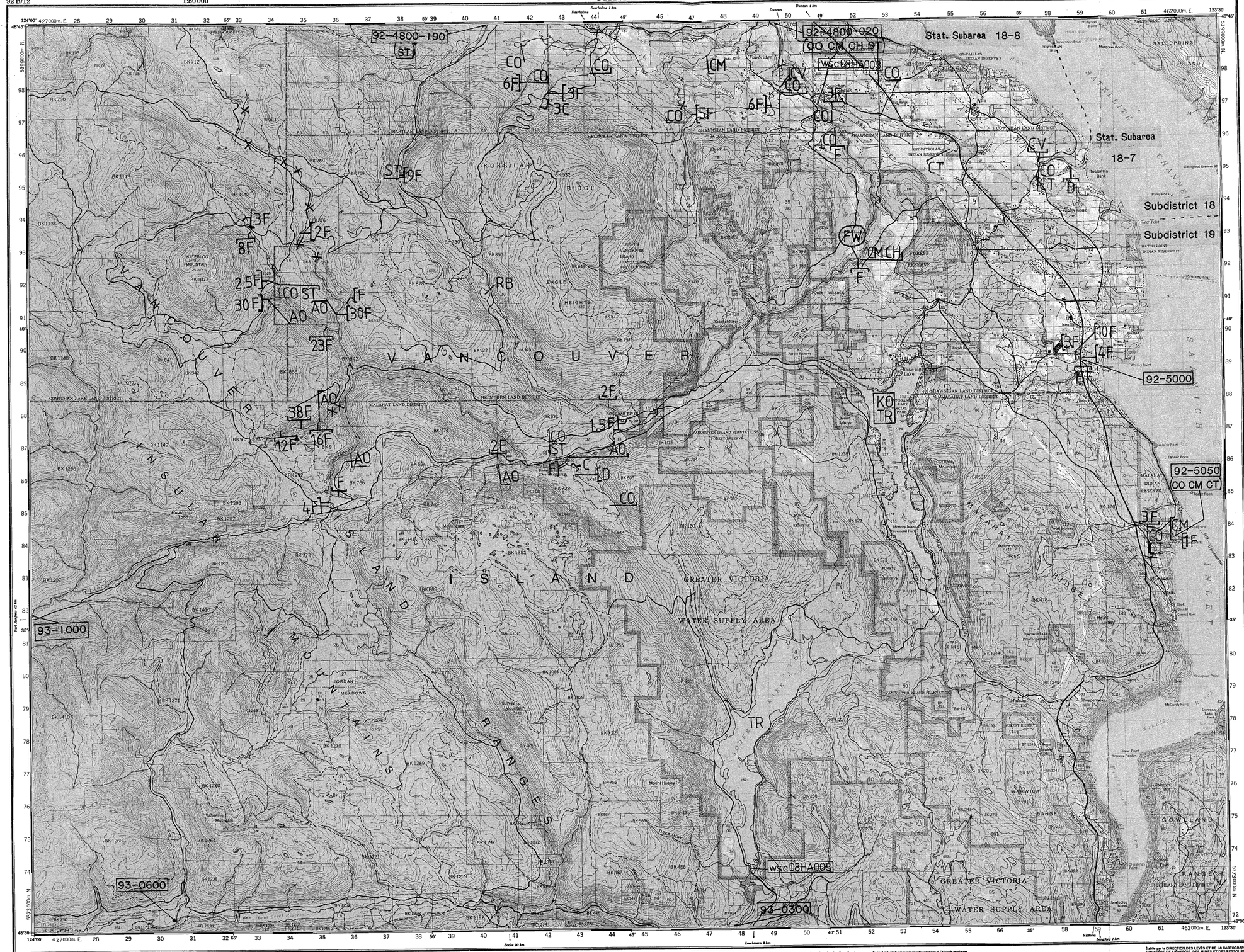
TABLEAU D'ASSEMBLAGE DU SYSTÈME NATIONAL DE RÉFÉRENCE CARTOGRAPHIQUE

92 C/9	92 B/12	92 B/11
92 C/8	92 B/5	92 B/6
USA	USA	USA

INDEX TO ADJOINING MAPS OF THE NATIONAL TOPOGRAPHIC SYSTEM

SEPT. 1987

SOOKE
92 B/5
EDITION 4



Military users, refer to this map as: / Référence de cette carte pour usage militaire.

SERIES	A 721	SÉRIE	
MAP	92 B/12	CARTE	
EDITION	4 MCE	ÉDITION	

GLOSSARY GLOSSAIRE

Airfield	Terrain d'aviation
Arena	Aréna
City Limits	Limites de ville
Customs	Douane
Ditch	Fossé
Dugout	Abreuvoir
Dump	Décharge
Filtration Plant	Usine de filtration
Gas	Gaz
Golf Course	Terrain de golf
Junk Yard	Ferraille
Kiln	Four
Lookout	Belvédère
Mine Waste	Débris de mine
Oil Wells	Puits de pétrole
Park	Parc
Rink	Patinoire
Senior Citizens Home	Foyer de l'âge d'or
Ski Area	Station de ski
String Bog	Fondrière à filaments
Surveyed Line	Ligne arpentée
Tank	Réservoir
Water	Eau
Winter Road	Chemin d'hiver

For a complete glossary see reverse side
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DFO/MOEP FISH HABITAT INVENTORY AND INFORMATION PROGRAM STREAM INFORMATION SUMMARY

91-2900 CO CM ST — Watershed Code and Species Summary

SPECIES INFORMATION

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FLOW

OBSTRUCTIONS (measurements included where known)

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2C100 — cascade, chute or canyon (height = 2m, length = 100m)

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-300 CO — tributary watershed code

SPECIES ABBREVIATION LIST

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PK - Pink	DV - Dolly Varden
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AF - All fish	MW - Mountain whitefish
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This Stream Information Summary map complements a companion Stream Summary Catalogue, organized by DFO Subdistrict. Maps and files are organized by watershed code.

TABLEAU D'ASSEMBLAGE DU SYSTÈME NATIONAL DE RÉFÉRENCE CARTOGRAPHIQUE

92 C/16	92 B/13	92 B/14
92 C/9	92 B/12	92 B/11
92 C/8	92 B/5	92 B/6

INDEX TO ADJOINING MAPS OF THE NATIONAL TOPOGRAPHIC SYSTEM

SEPT. 1987

SHAWNIGAN LAKE
92 B/12
EDITION 4

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Roads: / Routes:
hard surface, all weather — pavée, toute saison — dual highway / chaussée séparée — more than 2 lanes / plus de 2 voies — 2 lanes / 2 voies — less than 2 lanes / moins de 2 voies
hard surface, all weather — pavée, toute saison
loose or stabilized surface, all weather — gravier, agglomeré, toute saison
loose surface, dry weather — de gravier, temps sec
unclassified streets — rues hors classe
cart track — de terre
trail, cut line or portage — sentier, percée ou portage

FOR COMPLETE REFERENCE SEE REVERSE SIDE — POUR UNE LISTE COMPLÈTE DES SIGNES VOIR AU VERSO

SHAWNIGAN LAKE
BRITISH COLUMBIA

Scale 1:50 000 Échelle

Miles 1 0 1 2 3 Miles
Metres 1000 0 1000 2000 3000 4000 Mètres
Yards 1000 0 1000 2000 3000 4000 Verges

Information concerning location and precise elevation of bench marks can be obtained by writing to the Geodetic Survey, Surveys and Mapping Branch, Ottawa.

On peut obtenir des renseignements sur le lieu et l'altitude exacte des repères de nivellement en écrivant aux Levés géodésiques, Direction des levés et de la cartographie, Ottawa.

CONVERSION SCALE FOR ELEVATIONS
Metres 30 20 10 0 100 200 300 400 500 600 700 800 900 1000 Metres
Feet 100 50 0 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800 2900 3000 3100 3200 3300 Feet

ÉCHELLE DE CONVERSION DES ALTITUDES
Mètres 30 20 10 0 100 200 300 400 500 600 700 800 900 1000 Mètres
Pieds 100 50 0 100 200 300 400 500 600 700 800 900 1000 1100 1200 1300 1400 1500 1600 1700 1800 1900 2000 2100 2200 2300 2400 2500 2600 2700 2800 2900 3000 3100 3200 3300 Pieds

CONTOUR INTERVAL 20 METRES
Elevations in Metres above Mean Sea Level
North American Datum 1927
Transverse Mercator Projection

ÉQUIDISTANCE DES COURBES 20 MÈTRES
Altitudes en mètres
Système de référence géodésique nord-américain, 1927
Projection transverse de Mercator

Établie par la DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES, à l'aide de photographies aériennes prises en 1976. Vérification des ouvrages en 1978. Publiée en 1980.

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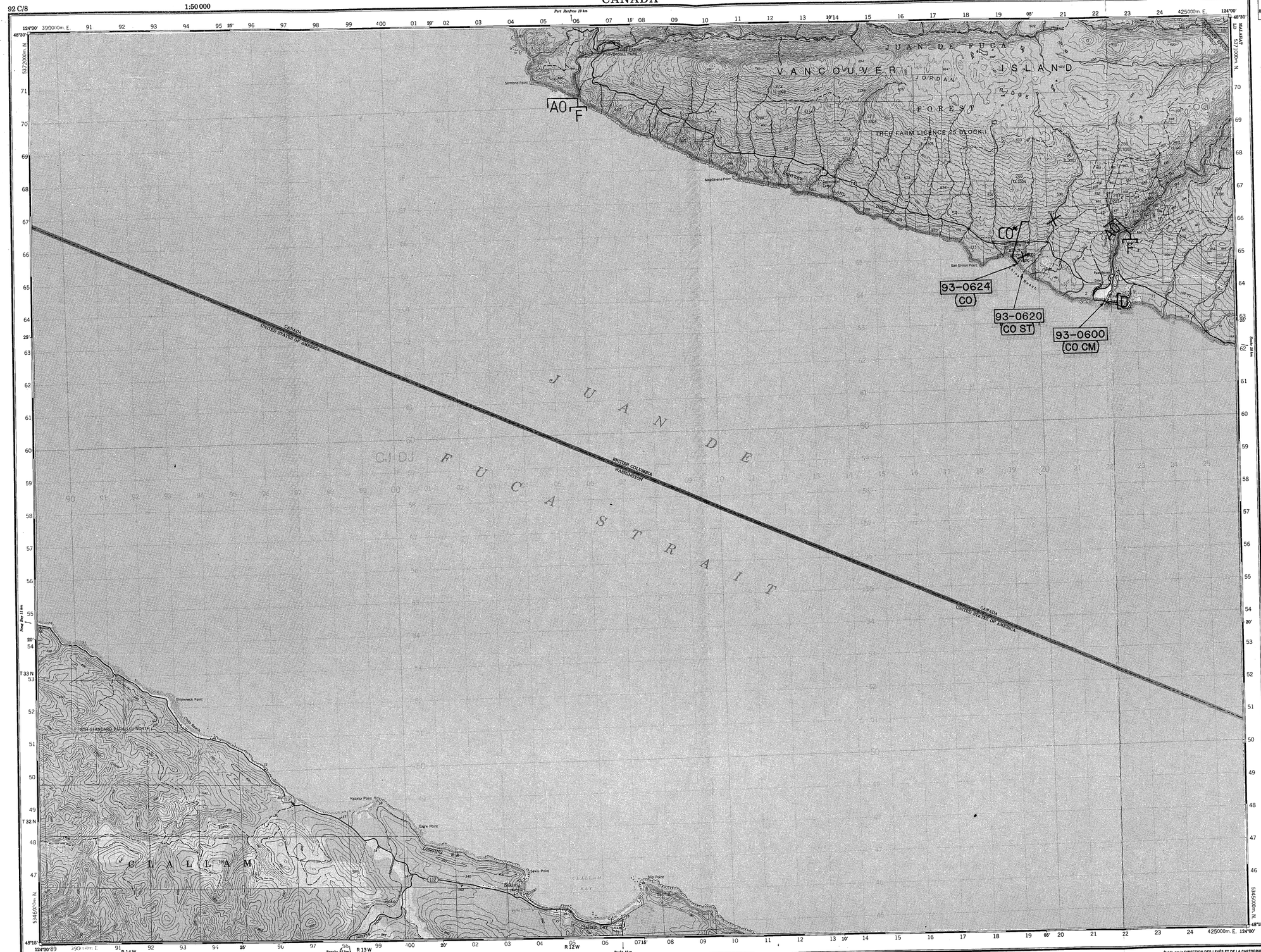

Military users, refer to this map as:
Référence de cette carte pour usage militaire:

SERIES	A721 SÉRIE
MAP	92 C/8 CARTE
EDITION	2 MCE ÉDITION

GLOSSARY GLOSSAIRE

Airfield	Terrain d'aviation
Arena	Aréna
City Limits	Limites de ville
Cookhouse	Douanne
Ditch	Fossé
Dragline	Abreuvoir
Dump	Dépotoir
Flotsation Plant	Usine de flottation
Gas	Gaz
Golf Course	Terrain de golf
Junk Yard	Ferraille
Kiln	Four
Lookout	Belvédère
Mine Waste	Débitat de mine
Oil Wells	Puits de pétrole
Park	Parc
Rink	Patinoire
Senior Citizens Home	Foyer de l'âge d'or
Ski Area	Station de ski
String Bog	Fondrière à filaments
Surveyed Line	Ligne arpentée
Tank	Réservoir
Water	Eau
Winter Road	Chemin d'hiver

For a complete glossary see reverse side
Pour un glossaire complet, voir au verso

DFO/MOEP FISH HABITAT INVENTORY AND INFORMATION PROGRAM STREAM INFORMATION SUMMARY

91-2900 (CO CM ST) Watershed Code and Species Summary

SPECIES INFORMATION

SK CO PK CM CH — species present

CO ST — lower limit of distribution

CO ST — upper limit of distribution

PK* — specific site of spawning

SK* / CO / CO* — major spawning zone

CM* — upper limit of spawning

FLOW

OBSTRUCTIONS (measurements included where known)

log jam (persistent)

3F — D = dam; F = falls (3m high); CV = culvert; BD = beaver dam

2C100 — cascade, chute or canyon (height = 2m, length = 100m)

ENHANCEMENT/MANAGEMENT ACTIVITIES

HY — HY = hatchery; FW = fishway; SC = side channel; CH = spawning channel

WSC08FB003 — Water Survey of Canada Gauging Station

300 CO — tributary watershed code

SPECIES ABBREVIATION LIST

SK - Sockeye	BS - Bass (general)
CO - Coho	CT - Cutthroat
PK - Pink	DV - Dolly Varden
CM - Chum	KO - Kokanee
CH - Chinook	LT - Lake trout
ST - Steelhead	LW - Lake whitefish
AF - All fish	MW - Mountain whitefish
AO - All salmon	RB - Rainbow
	TR - Trout (general)

This Stream Information Summary map complements a companion Stream Summary Catalogue, organized by DFO Subdistrict. Maps and files are organized by watershed code.

TABLEAU D'ASSEMBLAGE DU SYSTÈME NATIONAL DE RÉFÉRENCE CARTOGRAPHIQUE

92 C/10	92 C/9	92 B/12
92 C/7	92 C/8	92 B/5
USA	USA	USA

INDEX TO ADJOINING MAPS OF THE NATIONAL TOPOGRAPHIC SYSTEM

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Roads:	Routes:	dual highway 2 roadways separated	more than 7 lanes plus the 2 lanes	more than 2 lanes plus the 2 lanes	2 lanes plus the 2 lanes
hard surface, all weather	pavée, toute saison				
hard surface, all weather	pavée, toute saison				
loose or stabilized surface, all weather	gravier, aggloméré, toute saison				
loose surface, dry weather	de gravier, temps sec				
unclassified streets	rues hors classe				
cart track	de terre				
trail, cut line or portage	sentier, percée ou portage				

RIVER JORDAN

BRITISH COLUMBIA - WASHINGTON

Scale 1:50,000 Échelle

Miles 1 — 0 — 1 — 2 — 3 Milles

Metres 1000 — 0 — 1000 — 2000 — 3000 — 4000 Mètres

Yards 1000 — 0 — 1000 — 2000 — 3000 — 4000 Verges

Information concerning location and precise elevation of bench marks can be obtained by writing to the Geodetic Survey, Surveys and Mapping Branch, Ottawa.

CONVERSION SCALE FOR ELEVATIONS

Metres 30 20 10 0 — 100 — 50 — 0 — 100 — 200 — 300 — 400 Mètres

Feet 100 50 0 — 100 — 200 — 300 — 400 — 500 — 600 — 700 — 800 — 900 — 1000 Pieds

CONTOUR INTERVAL 20 METRES IN CANADA
Elevations in Metres above Mean Sea Level
CONTOUR INTERVAL 80 FEET IN U.S.A.
North American Datum 1927

On peut obtenir des renseignements sur le lieu et l'altitude exacte des repères de nivellement en écrivant aux Levés géodésiques, Direction des levés et de la cartographie, Ottawa.

ÉCHELLE DE CONVERSION DES ALTITUDES

ÉQUIDISTANCE DES COURBES AU CANADA 20 MÈTRES
Altitudes en mètres
ÉQUIDISTANCE DES COURBES AUX É.-U.A. 80 PIEDS
Système de référence géodésique nord-américain, 1927

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SEPT. 1987

RIVER JORDAN
92 C/8
EDITION 2

Military users, refer to this map as: / Référence de cette carte pour usage militaire:	SERIES / SÉRIE	A 721
	MAP / CARTE	92 C/9
	EDITION 4 MCE / EDITION	

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Interim corrections 1982.

Roads:		Routes:	
hard surface, all weather	pavée, toute saison	dual lanes 2 lanes / chaussée séparée 2 voies	lane(s) 2 lanes / voie(s) 2 voies
hard surface, all weather	pavée, toute saison	2 lanes / 2 voies	less than 2 lanes / moins de 2 voies
loose or stabilized surface, all weather	gravier, aggloméré, toute saison	2 lanes or more / 2 voies et plus	less than 2 lanes / moins de 2 voies
loose surface, dry weather	de gravier, temps sec		
unclassified streets	rues hors classe		
cart track	de terre		
trail, foot line or portage	sentier, percée ou portage		

PORT RENFREW
BRITISH COLUMBIA

Scale 1:50 000 Échelle

Miles 1 0 1 2 3 Milles

Metres 1000 0 1000 2000 3000 4000 Mètres

Yards 1000 0 1000 2000 3000 4000 Verges

Information concerning location and precise elevation of bench marks can be obtained by writing to the Geodetic Survey, Surveys and Mapping Branch, Ottawa.

On peut obtenir des renseignements sur le lieu et l'altitude exacte des repères de nivellement en écrivant au Levés géodésiques, Direction des levés et de la cartographie, Ottawa.

CONVERSION SCALE FOR ELEVATIONS

Metres 30 20 10 0 50 100 150 200 250 300 Mètres

Feet 100 50 0 100 200 300 400 500 600 700 800 900 1000 Pieds

CONTOUR INTERVAL 20 METRES
Elevations in Metres above Mean Sea Level
North American Datum 1927
Transverse Mercator Projection

ÉCHELLE DE CONVERSION DES ALTITUDES

EQUIDISTANCE DES COURBES DE NIVEAUX 20 MÈTRES
Altitudes en mètres
Système de référence géodésique nord-américain, 1927
Projection transverse de Mercator

Corrections provisoires 1982.

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GLOSSARY GLOSSAIRE

Airfield	Terrain d'aviation
Arena	Arène
City Limits	Limites de ville
Cisters	Douve
Ditch	Fossé
Dugout	Abreuvoir
Dump	Décharge
Filtration Plant	Usine de filtration
Gas	Gaz
Golf Course	Terrain de golf
Junk Yard	Ferraille
Kiln	Four
Lookout	Belvédère
Mine Waste	Déblai de mine
Oil Wells	Puits de pétrole
Park	Parc
Rink	Patinoire
Sacre Citizens Home	Foyer de l'âge d'or
Ski Area	Station de ski
Sitting Bog	Fondrière à filaments
Surveyed Line	Ligne arpentée
Tank	Réservoir
Water	Eau
Winter Road	Chemin d'hiver

For a complete glossary see reverse side
Pour un glossaire complet, voir au verso

DFO/MOEP FISH HABITAT INVENTORY AND INFORMATION PROGRAM STREAM INFORMATION SUMMARY

91-2900 / CO CM ST — Watershed Code and Species Summary

SPECIES INFORMATION

SK CO PK CM CH — species present

CO ST — lower limit of distribution

CO ST — upper limit of distribution

PK * — specific site of spawning

SK * / CO / CO — major spawning zone

CM * — upper limit of spawning

FLOW

OBSTRUCTIONS (measurements included where known)

log jam (persistent)

3F — D = dam; F = falls (3 m high); CV = culvert; BD = beaver dam

2C100 — cascade, chute or canyon (height = 2 m, length = 100 m)

ENHANCEMENT / MANAGEMENT ACTIVITIES

HY — HY = hatchery; FW = fishway; SC = side channel; CH = spawning channel

WSC08FB003 — Water Survey of Canada Gauging Station

300 / CO — tributary watershed code

SPECIES ABBREVIATION LIST

SK - Sockeye	BS - Bass (general)
CO - Coho	CT - Cutthroat
PK - Pink	DV - Dolly Varden
CM - Chum	KO - Kokanee
CH - Chinook	LT - Lake trout
ST - Steelhead	LW - Lake whitefish
AF - All fish	MW - Mountain whitefish
AO - All salmon	RB - Rainbow
	TR - Trout (general)

This Stream Information Summary map complements a companion Stream Summary Catalogue, organized by DFO Subdistrict. Maps and files are organized by watershed code.

TABLEAU D'ASSEMBLAGE DU SYSTÈME NATIONAL DE RÉFÉRENCE CARTOGRAPHIQUE

92 C/15	92 C/14	92 B/13
92 C/10	92 C/9	92 B/12
92 C/7	92 C/8	92 B/5

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SEPT. 1987

PORT RENFREW
92 C/9
EDITION 4

92 C/10 1:50 000 **CANADA** EDITION 4 92 C/10

Military users, refer to this map as:	SERIES A 721 SÉRIE
Référence de cette carte pour usage militaire:	MAP 92 C/10 CARTE
	EDITION 4 MCE ÉDITION

GLOSSARY GLOSSAIRE

Airfield	Terrain d'aviation
Arena	Aréna
City Limits	Limites de ville
Customs	Douane
Ditch	Fossé
Dugout	Abreuvoir
Dump	Dépotoir
Filtration Plant	Usine de filtration
Gas	Gaz
Golf Course	Terrain de golf
Junk Yard	Ferraille
Kiln	Four
Lookout	Belvédère
Mine Waste	Déblai de mine
Oil Wells	Puits de pétrole
Park	Parc
Rink	Patinoire
Senior Citizens Home	Foyer de l'âge d'or
Ski Area	Station de ski
String Bog	Fondrière à filaments
Surveyed Line	Ligne arpentée
Tank	Réservoir
Water	Eau
Winter Road	Chemin d'hiver

For a complete glossary see reverse side
Pour un glossaire complet, voir au verso

DFO/MOEP FISH HABITAT INVENTORY AND INFORMATION PROGRAM STREAM INFORMATION SUMMARY

91-2900 (CO CM ST) Watershed Code and Species Summary

SPECIES INFORMATION

SK CO PK CM CH species present
CO ST lower limit of distribution
CO ST upper limit of distribution
PK* specific site of spawning
SK* CO* CO* major spawning zone
CM* upper limit of spawning

FLOW

OBSTRUCTIONS
(measurements included where known)

log jam (persistent)
3F D = dam
F = falls (3 m high)
CV = culvert
BD = beaver dam
2C100 cascade, chute or canyon (height = 2m, length = 100m)

ENHANCEMENT/MANAGEMENT ACTIVITIES

HY = hatchery
FW = fishway
SC = side channel
CH = spawning channel

WSC08FB003 Water Survey of Canada Gauging Station

-300 (CO) tributary watershed code

SPECIES ABBREVIATION LIST

SK - Sockeye	BS - Bass (general)
CO - Coho	CT - Cutthroat
PK - Pink	DV - Dolly Varden
CM - Chum	KO - Kokanee
CH - Chinook	LT - Lake trout
ST - Steelhead	LW - Lake whitefish
AF - All fish	MW - Mountain whitefish
AO - All salmon	RB - Rainbow
	TR - Trout (general)

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Interim corrections 1982.

Roads:	Routes:	
loose or stabilized surface, all weather	gravier, aggloméré, toute saison	2 lanes or more / 2 voies ou plus; less than 2 lanes / moins de 2 voies
loose surface, dry weather	de gravier, temps sec	
unclassified streets	rues hors classe	
cart track	de terre	
trail, cut line or portage	sentier, percée ou portage	

CARMANAH CREEK
BRITISH COLUMBIA

Scale 1:50 000 Échelle

Miles 1 0 1 2 3 Milles
Metres 1000 0 1000 2000 3000 4000 Mètres
Yards 1000 0 1000 2000 3000 4000 Verges

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CONVERSION SCALE FOR ELEVATIONS — ÉCHELLE DE CONVERSION DES ALTITUDES

Metres 30 20 10 0 50 100 150 200 250 300 Mètres
Feet 100 50 0 100 200 300 400 500 600 700 800 900 1000 Pieds

CONTOUR INTERVAL 20 METRES
Elevations in Metres above Mean Sea Level
North American Datum 1927

ÉQUIDISTANCE DES COURBES 20 MÈTRES
Altitudes en mètres
Système de référence géodésique nord-américain, 1927
Projection transverse de Mercator

Corrections provisoires 1982.

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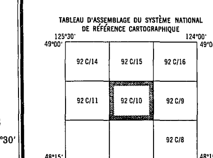
TABLEAU D'ASSEMBLAGE DU SYSTÈME NATIONAL DE RÉFÉRENCE CARTOGRAPHIQUE



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SEPT. 1987

CARMANAH CREEK
92 C/10
EDITION 4

Military users, refer to this map as: Référence de cette carte pour usage militaire: SERIES A721 SÉRIE; MAP 92 C/16 CARTE; EDITION 2 MCE EDITION

GLOSSARY GLOSSAIRE

Airfield	Terrain d'aviation
Area	Aréne
City Limits	Limites de ville
Cisterns	Douaire
Dock	Fossé
Dugout	Abreuvoir
Dump	Décapier
Filtration Plant	Usine de filtration
Gas	Gaz
Golf Course	Terrain de golf
Junk Yard	Ferraille
Kiln	Four
Lookout	Belvédère
Mine Waste	Déblai de mine
Oil Wells	Puits de pétrole
Park	Parc
Rink	Patinoire
Senior Citizens Home	Foyer de l'âge d'or
Ski Area	Station de ski
Strong Rig	Fundrière à filaments
Surveyed Line	Ligne arpentée
Tank	Réservoir
Water	Eau
Winter Road	Chemin d'hiver

For a complete glossary see reverse side
Pour un glossaire complet, voir au verso

DFO/MOEP FISH HABITAT INVENTORY AND INFORMATION PROGRAM STREAM INFORMATION SUMMARY

91-2900 CO CM ST — Watershed Code and Species Summary

SPECIES INFORMATION

SK CO PK CM CH — species present
CO ST — lower limit of distribution
CO ST — upper limit of distribution
PK * — specific site of spawning
SK * / CO / CO — major spawning zone
CM * — upper limit of spawning

OBSTRUCTIONS (measurements included where known)

log jam (persistent)
3F — D = dam; F = falls (3m high); CV = culvert; BD = beaver dam
2C100 — cascade, chute or canyon (height = 2m, length = 100m)

ENHANCEMENT/MANAGEMENT ACTIVITIES

HY — HY = hatchery; FW = fishway; SC = side channel; CH = spawning channel
WSC08FB003 — Water Survey of Canada Gauging Station
-300 CO — tributary watershed code

SPECIES ABBREVIATION LIST

SK - Sockeye	BS - Bass (general)
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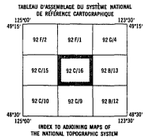
PK - Pink	DV - Dolly Varden
CM - Chum	KO - Kokanee
CH - Chinook	LT - Lake trout
ST - Steelhead	LW - Lake whitefish
AF - All fish	MW - Mountain whitefish
AO - All salmon	RB - Rainbow
	TR - Trout (general)

This Stream Information Summary map complements a companion Stream Summary Catalogue, organized by DFO Subdistrict. Maps and files are organized by watershed code.

TABLEAU D'ASSEMBLAGE DU SYSTÈME NATIONAL DE RÉFÉRENCE CARTOGRAPHIQUE



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SEPT. 1987

COWICHAN LAKE
92 C/16
EDITION 2

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Roads:	Routes:	Quick Travel 2-5 heures	Slow 5-10 heures	more than 2 hours plus de 2 heures	less than 2 hours moins de 2 heures
hard surface, all weather	pavée, toute saison				
hard surface, all weather	pavée, toute saison	2 lanes 2 voies	1 lane 1 voie		
loose or stabilized surface, all weather	gravier, agglomiré, toute saison	2 lanes 2 voies	1 lane 1 voie		
loose surface, dry weather	de gravier, temps sec				
unclassified streets	rues hors classe				
cart track	de terre				
trail, cut line or portage	sentier, coupe ou portage				

FOR COMPLETE REFERENCE SEE REVERSE SIDE — POUR UNE LISTE COMPLÈTE DES SIGNES, VOIR AU VERSO

COWICHAN LAKE
BRITISH COLUMBIA

Scale 1:50 000 Échelle

Miles 1 0 1 2 3 Milles
Metres 1000 0 1000 2000 3000 4000 Mètres
Yards 1000 0 1000 2000 3000 4000 Yards

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On peut obtenir des renseignements sur le lieu et l'altitude exacte des repères de nivellement en écrivant au Levés géodésiques, Direction des levés et de la cartographie, Ottawa.

CONVERSION SCALE FOR ELEVATIONS
Metres 30 20 10 0 50 100 150 200 250 300 Mètres
Feet 100 50 0 100 200 300 400 500 600 700 800 900 1000 Pieds

CONTOUR INTERVAL 20 METRES
Elevations in Metres above Mean Sea Level
North American Datum 1927
Transverse Mercator Projection

ÉQUIDISTANCE DES COURBES 20 MÈTRES
Altitudes en mètres
Système de référence géodésique nord-américain, 1927
Projection transverse de Mercator

Établie par la DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES, à l'aide de photographies aériennes prises en 1976. Vérification des ouvrages en 1978. Publiée en 1985.

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