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**CATALOGUE OF
SALMON SPAWNING STREAMS
AND ESCAPEMENT POPULATIONS
STATISTICAL AREA NO.6(NORTH)**



**DEPARTMENT OF ENVIRONMENT
FISHERIES SERVICE
PACIFIC REGION
VANCOUVER
1972**

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1972

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J. B. HAWLEY, CHIEF
CENTRAL COASTAL DIVISION

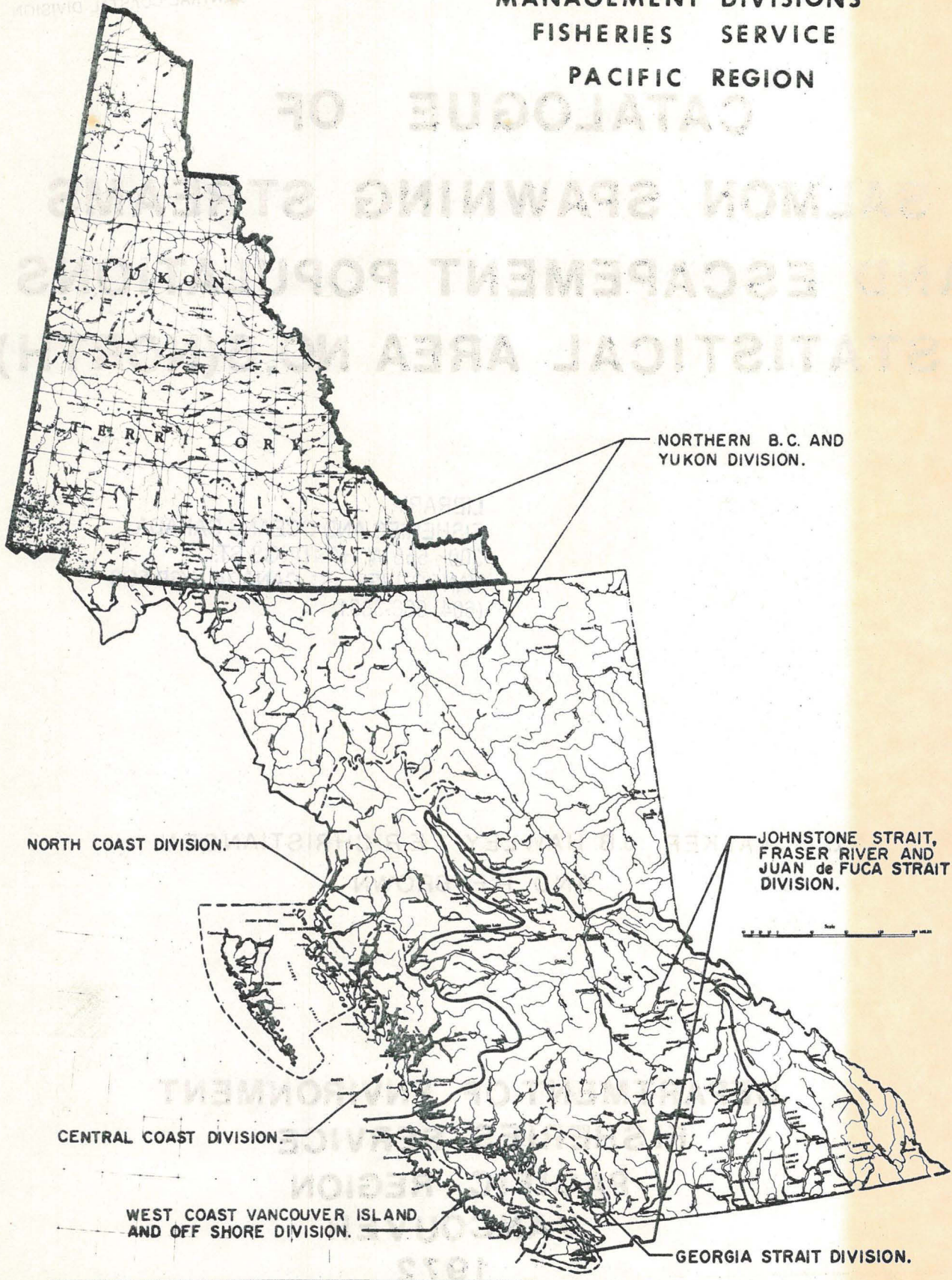
**CATALOGUE OF
SALMON SPAWNING STREAMS
AND ESCAPEMENT POPULATIONS
STATISTICAL AREA NO.6(NORTH)**

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AND R.F. BROWN

**DEPARTMENT OF ENVIRONMENT
FISHERIES SERVICE
PACIFIC REGION
VANCOUVER
1972**

MANAGEMENT DIVISIONS
FISHERIES SERVICE
PACIFIC REGION



STATISTICAL AREAS PACIFIC REGION



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INTRODUCTION

This catalogue reports on the salmon bearing watersheds and salmon populations at and adjacent to Kitimat. The study area is the northern extremity of Statistical Area No. 6 (Butedale) which is part of the central coastal area of British Columbia (Statistical Areas 6, 7 and 8).

The central area represents an intricate network of waterways and measures approximately 16,000 square miles with the major features being four deeply indented fiord-like inlets. The terrain commences with somewhat rounded and relatively low mountains on the ocean rim and increases to jagged and steeply rising mountains with elevations to 6,000 feet in the inner sections. Glaciers are common on the higher peaks. The large streams in the fiord-like inlets have characteristic U-valleys with relatively wide flood plains. Total annual precipitation is from approximately 100 to 150 inches. With the exception of commercial fishing, no industry of note existed in the central area prior to 1954, however, in that year an aluminum smelting plant commenced operations at Kitimat. In conjunction with this operation, a hydro electric power project was undertaken at Kemano River, 50 miles south of the smelter site. A pulp wood plant has since been constructed at Kitimat and proposals for pulp mill plants have been announced for Bella Coola area. Logging has proceeded in select areas only, such as Kitimat, lower Bella Coola and lower Dean Rivers. In the near future, forest removal will occur extensively in the central area.

In reporting on the northern part of Statistical Area No. 6, this catalogue describes an area which includes two lengthy waterways, namely, Douglas Channel and Gardner Canal. These inlets extend inward approximately 55 and 75 miles, respectively, from the inner coast line. It also includes the locale where aluminum smelting, logging and hydro power activities exist, ie. Kitimat and Kemano. These are the only settlements in the northern part of Area 6. From the salmon production standpoint, four streams are highly important, namely Quaal, Kitimat, Kemano and Kitlope Rivers.

Up to the 1950's commercial fishing was carried on throughout the study area, however, only gill nets and troll gear were allowed to operate in Gardner Canal. Since that period, protection was increased so that fishing is almost excluded from the study area. Sport fishing has become very intense on the Kitimat River.

REPORT ON SALMON STOCKS IN CENTRAL AREA

The former Central Conservation District (Statistical Areas 6, 7 and 8) is extremely important as a salmon producer. The average annual catch from 1951 to 1970 represents slightly more than 7 million fish in the even numbered years and 3 million in the odd years. The difference in numbers between even and odd years being the pink salmon. The central area over the last 20 years has contributed nearly one-half of the even year pink salmon catch in British Columbia, slightly more than one-quarter of the chum salmon, one-fifth of the odd year pink salmon and smaller proportions of the coho, chinook, and sockeye salmon, as shown below.

Commercial Catch Areas 6, 7 & 8, 1951-1970				
	Average Annual Catch in Pieces (000's)		Approximate Percent of B.C. Catch	
	Mean	Range	Mean	Range
Pinks - even year	5,785	1,752-17,381	49	21-74
Pinks - odd year	1,771	100- 4,206	20	2-48
Chum	701	168- 1,440	28	8-53
Coho	402	161- 616	12	5-16
Chinook	59	26- 107	6	3-10
Sockeye	230	87- 472	5	2-13

Pinks, even year: The even year run, on a twenty year average, has been slightly more than three times the magnitude of the odd year pink run. The data are largely influenced by the extremely heavy run in 1962 and the reduced odd year stocks in the latter half of the 1960's. Approximately 86 streams contribute 2,000 or more fish on an average. Spawning generally peaks in the last week of August and first week of September. Within the Kitimat section, the important streams for this group are Quaah, Kitimat, Kitkiata and Kemanu Rivers.

Pinks, odd year: Fewer streams carrying more than 1,000 pinks provide for the odd year run than the even year run (65 vs. 86 respectively). As mentioned above, generally the odd year run is weaker than the even

year one. Exceptions to this rule occur in the Canoona, Dean and Kwatna Rivers, particularly in the first named, where pinks in the odd year number in the order of 50,000 and in the intervening year less than 1,000. The odd year run has been the subject of much concern in the latter part of the 1960's because of decreased production. Spawning generally occurs in mid-September, or from one and one-half to two weeks later than that for the even year fish. The only important stream in the Kitimat section for these fish is the Quaal River.

Chum Salmon: Approximately 67 streams in the central area average more than 1,000 chums. This species is readily observed in the side channel and slough areas of the larger watersheds but the extent of main stream spawning is unknown. Spawning generally occurs throughout September. None of the five most important chum salmon streams in the central area are located in the Kitimat section.

Coho Salmon: The extent of coho spawning stocks is probably least known of all species. The lateness of migration coinciding with increased fall precipitation and water levels, the glacial colouration of the larger streams, and general inaccessibility of the area to man makes an assessment of this species exceedingly difficult. On the basis of superficial observations made in the course of surveys carried out from fixed wing craft and helicopter in 1969 and 1970, the Kitimat, Kitlope and Kemano Rivers are classified in a group ranking them second only in importance to Bella Coola - Atnarko for coho production. Spawning occurs from September to at least November.

Sockeye: Populations numbering more than 1,000 fish are found in approximately 13 watersheds in the central area. Lake spawning generally occurs in mid-September and stream spawning approximately one to two weeks later. Kitlope Lake is the only sockeye salmon producer of note in the Kitimat area.

Chinook: This species is distributed quite widely but populations are generally small in magnitude. The most important population in the central area is the one in Bella Coola - Atnarko system, which is the third largest chinook population in the Pacific Region. Spawning generally occurs in the first half of September. The Kitimat, Kemano and Kitlope Rivers are important for the production of this species in the Kitimat area.

References:

Conservation and Protection Branch, 1968. Report on the status of the odd year pink salmon stocks in the Butedale, Bella Bella and Bella Coola subdistricts and on the prospects for 1969. Report Department of Fisheries of Canada, 28 pp.

FISHERIES DEVELOPMENT POSSIBILITIES

Flow control, spawning channel, fishway and stream clearance/improvement represent the methods utilized to date by this Department to enhance and maintain the salmon stocks and consequently the discussion on development possibilities centres on these four techniques. However, this does not preclude the use of fish farms, hatcheries, selective breeding, lake fertilization, predator control, transplantation and other techniques as they are researched and developed.

Flow control: Opportunities for the implementation of flow control by the utilization of existing lakes appears to exist with the S.W. tributaries of the Quaal River, Kitkiata River and Kiskosh River.

Spawning channel: On the basis of favourable topography, size of spawning populations and commercial exploitation possibility, channels may be valuable if located in the Kitkiata (pinks) and Quaal (pinks) Rivers. Multiple industry in the Kitimat River system potentially endangers the salmon stocks in this very important fish producing stream. Spawning channels may be required here to substitute for sensitive biological areas (pinks, chums, chinooks). The outflow of clear unsilted water from the powerhouse on Kemano River (pinks, chums, chinooks) appears to provide an ideal situation for spawning channel(s).

Fishways: Generally, obstructions do not appear to be a serious factor limiting production of salmon in this area. Falls located near the mouths of the Brim and Wahoo Rivers are passible under some conditions to chinook and coho salmon and steelhead trout. Some further examination of the situation in these two streams is required.

Stream clearance/improvement: At this time there is no recognized need for this activity in area 6N.

Other: The Jesse Lake system situated on the north side of Douglas Channel approximately 15 miles west of Kitimat is barren of salmon because of a 30' drop between the lake and the sea. The drop is direct from lake to sea at the main falls, over a distance of 80' at the second outlet and over approximately 300' at the third falls. The theoretical production for this system is 7,000 coho and 60,000 sockeye. Immediate problems associated with the development of the Jesse Lake system into a salmon producer are transplantation, lake productivity and spawning area. The benefit of putting salmon in this system may be the enhancement of sport fishing located adjacent to a fast developing industrial area and increased sockeye production in an otherwise low sockeye producing area.

COMPOSITION OF THE SALMON STOCKS IN THE CENTRAL AREA
(Statistical Areas 6, 7 and 8)

Average Spawning Population	Number of Streams						
	Sockeye	Chinook	Coho	Chum	Pinks Odd Year	Pinks Even Year	
>1,000,000							
500,000-1,000,000							
200,000-500,000						1	
100,000-200,000					1	1	
50,000-100,000	1				2	3	
20,000-50,000	1		1	5	5	6	
10,000-20,000		1		6	5	8	
5,000-10,000	1		5	11	10	23	
2,000-5,000	5	4	11	19	22	27	
1,000-2,000	5	1	20	26	20	17	
	13	6	37	67	65	86	
Rank	1	Bella Coola - Atnarko	Bella Coola - Atnarko	Bella Coola - Atnarko	Bella Coola - Atnarko	Bella Coola - Atnarko	Bella Coola - Atnarko
	2	Kitlope*	Kitimat*	Kitimat*	Kainet	Koeye	Quaal*
	3	Kimsquit	Kemano*	Kimsquit	Kimsquit	Kwatna	Kitimat*
	4		Kitlope*	Kitlope*	Noota	Kainet	Koeye
	5		Dean	Dean	Neekis	Quaal*	Kitkiata*
	6		Kimsquit	Kemano*		Mussell	Kainet
	7					Canooka	Klatse
	8					Scow Bay	Kwatna
	9						Mussell
	10						Kildala*
	11						Scow Bay

* Described in this book



COAST

NORTH

SOUTHWEST

SOUTHWEST

SOUTHWEST

LAREDO

KLAMATH DIST. MON.

PRINCIPE

CHANNEL

Estevan

Laredo

Beauchemin

ORENVILLE

CHANNEL

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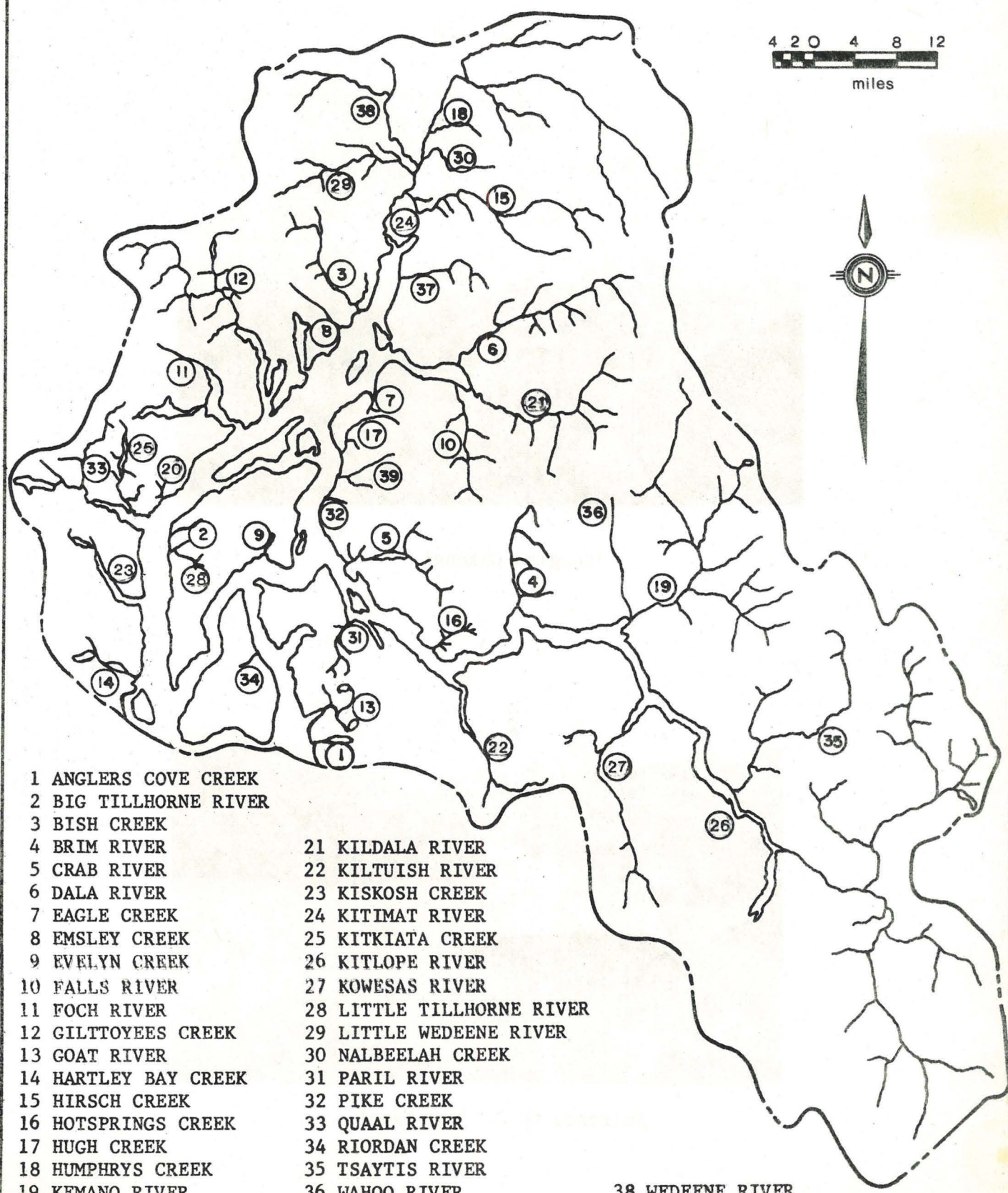
BASE MAP OF STATISTICAL AREA 6



SCALE - 10 miles to 1 inch

This map is a partial reproduction of the West Central British Columbia Base Map by Geographic Division, Surveys & Mapping Branch, Department of Lands, Forests, & Water Resources, Victoria, B.C. 1955-56.

SALMON SPAWNING STREAMS STATISTICAL AREA 6 (NORTH)



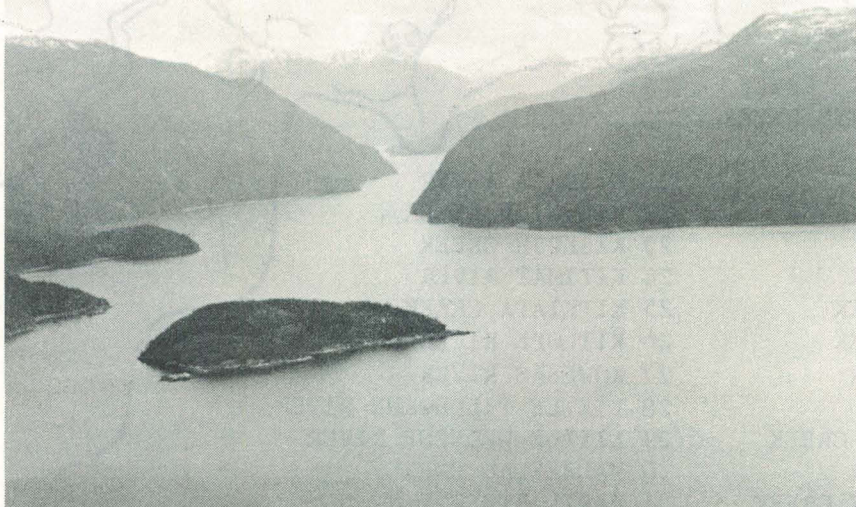
- | | | |
|-----------------------|---------------------------|-------------------|
| 1 ANGLERS COVE CREEK | 21 KILDALA RIVER | 38 WEDEENE RIVER |
| 2 BIG TILLHORNE RIVER | 22 KILTUISH RIVER | 39 WEEWANIE CREEK |
| 3 BISH CREEK | 23 KISKOSH CREEK | |
| 4 BRIM RIVER | 24 KITIMAT RIVER | |
| 5 CRAB RIVER | 25 KITKIATA CREEK | |
| 6 DALA RIVER | 26 KITLOPE RIVER | |
| 7 EAGLE CREEK | 27 KOWESAS RIVER | |
| 8 EMSLEY CREEK | 28 LITTLE TILLHORNE RIVER | |
| 9 EVELYN CREEK | 29 LITTLE WEDEENE RIVER | |
| 10 FALLS RIVER | 30 NALBEELAH CREEK | |
| 11 FOCH RIVER | 31 PARIL RIVER | |
| 12 GILTOYEEES CREEK | 32 PIKE CREEK | |
| 13 GOAT RIVER | 33 QUAAL RIVER | |
| 14 HARTLEY BAY CREEK | 34 RIORDAN CREEK | |
| 15 HIRSCH CREEK | 35 TSAYTIS RIVER | |
| 16 HOTSPRINGS CREEK | 36 WAHOO RIVER | |
| 17 HUGH CREEK | 37 WATHL CREEK | |
| 18 HUMPHRYS CREEK | | |
| 19 KEMANO RIVER | | |
| 20 KIHESH CREEK | | |

SALMON SPAWNING STREAMS
STATISTICAL AREA 8 (NORTH)

1 2 3 4 5 6 7 8 9 10
MILES



Douglas Channel



Entrance to Gardner Canal

- 1 ANGLERS CREEK
- 2 BIG TIDE CREEK
- 3 BISH CREEK
- 4 TRIM RIVER
- 5 CRAB RIVER
- 6 DATA RIVER
- 7 HADLE CREEK
- 8 FISH TOWN CREEK
- 9 FERRY CREEK
- 10 FALLS RIVER
- 11 BOON RIVER
- 12 GILTS CREEK
- 13 GOAT CREEK
- 14 HARTLEY CREEK
- 15 HINSON CREEK
- 16 HERRING CREEK
- 17 HORN CREEK
- 18 HUNTERS CREEK
- 19 KIMMEL CREEK
- 20 KINGS CREEK

21 WHEATLAND CREEK
22 WHEATLAND CREEK

23 WINDY CREEK
24 WINDY CREEK
25 WINDY CREEK
26 WINDY CREEK
27 WINDY CREEK

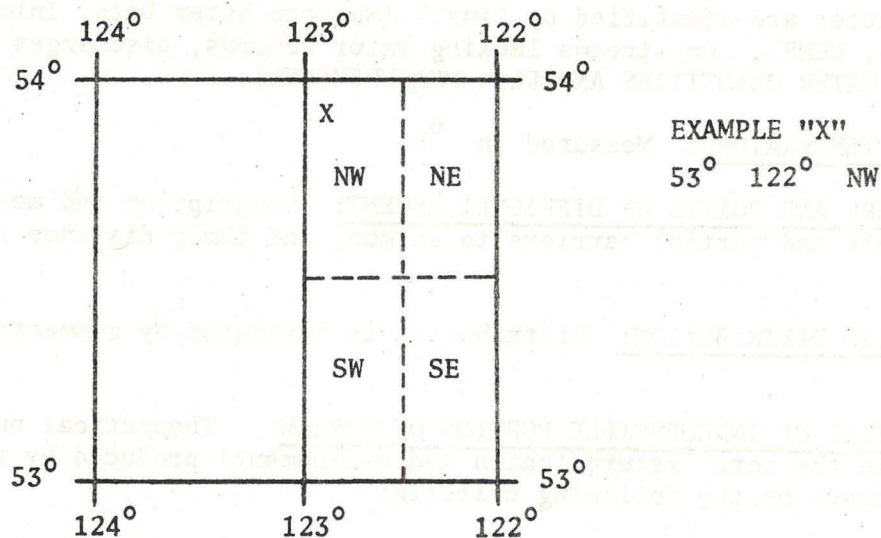
STANDARDS USED ON DESCRIPTION PAGE

NAME OF STREAM: Name given in Gazetteer of Canada - British Columbia; other names are added in lower case type.

CONSERVATION DISTRICT: As defined by the Conservation and Protection Service (APR 1965).

STATISTICAL AREA: As defined by the Department of Fisheries statistical map (JUN 1957).

LOCATION OF MOUTH AND POSITION: Position is defined by quadrant indexing. Each geographical quadrilateral of the earth's surface of 1 degree in extent in latitude and longitude is divided into the SE, SW, NE and NW quarters. The south-east corner of each quadrilateral gives the initial point for the figures of reference (Gazetteer of Canada - British Columbia).



LENGTH: Measured in miles and tenths of a mile from the mouth to a point beyond which 1% of the spawning population of any species fails to spawn profitably. Does not include tributary streams.

WIDTH: Average width, estimated to nearest foot, for the described length.

DRAINAGE: Area in square miles of the entire drainage basin feeding the stream.

COMPOSITION: Percentage occurrence of the listed categories for the wetted stream bed at average water levels within the described length.

Bedrock	bedrock
Boulder	>256 mm (>10")
Coarse	50.9 - 256 mm (2 - 10")
Fine	3.37 - 50.8 mm (1/8 - 2")
Sand & Silt	sand and silt
Unclassified	where bottom cannot be observed, e.g., log jams, pools, water colour, etc.

GRADIENT: Average vertical drop per thousand linear feet.

WETTED AREA: Number of square yards of stream bed under water at average flows within the described length.

SPAWNING AREA: Estimated number of square yards of stream bed suitable for salmon spawning within the described length. See following page.

DISCHARGE: Mean annual discharge near the mouth of the stream. Maximum and minimum values are either daily means or instantaneous discharges. The latter are identified by "inst" (Surface Water Data, Inland Waters Branch, DEMR). On streams lacking water records, discharges were estimated (see WATER QUANTITIES AND FLOW MEASUREMENTS).

WATER TEMPERATURE: Measured in °F.

BARRIERS AND POINTS OF DIFFICULT ASCENT: Description and measurements of complete and partial barriers to salmon, and their distance from the stream mouth.

SPAWNING DISTRIBUTION: Distribution is indicated by comments on stream data page.

POTENTIAL OF INACCESSIBLE PORTION OF STREAM: Theoretical number of adult fish in the total return (catch and escapement) produced by the inaccessible area based on the following criteria:

Sockeye	10,000 fish per square mile of lake surface
Coho	700 fish per linear mile of lakes and streams
Chum	1½ fish per square yard of spawning area
Pink	3 fish per square yard of spawning area
Chinook	No estimates

GENERAL REMARKS: Emphasizes features of streams and of spawning populations. Also includes industrial activity, routes of accessibility, etc.

ESCAPEMENT RECORD: The escapement estimate represents the mid point of the coded range of the escapement for each species. For example, 5,000 - 10,000 would be entered as 7,500. Where absolute numbers are provided by Department of Fisheries personnel, these numbers are entered. Where no estimates are recorded, the escapement, if any, is unknown.

The timing is in reference to spawning.

- E - early (first 10 days of month)
- M - middle of month
- L - late (last 10 days of month)

NOTE RE SPAWNING AREA: The spawning area presented in this report cannot in some instances, be used to calculate the optimum spawning population for a given species for two reasons (1) species utilize specific areas of a stream for reproduction such as chinooks upstream, chums and pinks in lower reaches, and this has not been taken into account and (2) water levels affect the amount of wetted gravel very significantly, for example, Qualicum River, 1960: 33 cfs = 45,000 sq. yds., 110 cfs = 85,000 sq. yds. and 230 cfs = 115,000 sq. yds.

MAP REFERENCE

<p>Roads:</p> <p>hard surface, all weather more than 2 lanes</p> <p>hard surface, all weather 2 lanes Route No. 18 less than 2</p> <p>loose surface, all weather 2 lanes wide or more</p> <p>" less than 2 lanes all weather dry weather</p> <p>Private Road, Trail Private Road Trail</p> <p>Railways:</p> <p>normal gauge, multiple track Station</p> <p>normal gauge, single track Stop</p> <p>abandoned, or under construction Siding</p> <p>narrow gauge, single track</p> <p>Bridge, underpass or overpass</p> <p>Tunnel</p> <p>House, Building •</p> <p>School • S</p> <p>Church +</p> <p>" with conspicuous Tower or Spire ⊥</p> <p>Post Office P</p> <p>Tower, Radio Mast, Lookout, etc. o</p> <p>Cemetery Cem</p> <p>Quarry [Quarry Symbol]</p> <p>Sand or Gravel Pit [Pit Symbol]</p> <p>Cliff [Cliff Symbol]</p> <p>Cutting [Cutting Symbol]</p> <p>Embankment [Embankment Symbol]</p> <p>Saw Mill • SM</p>	<p>Boundary, International [Symbol]</p> <p>" Province [Symbol]</p> <p>" County or District [Symbol]</p> <p>" Township or Parish [Symbol]</p> <p>" City or Town [Symbol]</p> <p>" Reservation, Indian, Military, etc [Symbol]</p> <p>Power Transmission Line [Symbol]</p> <p>Telephone or Telegraph, trunk route [Symbol]</p> <p>Horizontal Control Point △</p> <p>Boundary Marker ○</p> <p>Bench Mark • BM</p> <p>Spot Elevation, (in feet) 4582</p> <p>Mine or Pit ⊗</p> <p>Lighthouse [Lighthouse Symbol]</p> <p>Wharf or Pier [Wharf Symbol]</p> <p>Foreshore Flats [Flats Symbol]</p> <p>Swamp or Marsh [Swamp Symbol]</p> <p>Lake or Pond, intermittent [Lake Symbol]</p> <p>Glacier or Snowfield [Glacier Symbol]</p> <p>Stream, intermittent [Stream Symbol]</p> <p>Irrigation Canals, Ditches [Canals Symbol]</p> <p>Inundated Land, seasonal [Inundated Symbol]</p> <p>Contours, elevation 500 400</p> <p>" depression -500 -400</p> <p>" approximate -500 -400</p> <p>Forest, unclassified, [Forest Symbol]</p>
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DOUGLAS CHANNEL

0 2 4

Scale in miles





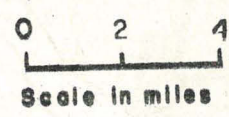
KILDALA ARM

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Scale in miles



KEMANO RIVER

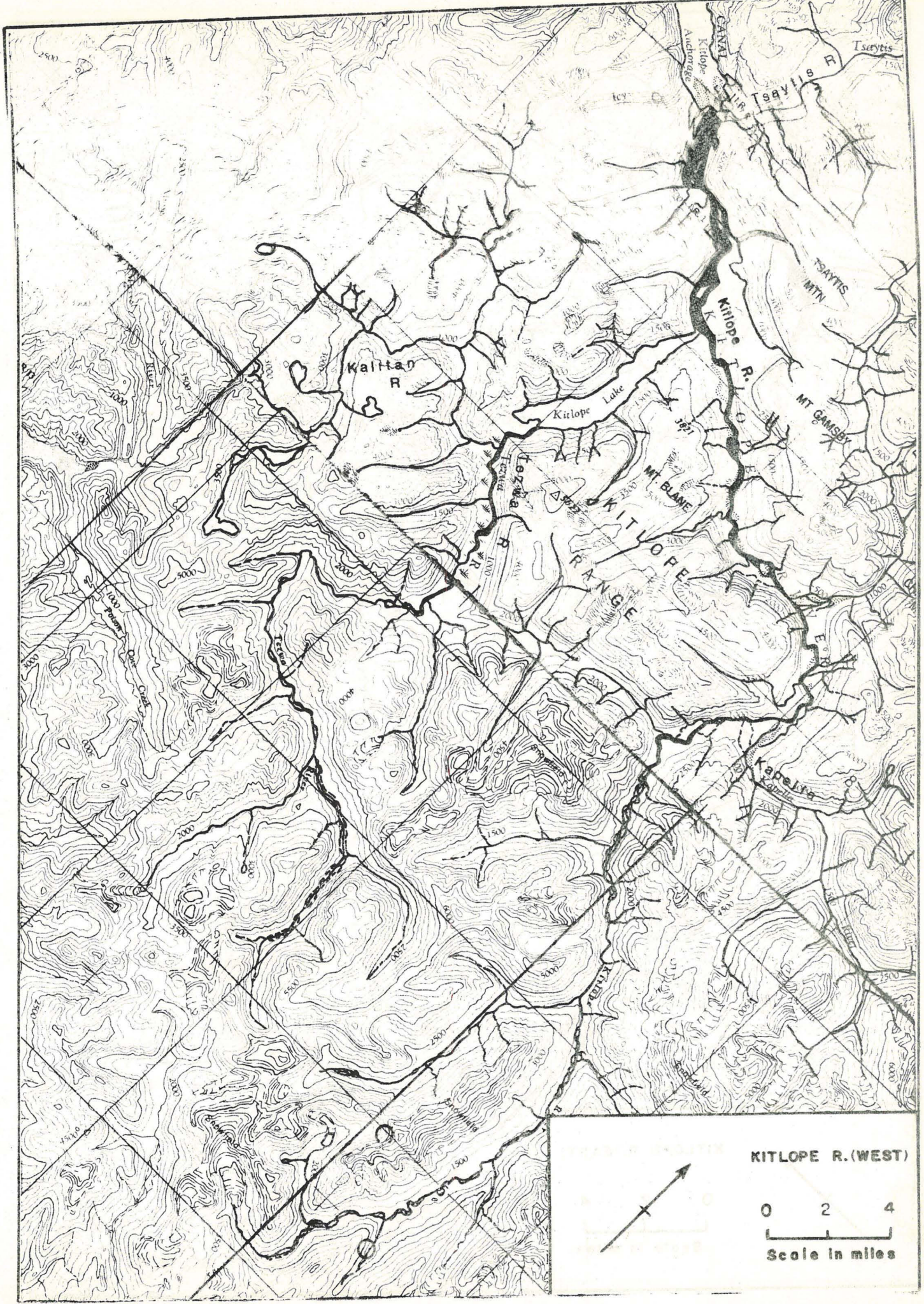




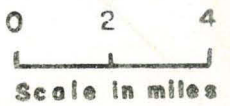
**SOUTH GARDNER
CANAL**



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Scale in miles



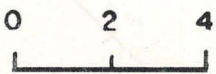
KITLOPE R. (WEST)



Scale in miles



KITLOPE R. (EAST)



Scale in miles

MISSOURI GEOLOGICAL SURVEY
BULLETIN 100, PLATE 101

Stream Description and
Escapement Record

ANGLERS COVE CREEK

For map, refer to page 18

NAME OF STREAM Anglers Cove Creek, Fishermans
 CONSERVATION DISTRICT 7 STATISTICAL AREA 6
 LOCATION OF MOUTH Flows SW. into Anglers Cove, E. shore and S. end of
Ursula Chan., Rge. 4, Coast Dist. POSITION 53 128 S.W.
 LENGTH 0.25 MI. WIDTH _____ FT. DRAINAGE 12.8 SQ. MI.
 COMPOSITION: BEDROCK _____ BOULDER 100 COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

GRADIENT:

FALL IN FT/000

0.0 - 2.5
2.5 - 5.0
5.0 - 7.5
7.5 - 10.0
> 10.0

WETTED AREA _____ SQ. YD. SPAWNING AREA _____ SQ. YD.

DISCHARGE _____ CFS MAX _____ MIN _____

TEMPERATURE _____

BARRIERS OR POINTS OF DIFFICULT ASCENT Series of cascades at 0.25 mi.,
considered to be impassable, however, on one occasion (1962) salmon were observed
above the falls.

SPAWNING DISTRIBUTION:

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	
COHO	0.0 - 0.25 mi. (falls)
CHUM	0.0 - 0.25 mi.
PINK (ODD YR)	0.0 - 0.25 mi.
PINK (EVEN YR)	0.0 - 0.25 mi.
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS:

- Tidal influence extends to falls.

NAME OF STREAM: Anglers Cove Creek, Fisherman
 CONSERVATION DISTRICT: STATISTICAL AREA
 LOCATION OF MOUTH: flows SW. into Anglers Cove, E. shore and S. end of
 U.S. Geol. Surv. & Coast Dist. POSITION: 33 128 S.W.
 LENGTH: 6.13 MI. WIDTH: FT. DRAINAGE: 12.8 SQ. MI.
 COMPOSITION: BEDROCK BOULDER 100 COARSE FINE
 SILT & SAND UNCLASSIFIED

GRADIENT: FALL IN FEET
 0.0 - 0.5
 0.5 - 1.0
 1.0 - 1.5
 1.5 - 2.0
 2.0 - 2.5
 2.5 - 3.0
 3.0 - 3.5
 3.5 - 4.0
 4.0 - 4.5
 4.5 - 5.0

WETTED AREA: SQ. YD. SPAWNING AREA: SQ. YD.
 DISCHARGE: CFS MAX. MIN.

TEMPERATURE: BARRIERS OR POINTS OF DIFFICULT ASCENT: Series of cascades at 0.25 mi. considered as impassible, however, on one occasion (1962) salmon were observed above the falls.

SPAWNING DISTRIBUTION: SECTION OF STREAM USED
 SPECIES: SALMON
 CHUM
 COHO
 0.0 - 0.25 mi. (falls)
 0.0 - 0.25 mi.
 0.0 - 0.25 mi.
 0.0 - 0.25 mi.
 0.0 - 0.25 mi.
 STEADHEAD

POTENTIAL OR IMPOSSIBLE PORTION OF STREAM

GENERAL REMARKS: - local falls, etc. to falls.

ESCAPEMENT RECORD FOR

Anglers Cove Creek, Fishermans

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947			25	3500	1500	
48			75	400		
49			25	1500	1500	
50				200	750	
51			75	1800	2000	
52			75	400	1500	
53			25	200	200	
54			75	200	1500	
55			75	750	200	
56			25	400	1500	
57				75	25	
58				400	400	
59			25	25	25	
60						
61					25	
62			25	400		
63			75	400	25	
64						
65						
66						
67			200			
68						
69						
70						
71						
72						
73						
74						
75						
76						
77						
78						
79						
80						
81						
82						
83						
84						
85						
Time						
Start			L. AUG	L. AUG	M. AUG	
Peak			M. SEP	M. SEP	L. AUG	
End			E. OCT	E. OCT	E. SEP	

REMARKS

BIG TILLHORNE RIVER

For map, refer to page 14

STATION	DATE	TIME	TEMP	WIND	WAVE	SEA	STATE
1200							
1300							
1400							
1500							
1600							
1700							
1800							
1900							
2000							
2100							
2200							
2300							
2400							
2500							
2600							
2700							
2800							
2900							
3000							

PREPARED BY: _____
 DATE: _____
 TIME: _____
 LOCATION: _____
 STATE: _____

Big Timber River

NAME OF STREAM

STATISTICAL AREA

CONSERVATION DISTRICT

LOCATION OF MOUTH (Flow SW into Douglas Chan. from Hawkspury Island)

POSITION 23 129 NE

LENGTH MI. WIDTH FT. DRAINAGE AREA SQ. MI.

COMPOSITION: SAND & GRAVEL BOLDER COARSE FINE

UNCLASSIFIED

GRAVEL

FINE SAND

0.5 - 1.0

1.0 - 1.5

1.5 - 2.0

2.0 - 3.0

3.0 - 4.0

WETTED AREA SQ. YD. SPAWNING AREA SQ. YD.

DISCHARGE CFS MAX MIN

TEMPERATURE

BARRIERS OR POINTS OF DIFFICULT ASCENT

SPAWNING DISTRIBUTION:

SECTION OF STREAM USED

SHOULDER

SOCKET

CHANNEL

COHO

CHUM

PINK (OLD)

PINK (NEW)

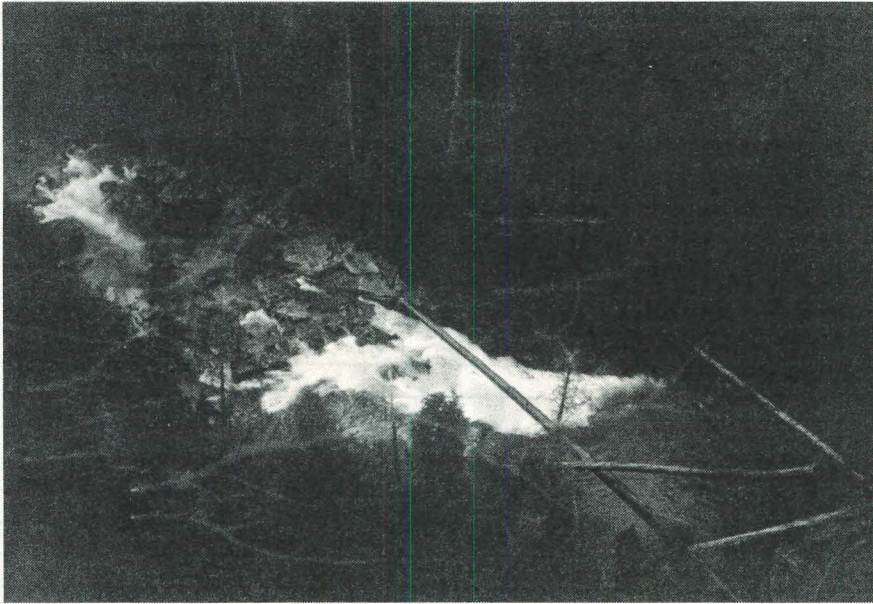
STEELHEAD

POTENTIAL OF INVASIVE PORTION OF STREAM

GENERAL REMARKS

BISH CREEK

For map, refer to page 15



Bish Creek - falls at 7.0 mi.



Mouth of Bish Creek

NAME OF STREAM BISH CREEK
 CONSERVATION DISTRICT 7 STATISTICAL AREA 6
 LOCATION OF MOUTH Flows SE. into Kitimat Arm, Rge 4, Coast Dist.
 POSITION 53 128 NW.
 LENGTH 7.0 MI. WIDTH 78 FT. DRAINAGE 48.3 SQ. MI.
 COMPOSITION: BEDROCK _____ BOULDER 80 COARSE 10 FINE 10
 SILT & SAND _____ UNCLASSIFIED _____

GRADIENT:

FALL IN FT/000

0.0 - 2.5	
2.5 - 5.0	
5.0 - 7.5	0.0 - 7.0 mi
7.5 - 10.0	
> 10.0	

WETTED AREA 320000 SQ. YD. SPAWNING AREA 64000 SQ. YD.DISCHARGE 225 cfs (est.) 02/09/70TEMPERATURE 26/08/69 48.0°F; 10/09/69 50.0°F; 02/09/70 48.5°FBARRIERS OR POINTS OF DIFFICULT ASCENT Falls at approx. 7.0 mi., no information on fish passage.

SPAWNING DISTRIBUTION:

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	
COHO	
CHUM	0.0 - 2.5 mi (majority)
PINK (ODD YR)	0.0 - 2.5 mi (majority)
PINK (EVEN YR)	0.0 - 2.5 mi (majority)
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS:

- Temperature: 02/09/70 45.5°F
- Heavily wooded watershed in lower 7.0 mi., no flood plain.
- 02/09/70 no salmon fry or adults observed at 8.5 mi.

NAME OF STREAM: _____
 OBSERVATION DISTRICT: _____
 LOCATION OF MOUTH: _____
 POSITION: _____
 LENGTH: _____ FT. WIDTH: _____ FT.
 COMPOSITION: _____
 SAND: _____

SPAWNING AREA: _____
 SPAN: _____
 DISTANCE: _____

SECTION OF STREAM USED: _____
 SPAWNING DISTRICT: _____
 SECTION OF STREAM USED: _____

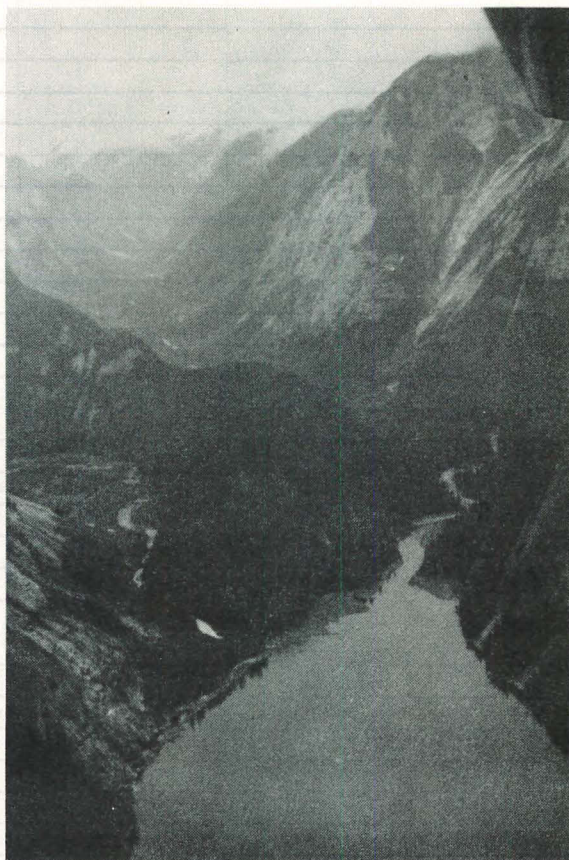
SECTION OF STREAM USED: _____
 SPAWNING DISTRICT: _____
 SECTION OF STREAM USED: _____

SECTION OF STREAM USED: _____
 SPAWNING DISTRICT: _____
 SECTION OF STREAM USED: _____

SECTION OF STREAM USED: _____
 SPAWNING DISTRICT: _____
 SECTION OF STREAM USED: _____

BRIM RIVER

For map, refer to page 16



Brim River

NAME OF STREAM BRIM RIVER
 CONSERVATION DISTRICT 7 STATISTICAL AREA 6
 LOCATION OF MOUTH Flows S. into Owyacumish Bay, Rge. 4, Coast Dist.
 POSITION 53 128 NE.
 LENGTH 10.0 MI. WIDTH 90 FT. DRAINAGE 60.8 SQ. MI.
 COMPOSITION: BEDROCK _____ BOULDER 74 COARSE 13 FINE 13
 SILT & SAND _____ UNCLASSIFIED _____

GRADIENT:
 FALL IN FT/000

0.0 - 2.5	
2.5 - 5.0	
5.0 - 7.5	
7.5 - 10.0	0.0-7.2 (Av. gradient)
> 10.0	0.0-2.0 (30/000 at some parts)

WETTED AREA 528000 SQ. YD. SPAWNING AREA 140000 SQ. YD.
 DISCHARGE 3600 cfs (est.) 06/09/69 (semi-flood); 255 cfs 04/09/70
 TEMPERATURE 07/09/69 47.0°F.; 11/09/69 49.0°F.; 01/09/70 47.0°F.
 BARRIERS OR POINTS OF DIFFICULT ASCENT Impassable falls, 11.0 mi., 20 ft. drop.

SPAWNING DISTRIBUTION:

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	Observed to 8.0 mi.
COHO	throughout
CHUM	
PINK (ODD YR)	
PINK (EVEN YR)	Observed to 8.0 mi.
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

- GENERAL REMARKS:
- Drains narrow "U" valley.
 - Non accessible to boat, no trail.
 - Spawning in tributaries limited to mouth areas only.
 - 0.0-2.0 mi - rapids; at least 90% boulder.
 - 2.0-6.0 mi - moderate flow area; good gravel (50%) meadow areas.
 - 6.0-7.2 mi - rapids; 100% boulder.
 - 7.2-10.0 mi - fewer rapids; some gravel areas (15%).
 - 10.0-11.0 mi - series of rapids.
 - 11.0 mi - falls.



Brim River approx. 5.0 mi



Brim River upper

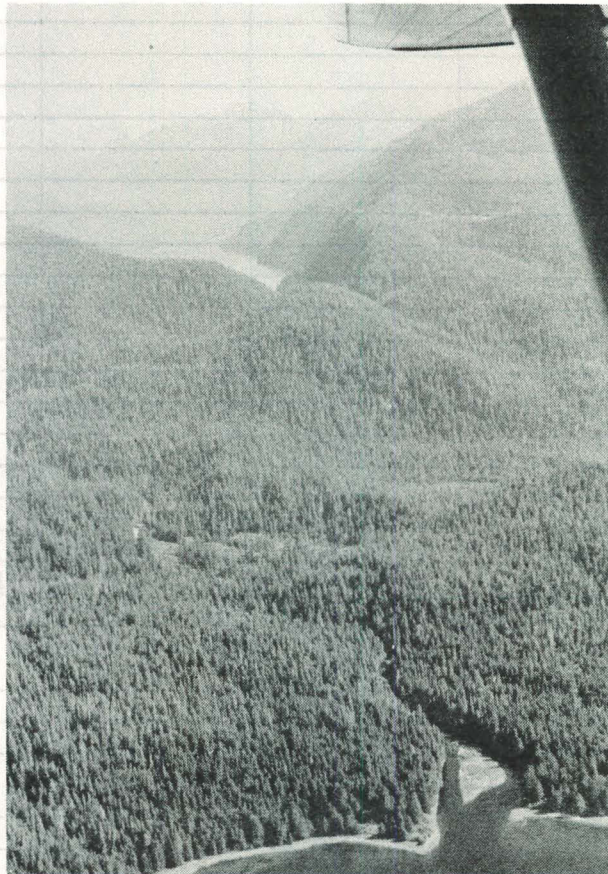
ESCAPEMENT RECORD FOR BRIM RIVER

YEAR	SOCKEYE	CHINOOK	COHO	CHUM	PINK	STEELHEAD
1947			1500	7500	7500	
48		400	1500	750	15000	
49			1500	3500	7500	
50		750	750	3500	3500	
51		400	1500	12000	6000	
52						
53		400	750	7500	1500	
54		750	750	1500	1500	
55		400	1500	1500	1500	
56		200	1500	750	750	
57				400		
58				400	75	
59		25	200			
60				1500	75	
61						
62			3500	3500	75	
63		750	1500	3500		
64		3500	7500	1500	35000	
65		1500	3500	1500	7500	
66						
67		750	3500	15000	750	
68		750	1500	15000	15000	
69						
70		75	1500		3500	
71						
72						
73						
74						
75						
76						
77						
78						
79						
80						
81						
82						
83						
84						
85						
Time						
Start		E. AUG	E. SEP	M. AUG	E. AUG	
Peak		E. SEP	M. SEP	L. AUG	M. AUG	
End		M. SEP	E. OCT	M. SEP	E. SEP	

REMARKS

CRAB RIVER

For map, refer to page 16



Crab River
Obstructions exist throughout
river to lake.

NAME OF STREAM CRAB RIVER
 CONSERVATION DISTRICT 7 STATISTICAL AREA 6
 LOCATION OF MOUTH Flows W. into entrance to Gardner Canal, Rge. 4,
 Coast Dist. _____ POSITION 53 128 NW.
 LENGTH 0.1 MI. WIDTH 70 FT. DRAINAGE 51.0 SQ. MI.
 COMPOSITION: BEDROCK _____ BOULDER 75 COARSE 25 FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

GRADIENT:

FALL IN FT/000	
0.0 - 2.5	
2.5 - 5.0	
5.0 - 7.5	
7.5 - 10.0	
> 10.0	throughout

WETTED AREA 4000 SQ. YD. SPAWNING AREA 1000 SQ. YD.
 DISCHARGE 800 cfs (est.), (semi-flood) 07/09/69
 TEMPERATURE 07/09/69 53.0°F.

BARRIERS OR POINTS OF DIFFICULT ASCENT Impassable falls, 0.1 mi.,
50 ft. total drop: Lower falls 20 ft. over 200 ft.; upper falls
30 ft. in two vertical steps. Series of major falls throughout
system.

SPAWNING DISTRIBUTION:

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	
COHO	to falls (0.1 mi.)
CHUM	to falls (0.1 mi.)
PINK (ODD YR)	to falls (0.1 mi.)
PINK (EVEN YR)	to falls (0.1 mi.)
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS: Lake fed (Crab Lake, 2 mi. from mouth, 5 mi. long,
.5 mi. wide).
 - All spawning intertidal
 - Non-productive stream for salmon.

NAME OF STREAM
 STATISTICAL AREA
 LOCATION OF MOUTH
 POSITION
 DRAINAGE AREA
 WIDTH
 COMPOSITION OF ROCK
 GRADE

SPAWNING AREA
 WATERSHED AREA
 DISCHARGE
 TEMPERATURE
 BARRIER POINTS OF DIFFICULT ASCENT
 50 ft. to 100 ft. lower falls
 10 ft. to 20 ft. upper falls

SECTION OF STREAM USED
 COHO
 PINK (0.1 mi)
 PINK (0.1 mi)
 PINK (0.1 mi)
 PINK (0.1 mi)

POTENTIAL OF FAVORABLE SECTION OF STREAM
 GENERAL REMARKS
 No spawning stream for salmon

DALA RIVER

For map, refer to page 16

YEAR	CHINOOK	TRIP	PINK
1911	100	100	100
1912	100	100	100
1913	100	100	100
1914	100	100	100
1915	100	100	100
1916	100	100	100
1917	100	100	100
1918	100	100	100
1919	100	100	100
1920	100	100	100
1921	100	100	100
1922	100	100	100
1923	100	100	100
1924	100	100	100
1925	100	100	100
1926	100	100	100
1927	100	100	100
1928	100	100	100
1929	100	100	100
1930	100	100	100
1931	100	100	100
1932	100	100	100
1933	100	100	100
1934	100	100	100
1935	100	100	100
1936	100	100	100
1937	100	100	100
1938	100	100	100
1939	100	100	100
1940	100	100	100
1941	100	100	100
1942	100	100	100
1943	100	100	100
1944	100	100	100
1945	100	100	100
1946	100	100	100
1947	100	100	100
1948	100	100	100
1949	100	100	100
1950	100	100	100
1951	100	100	100
1952	100	100	100
1953	100	100	100
1954	100	100	100
1955	100	100	100
1956	100	100	100
1957	100	100	100
1958	100	100	100
1959	100	100	100
1960	100	100	100
1961	100	100	100
1962	100	100	100
1963	100	100	100
1964	100	100	100
1965	100	100	100
1966	100	100	100
1967	100	100	100
1968	100	100	100
1969	100	100	100
1970	100	100	100
1971	100	100	100
1972	100	100	100
1973	100	100	100
1974	100	100	100
1975	100	100	100
1976	100	100	100
1977	100	100	100
1978	100	100	100
1979	100	100	100
1980	100	100	100
1981	100	100	100
1982	100	100	100
1983	100	100	100
1984	100	100	100
1985	100	100	100
1986	100	100	100
1987	100	100	100
1988	100	100	100
1989	100	100	100
1990	100	100	100
1991	100	100	100
1992	100	100	100
1993	100	100	100
1994	100	100	100
1995	100	100	100
1996	100	100	100
1997	100	100	100
1998	100	100	100
1999	100	100	100
2000	100	100	100
2001	100	100	100
2002	100	100	100
2003	100	100	100
2004	100	100	100
2005	100	100	100
2006	100	100	100
2007	100	100	100
2008	100	100	100
2009	100	100	100
2010	100	100	100
2011	100	100	100
2012	100	100	100
2013	100	100	100
2014	100	100	100
2015	100	100	100
2016	100	100	100
2017	100	100	100
2018	100	100	100
2019	100	100	100
2020	100	100	100
2021	100	100	100
2022	100	100	100
2023	100	100	100
2024	100	100	100
2025	100	100	100
2026	100	100	100
2027	100	100	100
2028	100	100	100
2029	100	100	100
2030	100	100	100
2031	100	100	100
2032	100	100	100
2033	100	100	100
2034	100	100	100
2035	100	100	100
2036	100	100	100
2037	100	100	100
2038	100	100	100
2039	100	100	100
2040	100	100	100
2041	100	100	100
2042	100	100	100
2043	100	100	100
2044	100	100	100
2045	100	100	100
2046	100	100	100
2047	100	100	100
2048	100	100	100
2049	100	100	100
2050	100	100	100

NAME OF STREAM DALA RIVER
 CONSERVATION DISTRICT 7 STATISTICAL AREA 6
 LOCATION OF MOUTH Flows SW. into head of Kildala Arm, Rge. 4, Coast Dist.
 POSITION _____
 LENGTH 13.0 MI. WIDTH 135 FT. DRAINAGE 168.3 SQ. MI.
 COMPOSITION: BEDROCK _____ BOULDER 72 COARSE 18 FINE 10
 SILT & SAND _____ UNCLASSIFIED Pools 25 (Mainly boulder)

GRADIENT:
 FALL IN FT/000

0.0 - 2.5	
2.5 - 5.0	0.0 - 7.0 mi.
5.0 - 7.5	
7.5 - 10.0	
> 10.0	7.0 - 13 mi.

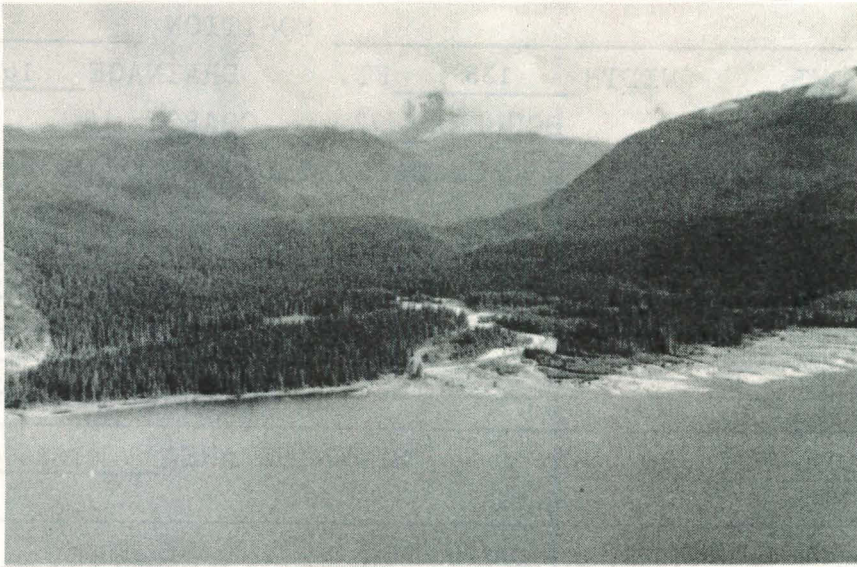
WETTED AREA 1030000 SQ. YD. SPAWNING AREA 288000 SQ. YD.
 DISCHARGE 1600 cfs (est.) 30/08/70
 TEMPERATURE 28/08/69 48.0°F; 30/08/70 51.5°F
 BARRIERS OR POINTS OF DIFFICULT ASCENT Canyon 13.0 - 16.0 mi.

SPAWNING DISTRIBUTION:

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	Observed to 13.0 mi. (1970)
COHO	0.0 - 13.0 mi.
CHUM	Observed to 7.0 mi.
PINK (ODD YR)	
PINK (EVEN YR)	Observed to 12.0 mi. (1970)
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS:
 - Canyon: 10.0 - 13.0 mi.; possible obstruction to salmon, fry observed to 13.0 mi. (start of canyon), none above.
 - Water temperatures: 30/08/70 51.5°F, 7.0 mi.; 49.0°F, 13.0 mi.; 45.5°F, 20.0 mi.
 - Accessible tributaries:
 Dahlaks Creek; major tributary 3.0 mi., accessible for 0.5 mi., canyon with multiple falls at 2.0 mi. Pinks lower half mile.
 Unnamed Creek, 13.0 mi.; 30/08/70 48.0°F, avg. width 20 ft., mainly boulder with a few patches of gravel, coho fry observed 30/08/70.
 - Other tributaries: small, limited access and spawning area.
 - Accessible by outboard jet to 10.0 mi., dependent upon water levels.



Mouth of Dala River



Dala River. Looking downstream from 9 mile.

Eagle Creek

NAME OF STREAM

STATISTICAL AREA

CONSERVATION DISTRICT

LOCATION OF MOUTH (Flow N. into Eagle Bay, SE. shore of Kilauea Air)

POSITION

Reg. of Coast Dist.

DRAINAGE

WIDTH

LENGTH

COARSE 100 FINE

BOULDER

COMPOSITION: BEDROCK

UNCLASSIFIED

SILT & SAND

SHADY

WALL IN

throughout

SPAWNING AREA

SO. YD.

WETTED AREA

MIN

CFS MAX

DISCHARGE

TEMPERATURE 88/85/82

BARRIERS OR POINTS OF DIFFICULT ASCENT

50 ft.

SECTION OF STREAM USED

SPAWNING DISTRIBUTION

SPECIES

SOCKEYE

CHINOOK

COD

TROUT

1/2 mile (100 yds.)

1/2 mile

1/2 mile

STATISTICAL

POTENTIAL OF ACCESSIBLE PORTION OF STREAM

GENERAL COMMENTS

EMSLEY CREEK

For map, refer to page 14

222
222
222

NAME OF STREAM EMSLEY CREEK
 CONSERVATION DISTRICT 7 STATISTICAL AREA 6
 LOCATION OF MOUTH Flows SE. into Emsley Cove, Kitimat Arm, Rge. 4.
 Coast Dist. _____ POSITION 53 128 NW.
 LENGTH _____ MI. WIDTH 37 FT. DRAINAGE 8.0 SQ. MI.
 COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____
 SILT & SAND _____ UNCLASSIFIED _____

GRADIENT:
 FALL IN FT/000

0.0 - 2.5	
2.5 - 5.0	throughout
5.0 - 7.5	
7.5 - 10.0	
> 10.0	

WETTED AREA _____ SQ. YD. SPAWNING AREA _____ SQ. YD.

DISCHARGE 60 cfs (est.) 26/08/69

TEMPERATURE 49.0°F 26/08/69

BARRIERS OR POINTS OF DIFFICULT ASCENT _____

SPAWNING DISTRIBUTION:

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS:

- Pool and riffle stream with sand, gravel, and some pockets of clay; multiple tree-falls in creek; drains heavily wooded area.
- Gravel area to 2.0 mi. est. 40.0% = 14000 sq. yds.

STATISTICAL AREA

CONSERVATION DISTRICT

LOCATION OR ROUTE
POSITION 33 128 NW

WATER
DRAINAGE 8.0
COURSE
FINE

UNCLASSIFIED

3.0
3.5
3.0

SPAWNING AREA

SC. YD.

(est.)

TERRESTRIAL

BARRIERS OF POINT

SECTION OF STREAM USED

SECTION OF STREAM

Stream bed composed of gravel and sand, with some pockets of clay; with
some scattered woody debris.

ASSIGNMENT RECORD FOR EVELYN CREEK

EVELYN CREEK

For map, refer to page 14

005 25 005

YEAR
SUCKEYE
CROCODILE
TURTLE
SNAKE
FISH
MAMMAL
BIRD
INSECT
PLANT
OTHER

NAME OF STREAM (WRITE CLEAR)

STATISTICAL AREA

LOCATION OF POINT (Give S. and Range, Twp., Sec. & Range)

POSITION (S. 128 NW)

LENGTH (FEET) WIDTH (FEET)

COMPOSITION (SILT, SAND, GRAVEL, COARSE SAND, FINE)

UNCLASSIFIED

WETTED AREA (AC. OR SQ. YD.)

DISCHARGE (GAL. OR CU. FT. PER HOUR)

TEMPERATURE (F. OR C.)

CHARACTER OF POINT OF DIFFICULT ACCESS

SECTION OF STREAM USED

TYPE OF STREAM

WETTED AREA

LENGTH

WIDTH

DEPTH

CHARACTER OF POINT OF DIFFICULT ACCESS

GENERAL REMARKS

(Write in left margin)

FALLS RIVER

For map, refer to page 16

LINE	DESCRIPTION	AMOUNT	DATE	INITIALS
1000				
1001				
1002				
1003				
1004				
1005				
1006				
1007				
1008				
1009				
1010				
1011				
1012				
1013				
1014				
1015				
1016				
1017				
1018				
1019				
1020				
1021				
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1089				
1090				
1091				
1092				
1093				
1094				
1095				
1096				
1097				
1098				
1099				
1100				

NAME OF STREAM FALLS RIVER

CONSERVATION DISTRICT 7 STATISTICAL AREA 6

LOCATION OF MOUTH Flows N.E. into Kildala Arm, Rge. 4, Coast Dist.

POSITION 53 128 N.W.

LENGTH 0.1 MI. WIDTH 85 FT. DRAINAGE 80.0 SQ. MI.

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____

SILT & SAND _____ UNCLASSIFIED _____

GRADIENT:

FALL IN FT/000

0.0 - 2.5	
2.5 - 5.0	
5.0 - 7.5	
7.5 - 10.0	
> 10.0	

WETTED AREA _____ SQ. YD. SPAWNING AREA _____ SQ. YD.

DISCHARGE _____ CFS MAX _____ MIN _____

TEMPERATURE _____

BARRIERS OR POINTS OF DIFFICULT ASCENT Impassable falls, 0.1 mi., total of 30 ft. in two vertical steps of 15 ft.

SPAWNING DISTRIBUTION:

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS: _____

NAME OF STREAM FALLS RIVER

CONSERVATION DISTRICT

STATISTICAL AREA

LOCATION OF MOUTH Flows N.E. into Kibala Riv. N.E. Coast Dist.

POSITION 23 1/2 N.M.

LENGTH 1.4 MI. WIDTH 22 FT. DRAINAGE 20.0 SQ. MI.

COMPOSITION BEDROCK BOULDER COARSE FINE

SOIL SAND UNCLASSIFIED

GRADIENT

FALL IN FEET

1.0
0.5
0.0
1.5
1.0

WETTED AREA 20.0 SQ. YD. SPAWNING AREA

DISCHARGE LBS. MAX. MIN.

TEMPERATURE

BARRIERS OR POINTS OF DIFFICULT ASCENT impassable falls 0.1 mi. total of 10 ft. in two vertical steps of 5 ft.

SPA WING DIVISION

SECTION OF STREAM USED

SPECIES

SOCIETY

CLIQUE

GROUP

TYPE (P.M. M)

TIME (P.M. M)

TIME (P.M. M)

STRENGTH

POTENTIAL OF THIS PORTION OF STREAM

GENERAL REMARKS

FOCH RIVER

For map, refer to page 14

50A 1
50B 2
50C 3

50A 1
50B 2
50C 3

50A 1
50B 2
50C 3

NAME OF STREAM Foch River
 CONSERVATION DISTRICT 7 STATISTICAL AREA 6
 LOCATION OF MOUTH Flows SE. into head of Foch Lag., Rge. 4, Coast Dist.
 POSITION 53 129 NE.
 LENGTH MI. WIDTH 75 FT. DRAINAGE 42.4 SQ. MI.
 COMPOSITION: BEDROCK 30 BOULDER 30 COARSE 50 FINE
 SILT & SAND UNCLASSIFIED 20 Pool

GRADIENT:

FALL IN FT/000	
0.0 - 2.5	
2.5 - 5.0	
5.0 - 7.5	(estimated)
7.5 - 10.0	
> 10.0	

WETTED AREA SQ. YD. SPAWNING AREA SQ. YD.

DISCHARGE 255 cfs (est.) 14/09/69

TEMPERATURE 14/09/69 44.0°F; 15/09/69 42.0°F

BARRIERS OR POINTS OF DIFFICULT ASCENT

SPAWNING DISTRIBUTION:

SPECIES	SECTION OF STREAM USED
SOCKEYE	
CHINOOK	
COHO	Throughout system
CHUM	majority lower 3.0 mi.
PINK (ODD YR)	majority lower 3.0 mi.
PINK (EVEN YR)	majority lower 3.0 mi.
STEELHEAD	

POTENTIAL OF INACCESSIBLE PORTION OF STREAM

GENERAL REMARKS:

- Water colour: Blue-green
- Personal use fishery - (mainly coho, some chum) carried out occasionally
- Slide area at approx. 4.0 mi



Entrance to Foch Inlet



Foch River - mouth area

GILTOYEEES CREEK

For map, refer to page 14



Gilttoyees Creek - cascades at 7.0 mi.

NAME OF STREAM GILTTOYEES CREEK
 CONSERVATION DISTRICT 7 STATISTICAL AREA 6
 LOCATION OF MOUTH Flows S. into Gilttoeyes Inlet, Rge. 4, Coast Dist.
 POSITION 53 129 NE.
 LENGTH 7.0 MI. WIDTH 147 FT. DRAINAGE 120.0 SQ. MI.
 COMPOSITION: BEDROCK _____ BOULDER 15 COARSE 30 FINE 5
 SILT & SAND 50 UNCLASSIFIED _____

GRADIENT:
 FALL IN FT/000

0.0 - 2.5	
2.5 - 5.0	
5.0 - 7.5	(estimated)
7.5 - 10.0	
> 10.0	

WETTED AREA 603000 SQ. YD. SPAWNING AREA 211000 SQ. YD.
 DISCHARGE 950 cfs (est.) 15/09/69

TEMPERATURE _____
 BARRIERS OR POINTS OF DIFFICULT ASCENT Cascades at 7.0 mi., caused by slide, 150 ft. drop over 500 ft.

SPAWNING DISTRIBUTION:

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

- GENERAL REMARKS:
- Tidal to 3.5 mi.
 - Accessible to 7.0 mi. by outboard jet.
 - Personal use fishery - exists occassionally.
 - Accessible tributaries: Unnamed, 5.0 mi.; 43 ft. wide; 15/09/69 49.0°F.; est. discharge 320 cfs; mainly boulder.



Mouth of Gilttoyees Creek



Gilttoyees Creek
at tidal limits

GOAT RIVER

For map, refer to page 18

YEAR	MO	DAY	TIME
1900	1	1	10:00
1900	1	2	10:00
1900	1	3	10:00
1900	1	4	10:00
1900	1	5	10:00
1900	1	6	10:00
1900	1	7	10:00
1900	1	8	10:00
1900	1	9	10:00
1900	1	10	10:00
1900	1	11	10:00
1900	1	12	10:00
1900	2	1	10:00
1900	2	2	10:00
1900	2	3	10:00
1900	2	4	10:00
1900	2	5	10:00
1900	2	6	10:00
1900	2	7	10:00
1900	2	8	10:00
1900	2	9	10:00
1900	2	10	10:00
1900	2	11	10:00
1900	2	12	10:00
1900	3	1	10:00
1900	3	2	10:00
1900	3	3	10:00
1900	3	4	10:00
1900	3	5	10:00
1900	3	6	10:00
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1900	4	1	10:00
1900	4	2	10:00
1900	4	3	10:00
1900	4	4	10:00
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1900	5	1	10:00
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1900	5	5	10:00
1900	5	6	10:00
1900	5	7	10:00
1900	5	8	10:00
1900	5	9	10:00
1900	5	10	10:00
1900	5	11	10:00
1900	5	12	10:00
1900	6	1	10:00
1900	6	2	10:00
1900	6	3	10:00
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1900	8	1	10:00
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1900	11	12	10:00
1900	12	1	10:00
1900	12	2	10:00
1900	12	3	10:00
1900	12	4	10:00
1900	12	5	10:00
1900	12	6	10:00
1900	12	7	10:00
1900	12	8	10:00
1900	12	9	10:00
1900	12	10	10:00
1900	12	11	10:00
1900	12	12	10:00

1900 M. AUG
 1900 E. SEP
 1900 M. SEP

NAME OF STREAM GOAT RIVER Goat Cove Creek

CONSERVATION DISTRICT 7 STATISTICAL AREA 6

LOCATION OF MOUTH Flows W. into Goat Hr., Ursula Chan.; Rge. 4, Coast Dist.

POSITION 53 128 SW.

LENGTH 0.1 MI. WIDTH 18 FT. DRAINAGE 22.4 SQ. MI.

COMPOSITION: BEDROCK _____ BOULDER _____ COARSE _____ FINE _____

SILT & SAND _____ UNCLASSIFIED _____

GRADIENT:

FALL IN FT/000	
0.0 - 2.5	
2.5 - 5.0	
5.0 - 7.5	
7.5 - 10.0	
> 10.0	

WETTED AREA _____ SQ. YD. SPAWNING AREA _____ SQ. YD.

DISCHARGE _____ CFS MAX _____ MIN _____

TEMPERATURE _____

BARRIERS OR POINTS OF DIFFICULT ASCENT Impassable falls, 0.1 mi., 15 ft. vertical.

SPAWNING DISTRIBUTION:

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS: - No salmon observed in recent years.

Great Cove Green

STATISTICAL AREA

LOCATION OF MOUNTAIN: ... U.S. Coast Guard Dist.

POSITION 25 1/2 SW

SOIL TYPE DRAINAGE

18 FT

COARSE FINE

BOULDER

UNCLASSIFIED

80 YD SPAN AREA

MIN

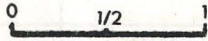
DIPMENT ASPECT ... 0.1 ft ...

SECTION OF STREAM USED

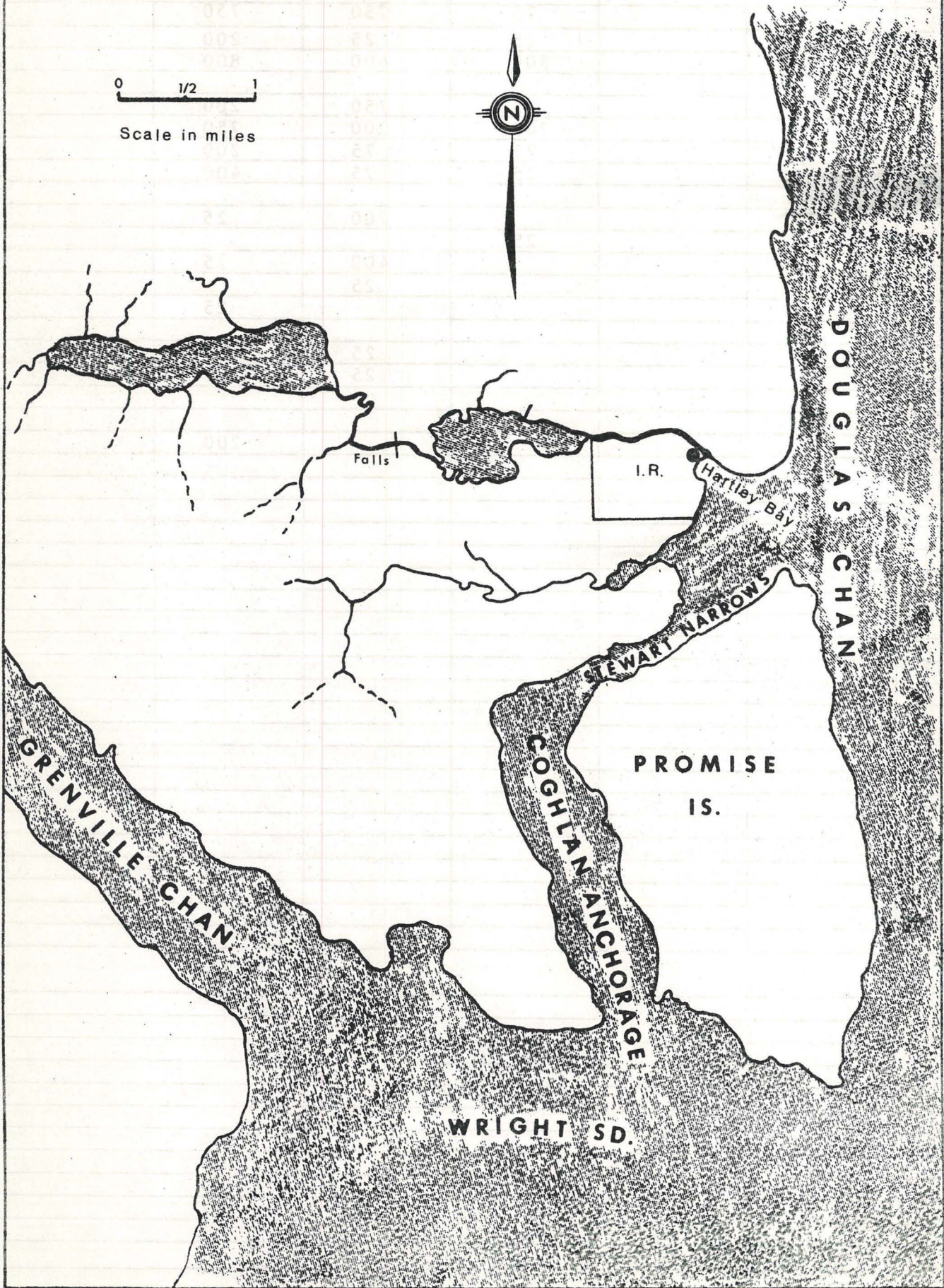
STATE POSITION

No. streams observed in recent years

HARTLEY BAY CREEK



Scale in miles



NAME OF STREAM Hartley Bay Creek

CONSERVATION DISTRICT 8 STATISTICAL AREA 6

LOCATION OF MOUTH Flows E. into Hartley Bay, near entrance to Douglas Channel.

POSITION 53 129 SE.
LENGTH 2.5 MI. WIDTH 15 FT. DRAINAGE 3.2 SQ. MI.

COMPOSITION: BEDROCK _____ BOULDER 50 COARSE _____ FINE _____
SILT & SAND _____ UNCLASSIFIED (50% Fine Silt and Sand comp.)

GRADIENT:
FALL IN FT/000

0.0 - 2.5	
2.5 - 5.0	
5.0 - 7.5	
7.5 - 10.0	
> 10.0	

WETTED AREA _____ SQ. YD. SPAWNING AREA _____ SQ. YD.

DISCHARGE _____ CFS MAX _____ MIN _____

TEMPERATURE _____

BARRIERS OR POINTS OF DIFFICULT ASCENT Impassable falls 2.5 mi. (0.25 mi above Hartley Bay Lake).

SPAWNING DISTRIBUTION:

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

POTENTIAL OF INACCESSIBLE PORTION OF STREAM _____

GENERAL REMARKS:

- Subsistence fishery site.
- Indian village at mouth (Hartley Bay).
- Hartley Bay Lake (1.25 mi long x 0.5 mi wide) is 1.0 mi from mouth.

NAME OF STREAM

Garfield Bay Creek

CONSERVATION DISTRICT

STATISTICAL AREA

LOCATION OF MOUTH flows E. into Garfield Bay, near entrance to Douglas Channel.

POSITION

33 128 W.

LENGTH

2.2 MI.

WIDTH

12 FT.

DRAINAGE

2.2 sq. mi.

COMPOSITION

GRAVEL

BOULDER

COARSE

SAND

SILT & SAND

UNCLASSIFIED (S&S and S&S)

GRADIENT

FAH IN FT/100

0.0 - 2.5

2.5 - 5.0

5.0 - 7.5

7.5 - 10.0

> 10.0

WETTED AREA

29 YD.

SPAWNING AREA

50 YD.

DISCHARGE

CFS MAX

MIN

TEMPERATURE

BARRIERS OR POINTS OF DIFFICULT ASCENT (possible falls 2.5 mi. above barrier bay head)

SPAWNING DISTRIBUTION

LENGTH OF STREAM USED

SPOTTED

SOLENOPTER

CHINOOK

COHO

CHUM

PINK (OD 1/2)

PINK (EVEN 1/2)

STEELHEAD

POTENTIAL OF UNDESIRABLE FORTION OF STREAM

GENERAL REMARKS

- Stream is very clean
- Indian village at mouth of Garfield Bay
- Indian name: (1.5 mi long x 12 ft deep)

HIRSCH CREEK

For map, refer to page 15

YEAR	SOCKETS	CHUM	PINK
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